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FOREST AND STREAM.

A Weekly Journal of the Rod and Gun,

ANGLING, SHOOTING, THE KENNEL,

PRACTICAL NATURAL HISTORY,

FISHCULTURE, PROTECTION OF GAME,

—AND THE—

INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST

—IN—

OUT-DOOR RECREATION AND STUDY.

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AN ADIRONDACK BILL.

A BILL for the preservation of the Adirondack forests was introduced on Tuesday in the New York Legislature. This bill, which is said to have been drawn up by the Chamber of Commerce Committee, provides for a commission to inquire into the ownership of Adirondack lands, and authorize the appropriation by the Legislature of $500,000, for the purpose of acquiring these lands for the State, and adding them to those already owned by it. The whole is to form an Adirondack Reservation. The purpose of the bill is the protection and increase of the water supply of the Hudson and Mohawk rivers, and their tributaries, and of the Erie and Black River canals. The lands to be selected lie in the counties of Clinton, Essex, Franklin, Fulton, Hamilton, Herkimer, Lewis, Oneida, Saratoga, St. Lawrence and Warren.

The work of selecting these lands and protecting them after they shall have been acquired by the State is to be placed in the hands of three individuals, to be known as the Commissioners of the Adirondack Reservation. These officials are to be appointed by the Governor and the Senate, and are to serve for two, four and six years, respectively. They are authorized to care for and improve the lands, forests and waters under their control, and to appoint forest wardens to carry out this improvement, and to bring suits against trespassers on the State lands. In fact, the bill provides for a forestry commission modeled after some of those of Europe recently alluded to in FOREST AND STREAM.

It is to be observed, however, that only about one-half of the Adirondack region is provided for in the bill, the watershed only of those rivers flowing south being protected, while those which flow north are passed over. No doubt the increase of the water supply of the Hudson, the Mohawk, and the Black rivers is most important, and it is perhaps wise to begin the work in a small way, selecting that portion of the region in which the benefit of forest protection will be most speedily felt.

A most bitter opposition to the bill may be expected from the lumbering interest, which is unwilling that the forests should be protected until they shall have been entirely cut off. Still, so great is the public interest aroused by the recent discussion of this subject, that the friends of forest protection have strong hopes that the present bill may become a law.

It is only a short time since a large proportion of the public appeared to think that forests were useful only as supplying lumber and firewood, but this ignorance has now been replaced in many minds by a much more intelligent comprehension of the value of our woodlands.

Those who have carefully read what we have recently had to say upon this subject, cannot have failed to comprehend the immeasurable importance of our forest lands to every class of people. It is the duty of every man to use what influence he can to protect these forests.

ANGLING SLANG.

OUR attention has been called to this matter by an editorial note in the London *Fishing Gazette*, which complains of a want of originality in writers who use the terms "spotted beauty" for trout, "finny tribe" for fish, and "rodster" for angler, and says that these terms cause worse language on the part of readers and a frequent use of the editorial waste basket.

We have noticed a growing tendency to this evil habit in America, and our pen is often drawn through the obnoxious words and the correct ones substituted. If any correspondent, in giving an account of our fishing to some local paper, should call us a "rodster," he would forfeit our good opinion forever. We do not know who coined this vile term, nor why, having been coined, others allow its use. Worse than this, if possible, is the phrase "chucking a bug," for casting or throwing a fly. To speak of a gentleman as a "bug chucker" may appear to some to be the very essence of wit, while to others it seems a coarse vulgarity.

Even if these things were wit in the originator, they have become offensively stale by repetition, and no writer, who has any wish to appear original, will use them. "Disciples of Walton" is another hackneyed term. It is not as offensive as the disgusting "rodster" and "bug chucker," which none but the coarsest natures indulge in, but it has been in use to describe anglers so long that it is at least threadbare and has ceased to be an improvement on the word which it supplants.

Slang may occasionally be effective in tersely describing in a word what otherwise would take a sentence, but it is usually a very transient thing, and stale slang has not only lost its savor, but the dose is nauseating.

NO MONEY FOR REVOLUTIONS.

CAPTAIN LUNDBORG, attached to the Swedish Legation in Washington, is before Congress as a petitioner for national alms. Captain Lundborg has been for several years hawking about a "revolution" in naval architecture, and failing to receive any encouragement from private sources, now seeks to float his scheme at the expense of the nation.

This scheme consists in so altering the present forms of vessels that the "water shall be parted upward" instead of horizontally, the worthy Captain being under the impression that he has made a discovery which will result in materially diminishing the resistance of ships to passage through the sea. It is almost needless to say that the scheme is very ancient, equally as chimerical, and only the superficial conception of an amateur at the business. No vessel, whatever her form, can part the water in any other direction than upward. The plumb sides of a steamer of usual shape impart their pressure laterally, it is true, but that pressure, by well-known physical characteristics of water, is instantaneously transmitted in all directions, and finds relief in the direction of least pressure, which is upward, as demonstrated in practice by the creation of bow waves. To construct a vessel of special form to accomplish what every vessel already accomplishes, is the wonderful piece of crude engineering, for which Congress is asked to vote money to the material gain of Captain Lundborg in particular. His proposed variation upon ordinary forms involves a swell in the bilge with a fore and aft section resembling a cigar. A structure of the kind would cost a great deal more and be far heavier than the simpler forms in existance. It would call for greater driving power, and could not compete in point of economy with steamships now afloat. Its qualities at sea are likewise very much open to question.

The whole scheme is silly, and can fittingly be classed with the Voorhees steam catamaran, the notorious Meteor, the "globe" steamer, the Keely motor and similar humbugs of the day. Had Mr. Lundborg's vagary the slightest merit or had it received the indorsement of competent naval architects and engineers in place of the sympathy of a few old-fashioned Admirals not versed in marine engineering, there would not be any difficulty in attracting the attention of private capital in these times when money goes begging. If the petition recently introduced by General Rosecrans is not smothered in committee it is to be hoped Congress will, by a large negative vote, promptly choke off this attempt to experiment at the expense of the national income, or else a flood of quacks will pour in from all quarters with similar fantastical ventures. Why should Captain Lundborg, an alien, receive aid for his nonsense any more than any other of the million of more deserving inventors who are, at least, citizens of the country? His appeal to Congress is preposterous.

THE "FLICKERING" VOTES.

THE polls will close to-morrow. All votes received then will be counted, whatever may come in Saturday will be just one day too late. The limit of time was made that our British Columbia subscribers might have opportunity to be represented, and their votes reached us last Monday. Others had previously come in from Mexico, Cuba, Bermuda, England, Scotland, Ireland and Germany. Total number of ballots received up to date (Wednesday, Jan. 30) 1929, not including a number of anonymous cards which have not been counted. The winning stories will be announced in our next issue, and the winning voters, if they can be determined by that time, but it is probable that they will not be decided before the week following.

IN CERTAIN LOCALITIES along the Atlantic coast the fowl shooting during the month of January has been remarkably good. Earlier in the season, indeed during the whole of November and December, the weather was so mild and pleasant that, although the birds were present on the feeding grounds in great numbers, they did not afford any good shooting. We have recently learned, however, of the score of two gentlemen, who have been shooting on the grounds of the Narrows Island, in Currituck county, N. C., which is remarkable. During a month spent at the club house they killed 10 swans, 104 geese, 194 canvas-backs, 27 redheads, 469 common ducks (teal, widgeon, black ducks, mallards, etc.), 9 quail and 51 English snipe. Taking out Sundays, stormy and other days, when no shooting was done, it will be seen that this makes a very high average for the month. The grounds over which this shooting was done are among the best for fowl on the Atlantic coast, and, in these days of game scarcity, it is satisfactory to know of one locality where it is still abundant. With proper attention to preservation, and with the abolition of battery shooting, the members of the clubs situated along Currituck Sound should have good shooting for all time.

THE CARTED STAG AGAIN.—Last week we referred to the importation of the English carted stag hunts, and mentioned that such a hunt had been held in Missouri. In another column will be found some account of a similar disgraceful occurrence near Cleveland, O. Now Cleveland is fortunate in possessing, among her older citizens, some of the best sportsmen of this country, men who are a credit and honor to the company of those who handle rod and gun. We can imagine the disgust they must feel at such a travesty of deer hunting as that at Newburgh the other day.

DOG CLUBS.—As may be learned from our kennel columns the proposed beagle club is on a fair way to successful organization. We count the formation of special clubs of this kind a promising indication of the growth of intelligent interest in the several breeds. The new beagle club ought to have a membership of five hundred.

NEW GAME LAWS.—We hope that our readers in the several States will take pains to inform us of any changes that may be made in the game laws this winter. One way to insure the good effect of such laws is to give them the widest possible currency, and such an effectual publicity is secured by printing them in this journal.

THE MASSACHUSETTS DOG LAWS are the subject of an instructive paper printed in another column. We commend a perusal of it to the individuals who propose to make the old Bay State ridiculous by enacting the dog-bond provision already adverted to in our columns.

THE CLAY-PIGEON TOURNAMENT.—Several news notes relating to the Chicago clay-pigeon tournament have been necessarily postponed to our next issue.

FOREST WEALTH.

IN a recent article on Forest Schools in Europe we alluded to the great loss just ahead of us because of our reckless waste of the woods with which the white man found this country so richly endowed.

That loss was stated as likely to reach the bewildering total of a billion dollars a year, that can be estimated and measured with some degree of certainty; besides a vast amount of incidental damage through the crippling of the industries dependent upon wood, and especially the white pine, for their material; through climatic change, and through diminished water supply for the needs of cities, for agriculture, and for transportation.

Just a few figures to show that this is not wild guessing. Mr. James Little, of Montreal, who is no doubt one of the most painstaking and well-informed statisticians upon this subject, gives the value of the lumber produced in the United States, "as it falls from the saw," for 1882 as not less than three hundred millions of dollars. Of this inconceivable total, white pine is the principal factor. We have almost reached the end of our supply of that wood. At our present rate of consumption not more than seven years hence we shall see the last of it. Prof. Sargent, curator of the Arnold Arboretum, connected with the Bussey Institution of Agriculture belonging to Harvard University, is also the special forest statistician of the U. S. Census Bureau. He reported in 1882 to the Massachusetts Board of Agriculture that only eighty billion feet of white pine remained at that time in the United States, and this total included much small and poor timber. He said that the average annual consumption was then ten billion feet, and the cut for the year next after his estimate was the largest ever made. Nearly two out of the eight years' supply which remained when Prof. Sargent made this terrible revelation have already gone. That statement was the cause which doubled, and in some cases more than doubled, the price of standing white pine. In favorable locations it is now held at two hundred dollars an acre and often more.

Mr. Little further assures us that the Dominion of Canada, except for her supply upon the Pacific coast, is almost as badly off as we are. Her stores, which were thoughtlessly spoken of as exhaustless, are not so. From earliest times men have been so impressed with the magnitude of great forests that they have called them inexhaustible. But not even tropical abundance and reproductive power could supply the awfully expeditious, and awfully wasteful modern methods of lumbering with material for any great time.

The pine of the Pacific coast, though, no doubt, rich and abundant, will be very expensive by the time it is brought to the markets which the forests of Minnesota, Wisconsin, Michigan and Canada have been supplying. Besides it will be found a far from limitless store if attacked as the woods of the East have been.

But to return to our figures: $300,000,000 at the sawmills and $450,000,000 at the places of consumption was the value when Mr. Little made his estimates. To replace it from other lands (if they could spare it, which they could not) would cost two or three times more, and would require more than all the tonnage of seagoing vessels in the world to transport it. Here, then, is a commodity which will soon be gone, and when gone would cost not less than a billion dollars a year to replace if it could be had.

Since we cannot replace it from abroad, what shall be done? Passing by with a mere mention the obvious expedient of using as many substitutes as possible for white pine in buildings—and if non-combustible materials like iron, stone, brick, etc., are used, the saving in insurance will be immense—we come to the matter of economy in cutting and marketing.

Pine lumbering, as at present carried on, is a terribly wasteful business. Experts say that on an average fifty small trees are sacrificed in getting out one large one. Tops and brush are left where they become resinous tinder heaps in a dry time, and any spark may start a conflagration that no man can stop. Campers, hunters and anglers often start fires through carelessness. Every reader of FOREST AND STREAM who goes into the woods should appoint himself a committee of one to impress upon the thoughtless the duty of taking care not to start fires. And the public ought to protest against leaving brush as lumbermen generally do leave it. Forest fires often cost awful waste of life, such as all can remember to have occurred in Wisconsin and Michigan within a few years.

But after all, the great dependence must be upon reproduction. This is not by any means impracticable. Almost always, if fires and cattle and other browsing animals are kept off land which has once been covered with white pine, it will soon seed itself. Sowing is not a complicated matter if the young shoots do not appear thick enough. Then trim up and thin out, as the case demands, and in fifty years there will be from 100,000 to 150,000 feet of lumber to the acre; and the material taken out in the interval will, in many cases, perhaps in most, pay taxes, interest and cost of labor.

In 1800, a tract of land in New Hampshire, which had been burned and cleared, was allowed to seed itself with white and Norway pines. Hon. Levi Bartlett became owner in 1825. He thinned two acres, taking off over half the smallest trees, which he reported much more than paid, as fuel, for the labor of this thinning. Twenty-five years later, a careful estimate showed that the land which had been thinned was worth at least one-third more than that which had been let alone. "He thought that had the land been judiciously thinned yearly, enough would have been obtained to have paid the taxes and interest on the purchase, above the cost of cutting and drawing out, besides bringing the whole tract up to the value of the two acres which had been thinned out." At the end of twenty-five years from the seed the larger trees were from forty to fifty feet high, eight inches on the stump, and furnished timber which could be hewed for rafters. "After the next twenty-five years (fifty from the seed) he * * estimated that the trees left on the two acres would average six to eight feet apart. They were mostly Norway pine, ten to twenty inches in diameter, and eighty to 100 feet high. He was greatly surprised seven or eight years after this to see the increase of growth, especially in the two acres thinned thirty years before. The owner had done nothing, except occasionally cutting a few dead trees." That which had been thinned was now worth twice as much as that which had not been. There was not twice as much wood, but owing to the greater size and length of the trees, they were worth twice as much at the mill. "There were hundreds of Norway and white pines that could be hewn or sawed into square timber from forty to fifty feet in length." "On the part left to Nature's thinning there was a vastly greater number of dead trees—many of them fallen, and nearly worthless." (Hough's Report to Department of Agriculture 1877, pp. 400 and 401.) It was estimated that at this time the land would yield 150,000 feet of lumber to the acre.

At the enhanced price which, twenty-five years from now, white pine will surely bring it is easy to see that there is money in these two things; cutting only the large, and in every way saving the small trees; and in planting, protecting from fire and cattle, and thinning wherever white pine will thrive. In another article we may speak of methods of propagating and cultivating other trees which will mature more quickly, and furnish for many uses an acceptable substitute for the white pine.

The Sportsman Tourist.

AN OREGON EPISODE.

IN WHICH IT IS RELATED HOW KIT JACKSON'S MULE WAS SURE.

"LOOK, boys, quick, thar goes one of the Big Sandy cattle as sure as Kit Jackson's mule."

Three men sprang to their feet from a prostrate log, where they had been sitting, and gazed eagerly in the direction indicated by the speaker; just in time to catch a glimpse of a large animal, evidently of the bovine species, as it disappeared in a thicket of tall salmon berry bushes about two hundred yards distant.

The time was early morning in the latter part of September. The place was a large "burn" between the Big and Little Sandy, two small streams that spring from sources on or very near Mount Hood and flow in a northwesterly direction until they reach the Columbia. The men were four hunters, who, with four pack animals, had been hunting in the vicinity for nearly a week, and whom I will briefly introduce to the reader. Wilson, the speaker above mentioned, was a tall, spare man, between forty and fifty, who owned a small clearing on the great trail from Eastern to Western Oregon that skirted the base of Mount Hood as it passed through the Cascade range. Here he had built a small log cabin, where his wife and several children resided, and where Wilson himself, who did a very small amount of farming—and no end of hunting and trapping—put up when he was out of the mountains. His dress was a nondescript affair of buckskin and butternut, and his rifle a long octagon-barrel muzzleloader, with a buck-horn sight, such as was almost invariably seen in the hands of the old line of Western hunters and trappers twenty years ago. Two of the remaining three were brothers, named Charles and Ben Doyle, who were several years younger than Wilson, and owned a farm together a few miles from the location made by the latter. The last of the party was the writer, who had drifted up into that remote quarter from San Francisco on purpose to have a good hunt, and a surfeit of venison.

Before going further it may not be out of place to describe the nature of a "burn" for the benefit of those unacquainted with the terms used in the far West. The immense forests of pine, spruce, hemlock and fir that cover the western slopes of the mountain ranges from Mendecino county, Cal., to Alaska are subject almost every year to devastating fires that destroy sometimes in one year more timber than all the sawmills that are scattered through that country have consumed since its first settlement by the whites. These tracts, which are frequently many miles in extent, are called "burns." All, or nearly all, of the trees will be killed, many of them entirely consumed, others are burned so badly at the base that they are overthrown by the winter gales, and the remainder, stripped of bark and foliage and bleached by sunshine and storm, present anything but an inviting picture to the lovers of the beautiful in nature.

These "burns," however, are the favorite resorts of almost every species of game found in the country. After the fire comes a rank growth of wild pea vine, salmon and salal brush. Then come the deer, who feed greedily upon the pea vine, while bear and grouse grow fat upon the salmon and salal berries, especially the latter, which are frequently found in such profusion that they can be stripped off by the handful, and as they much resemble a large huckleberry in size, color and taste, are not to be despised by the hunter himself.

With this explanatory digression, I return to my camp-fire on the Sandy. I use the word "camp-fire" advisedly, for that was about all there was to indicate the place where we had located, unless it was the four horses tied to the bushes near by where the pea vine was thickest. The certainty of fine weather in this season and latitude obviated the necessity of a shelter of any kind, and therefore we had none. Four beds made by layers of pea vine a foot deep and covered with blankets occupied the space on one side of the fire, and a small Dutch oven, an old tin coffee pot, with a few cups of the same material, and a sack of self-raising flour, comprising the entire kitchen outfit, were scattered about on the other. The limb of a fallen tree, conveniently located, furnished us with comfortable seats when we were not lounging upon the blankets, and also a rest for our rifles and extra clothing. Just beyond the kitchen utensils the saddles of eight or nine deer wrapped in the hides and tied ready for packing were piled together—for we were making arrangements to leave the burn that day—while a large buck, upon whose sides the clear fat was at least half an inch thick, and which had for that reason been selected for our special delectation, was suspended just clear of the ground from another limb of the fallen pine. Over beds of coals drawn out on each side of the fire, and transfixed upon forked sticks, with one end stuck into the ground or beneath a stone, hung several ribs of the above mentioned buck, the rich fat slowly dripping on to the coats, and sending up to our nostrils those delicious, appetizing clouds, whose flavor lingers with me still.

It was thus we were situated, and thus we were engaged, when Wilson with a pone of bread in one hand and a half-picked rib in the other arose from his seat, and after scanning the brush as far as he could see with the instinct of a true hunter, brought us all to our feet by the remark with which I have headed this chapter. To the Doyle brothers there did not seem to be anything very mysterious about the affair, but the writer, who had only been upon the upper coast three or four weeks, was as profoundly ignorant of exactly what was meant by the "Big Sandy cattle," as he was of the certainty of Kit Jackson's mule.

"How many of them are left now, Wilson?" said Charley Doyle, after we had become satisfied there were no more cattle in sight, and resuming our seats, had attacked the spare ribs with renewed vigor.

"Only three or four. Miller killed one early last spring, and saw one heifer and two steers besides, but as there were at least seven when they were first seen and only three are killed, I think there are four yet," was the reply.

Upon inquiry I found that the cattle were some that had been lost from a herd that a drover had attempted to drive across the mountains nearly two years before, and being overtaken by a severe storm, the whole herd had stampeded into the timber and many of them were never recovered, but having broken up into small bands and drifted off miles away from the road, had become much wilder than were the deer in that vicinity.

"I think we'd better give them fellers a whirl before we dust out of this," said Wilson, sending a denuded rib spinning over the brush, and taking a fresh one from the fire. This suggestion seemed to meet with the approval of all parties, the novelty of the thing being of itself sufficient to enlist my hearty co-operation. So it was agreed to postpone our departure another day, in order to give the wild cattle "a whirl." Accordingly after breakfast was finished we rolled up the blankets, tied the horses to fresh feed, and shouldering our rifles struck out toward the narrow bottom of the Big Sandy, where the animals had disappeared. So thick was the fallen timber that our progress on foot through the burn was exceedingly slow, and going on horseback was entirely out of the question, for it had been with the greatest difficulty that we had succeeded in getting our horses into the place selected for our camp, although the intelligent brutes, who had all been raised in the mountains, never failed to attempt to surmount any obstacle that we led them up to by the bridle. Upon reaching the edge of the bottom it became evident that our only chance of success lay in separating into two parties, one to go to the upper end of the bottom and lie in wait at the passes, while the other beat up from below. Wilson and I therefore slowly moved up the edge of the bottom, while the Doyles went for the lower end.

Reaching our destination we sat down on a log to wait, and knowing it would be some time before the boys below us would be in a position to need our assistance, I thought it a favorable opportunity to learn something of the history of my companion, which I had reasons to believe had been rather an eventful one, as he had been many years in the State, and was a volunteer scout all through the long and bloody struggle of the settlers with the Rogue River Indians. With most men who have spent many years hunting and trapping, especially in those portions of the country infested with hostile Indians, silence becomes a second nature, the necessity of caution, the dearth of any great variety of subjects to excite conversation, and the very limited number of their companions, all tend to promote this reserve until it becomes habitual, and as Wilson was no exception to the rule, my efforts to draw him out were only partially successful such as they were, however, I give in substance without any attempt at a literal rendition.

"Wilson," said I, as a leader, "were the Rogue River Indians a cowardly pack of ragmuffins like the Diggers, or did they more nearly resemble the Sioux, Cheyennes and other warlike tribes of the buffalo country?"

"They were the bravest tribe of reds I ever saw, and were themselves so confident that they were nearly our equals man for man, that Capt. John, their war chief, offered to select a given number of men and fight a pitched battle with an equal number of whites, the result of which should decide who should possess the land. Scores of the settlers were eager enough to accept the challenge, but of coure no one had any authority for such a proceeding."

"Did you have any hand to hand encounters with them?"

"We had many of what might be called rifle duels, but the country was so rugged and so heavily timbered that those were usually conducted at very short range, and as the abundance of game there had made excellent marksmen of both sides, they were almost always very short and deadly. On one occasion two of us were scouting in the neutral ground, and after a long and fatiguing march had stopped to rest by the side of a trail. Being still far from the Indian encampment we did not consider the neighborhood very dangerous, and had taken no special precautions although we were far from being noisy, when a slight rustling off in the narrow trail ahead of us put us both on the alert. We had barely time to cock our rifles when the Indians, evidently scouts like ourselves, appeared in full view walking one behind the other, and only a few yards from us. Quick as a flash it occurred to me that my pardner would be likely to take the one in front and without a moment's hesitation I fired at the other. Our rifles cracked as one report, and both Indians dropped dead in their tracks."

I had become so interested in Wilson's narrative, albeit it was only drawn out by persistent questioning, that I almost forgot what we were there for. The chivalrous conduct of Chief John, who must not be confounded with Capt. Jack, the Modoc chief, who flourished at least two decades later, was so different from that of most of the various tribes with whom I had been personally acquainted, that it reminded me more of the Sultan Saladin than it did of the

copper-colored friends I had known, and I was about to follow up the pumping operation still further when the crack of a rifle, followed instantly by a loud shout from one of the Doyles, brought both of us at once to our feet. From our position we could see by the swaying brush that the brute had been started and was coming toward us as rapidly as the nature of the thicket would permit. Stepping a few yards apart, in order to command as much of the front as possible, we cocked our rifles and awaited the result. Nearer and nearer he came, the loud cracking of the brush accurately marking his advance, until the brushes parted in front of Wilson, who stood in plain sight in the knee-high salal, and a long-legged, gaunt, red and white steer of the genuine Texan stamp came into full view almost at a bound. We had arranged it thus with the expectation that as soon as he saw us in front he would attempt to turn and re-enter the thicket, giving us a chance at him behind the shoulder as he turned, and driving him back toward the Doyles should we fail. This would probably have been the result had he not been so desperately wounded, but with the blood dripping from his mouth, if he had any intention of showing the white feather it was not visible, for with accelerated speed he charged straight for Wilson, who coolly stood with his rifle to his cheek near the log upon which we had been sitting.

Unable longer to stand the tension upon my nerves, I fired quartering at the steer's head, but unfortunately just as he dropped it for the assault. The .44-caliber bullet struck the far horn squarely near the base, shattering it in pieces, and the next instant, either dazed by the shock or choked by blood from the bullet of Doyle, which had evidently pierced his lungs, he stumbled and came down upon his knees, only a few feet from Wilson, who sent his bullet through his brain before he could recover himself. We were surprised to find him in such poor condition, considering the great abundance of feed around us, until we found an old bullet wound in his lower jaw that had carried away several teeth which must have seriously interfered with his eating, and rendered it a matter of much doubt whether he would have been able to survive the following winter.

"That ere feller had a leetle idee of showing fight," said Wilson, as he drew several bullets from his pocket, and after carefully selecting one placed it in the palm of his hand, and from his horn poured out sufficient powder to just cover it, which was his method of measuring a charge, then putting a strip of buckskin over the muzzle he placed the ball on top and forced it down until it was level with the end of the barrel, after which he trimmed off the surplus buckskin with his sheath knife, and sent the lead home with the hickory ramrod.

We were soon joined by the Doyles, and learned that the old Texan had been lying in a little opening overgrown with rushes, probably the bottom of what was a pond in the rainy season. Ben had heard him as he jumped and started to run, but was unable to see him while Charley, who was a little in advance and at some distance to the right, caught a glimpse of him just as he reached the edge of the surrounding thicket and fired with the result above stated. We were unable to find any fresh traces of the remainder of the band, but as we found the encampment of a party of straggling Indian hunter, that did not appear to have been deserted more than a week, it is possible they may have been able to have given some information upon the subject. After skinning the animal we slung between two poles the hide and such portions of the meat as we wanted and returned to camp. It was still early in the day, but as we expected to leave the burn in the morning, and already had as much meat as we could easily pack out, we concluded to do no more hunting but to devote the remainder of our time to mending our clothes and lounging by the camp-fire, where more or less cooking was going on nearly all the time.

Our trip had indeed been a very satisfactory one, for although we had only hunted a little while in the morning and evening of each day, we had killed eleven deer and one black bear—grizzlies are not found in that section of Oregon—besides as many blue grouse as we cared to shoot, which was not many, as we took no notice of them, unless close to camp, and we had a chance to make a fancy shot at their heads. The only real temptation I had from them was one morning while passing around the butt of a fallen tree I saw a number of them sitting on the other end, and could easily have killed three with a single shot from my rifle, but as they would have hardly been worth picking up after being shot through the body with so large a bullet I passed them by. Black bears were plenty enough, but as nobody would eat bear meat at our camp so long as fat bucks could be obtained, that incentive, at least, was wanting in the chase.

Late in the afternoon, after completing as far as possible our arrangements for departure the next day, my idle thoughts reverted to the old Texan and the first sight we had of him; and turning to my companion of the morning, I said, "Wilson, how sure was Kit Jackson's mule?" "Well," said that worthy, who was busily engaged sewing a rip in his bootleg with a buckskin whang, "according to Kit himself there wasn't anything he warn't sure of doing that he started in on. He allowed that mule could out-pull, out-kick or out-buck anything that went on four legs and wore hair, and as far as I ever heerd on Kit was about right; but where he got the name of being so *dead* sure was one day when Kit came to the village, and after taking in a big load of bug juice, began, as he allers did, to brag on his mule, and tell how far he throwed a feller that tried to ride him. 'I tell you what,' said Kit, as he stood at the bar setting 'em up for the boys, 'ennybody but me that thinks he can ride that mule is a dern fool, for he is going to get throwed sure pop.' Now, there happened to be a chap from the cow counties in there that day, who called himself a buckarer (vaquero), and he allowed the mule might throw 'em some pops, but when Jackson or ennybody else talked about its being sure pop, he was ready to chip in, as he calkelated he could ride ennything that ever wore a saddle. Some words passed between him and Kit, and he bet the drinks for the crowd that he could ride the mule. This offer suited everybody there, and they all took a hand in fixing up the thing, because, you see, they all had an interest in it.

"Kit trotted out his mule and pretty soon out came the feller with a Spanish saddle with two hair sinches and a crupper, got up on purpose for the occasion. Now that ere mule knew thar was suthin' uncommon going on, the minute that chap began to draw up on them two sinches, so he began to swell up just like a big toad. But it was no use, Dunk, that's what they called the feller, had been there before, and he drawed up first on one latigo and then on the other till the mule couldn't stand it no longer, so he jest looked 'round once with a wicked twinkle in his eye and let go his breath till the sinches were up to the last notch. Well, he got on, and for about five minutes there was some of the tallest buckin' ever seen in them parts. The mule dropped his head between his knees, roached his back; and some of his stiff-legged jumps, they said, measured ten feet. He fetched the blood out of Dunk's nose and mouth, but he couldn't fetch Dunk. Then he opened up on a new deal and tried to fall over backwards on Dunk and smash him, but that didn't work either, for when he was just balanced and going to fall, Dunk would slip his right foot out of the stirrup and step onto the ground and let him come down; then as soon as the mule got on his feet again, he found Dunk on his back with the rowels of his big spurs hooked into the sinches.

"Then he made for the trees along the sidewalk and tried to scrape Dunk off by running under the low limbs and against the trunk at the same time. No go. Dunk seemed to ride just as well with his toes hooked round the cantle of the saddle and his body down by the mule's knee as he did anywhere.

"The boys had been betting on the mule all the time, but they begun to hedge now. Things begun to look a little streaky for Kit, when all at once the mule made a break for the river. What he was going to do there nobody could guess. In he went and started as if to swim across just below the bridge, but when he got right over the deepest place down he went, mule, rider and all, plump out of sight, like a porpoise. Then the boys got scared and made a break for the bridge as fast as they could hook it. Looking over the rail down into the deep water, there they saw old Jeff on the bottom hanging on to a big root with his teeth, and Dunk on his back a clappin' the spurs into his ribs and jerkin' on the bridle, trying to raise him to the top. When Kit's backers seen that they got fast again to bet on the mule, for you see they allowed that as old Jeff knew what he was going to do, he'd fill up his bellusses before he went down and so had the bulge on Dunk; but the rest thought that Dunk had dropped on it time enough to get in a square breath; and even if he didn't the mule was sinched so tight he couldn't hold much wind nohow.

"Pretty soon, though, they seen Dunk look up, then he let go of the saddle and made for the top. He didn't say nothing when he got up, but jest took a good long breath and went down again, but he was a leetle too late, for jest as soon as he let go the bridle, Jeff slid out from under him and started for shore with his head and neck stretched out like a loon after shiners. 'Twas no use for Dunk to try to ketch him then; it couldn't be did, so he paddled for shore too. When Dunk had crawled up the bank and shook himself, he cum up to Kit and said, 'Mr. Jackson, I was wrong; and I ask your pardon. When that are mule starts in to do anything, he's going to do it, sure pop. Boys, less all go up and take suthin.'"

"Had that account been properly sworn to before a justice when you heard it?" said I, when Wilson had finished his bootleg and his yarn at the same time.

"Well, I can't say as to that. The crowd that put in their spare time at the Bullwhackers' Retreat, didn't fool away much spare cash on legal dockyments, leastwise during saloon hours; but that's how the boys cum to swear by Kit Jackson's mule." FORKED DEER.

SAN FRANCISCO, Jan. 7, 1884.

BETWEEN THE LAKES.

Second Paper.

THE CAMPING GROUND FOUND.

WHEN an Indian skipper, Captain Kishkatog, and his able and his ugly mate, Dan Sky, sailed away and left us at our camp on the Ahmeek-we-se-pe, it was with the knowledge on our part that we were nineteen miles from the nearest point to which we could look for relief in any contingency. We were in an unhacked wilderness—a wilderness in which men had been lost and never found. It is true that steamers were not infrequently seen from three miles out to as far as one could see, but for all the relief any steamer would or even could bring to us, it might as well be on the broad Atlantic. When our man left us, he left us alone; left us beyond the reach of wearying clients and vexing students, and book and insurance agents and lightning-rod and tree peddlers, with no sounds to hear beyond the circle of our own voices, save the sounds that came from out the woods and from off the waters.

Were we happy at being thus left? Was not this the fulfilment of the dream of each one of us ere we left home? Yes, but I dare say not one of us but nursed an uneasy feeling, as he watched the Indian's boat dancing away on the bosom of the broad waters. What if something should happen? What if one of our number should get hurt, or become sick or get drowned? These and like questions our thoughtful wives had propounded before we left home, and with a courage born of a then state of safety we had answered lightly, as became truly brave men; but now, when we stood alone in the wilderness, the anxious faces of our dear wives looked out from the little cloud of mist that overhung the Ahmeek-we-se-pe, and we thought of the questions they had once asked, but our courage was gone. The questions were unanswered.

Away with forebodings! Let us look around! Here upon this sand bluff, sixty feet above the lake's level, in the edge of a little grove of Norway pines, whose straight and tall and slender boles ceaselessly wave to and fro in the breeze, our white tent lifts its humble comb and is to be our roof-tree the coming three weeks. The view lakeward in storm or calm will never fail to please. Ah! The gorgeous sunsets we will see, and the tempests of rain and thunder that will drive over the bosom of the waters! Four miles westward a great rock promontory, three hundred feet high and a thousand feet long, and crowned with a forest of evergreen trees—the Grand Portal of the Pictured Rocks—gleams in the early morning sunshine like a great wedge of gold. At the foot of our sand bluff the Ahmeek-we-se-pe, flowing from beneath a drift of stranded trees, races over the bar down to the lake and leaves a long rippling trail in its waters. Beyond the belt of Norways, to the south, is the "deep, tangled wild woods," through which a footpath winds half a mile, ending at the shore of the Ahmeek-sah-kah-e-gan, the Beaver Lake of the Ojibwas. This lake, a mile in width and two in length, with its longer axis parallel with the great lake shore, is surrounded by an unbroken fringe of green woods—woods as green and impenetrable as on that day two hundred and forty-two years ago, Father Alloüz first sailed the south shore of the great lake. A lovelier sheet of water is not to be found in all this region of lovely lakes. Next the shore the water is shoal all the way around, but as it recedes, it becomes gradually deeper until at a distance varying from fifty to one hundred yards from the shore it suddenly drops down into a deep basin; and lying close in against the rim of this basin are bass and pike, in size and numbers seldom equaled.

West of Beaver Lake and connected with it by a narrow and short canal is a small lake, one not much short of three miles in circumference, and east of it is a cedar swamp and next a pond, after which comes a small deep lake which has never been fished.

This system of small lakes and ponds and swamps, is a peculiarly interesting geological feature of the region. Lying in the shape of a strung bow with the back to the hills and the arms curving to the great lake shore, they suggest that once they formed a part of the great lake itself. No doubt such was the fact. The evidences here and elsewhere along this south shore are indubitable, that at some period in the remote past, there has been a subsidence of not less than sixty feet and probably a great deal more than that, of the waters of Lake Superior. As that subsidence went on, the drifting sands from the Pictured Rocks above, lodging at the wide mouth of a narrow bay, a high bar or ridge was piled up, back of which lay a semi-circular basin six or eight miles long and one in width, which has since developed into these small lakes, besides ponds and swamps. On this high sand ridge grow soft woods almost exclusively, while back on the sandstone hills—the true ancient lands of the region—hard woods mainly grow, interspersed with occassional white pines of enormous size.

The region is not only interesting from its geological history, but from its classical associations also. In that unique poem, "The Song of Hiawatha," a poem that carries with it the odors of the pine woods and the gurgle of trout streams, we are told that after the mischief-making Paw-Puk-Kewis had

> "Vexed the village with disturbance,"

by teaching the young men

> "All the game of bowl and counters,"

and by raiding the house of Hiawatha and insulting old Nokomis his mother, and Minnehaha his bride, and finally, from the lofty brow of the Grand Portal, by killing his chickens, the gulls, that greatly wronged hero, in great rage, set out to bring the evildoer to just punishment. Long was the pursuit and well sustained the flight. After many and marvelous vicissitudes, however, the wily fugitive took refuge among the beavers, who in some mysterious manner changed him into a beaver, and made him

> "Ten times larger than the other beavers,"

after which he became their king. As might have been expected, his elevation to the beaver throne puffed him up enormously, so much so that he could not pass the doorway of his palace; and so, when Hiawatha had discovered the place of his retreat he cut the dam, and after the waters had run off the beaver king was at his mercy. He and his young men,

> "Pounded him as maize is pounded,
> Till his skull was crushed and broken."

The region we are now in, is the *locus in quo* of this tragic tale. Beaver Lake was the Ahmeek-sah-kah-e-gan of the Ojibwas, and here was in ancient times a great beaver center, and even yet a few stray beavers linger around the seat of that ancient empire, whose "signs" may be seen on every stream. The story as told by the poet is founded on Indian tradition, and as every tradition has some groundwork of truth to rest upon, I looked around me to see if I could find some one stream where the greatest number of conditions were to be found, which made probable the supposition that it was the one across which a dam was built, and where a beaver colony of such magnitude was established, as to excite the Indians' particular attention, and thus give rise to legends and extravagant stories. Into the south side of Beaver Lake a stream flows, and between that and the hills southward many miles of stream intervene, though as the crow flies the distance is not over two and a half miles. Along that stream in its upper half, I traveled for I know not how far, and as I whipped the little pools and eddies and filled my creel with richly tinted trout, I remembered that Paw-Puk-Kewis in his flight

> " * * * * came unto a streamlet
> In the middle of a forest,
> To a streamlet still and tranquil
> That had overflowed its margin;"

and here, thought I, is the forest and the tranquil streamlet, and what was more to the point, the entire course of the stream as far as I explored it, was filled with the ruins of ancient beaver dams and habitations. Indeed these curious animals have not altogether abandoned the stream yet. Occasionally fresh cuttings were met with, as also was an Indian camp that had been occupied the preceding winter, from which I secured a handful of the yellow and beautifully curved beaver teeth, plucked from the numerous decaying jaws lying around. This stream has been seldom visited by any save the Indians, and as it is unnamed in the Michigan maps, I venture to ask that it henceforth be known as the Paw-Puk-Kewis.

In addition to bass and pike in the small lakes, every stream in the neighborhood is a trout stream. Three miles west of our camp a stream thirty feet in width plunged over a rock wall, falling according to one authority one hundred and fifty feet. We did not visit this stream but were told that it abounded in trout of good size. Mr. Frank Milligan, a D. M. & M. Railroad official, had fished in it, and he said the trout were so plentiful and took the hook so greedily, that one soon tired of the sport.

We spent a longer time making camp than I had anticipated. One of the Judge's favorite maxims was, "That the success of a camping excursion depends mainly upon the comfortable arrangements in the camp itself." "No matter how successful in your hunting and fishing and tramping excursions," the Judge was wont to say, "unless you have a nice, comfortable, cozy camp to go to you will soon grow restless and discontented, and want to go home." And now that we had selected a permanent camping ground, I soon learned that, according to the Judge's standard, who was ably seconded by the Greek Professor, a camp meant a great deal more than setting up a tent. An awning was erected separate from the tent, which not only accommodated our table but afforded us protection from the dews as we sat in front of our night fire and talked over the events of each day. Boxes were converted into cupboards for the convenient and safe storage of provisions; racks were made on which to hang cooking utensils, and the camp ground was cleared of unsightly rubbish. The tent itself received particular attention. A gun-rack was set up at the head of our bed, and the bed itself was a work of art. "More than a

third of our time will be spent in bed and surely that third warrants us in doing our best to make it pass pleasantly," said the Judge, and the sweet and restful sleep that came to us all through our camp life on the Ahmeek-we-se-pe proved the wisdom of his words. Many campers-out, through ignorance in some instances doubtless, but generally through indolence, neglect to provide their camps with fixtures conducive to convenience and comfort, and as a consequence the discomforts endured often overbalance the pleasures enjoyed. A few hours of intelligent labor will make a comfortable woods home.

I think it was the afternoon of our third day in this camp that the Greek Professor came up the bluff with rod in hand and eyes fairly bursting from their sockets. "I never saw the like!" he exclaimed.

"What is it? Where is it?" we both asked.

"I never had such an experience before," returned the Greek Professor.

"Was it a bear?" asked the judge. Every novel happening in the woods can generally be connected in some way with a bear, although a bear is less apt to be encountered by the summer visitor to the lake region than any other animal save the wolf.

The Greek Professor said it was not a bear, but trout—speckled trout. "I have just caught seventeen running from ten inches up to fifteen down there at the mouth of the creek."

"Oh, pshaw!" exclaimed the Judge as his under jaw perceptibly dropped.

"But I have!" said the Greek Professor with energy, "and they are down there now in the minnow bucket."

"Darn it! Why didn't you tell me?"

"I couldn't," said the Greek Professor. "I mean I hadn't the time—that is, I couldn't stop."

But I don't think the Judge heard all the Greek Professor said. He flung aside the book he had been reading, and jointing his rod and tieing on his flies, he fairly flew down the bluff, notwithstanding his avoirdupois made such a feat somewhat hazardous, and cast into the swift waters below the drift pile at the mouth of the stream. The feathery lure scarcely touched the rough water ere there was a splash and a bite. The Judge "never saw the like," he said. The Greek Professor had followed close after the Judge's heels, and with great interest I watched the two as they plied their rods. Trout of excellent size and shining in the sun as unwillingly they came ashore, as if studded with brilliants, rewarded the fishermen's zeal.

O, what happiness, what felicity! But alas! They reminded me of children playing with pearls. Time and time again both had descanted on the criminal waste that characterized the sportsman in general and each had over and over asserted his abhorrence of the wanton destruction of fish and game, so common in our country; yet there they were fishing away till not a trout would rise to fly or spring at a worm. They had exhausted the preserve. The fish were "on the feed," and all the conditions happening to be right for them rising to the lure that afternoon, the beautiful and wary creatures had been transferred from the swift waters of the stream to the narrow confines of the minnow pails, and ere we could consume them, the half died and were thrown away. Thence on the greedy sportsmen were driven to other waters. The creek above its mouth contained many fine trout, but it was with great difficulty the fishermen could make their casts for the overhanging brush and the log-filled channel. In my presence they never afterward denounced in strong language greedy sportsmen.

The country we were in abounded in game as well as its waters in fish. Grouse, called partridge up there, were not infrequently met with in the woods, and any bright day the Beaver Lake visitor would be rewarded with a view of a deer at some point on the lake's margin. On the north shore of the lake and immediately across the ridge from our camp, the bank was high, whence you could see seven-eighths of the entire south shore line. One day we counted six deer at one time feeding here and there along that shore, and it was seldom, when the weather was favorable, that one or two were not seen.

The smaller lake lying westward of Beaver Lake, was even more frequented by them than the larger one. Along its west shore was quite a pasture ground of lily pads which was daily and nightly visited. One afternoon the Judge and I made the tour of this little lake, and we ran four in as many separate places out of the water.

[TO BE CONTINUED.]

DOWN THE YUKON ON A RAFT.

BY LIEUT. FRED'K SCHWATKA, U. S. ARMY.

Fifth Paper.

AT Marsh a few miserable "Stick" Indians put in an appearance, and not a single solitary curiosity could be obtained of them. A rough-looking pair of shell earings that a small boy had he instantly refused for the great financial consideration of a jack-knife from one of the party, who supposed them to be purely local in character. Another trinket was added to the jack-knife, and still refused, and additions kept on to the original offer, until just to see if there was any limit to their acquisitiveness, the last offer stood at a double-barreled shotgun with a thousand rounds of ammunition, a gold watch, two sacks of flour and a camp stove, and in refusing this the boy generously added the information that its value was based on the fact that it had been received from the Chilkats, who had gotten it from the white traders. It had probably been made in Connecticut. A few scraggy, half-starved dogs nearly completed the outfit, the greater part of their composition being unmitigated belligerency, two of them fighting until they were so exhausted that they had to lean up against each other to rest. A dirty group of assorted sizes of children finished out the picture of one of the most dejected races of people on the face of the earth. They visited their fishlines at the mouth of the incoming river at the head of Lake Marsh, and caught enough to keep body and soul together after a fashion.

This manner of fishing of theirs is quite common in this part of the country, and at the mouth of a number of streams, or where the main stream debouches into a lake, their long willow poles driven into the mud far enough to prevent washing away, are often seen sticking up, swinging backward and forward by the force of the current, and on closer examination they reveal a sinew line tied to them about or a little above the water line. They occasionally did us good service as buoys, indicating the mud flats which we could thereby avoid, but the number of fish that we ever saw taken off of them was not alarming. The greatest number are usually secured by means of their double-pronged fish-spear, which is such a common fishing instrument among nearly all the nations of sub-arctic America, and even further south and north, and which I represent in the engraving.

The bent arms are made of very elastic wood or of the horn of mountain goat, musk-ox, or some such material, and armed at their free ends with re-entering sharpened spikes of metal, the long pole to which the bent arms are attached having a third spike, complete the triangle of barbs which receive the fish when speared from overhead, *S* in the figure being a salmon's back as the harpoon is applied. I never noticed the Tahk-heesh or "Sticks," with any nets, although they could easily have had them, so slight were my investigations in this respect. Among my trading material to pay for services, fish hooks were eagerly sought for by all of the Indians, until after White River was passed, and then the Yukon becomes too muddy for any kind of fishing depending on the fish's eyesight. Lines they are not so eager to obtain, their common ones of sinew evidently subserving all their purposes.

No good bows or arrows were seen among them, their only weapons being the stereotype Hudson Bay flintlock smoothbore musket, the only kind of gun throwing a ball that this great trading company has ever issued since they have come into existence. They also sell a cheap variety of double-barreled percussion-cap shotgun which the natives buy, and loading them with ball find them superior to the first named instrument of destruction (to powder). Singular as it may appear, these natives, like the Esquimaux I found around the northern part of Hudson's Bay, prefer the flintlock to the percussion-cap, probably for the reason that the latter depends on three articles of trade—caps, powder and lead—while the former depends on but two of these, and the chances of being short of ammunition, often many weeks' journey away from these supplies, are thereby lessened. These old muskets are tolerably good at forty to fifty yards, and are even reasonably dangerous at two and three times that distance, and in all their huntings they manage by that tact peculiar to savages to get within this distance of moose, black bear and caribou, and thereby to have a pretty fair subsistence the year round, with a summer diet of salmon and a few berries and roots. Some few of them had old horse (mustang) pistols, flintlock and smoothbore, that I could hardly imagine the use to which they could possibly put them unless it would be to present to their enemies on the verge of a war, or to give to the mother of their intended bride as one of the gifts usual to savages under such circumstances.

This Camp 15 was on a soft boggy shore covered with reeds, where a tent could not be pitched and blankets could not be spread and with the raft way out in the lake through soft white mud. I think that the whole combination, taken together and mixed with the inevitable mosquitoes and a few rain showers, made about as disagreeable a predicament as could be well imagined, and shows in a small way some of the usually unmentioned concomitants of exploration.

On the 29th of June we passed out of Lake Marsh and once more entered the river. On the lakes one man at the stern oar of the raft had been sufficient, but on the river an additional oarsman at the bow was needed, for at short turns and nearing sunken boulders or sand and gravel bars or steering clear of eddies it was often necessary to do some lively work in swinging the ponderous craft around to avoid these obstacles. I believe I made the remark in a previous article that managing a raft on a lake, especially with a favorable wind (and you cannot manage it at all if you have not a favorable wind) was a tolerable simply affair. It was certainly simplicity emphasized compared with managing it on a river, although one would think the reverse. Especially was this so on a swift river like the Yukon or any of its branches. Naturally a raft or any floating object will keep the center of the current of a stream if only left alone, after it is once put on that part, but the number of things that present themselves from time to time to drag it out of this channel seem marvelous. Old watermen and lumbermen know that when a river is rising it is very hard to keep the channel, and even the drift wood lines the shores of the stream, and they eagerly await the time when this commences flowing along the main current or at least is equally distributed over the water, for then they know that the water has started to subside, or is at a "stand still," as they say.

Again, a river with soft banks (and in going the whole length of the Yukon, over 2,000 miles, we saw all varieties of shore), the swift current, which one desires to keep in, using it for his motive power, only nears the shores at points or curves, where it digs out the ground into steep perpendicular banks, and here it is almost impossible to find a camping place, and this swift current has to be rowed out of to secure a camp at night, and has to be worked back into after breaking camp next morning. If the banks are wooded the trees that are constantly tumbling in off of these places that are being cut out, and yet hanging on by their roots, form a sort of *chevaux de frise*, that have received the backwoods cognomen of "sweepers," and a man on the atmospheric side of a raft plunging through them wishes he was dead, or at least that he was a muskrat so that he could dive out. To the inexperienced man who has never had his hair combed by a whole timber district in a brief minute these remarks may seem absurd, but to the old veteran raftsman it will awaken many a sigh of sympathy from his breast as he picks splinters three inches long out of it and digs the moss driftwood and leaves out of his eyes to look at his hat dancing on a limb a mile back, and takes an inventory of stock to see if that is all that is lost.

Again, when an island is made out ahead, the varieties of guesses as to which side the raft will pass shows how hard it is to tell, and it would be a splendid question for a civil service reform examination. It takes a peculiarly practiced eye to follow the line of the current of the stream from the raft's position beyond any obstruction in sight a good distance ahead, and more times than one our hardest work was rewarded by stranding us on the very bar or flat we were striving to avoid. The position of the sun, the clearness and swiftness of the water, the nature and strength of the wind blowing, however light it might be, and a dozen other abstruse functions determined whether a person could solve this apparently simple problem. If the upper point of the island that split the current around its two sides could be determined (and this was often as hard a problem as the other at any great distance) one could tell by projecting a tree directly beyond this point against the distant hills or mountains, and if it crept along them to the right, the raft might pass to the left of the island, and surely would do so if the current was not deflected by some bar or shoal between the raft and the island. And such shoals and bars of gravel, sand and mud are very common obstructions in front of islands, much more common than one would suppose, and too common not to be some dependency between them. These bars were not prolongations from the point of the island, but submerged islands, just in front of them, and between the two probably a steamboat could have passed. Using trees as guides to tell on which side of the island the raft might pass was, as I have said, not so easy as appears at first sight, for unless the tree directly over the splitting point of the current could be made out, all guesses were of but little value. The trees on the right and left flanks were always the most conspicuous by being fewer in number than the dense growth of the center of the island, and persons were prone to use these in making their calculations, and one can readily reason that when they were near and the island wide, both outside trees would appear to diverge, and according as you took right or left you would surmise you were going to left or right of the island. As a person stood on the bow, or down-stream end of a raft, and looked out on still water flowing along, the imagination easily conceives that they can follow up from that position to anything ahead and see the direction of the current leading straight for it. Again, eddies and slack currents are great nuisances, for though you may not get into the very heart of them, every time the sum total in a day's drift that they can injure you is considerable, and by a little careful management in steering the raft they can nearly always be avoided. Of course, you are often called upon to choose between them and other impediments, so that the mind is constantly alert as you drift on.

In a stream with no eddies or slack currents, everything goes happy until along toward evening, when you want to go into camp and the river tearing along at four and five miles an hour. I defy any person, who has never been similarly situated, to have any adequate conception of how a ponderous vessel like our raft, made of large logs and loaded with four or five tons, will bring up on any obstacle going at the rate already mentioned. If there are no eddies or slack currents into which it can be rowed or steered and its progress stopped or slackened, it is almost impossible to go into camp, for should the raft strike end on, a side log may be torn out and the raft converted into a lozenge by the shock. Under these circumstances we would bring the raft close into the shore, and with the bow oar hold the head out, while with the steering oar the stern end would be thrown against the bank, and this frictional brake would be kept up until the raft slowed down a little, when one or two, or even a half a dozen would jump ashore at a favorable spot, and with a rope complete the slackening until it was a gait that would warrant twisting the rope around a tree on the bank and a cross log on the raft, when from both places the rope would be slowly allowed to play out under strong and increasing friction, or "snubbing," as logmen call it, and this would bring the craft to a stand where she would receive a series of snug lashings if the current was swift.

Good camping places were not to be had in every stretch of the river, and worse than all, they had to be picked out a long ways ahead in order to swing the raft into them from the middle of the broad river. Oftentimes a fine place would be seen just as we were abreast of it, that had been concealed until then by some heavily wooded spur or point, and then of course it would be too late to reach it with our slow craft, and to go skimming along near shore was to compromise a good deal of our rapid gait. Running from swift into slacker water could be readily done by simply pointing the craft in the direction one wanted to go, but the reverse was not so easy, at least by the same easy means. I suppose the proper way to manage such an amphibious animal as a raft would be by side oars and rowing it end on, but as our two end oars—bow and stern—were the most convenient for work, and in going into camp at night or seeking the middle of the current in the morning we used them entirely, and rowed our bundle of logs broadside on to the position we desired, that is, if nothing prevented. We generally kept the bow end inclined to the shore we were trying the reach, and this, in passing from swift to slack, water helped us as already stated, and in a three-mile current we could keep at about an angle of thirty degrees from the axis of the stream as we made shorewards, and thus roughly calculate the spot on the beach where we would bring up. The greater or less swiftness of the current would vary this angle of course, and our calculations accordingly.

Our bundle of effects on the two decks made quite high piles fore and aft, and when a high wind was blowing—and Alaska in the summer is the land of wind—we had a sailing power with us that we could not lower, and that often swept us under "sweepers" or dragged us over bars or sent us down unwelcomed channels of slack water and in violent gales actually held us against the bank and successfully vetoed all possible movements forward. During hot days on the wide, open river the sun would come down with a blistering effect that would make one feel as if he was floating on the Nile or Niger, anywhere in fact except under the shadows of the Arctic Circle. Roughly improvised tent flies helped us screen ourselves to a limited extent from this equatorial torment, but if built too high, the stern oarsman, who had charge of the "ship," could see nothing ahead and it would have to be pulled down.

"Cut-offs" through channels that led straight across were often most deceptive affairs, the swifter currents always swinging around the great bends, and time was always made by keeping in them. Especially bad was a peculiarly seductive "cut-off" with a swift current as you entered it, on account of flowing over a bar, and then immediately deepening the current would slow down to a rate that was provoking beyond measure as you saw piece after piece of drift wood go rushing by in the main channel behind you, and in a little while could be recognized passing in front, having "taken the longest way around and the shortest way home," especially if both ends of the "cut-off" were visible from its interior.

Of submerged obstructions, snags were of little account, for the great ponderous craft would go wading through them. Sand, mud and gravel bars were by far the worst that we had to contend with, and I think I have given them in the order of their general meanness in raft navigation. Sand was particularly obstreperous, and when the gridiron of logs ran up on one in a swift current there was "fun ahead," to use a Western expression of negation. Sometimes the mere jumping overboard of all the crew would send the craft ahead a few yards, and in lucky instances clear the obstruction; but this was seldom, and those who made preparations for hard work were seldom disappointed. In a swift current the water would sweep out the sand around the logs until its buoyancy would prevent its sinking any lower, and out of this rut the great bulky thing would have to be lifted before it would budge an inch in horizontal direction, and when this was done we would often be cheered by

seeing the noble craft sink down again to repeat the same process. The simplest way off of a sand bar was to find the nearest point to a deep channel and swing the raft end for end up stream, even against the most rapid current, until the channel was reached, or in the most aggravated cases the load would have to be taken off and placed on shore, and when the "boat" was free she was "snubbed" into the first favorable place on the bank with respect to loading.

Looking back, it seems almost miraculous that a raft could make a voyage of over 1,300 miles along a river, starting at the very head, where it was really narrow enough to stop the raft if it should swing out of a straight course end on (as it did in the Payer Rapids), and covering nearly two months of daily sticking on bars and shooting through rapids, and yet get through almost unscathed. When I started I had anticipated building two or three of those primitive craft before I could exchange to good and sufficient native or civilized transportation. Mud bars were not near so bad, unless the material was of a clayey consistency, when there would be added a little bit of adhesiveness to the other impediments. In general, it was possible to pry right through them with muscle and patience. The best of all were the gravel bars, and the larger and coarser the gravel the better, and when they were cemented into a firm bed by a binding of clay almost as solid as rock, and as little yielding tendency, we could ask for nothing better, and always went to work with cheerful prospects of a speedy release. The prominent benefit from a gravel bar in assisting one over is not wholly due to the material, but in the fact of the swift current, which is a great assistance. By simply lifting the raft this great power throws it forward, and by turning it broadside to the current and "biting" alternately at each end of the long "boat," we passed over gravel bars on which I do not think the water was over eleven or twelve inches deep, although the raft drew nearly double that.

[TO BE CONTINUED.]

LIFE AMONG THE BLACKFEET.

BY J. WILLARD SCHULTZ.

Tenth Paper—Folk-Lore.

THE OLD MAN AND THE ROCK.

Once the Old Man was crossing a large prairie, and becoming tired, he sat down on a rock to rest. After a time he arose to resume his journey, but before going he threw his robe over the rock saying, "Here, I give you my robe because you have let me rest on you. Always keep it." And he went away.

Now he had not traveled on very far when it began to rain, and meeting a coyote, he said to it: "Little brother, little brother, run back to that rock and get my robe, and we will get under it and keep dry." So the coyote ran to the rock, but returned without the robe. "Where is it?" the Old Man asked, "Si-yah!" replied the coyote, "the rock said you gave him the robe and that he was going to keep it."

Then the Old Man was very angry, and he went back and jerked the robe off the rock saying, "I only wanted to borrow the robe until this storm is over, but now that you have acted so mean about it I will keep it, you don't need a robe anyhow, you have been out in the rain and snow all your life, and it will not hurt you to always live so." Saying which he and coyote went up in a coulee and got under the robe.

Ere long they heard a noise, and the Old Man said: "Little brother, run up on the hill and see what is making that noise." Soon the coyote came running back and said: "Run! run! the big rock is coming," and they both ran away as fast as they could. The rock gained on them and the coyote, running into a badger hole, was run over and killed. The Old Man was very scared, and as he ran he threw off all his clothes, but the rock kept gaining on him all the time. Not far off he saw a band of buffalo bulls, and he cried out to them, saying: "Oh, my brothers, help me, help me; stop that rock." And the bulls all ran at it and tried to stop it, but it crushed in all their heads. Deer and antelope also tried to stop the rock, but they shared the same fate as the buffalo, and a number of rattlesnakes formed themselves into a lariat and tried to noose the rock, but those that formed the noose were ground to pieces. The rock was now very close to the Old Man, so close that now and then it would strike his heels. As he was about to give up he saw a flock of bull-bats circling over his head, and he said to them: "Oh! my little brothers, help me; I am almost gone." Then the bull-bats flew down against the rock and made their peculiar cry, and every time they struck it they chipped a piece off, and at last the chief bull-bat broke the rock in two. Then the Old Man, to pay them for saving his life, made very wide mouths on them and named them "Pis-tō'-iks"—fighters.

Moral: When you make a present never take it back.

THE OLD MAN AND THE ELK.

One evening the Old Man was walking along a ridge and he was very hungry. Not far off he saw a large band of elk, and he said to himself, "I will kill every one of those elk, and then I won't be hungry." So he went up to the elk and said, "Oh, my brothers! I am lonesome because I have no one to follow me." The elk said, "Go on, Old Man. We will follow you."

Then the Old Man led them close to a high cut bank, and he ran up a little and got down and came under the bank where it was straight up and down, and he called out to the elk, "Come on, here I am; jump right down." But the elk said, "It is so dark we can't see to jump. Build a fire." Then the Old Man built a fire, but still the elk were afraid to jump. "Don't be afraid," the Old Man said, "jump right down; it's nice; you will laugh."

Then the elk jumped and were killed, all except one doe elk, which stood on the bank yet. "I don't hear any one laugh," she said, and she was frightened and ran away.

Then the Old Man skinned all the elk and cut the meat up to dry and hung the tongues up on a pole. When it was daylight he went off, and at night came back very hungry. All the meat was gone; the wolves had eaten it all up. He took down the tongues one by one, but they were all hollow; the mice had eaten all the meat out of them. So the Old Man had nothing to eat that night.

Moral: Never kill more meat then you need.

THE OLD MAN MAKES SOME BAD WEAPONS.

Once the Old Man was fording a river when the current carried him down stream and he lost his weapons. He was very hungry, so he took the first wood he could find and made some arrows, a bow, knife and spear. When he had finished them, he started up a mountain. Pretty soon he saw a bear digging roots, and he thought he would have some fun, so he hid behind a log and called out "No-tail animal, what are you doing?" The bear looked up, but seeing no one kept on digging.

Then the Old Man called out again, "Short-tail ground-cater, what are you doing?" Then the bear rose up on his hind feet, and seeing the Old Man ran after him. The Old Man commenced shooting arrows at him, but the points only stuck in a little way, for the shafts were rotten and the bear pulled the points out as fast as they struck him. When the arrows were all gone he threw his spear, but that too, was rotten, and broke off. Then the Old Man grasped the bear by the hair and tried to stab him, but the knife handle also broke, for it was rotten. All his weapons were broken, so the Old Man turned and ran, and the bear pursued him. As he ran, the Old Man looked about for some weapon, but he could find none. Neither could he see any animal to help him. At last he saw a buffalo bull's horn lying in the path. Picking it up, he placed it on his head and turning round, shook his head at the bear, and bellowed so loudly that the bear was scared and ran away.

Moral: Always make your weapons of good wood.

[TO BE CONTINUED.]

THE COURT OF ARCTOMYS MONAX.

A LEGEND OF THE HOCKHOCKING.

IN my boyhood days I listened to labored and exhaustive exhortations upon the ground hog and how he influenced the weather for six weeks following the 2d day of February; but it was not for many seasons afterward that the sage and learned theories came back, like a flock of summer birds, bearing with them memory of the warmth still existing beyond the long, long portage of thirty years.

Last winter I read your request for some one to write of the ground hog. I felt impelled to write you then, but realizing the responsibility resting upon the historian, and knowing how necessary it is that he should be unbiassed when called upon to decide which version of many and conflicting stories touching past events shall be handed down to coming generations and preserved through time, my fears and diffidence overcame me and I refrained.

It is true that in what I send you now I may digress occasionally from the language of the narrator, but if I do it will be like a bright feather stuck in the ebon plumage of the crow, distinctly a child of adoption that does not affect the identity of the parent.

The ground hog is known to science as *Arctomys monax*, and passing the generic, possesses the following specific character: "Length to base of tail 14.50 inches, varying from 13.00 inches to 15.50 inches; of tail vertebræ about 4.50 inches; of tail to end of hairs about 6.75 inches. Color above, generally mixed fulvous, brownish-black and gray; below, yellowish-rufous, varying to brownish-rufous. Top of head, upper surface of all the feet and the tail, usually black or brownish-black, varied slightly with pure gray or rusty gray, and even to nearly uniform intense black. The ears are large, rounded, thinly-haired, generally gray. Tail full, rounded and bushy."

The ground hog is strictly a herbivorous animal. It is especially fond of peas, clover, grain, leaves and buds. It burrows principally in banks and bluffs, along some stream, though often found in the open fields. It usually produces from four to six young in the early part of the summer. It is not gregarious and hibernates through the winter, with an occasional exception, that I may hereafter mention.

The habitat of *A. monax* extends from the Carolinas northward to Hudson's Bay and from the Atlantic to Iowa and Minnesota, and is generally known as the woodchuck.

Almanacs in general have neglected to give due praise to the sage, but what they lack is more than made up in the loyalty of the oldest inhabitant.

The ground hog, as known to the "Moss-backs" of the Hockhocking, agrees in the main with the description of the naturalist, and while some may feel sore at my making public one of the oldest traditions of the valley, I here assert that I am not actuated by any motive of ill will in presenting to the world these facts, for I am a descendant of the oldest settler, and do not feel that it is my mission to bring discredit upon the sayings of a hundred years ago. Nor do I wish for any one to seek for personalities in the notes presented, for the garden has been weeded, and nothing will be entertained but the question touching their authenticity.

Once, possibly before the cliffs along the river had quit growing, a young man came into the valley, and by his decorous and gentlemanly bearing soon won the confidence of the people, and was quickly assigned a place in society. His accomplishments were many and varied. His experience, as given before the deacons and elders, was lucid, and clearly defined the influence of a great moral director in the formation of his character. He was a power among the young people. He acknowledged one day that he was a true sportsman. When afterward chided for shooting quail on the ground, deer out of season, and catching fingerlings for count, he defended his position by explaining that such divergences were allowable among sportsmen, when they were desirous of realizing just how many pangs and stings were apportioned the "pot-hunter." Such a show of philosophy, it is needless to say, silenced idle tongues, though it is thought to this day that the humanity of the most expert and discreet hands lends to them a weakness that drops into the experience of all sportsmen a something they would like to blot out.

Among the less orthodox portion of the community this young man was a wonder. He loved a good story, and had a penchant for "moonshine whisky" that inspired them with confidence and left his character unblemished. He was a "jam up fiddler," and through this accomplishment was able to win and marry Cindy Stone, the best looking girl in the valley. Smith—that was his name—lived to raise fourteen children and then expired. Peace to his ashes.

One time, at a barbecue on the 2d of February, Smith remarked that they would have six weeks more of rough, stormy weather. "Ground hog seed his shadder?" asked the boy from whom I have descended rather indirectly.

"No, responded Smith, "*Arctomys monax* has decreed it in open court. The king's will is law."

After the tempest of question had subsided, he explained that *A. monax* was the ground hog's other name, and that his palace was accessible to men once in a hundred years, and that the next reception would be the following season.

This news of course set things on end, and as many as four hundred meetings were held before it was decided who should go as an ambassador from the tribe of "Moss-backs." The choice fell on my father's father's father, he being a boy ten years old, and the son of the "boss chief." It was thought that his position in society better qualified him for the honor, such standing in society then, as now, rather giving a man the best show, though I have since been humiliated and mortified by learning that my ancestor did not even make a good cobbler, when in after years he renounced barbarism and became civilized. However, I am glad to be numbered among the children of that barbaric sire, who has handed down to his progeny honors that inspired with pride even the fourth generation.

Smith coached the young ambassador, and each day saw him better fitted to meet his "highness," *A. monax*. The tribal knowledge of royalty in those days was limited, but allowing this weakness, it was not an unplatonic gang, and the lad was armed with an address that was expected to take the cake, being couched in words of elegant diction and replete with beautiful conception. He was also instructed to bear clover and red and black haws as offerings. Everything being in readiness, the ambassador went into his father's tent for his blessing, and then started due east, expecting to "pull up" somewhere about what is now known as New York State. His instructions were not clear on that point; the ways of transmitting news in those days were defective, and doubtless degenerated into what is now known as the "Associated Press."

Many mishaps befell the boy during his travels, but he never faltered once, which fact has been accounted for in the family circle by the parting injunction of his father: "Get there, Eli!"

It matters not what destiny ruled him, for we know that on the 1st of February the footsore pilgrim knocked at the door of a humble cot among the mountains and struck the old hermit for a bed. After doing the weather and kindred subjects, the old lad drew a jug from some hidden recess and pronounced it crab-apple cider. This was fine on the old man's part, for the revenue officers were as strict then as they are now, and the production of fine old liquor in such an out of the way place might at some time have been the signal for a gentleman to rise to a point of order. The old man napped off for a moment, and finally came up standing: "Pleasure is transitory when you do not include mankind. Don't lie, even in telling a fish story. Don't steal even a watermelon. Meet all men as gentlemen and treat them as they deserve, even if you make a mistake. A kind word costs less than a bitter one; the first will warm, the latter chill a sorrow-laden heart. Don't preach charity, but practice it. At daybreak arise and travel to the east. Do not be surprised at what you may see, but learn all you can. Your coming will awake a king and his subjects from their winter sleep."

The next morning the pilgrim took up his grip-sack and tramped. He passed up a dark hollow and was soon lost among the shadows. It was a ghostly place to explore. His footsteps woke up old hoary-headed echoes that had slumbered for a hundred years. It sounded as though an army was marching up the defile. Fortunately, the diplomatic corps was "sandy," and marched on like a little man. By and by he came to a place where the rocks rose in a sheer precipice hundreds of feet high. For the first time he weakened, but soon rallied, when he noticed an escutcheon carved in the cliff and below it a huge knocker, which he at once sounded. The effect was magical. The time ball went down at six, the signal station displayed a storm flag, and down deep in the bowels of the earth he heard the hoarse baying of the dogs of war. Then, for the first time, he loosened his hunting knife and unslung his tomahawk, resolving to die as it best becomes the brave.

Just then two vast doors swung open, and sweeping up from measureless caverns, came soft winds laden with the perfumes of a summer clime. A few minutes later a dazzling light illumed a transparency and he saw this legend in characters of fire:

WELCOME, MOSS-BACK!

Proceeding cautiously, he soon found himself in a large and spacious room, well filled with the satellites of Winter and Spring. The stern old King in armor of white and with a mace of ice, glowered on him as he passed, while the gracious Queen and her train made him their captive and bound him with garlands of flowers. While contemplating the wonders around him, an unseen hand drew back the great curtain of mist that hung like a bank of snow to the north, and he marched with his fair captors into a grand audience hall, possibly a third larger than the Coliseum at Rome. To the right, to the left, and in fact, all around him, was a vast multitude of ground hogs. It was as if there had been a great storm, where it rained nothing but ground hogs. High up among the shadows of the vaulted roof, he heard the birds of passage singing snatches of songs. The brooks were freed from their chains of ice and the music of their babblement welled up out of the distance.

On a throne of gold, patterned after a bunch of clover leaves, slumbered the King. Back of him, on canvas, was a trout stream wandering through a clover field. The stream was full of speckled beauties, and bees foraged along the blossoming banks. It was a work of art, by an old master. The silver-haired King of Storms was called to the chair, but his wand failed to awaken the congregation, so Spring touched the sleepers and the great walls trembled at the tumultuous yawn.

Music, soft and sweet, floated down from hidden galleries. Deeper and stronger grew the measures, and when the fluted columns lent their thunders to the mighty symphony the ambassador beheld a kingdom of ground hogs tripping the light fantastic toe.

When his Excellency had finished a very difficult Irish jig, it was then that the offerings of the "Moss-back" were presented. Tears welled up into the eyes of the King as he looked upon the divine fruit. He called the young man to a seat on the throne, and after accepting his credentials as an ambassador, explained to him that the ceremonies yet to follow originated when Time was a yearling.

All sounds of the festivities had died away. On the right was the Queen and on the left the King. On the throne the "moss-back" and his Majesty. At a signal, a giant carried in a sun dial, about as large as the turntables now used about railroad shops. This he placed in the center of the hall and taking a hundred-pound cannon ball from his hip pocket stood facing the south. "At 12 o'clock," said the King, "he will throw that ball through the wall, and if the sunlight marks the hour, storms will rule for six weeks. If not, spring will take charge."

The bruised air shrieked along the track of the ball as it pierced the south wall and was lost in the blue deep beyond. Four minutes and a quarter went by, and lo, an arrow of sunlight dropped lightly upon the sun dial at high twelve.

My countrymen, what an hour was that.

In the twinkle of an eye every ground hog disappeared. Spring fled weeping from the hall, and Winter's buglers

sounded call after call along the corridors. The gusty clouds turned their mighty bellows upon the doomed building. Giant hands tore away section after section of the roof. From the lofty walls heaven's archery trained its enginery and filled the air with arrows of snow. Mocking voices catcalled among the shadows, while the Vulcan of Winter forged chains to shackle the universe.

The ambassador of the "Moss-backs" felt strange and out of place among such tumultuous scenes. A great longing sprung up in his heart to be at home, but he compromised by crawling into a hole.

At 6 o'clock a train as of giant powder knocked the palace into a cocked hat. A few minutes later the triumphal car of the Storm-king, drawn by a lumbering old blast, rolled noisily away toward the north; and then silence reigned.

When one week later the traveler stood in the council chamber of his people and related his experience, an aged chief arose and said: "Truth is mighty. Before it the fallacies of ages crumble away. It pains me to know that I was so many years in darkness. I repent, and feel that if a few more cannon balls could be thrown, and a few more arrows of sunlight illume the sun dial of life, we would have a fuller knowledge of our own weaknesses, and be better able to guide our fellows away from the shoals that have caught the wreckage of many a soul, that lied well but not wisely."

The hero was feasted on boiled dog.

Here tradition ends.

Some people are slow to believe this story, but among the "Moss-backs" it is never questioned.

A fitting monument has been erected in memory of Smith. Without him the world might have remained in darkness upon the great subject PARSON O'GATH.

BAIRD IRON WORKS, Gore, Ohio.

Natural History.

THE RAMBLE OF A NATURALIST.

BY JUDGE JOHN G. HENDERSON.

IN my boyhood days, long before I ever heard of Audubon, Wilson, Nuttall, or the Prince of Musignano, it was my delight to go alone into the deep woods with my shotgun, note-book and pencil, to study the habits and character of birds. And now, as often as spring returns, bringing with it the song of the robin, bluebird and the whip-poor-will, the old desire for the woods and the birds comes over me again. As often as the duties of my profession will allow, I gratify that desire; and although these ornithological rambles are not so frequent as they once were, yet even now the cry of the catbird, or the song of the brown thrush causes the blood to bound again through my veins, just as it did long years ago, when a barefoot boy I first saw the blue eggs of the one in the nest hidden in the briar patch, or counted the speckled eggs of the other as I peered into its curious nest hidden under the end of a rail on the corner of the old worm fence. Never shall I forget some of the impressions made upon my mind during these juvenile rambles. For example, I remember shooting the yellow-billed cuckoo (*Coccyzus americanus*.) To me it was then entirely a new bird, and I now remember distinctly how curiously I examined it; counting the feathers of the tail, noting the terminal spot upon each, the long pointed wings, and long curved bill, and the thought then came to my mind, "What an interesting book it would make, if some one would write a description of all the birds, and tell all about their food, their nesting and their habits." Poor, ignorant boy! What a treat would it have been had some friend placed in my hand Wilson's "American Ornithology," or Audubon's "Ornithological Biography."

But I have forgotten the object I had in view—that of taking you from the busy city, with its miles of sidewalk and monotonous stone or brick buildings, with me to the woods and the green fields. Billy is saddled and ready, while Pete, the old pointer dog, and Birdie, the little cocker spaniel, are both barking impatiently, so let us be off.

What is that bird with the long tail, the brownish back and light yellow abdomen in the old elm at the end of the lane? Listen to his harsh note, and see, there is his mate with something in her mouth. She is making a nest near here. Let us look for it, for they are hard to find. We need not look among the terminal bunches of leaves for a hang nest like that of the oriole, nor on the branches for a nest like that of the robin, or wood thrush, for the great crested flycatcher, builds its nest "in hollows in trees, stumps, or limbs." Its scientific name is *Myiarchus crinitus*. The eggs, four, five or six in number, are desposited on a bed composed of loose hay, feathers, hair of small quadrupeds, or the exuviæ of snakes. "Their ground color is a light buff, rather than cream color, over which are waving lines, marblings, markings, and dots of a brilliant purple, and others of a more obscure shading." (Baird, Brewer & Ridgway's North American Birds, Vol. II., p. 336.) "This flycatcher is tyrannical in a degree surpassing the kingbird itself," says Audubon, and he adds that they have frequent encounters among themselves in which they exhibit unrelenting fierceness and cruelty, sometimes even plucking a conquered rival. But see the female has gone into that hole on the underside of that big limb, full sixty feet from the ground, and perhaps some other day we may come with ropes and other contrivances to assist us in mounting to it, where we may obtain for our collection a set of their beautiful eggs; but now we will go on our journey.

Ah! there is a nest in the old thorn tree, about six feet from the ground. The reins are thrown over a stake and "Billy, stand there while we reconnoitre." That is the slender apology which the turtle dove calls her nest, a few coarse sticks laid together on the thorns in the fork, for a foundation, and lined with grasses. The cavity is not as deep as a saucer, and yet there is something there for that little bird-mother to love, and of which she is proud; for see, my hand is within a foot of her and yet she only eyes me curiously. Listen! we can almost hear her heart beat. Look at her beautiful eyes, and the lovely outline of form, her soft, blended plumage; but she is off, and pretending to be wounded, she goes fluttering through the bushes. That is what was once called instinct, but we have no time now to discuss the question whether it is instinct or intelligence, and, "Mother birdie, you cannot fool us now." Well do I remember, when a barefoot boy, I set down my basket of seed corn and gave chase to what I supposed was a wounded meadow lark (*Sturnella magna*); but such tricks won't win now; so, leaving our frightened bird to carry on her performance, as the lawyers say, *ex parte*, we will peep into her nest. One little red, downy dove and another just ready to break the shell! "Come back little birdie, we won't rob you of your treasures."

Listen! No such music as that ever fell on mortal ear, except in the deep tangled woods, under the shade of the great elms where sunlight seldom goes. That is the song of the wood thrush (*Turdus mustelinus*); but, lest you think me unduly enthusiastic over the song of a bird, let us recall Audubon's description of these notes. "Seldom," he says, "have I listened to the notes of this thrush, without feeling all that tranquillity of mind to which the secluded situation in which it delights, is so favorable. The thickest and darkest woods always appear to please it best. The borders of murmuring streamlets, overshadowed by the dense foliage of the lofty trees growing on the gentle declivities, amid which the sunbeams seldom penetrate, are its favorite resorts. There it is, kind reader, that the musical powers of this hermit of the woods must be heard to be fully appreciated and enjoyed. The song of the wood thrush, although composed of but few notes, is so powerful, distinct, clear and mellow, that it is impossible for any person to hear it without being struck by the effect which it produces upon the mind. I do not know to what instrumental sounds I can compare these notes, for I really know none so melodious and harmonical. They gradually rise in strength and then fall in gentle cadences, becoming so low as to be scarcely audible; like the emotions of the lover, who at one moment exults in the hope of possessing the object of his affections and the next pauses in suspense, doubtful of the result of all his efforts to please."

Such is the American Backwoodsman's glowing description of the song of the bird whose notes are now falling upon our ear. Doubtless he is singing to cheer the heart of his beloved, who is patiently sitting upon her nest somewhere near us. We know it is astride of a low limb, perhaps in the dogwood just beyond the brook. No, it is not there. Let us look in the tangled thicket away to the right. The brush is thick and apparently impenetrable, but by stooping we can get through, and when once in the middle we can easily see a nest if there is one there. Yes, there is a nest in the top of that low bush, supported partly by the bush and partly by the blackberry briars, but it is not that of the wood thrush, but of his cousin, the catbird (*Mimus carolinensis*). The scared mother has just left it and plunged through the thicket. Listen, there is her complaining note. The eggs are warm and fresh, and henceforth eggs and nest will occupy a place in our cabinet. As we deposit the eggs in our basket we think of the similarity of color in the eggs of this species and those of the robin (*Turdus migratorius*), the wood thrush and other members of the same family, except the brown thrush, and that this similarity extends even to those of the bluebird (*Sialia*).*

Carefully depositing the eggs of our catbird in the basket we are off again, wishing Mrs. Catbird better luck next time. Round and round we tramp, with both eyes wide open, but no nest of the wood thrush can we find.

So we mount Billy again and ride another mile, then tie and into the woods again. Birdie is giving tongue, as the sportsmen say, beyond the creek, but he is only after a gray rabbit (*Lepus sylvaticus*). See! there it goes skulking through the grass and weeds, crouched down almost to the ground. Old Pete looks at it as it passes, but too well trained to "chase fur" he only looks at us and wags his tail.

But a little gray bird arrests our attention as he sits upon the end of that old snag jutting out over the creek. That is the wood pewee (*Contopus virens*), busy getting his breakfast. See him turn his head from side to side as he watches for insects. Look at him through this field glass. See the expression of his eye, his erected crest. See him launch into the air, seize his prey, always returning to the same spot. He is small and not brilliantly colored, but he is a curious bird. His nest may be within twenty feet of us, on the jutting limb of that old oak, and his beloved little partner eyeing us curiously; but we will have a good time finding it. Of the nest of this bird, Audubon says: "Were it not that the bird generally discloses its situation, it would be difficult to discover it, for it is shallow, well saddled to the branch, and connected with it by an extension of the lichens forming its outer coat in such a manner as to induce a person seeing it to suppose it merely a swelling of the branch." [Ornith. Biog., Vol. II., p. 95].

So giving up the search without an effort, let us ramble on. Yonder is the cardinal grosbeak. Somewhere near us is his nest, for his song, that we heard but a moment ago, is hushed, and he now only utters a short alarm note at intervals as he watches us. Now, while crawling on our hands and knees in the brush on the hillside near the creek, directly overhead we spy a nest. It is about eight feet from the ground astride of a small elm that is bent over at the top. See the bird is on. We can only see her head, the underside of her bill and throat; but we know by the specks on the latter that she is the wood thrush; but she is off and away through the thick brush, before we have time to get a good look at her. The nest is too high for us to look into, the tree too slender to climb, so we carefully remove it, and what do we find? Three eggs of the wood thrush and one of the cowbird. This is the fourth time this spring that we have found nests containing the egg of the cowbird, viz.: one in the nest of the robin, one in the nest of the field sparrow (*Spizella pusilla*), with two eggs of the rightful owner; one in the nest of the wood thrush, with three eggs of the owner, and three in the nest of the cardinal grosbeak (?) with three eggs of the latter, and the present instance.

The three cowbird eggs were brought to me by a little boy, who said he found the six eggs in one nest. The nest he had destroyed; so I had no means of identifying the rightful owner, except by the eggs, which I believe to be those of the cardinal grosbeak. Had we known that the nest now before us contained an egg of the vagabond cowbird, we would not have taken it down, but allowed the wood thrush to incubate it, and by observation have determined whether birds as large as this thrush rear the young cowbird.

These eggs were all fresh, but the mother bird was carefully sitting on them, just as if the whole four were her own. Mr. Ord mentions two instances in which the wood thrush hatched the egg of the cowbird, and Mr. J. A. Allen saw in Western Iowa a female brown thrush (*Harporlynchus rufus*) feeding a nearly full grown cowbird. Dr. Brewer says this is an interesting fact, and the only evidence we now have that these birds are reared by birds of superior size. (Baird, Brewer & Ridgway's North Amer. Birds, Vol. II., p. 155). Our haste in the removal of this nest prevented the opportunity for making valuable observations upon this point, but it is too late now, and as we sit down on the sloping bank to number the nest and eggs, we fancied we could see the little female cowbird, with palpitating heart, hurriedly depositing her egg in the stranger nest, and the consternation of the thrushes when they found it.

Careful observers have noted these occurrences and described them in felicitous language. Audubon says: "When the female is about to deposit her eggs she is observed to leave her companions and perch upon a tree or fence, assuming an appearance of uneasiness. Her object is to observe other birds while engaged in constructing their nests. Should she not from this position discover a nest, she moves off and flies from tree to tree, until at length, having found a suitable repository for her egg, she waits her opportunity, drops it, flies off, and returns in exultation to her companions." (Ornith. Biog., Vol. I., pp. 495–496).

Dr. Elliott Coues describes the same performance in the following quaint and felicitous language: "It is interesting to observe the female cowbird ready to lay. She becomes disquieted; she betrays unwonted excitement, and ceases her busy search for food with her companions. At length she separates from the flock, and sallies forth to reconnoitre, anxiously indeed, for her case is urgent, and she has no home. How obtrusive is the sad analogy! She flies to some thicket or hedgerow, or other common resort of birds, where something teaches her—perhaps experience—nests will be found. Stealthily and in perfect silence she flits along, peering furtively, alternately elated or dejected, into the depths of the foliage. She espies a nest, but the owner's head peeps over the brim; and she must pass on. Now, however, comes her chance; there is the very nest she wishes, and no one at home. She disappears for a few minutes, and it is almost another bird that comes out of the bush. Her business done, and trouble over, she chuckles her self-gratulations, rustles her plumage to adjust it trimly, and flies back to her associates. They know what has happened, but are discreet enough to say nothing—charity is often no less wise than kind." (Birds of the Northwest, p. 185.)

Audubon says: "When the female returns and finds in her nest an egg which she immediately perceives to be different from her own, she leaves the nest and perches on a branch near it, returns and retires several times in succession, flies off, calling loudly for her mate, who soon makes his appearance, manifesting great anxiety at the distress of his spouse. They visit the nest together, retire from it, and continue chattering for a considerable time. Nevertheless, the obnoxious egg retains its position, the bird continues to deposit its eggs, and incubation takes place as usual." (Ornith. Biog., Vol. I., p. 497).

But leaving our wood thrush to console herself in her affliction over the loss of her eggs and nest, with the fact that the hated cowbird egg is gone too, let us pass on. Now hold on to my hand while we cross the slender log over the creek, and we will follow up the ravine in the wheatfield. It is skirted with bushes—just the place for birds' nests. Out from under that clump of bushes Pete scares a yellow-billed cuckoo (*Coccyzus americanus*), but no nest there. Further on in a little brush, on the margin of the ravine, we find the nest of a little sparrow, probably the black-throated bunting (*Euspiza americana*), but as it contains but a single egg we leave it. Its unusual position—about five feet from the ground—causes us to hesitate as to the species. There, in that clump of roses, is a nest of the brown thrush (*Harporhynchus rufus*), with a single half-grown young one in it, and beyond, in the forks of a small elm, about eight feet from the ground, we find the nest of the bluejay (*Cyanurus cristatus*), containing three eggs, all of which are numbered to correspond with the entries in our "Field Book," and we seek for other "spoils;" but we know by experience that it is useless to expect to find other nests very near that of the bluejay, because birds are careful to shun such a robber.

Trudging on up the ravine, Pete comes to a point on a turtle dove, she flushes, feigns to be wounded, and her nest is found about three feet from the ground in the forks of a little elm, on the bank of the ravine. It contains two fresh eggs, and, as the nest is an unusually good one for the dove, we number it among the ornithological specimens of our cabinet, and, while making the entries, we see a female black-throated bunting (*Euspiza americana*) slip off her nest and steal away amid the briers. The nest, within six feet of that of the dove, is about a foot from the ground, neatly made, lined with slender grasses, and supported by being built against a blackberry bush, and held in place by weeds or grasses. All the nests of this species which we have ever found have been up off the ground, although the books say that the usual nesting place is on the ground. It contains three pale blue eggs, about the size and shape of those of the bluebird (*S. sialis*), and, as these nests are hard to find, of course we take it. Down the fence, within fifty yards, in a little thorn, about fifteen inches from the ground, we find a beautiful nest of the field sparrow (*Spizella pusilla*), containing four eggs, about the size and shape of those of the chipping sparrow (*Spizella socialis*), but differing in color. These are white, with brown blotches about the larger end, while those of the chippy are pale green with similar dots. As we desire to take the bird, we leave the nest and eggs for another day.

Returning down the other side of the ravine we find the nest and four eggs of the catbird (*Mimus carolinensis*) in a thick clump of roses.

Crossing the wheatfield westward along an old, blown-down fence, we find the indigo bird (*Cyanospiza cyanea*), the black-throated bunting and the Maryland yellow throat (*Geothlypis trichas*), all of which, by their actions, probably have nests in the vicinity, but none of which are we able to find. Allow me to say to you that never yet have I had the good fortune to find the nest of the latter bird. The books all tell us where to look for them, in old brier patches, on the ground, and, judging from the number of birds of this species seen in a day's tramp, they must be plenty in my locality, yet, as above stated, I have never found a nest. By the way, all three of these birds are the victims of the cowbird's laziness. Audubon told Brewer a curious story of how the cowbird got its egg into the nest of the golden crowned thrush. This nest, built on the ground and so constructed as seemingly to preclude the possibility of the cow birds depositing its eggs in it, but Dr. Brewer says that Audubon told him that it was the custom of the cowbird to roll her egg along on the ground and thrust it into the nest with her head.

Leaving the upland, let us go now upon the river bottom as the bald, grassy bluffs just before us indicate that we ar-

* Audubon mentions many points of resemblance between the robin and bluebird, to which might be added the spotted breast of the young of the former, and similarity in the color of the eggs. All of these facts corroborate his judgment when he says that if he "were now engaged in forming an arrangement of the birds of our country he might conceive it proper to assign the bluebird a place among the thrushes."—Ornith. Biog., Vol. II., p. 86.

near there. Coming to a heavy undergrowth on the bank of the creek, just beyond where it enters the lowlands, again Billy is tied to the fence, and we plunge into the almost impenetrable brush. Just to the left, beyond that big log, is the object of our search. About twelve feet from the ground, in that slender box-elder, we see a nest, looking for all the world like an overgrown nest of the turtle dove, and above it we see the eye and the long bill of the mother bird. It is but a moment's work to mount the tree, and, as we do so, the flapping wings and long, dangling legs of the bird as she leaves show her to be the green heron (*Ardea virescens*). This we knew before, for already we have taken six eggs from this nest, four on the 7th day of May, two more on May 25, and to-day, June 4, we find three more, which we carefully number and place in our basket, for in this locality the nests of the green heron are not found every day. This makes nine eggs added to our collection from this one nest. They are of a beautiful pea-green color, about the same shape at either end, and are an inch and three-eighths in length and one and one-eighth in breadth. The nest we carefully leave, expecting to get a dozen more eggs from it at least, and then add both nest and bird to our collection; but counting eggs before they are laid is the next thing to counting chickens before they are hatched.

Again the notes of the wood thrush greet our ears, and again we search for the nest, and in doing so find two nests of the cardinal grosbeak in alder bushes. They are just completed, apparently, and their location is carefully noted in our field book, to be looked after in the future.

That long-tailed bird that just flitted by us is another yellow-billed cuckoo. Wilson says that the nest of this bird is usually fixed among the horizontal branches of an apple tree; sometimes in a solitary thorn crab, or cedar, in some retired part of the woods. The eggs are greenish blue. The only nest of this bird I ever found was in the top of a low tree overspread with a grape vine, and as many of these are near us forthwith we examine them hoping to find a nest of this species. See, there is something in the top of this one. We shake the vine that scrambles over the tree, and out bounds a fox squirrel (*S. magnicaudatus*). Striking flat on the ground, he bounds away, with Birdie at his heels, Pete refusing to "chase fur."

But now it is near night, and we have one other locality to visit. In the lowlands beyond the sandridge the redwing blackbirds (*Agelæus phœniceus*) are, or ought to be, nesting. Our faithful Billy soon carries us there, and the first sound that greets us is the *con-cur-ree-e-e* of the redwing, as he rises and falls with the wind on a swaying reed in the marsh. In a few minutes Billy carries us to the middle of the swamp, for the mud is not deep, and all about us are the nests attached by their sides to the weeds and grasses, and in them are the beautiful marbled eggs of this species. We take the first, containing four as pretty eggs as ever gladdened the eye of the oölogist, and then another, and another, until our arms are full. Riding ashore we deposit our treasures, and wading in, we collect more, until want of carrying space cries "hold, enough."

And now with our collecting basket packed with eggs, and another great basket full of nests, we start for home, fully satisfied with our day's work, and only regretting that we did not take our breech-loader with us, in which case some of the feathered beauties that complained so bitterly of our robbery would add their beauty to our case of birds. As we ride slowly home, thinking of loved ones, our heart is gladdened by the clear ringing "Bob White" of the quail from the neighboring wheatfields, and we remember that last summer, while attending the meeting of the American Association at Cincinnati, amid the noise of the city, we were suddenly greeted with the same "Bob White" in one of the busiest streets, when looking overhead we saw our familiar bird in a cage at a negro woman's window. But we are home again. Billy is fed, we have disposed of a fine spring chicken, our ornithological treasures are spread out on the table in my study. To-night will bring us "balmy sleep," and to-morrow we will go to our briefs and law points again, just as if we never inhaled the country air, laden with the perfume of clover blossoms, just as if our hearts had never been gladdened by the *coo-coo* of the rain crow or the song of the wood thrush.

FOOD FOR THE BIRDS.

IT is the "off season." Very off. Out of season for man, beast or bird. It is an exceptional season. Sitting here, in my little back-woods den, I see the snow come down, hour after hour, until past midnight. Then comes a dash of rain. It lasts half an hour. Next, a light, feathery snow, and a sudden drop that sends the thermometer to 10° below zero. Then seven successive mornings in which the mercury ranges from 4° to 11° below, and another snow-storm, ended by a sudden rain of two hours, topped off with a light snow. Two heavy falls of snow, each with a crust, and a light tracking snow on top.

It is not a bad winter for game. There is no ice-glaze on the trees to starve the grouse. No hound can run on this double crust, but hares can. The fox laughs at the hound; also the rabbit and hare. It is a rough season for beasts and birds of prey.

A horned owl, the Canada owl, came into my barn last night and collared my last game hen. I heard the row, and jumped out into two feet of snow in my stockings. As he was heavily sailing off with his prey I took a snap shot and he dropped the hen, but went off to the dense hemlocks to the eastward all the same. As we counted seven shotholes in the hen, we are afraid he will not come back.

A family of muskrats come into my orchard nightly on the chances of rotten apples. I do better by them. I have bushels of apples in the cellar that are slowly decaying. I take these out and empty them where rabbits and muskrats can easily and safely reach them. It amuses Mrs. N. and me to sit by the window and see them work, carrying off the worthless apples in the dim moonlight. Then we have chickadees, chickarees, bluejays and woodpeckers. We feed them faithfully, even the little blue-grey nuthatch. We hang liver, pluck, kidneys and suet in the trees, and we couple up ears of corn with twine and toss them into the tops of apple trees for the bluejays and chickarees. We are so far and a trifle lonely. A little amuses us. NESSMUK.

WELLSBORO, Pa.

AN ALBINO TEAL.—I saw an albino duck to-day—a green-winged teal. It was caught in a net with others and preserved alive. On Christmas Day it was sent as a present to the market-man, and is now confined in a cage—as tame and fearless as any domestic duck. It is not pure white, but a light ashen gray, save a dark spot on each wing.—W. N. B. (Denver, Col., Dec. 27, 1883).

CALIFORNIA QUAIL IN CONFINEMENT.

ABOUT a year ago there was presented to a lady here, a pair of California quail. By exercising a great deal of care, and paying the birds daily attention, she has kept them in perfect condition and plumage.

They originally came from New Mexico, being brought here by a gentleman on his homeward journey. Their traveling companions was a pair of mocking birds, who died shortly after their arrival, but the quail, seemingly liking the change in climate, flourished.

Their present home is a very large cage. Each morning the bottom is covered with fresh earth, in which the birds delight to bathe and wallow, much after the fashion of a chicken.

At first they were very wild, all attempts to quiet their fears proving ineffectual, but as time went by, they gradually lost their shyness, till now they are as gentle as they were wild at first. They are perfectly happy and contented, enjoying each other's society as much as they would in their natural haunts.

Their diet consists solely of wheat, with greens given every now and then, as a relish.

One peculiar feature regarding these birds is, that during their captivity they have never been seen to bathe in water, although the sand bath is a daily performance. They have made no effort to breed. NEMO (of Texas).

FRANKLIN, Jan. 26, 1884.

NOT A BEAR.—A Berwick, Pa., correspondent informs us that the telegraphic report (quoted in Mr. Litchfield's article two weeks ago), stating that a man had been killed by a bear near Retreat Station, Pa., was incorrect. The tracks were made by the bare feet of the man, and were at first supposed to have been the traces of a bear. This only illustrates the unreliability of the average newspaper bear stories. The rest of Mr. Litchfield's paper, however, commends itself as a plain, unvarnished tale of actual experiences, and may be accepted as a valuable addition to the authentic records of the grizzly's ways.

A FINE ROUGH-LEG.—It is rare that a really fine specimen of the black hawk variety of rough legged hawk (*Archibuteo lagopus sancti-johannis*) is captured. There is now a beautiful specimen of this fine bird in the shop of Mr. O. B. Deane, taxidermist, Springfield, Mass., that was taken at Northampton. There is hardly a feather on him of other color than pure black. The meadows about Northampton abound with this species more than of any other, the mottled variety I mean, and I think no less than fifty in various plumages have been taken during the past few years.—W. A. STEARNS.

MAINE WINTER BIRDS?—Vinalhaven, Me., Jan. 24.—I saw several robins yesterday; they were feeding on the snow among some tall grass. My curiosity prompted me to investigation, and on repairing to their dining room found they were feeding on small spiders. The spiders seemed to be lively, and I supposed they came out of the bunches of grass. Temperature at the time 42° F. Saw a crow blackbird about a week ago, also a golden-winged woodpecker. Is it not rare to see them in this far north country during such extreme cold weather?—MEDICUS II.

ALBINO RUFFED GROUSE.—Somerset, Pa.—Mr. George H. Tayman has received a full-grown, pure white, pink-eyed partridge, or pheasant, as they call it here. It was shot near Oakland, a summer resort on the Baltimore & Ohio Railroad, about thirty-five miles from this place.—W. V. T.

Camp Fire Flickerings.

"That reminds me."

97.

MANY, many years ago, I was a youngster and semi-attached to a command of our country's brave defenders, who did duty along the Gulf coast. I was fond of a gun, as what boy is not? Upon one occasion a small detachment of our command was encamped upon a small grassy island off the coast of Texas. It was plentifully stocked with deer and the easiest way to get them was for the hunter to bury himself in the sand and wait for them to come within range. One day I borrowed a gun from the engineer, and set out on a deer hunt by myself. Proceeding about three miles I sighted the game, picketed my horse, crept up as near as I could safely, scooped out a hole in the sand and covered myself up, all except head and arms, completing the "blind" by some tufts of grass I had plucked for the purpose. The deer were feeding quietly but approached my hiding place very slowly. The sand was warm and comfortable, and without a thought I dropped asleep. When I awoke, the sun was just going down and deer were feeding all around me at short range. Cautiously taking up the gun which lay in front of me, I got ready for a shot. Then I concluded that I might as well get two or three deer and waited for a string of them to get in line. At length a splendid buck and two does came in range and I cut loose.

When I again awoke the stars were shining. There was a peculiar feeling about my face, and upon putting up my hand I found it was caused by a thick covering of blood that flowed from a long deep gash in my forehead. Under my hand lay the butt of the gun stock. I dug myself out of the sand, and feeling around in the grass, I picked up a piece of gun barrel about eighteen inches long and split open through most of its length. Wearily making my way to where the horse had been left I found him gone and continued the pilgrimage on foot to the camp.

The next morning I laid the relics before the engineer with the remark, "Mr.——, here's your gun—two of them I might say." "Yes, yes, but what's the matter with it?" "That's just what I would like to know," I replied. He looked it over again and then asked, "Did you load it?" "No, sir; I supposed it was loaded when I borrowed it, and I still think it was." Then he called "Sam." An ebony chattel belonging to him and of about my own age responded. "Sam, did you load my gun?" "Ye-yes-yes, massa, me load 'm." "How did you load it?" "I-I-I jes put in a heapin' handful of powder, massa." "Then what?" "Then I jes put in four big bullets an' pounded 'em down with a iron ramrod as far as they'd go, but they wouldn't go clean down."

Then I went back to the scene of the hunt to gather up the slaughtered deer, but none were to be seen, nor was there either blood or hair to suggest a tragedy except around the sand hole where I had taken my nap, and they had never belonged to a deer. DODGERS.

GONE TO FLORIDA.

98.

Story 67 of "Camp-Fire Flickerings" reminds me of one I have either read or heard told. An elderly darkey, coming home one winter's evening with rather more benzine than ought to be carried at one load, took up his position before the old-fashioned fire-place. Putting the heel of one boot upon the toe of the other he proceeded to warm his feet and in so doing fell asleep. On awakening his first glance was directed to his boots. With a half drunken leer he said, "Stan' aside dhar sonny an' let yer poo' ole fodder warm hisself." Just then the top foot fell to the floor, and with a "tank ye chile, tank ye; I'll award ye," he resumed his nap. MILLARD.

CHEYENNE, Wyo.

99.

In your "Talk" you say that Cuvier, with a single bone could reconstruct, or at least said he could, the animal from which the bone was taken. That reminds me of an occurrence in this place a good many years ago. One day an alarm was sent out that a bear had crossed some open lots on the outskirts of the village. All the little, and big, and old and young hunters started out to hunt that bear. The stories which were told at the post-office and stores by the returned hunters in the evening were remarkable. None had seen the bear, but a good many came very near seeing it. At last Gus, the oldest hunter and greatest prevaricator in this region, came in. All turned to him to hear his report. "Well, Gus, did you get a shot at the bear?" was asked. "No, I did not get a shot at him, but I saw him and he weighed 400 pounds, I am sure!" he replied. "Why in the world didn't you shoot him?" they all asked. "Well, you see, I could only see a spot of him about the size of my hand, and I wanted to get a better view of him and he disappeared in the bushes. H.

JEFFERSON, Ohio.

Game Bag and Gun.

CHILL DAYS IN NORTH CAROLINA.

The wind it blew,
And then it snew,
And then it thew,
And then it friz.—*Anonymous.*

IT was my purpose on Friday, the 4th of January, 1884, to get my friend Teceel, with his two dogs, Nip and Joe (the latter a young black and tan setter, recently sent him by Calvin Pemberton, of Arkansaw), and go on the Monday following to the old Leak plantation, at the confluence of Little River with the Pee Dee, to pay our respects to the birds, which are abundant at that locality. I had written to my philosophic kinsman, Crickett, who lives on the west side of the river, to listen for our guns in the afternoon, and if he heard them to make his appearance that night at the hospitable house of a gentleman whose kindness and that of his family I have often enjoyed, and the next day we would go up to Toney's Ford, where he could get an opportunity to redeem his character, which was somewhat imperilled at that place on a former occasion. He had announced his purpose to join us, provided he could get some gunpowder and wads with which to load his shells. For his supplies of all kinds in this line he generally looks to me, and though his guardian ("ad litem" will do in this case) I find it somewhat difficult to provide for his adequate support, owing to his constant shooting at anything which can fly or run. My own shells were ready. I did not doubt that we should have several days of capital sport, for I knew game was plenty enough to afford it, and I had great confidence in the foresight of the weather prophets, who had assured us of an exceedingly mild winter.

On Saturday, the 5th, though the morning looked a little gloomy, I supposed it was only premonitory of a gentle rain, and that when Monday came the ground would be dry, and the sky clear—a bright sun making the atmosphere quite as pleasant as could be desired. So, taking a broken umbrella—the only one which the familiarity of my friends has left me—and leaving my overcoat at home, I collected my letters and went down to my office to transact such business as my position imposes upon me, and get all things ready, so as to enable me to be absent for several days. The wind was blowing somewhat keenly from the north, to be sure, but I took it that the temperature was not likely to become colder. I had not been seated at my desk very long before the gentleman who has charge of the construction of a stone dam for the mill came in and told me that he was apprehensive he should be obliged to stop work, for the snow was beginning to fall. I looked out and saw that the flakes were falling rapidly then upon the pond, "a moment white, then gone forever;" but the others lay and accumulated upon the ground. When I returned to my home the whole earth was covered with the white mantle for the depth of over an inch, and there was no abatement of the fury of the storm. The thermometer indicated a falling temperature, and next morning the mercury showed 1° above zero. This is rare with us. On the 20th of January, 1857, the register was 3° below, but never since then, until Sunday morning, the 6th of January, 1884, have we had so cold a time by several degrees. They who are accustomed to a more rigorous latitude must not smile at the shivering of one who complains when the mercury sinks in the tube only 30° below the freezing point. It is now too cold for any comfort.

[By the way, the phrase "cold comfort" used by King John when, because of a burning fever which raged within him, he wanted all the rivers of his kingdom to flow through him, "and comfort him with cold" (Act V. Scene VII.) has no very agreeable significance when "the winter thrusts his icy fingers in our maws."]

It was but little while after reaching my house, kicking the dry snow from my boots, entering the door and coming before a blazing fire, that I reached the conclusion that the proposed hunt for Bob White must be abandoned for a more congenial occasion. And thus that trip was not taken.

But about ten days before that time, Jim LeG. and I, with my son whom I call Dumble, with our dogs, and a young man named Rill Wobbins, who was going to visit his sister, drove up to the plantation before named, which is about fifteen miles northwest of the place where I live. I started with only 118 shells, supposing that Dumble would not want more than thirty-eight, and I could use the others

in my 16-bore hammerless. Soon after arriving we got up a splendid covey, out of which we bagged six. Crossing a lagoon and going down the river we started three or four others, and that night reached the house of our friend P. N. S. with twenty-eight birds. Next day we bagged over forty, exclusive of a woodduck and a woodcock, and would have done still better but for a rain which interfered with us. Owing to the fact that my dog Branch not only refused to hunt where I wanted him to, and when I was somewhat imperious in my commands actually ran from me. I saluted him with a load of No. 8 shot at less than forty yards. This expedited his retreating movements somewhat, and I did not have the pleasure of his company again. My friend Tom S. had a bitch, however, who fully supplied his place. This bitch was the same one I bought two years ago, because she was recommended as "a good retriever from land and water," and whose exploits in Chatham I faintly described in the FOREST AND STREAM. Well, she has improved since that day, and is now a very fair field dog.

I found Branch that night about feeding time, and he looked at me as if he feared I would shoot him again. His fears may not be groundless. That depends, very greatly, upon whether I am simple enough to give him a chance to try my patience, and if I am, whether he attempts to run off from me. If he does, he will get a load at very short range, and there will be a dog skin for somebody. I very much fear that I was badly fooled in that dog. I have another, a Laverack, about fourteen months old, and a black and tan pup, about five months old, presented to me by my friend A. H. Galloway, of Rockingham county. I trust these two may be made of some value. In the hands of a dog educator, no doubt, they would be made so. But I am hardly patient enough for that sort of business.

After this digression, I return to the subject to say, that the day following we returned home, and on the way called at the plantation where we five hunted. We soon had up some birds, and after I had shot awhile, I found that my shells were exhausted. Rill Wobbing had used my little Webley, and had fired more than thirty times. Tom S., however, who rarely hits a bird, though he is an adept on rabbits, generously tendered me the use of his 12-bore, and I was thus enabled to finish the hunt. We got thirty-one birds, and after taking ten each for ourselves, and giving Tom an equal number, got in our buggies and reached home that night. During the trip we killed over 100 birds, and left enough to stock several thousand acres of land.

If the weather and my business permit, I shall try that section again before the season expires. It may be that I shall have Mud along with me, with the gun he did not swap, and I shall have some amusement. He always affords it. If I can get him to accompany me, and then match Crickett against Teeel, we shall, at least, have a jolly time, and, besides, supply our hospitable friends with all the birds they can eat.

This has been written when the temperature was too low for any comfort, and after thawing the ink. My handwriting, which, my friends say, is none of the most legible, I apprehend you will find trouble in reading. WELLS.

JAN. 7, 1884.

THE GREAT LONE LAND.

ALTHOUGH I have perused the columns of your valuable and entertaining paper for nearly two years, I have failed to perceive any correspondence from what I consider the sportsman's "Eldorado," this great Canadian Northwest. It is universally conceded to be so by all sportsmen who have visited the magnificent grounds, shot ducks and prairie chickens, geese and swans, pelicans and wavys, partridges and rabbits by the score.

The city of Winnipeg is situated on the main line of the Canadian Pacific Railway, at the junction of the "Rushing Red" and the Assinaboine rivers, about 475 miles northwest of St. Paul, Minn., where there now stands a city of some thirty or forty thousand inhabitants. Many old settlers remember when the buffalo, a race now nearly extinct in the Canadian Northwest, roamed in countless hundreds; and even now, in close proximity to the city, their trails, on which they tramped single file during the troublesome and rebellious years of our forefathers, are still distinctly visible; and, should you visit the town of Calgary, on the Canadian Pacific Railway, some 800 miles west of Winnipeg, you will find the whitened and bleached bones of thousands of these once noble and numerous animals. By the way, Mr. S. L. Bedson, Warden of the Provincial Penitentiary, a splendid and ardent sportsman and genial companion, is in possession of a herd of some twenty-five pure, full-grown and domesticated buffalo, which were, I believe, raised from calves captured by some Indian hunters while on the chase. They run at large on the prairie, mingle readily, and cross with our domestic cattle.

The country here consists of level prairie, for the most part, to the west intersected here and there with bluffs of poplar and magnificent lakes; also, in some places, with marshes, which are fairly alive with fowl, while on the farms and prairies are found prairie chickens in abundance, and on the bluffs rabbits without number. In the north and east it is heavily wooded with fine spruce and tamarack. The country east is very rocky, and contains valuable gold and iron mines, also scenery which is, I believe, unrivalled. The beautiful Lake of the Woods, surrounding the pretty City of Rat Portage, which is fast becoming a popular summer resort, will, we may rest assured, not remain long in obscurity, and the day is not far distant when people will flock in thousands to this place, bathe on the magnificent beaches, camp on the thousand islands and enjoy the splendid trout, bass, pickerel and pike fishing of which it affords an abundance. In the south the country is not so heavily wooded as in the east, and at or near the Souris River rich coal mines are now being developed, while railway construction is pushed forward rapidly in order to open up the country.

It is said by sportsmen, who certainly should know, that the Souris affords the best prairie chicken, deer and elk hunting they ever found. It certainly must afford the former, for a friend of mine, who is a very poor shot, recently bagged over seventy chickens in one day's hunt. Judging from this feat I should say a good sportsman could bag an unlimited quantity in the same space of time. The Manitoba prairie chicken is somewhat similar in appearance, though larger and has coarser feathers, than the pinnated grouse. They are found in countless numbers on the bare prairie, rarely, if ever, seeking cover, not even in winter, when they burrow in the snow and are very wild to approach, but in warm weather they will permit you to approach within twenty feet of them, while they are concealed in the long grass, before rising. With a good setter they afford splendid sport during September, October and November, and in my next I shall give you an account of some of my hunting excursions after them and other kinds of game in the "Great Lone Land." OJIBWAY.

WINNIPEG, Manitoba.

"TRIAL BY JURY."

Editor Forest and Stream:

In your issue of Jan. 17, an article appears headed "Trial by Jury." A week or two before that, in a short article the statement was made that the game laws as they stand at present were better than any that were likely to be passed by the Legislature at Albany. In this I fully concur, and as the article "Trial by Jury" has undoubtedly been read by thousands of sportsmen in this State who recognize FOREST AND STREAM as the standard authority in all such matters, I would like, with your permission, to endeavor to show that even in these cases, one of which is an extreme one, the law afforded ample protection. I am not a "country lawyer," but I believe that light penalties rigidly enforced are better than very heavy ones. During Governor Cornell's administration, as many of your readers will remember, a new game law was passed by both the Assembly and Senate, and was vetoed by the Governor on the ground that, as the violation of the law was only a misdemeanor, the fines and punishment were excessive.

Now, in the case of Murdock, the plaintiff was compelled to sue for trespass as the season was open, but he should have accepted the defendant's offer or tender of $2 and costs, which could not have been less than $1 50, his lawyer's fee was at least $5, for even in the country they seldom forget to charge. There was also the loss of his day to appear for trial, probably $2 more, which would make $10.50, and had he went to trial without making the tender, he would have been compelled to pay costs to the amount of nearly $4 instead of $1.50. As I said before, the plaintiff should have accepted the offer to settle and quietly waited for the next customer to be served the same way. He thinks he accomplished nothing; he will find that he has done more toward the protection of game in his section than he imagines. He has shown to this man that with a jury, no doubt reluctant to impose a heavy fine on a laboring man, they were still compelled by duty and the obligation of their oath to fine him. There are few people who like to be brought into court with the certainty of being beaten. In regard to the clergyman's case it was very simple. Instead of suing him for trespass, he should have been arrested for killing game out of season, the case proven, and the jury, by their oaths, would have been compelled to convict him; the law prescribes the penalty, and if the magistrate refused to impose it, he too became liable. JOHN H. DAVIS.

EAST CHESTER, Jan. 20.

[In this case the plaintiff's purpose was to test the law, not to punish the defendant.]

WINTER NOTES FROM MICHIGAN.

POOR Bob White is having a hard row to hoe hereabouts this winter. Not only has the thermometer had a disgusting habit of diving down under the zero mark for the last month or so, but the poor little quail have also been obliged to hunt hard for feed. The corn crop was nearly a total failure last year in this State, so the birds are dependent for their food upon rag weed and the grain that can be picked up along the railroad tracks. The crust upon the snow is a blessing to the birds just now, enabling them to run across it in their search for rag weeds. As for the grain cars, wouldn't it be quite a scheme to start a fashion among the bad boys of boring a hole here and there in every grain car they came across? I wish some one would set the thing going. And I think the augers wouldn't cost the boys much if applied for at the right place.

A great many rabbits have been killed during the winter in this vicinity. It is to be regretted that the use of ferrets is becoming more and more common. How different this boggish way of hunting the rodents and that portrayed by "Mark" in FOREST AND STREAM of Jan. 17.

Reports come down from the pineries that wolves are remarkably numerous this season. In Roscommon county especially they appear to have increased in numbers over previous years. Talking of wolves "reminds me" of one we shot some six or eight years since. We were walking along a "tote" road, when of a sudden one young hound bristled up and snuffed the air excitedly. Thinking he scented a deer we let him go, whereupon he bounded off eagerly and fiercely, and disappeared over the side of a slight ravine. In less than two minutes we heard a crackling of brush and made ready to shoot the expected deer, but were surprised at the sight of our heroic hound coming back to us at full speed, tail between his legs, and twenty yards behind, following hard after, was a large gray wolf. And when the wolf saw us for the first time not fifty yards away, what a surprised and foolish-looking wolf he was. He dropped on his haunches with a hang-dog, chop-fallen expression, and seemed to say: "Well! What an ass I have made of myself." He seemed to know that he was done for, and sat still until a .50-caliber ball tumbled him over.

A new organization in Detroit is "The Michigan Gun Club and Game Protective Society." The officers are as follows: E. H. Gillman, President; Al. Henkel, Vice President; H. Dunnebeck, Treasurer; B. Worcester, Secretary; U. G. Chilvers, F. A. Woods, L. N. Hilsendegen and Herman Bowman, Directors.

The Island Club, of East Saginaw, are planning to build this spring a club house, to cost some $7,000, upon Herriman's Island, in Saginaw Bay.

Fishing through the ice is now at its height upon nearly all the waters of our State. At St. Clair Flats, St. Ignace and, in fact, at places innumerable, immense numbers of large pike and other varieties of the finny tribe are speared daily, and is exciting and comfortable sport, sheltered as most of the fishermen are in a warm, portable little house, which protects them from wind and cold while they play their decoys and spear their victims.

Mr. J. B. Horton, of St. Paul, Minn., has been in Detroit for a day or so showing up to sportsmen a new hammerless gun, invented by Burkhard and Novotny, of St. Paul. I saw the gun taken apart and critically examined by several gentlemen, and it really embraced some new principles that would seem to make it a strong candidate for popular favor. As yet but five or six have been made. Mr. Horton is now on his way East for the purpose of introducing the gun. DELTA.

DETROIT, Jan. 26

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

I have been very much interested in the ideas of my brother sportsmen in regard to a .40-90 repeater, and as I hunt large game four months in every year with a reasonable amount of success, I will give my opinion. I want a .40-90 repeater, Winchester preferred, if it can be made so that it will stand the work and be safe.

If after a thorough test, the manufacturers think a lever gun will not be safe, let them make a bolt repeater, with if possible, a set trigger, and I will be willing to pay what it is worth and try it. I use a .45-60 Winchester. It is a good gun, and I like it, but my hunting companion has got a .40-70, that he uses as a .40-75—pounds in 75 grains of powder. At from 75 to 125 yards I can kill as well as he can, but at 200 yards, more or less, I am not certain to get there, and he is; and I know it is not my fault, for I have tried his gun, and I can do as well as he can with it. But when it comes to game on the run, I can kill more than he can, because mine is a magazine and his is a single shot. Of course a .40-90 will be an experiment, but I am willing to help pay for it.

In regard to sights, I have tried pretty much all the new-fangled sights in the market, and have laid them all aside and gone back to plain open ones. I have half a dozen patent sights that are for sale cheap, for I shall never use them again.

I must say a few words in defense of the magazine guns, Winchester especially, in reply to "W. N. B.," in your issue of the 10th. I have carried a Winchester full of cartridges as a saddle gun since 1871. Ridden always with cartridges in it, and never had it to fail me but once, and then I had got a .45-caliber Colt's pistol cartridge into the chamber by accident. I have been in lots of tight places, and my Winchester has always pulled me through—and I have never had to climb a tree, just because the pump handle arrangement was so speedy. W. J. DIXON.

CIMARRON, Kansas.

I have been accused of heresy in some points relating to the rifle, and justly so if heresy be deliberately butting one's head against the stone wall of popular opinion. But heresy may well be pardoned if accompanied by no proselyting spirit. I think that not a line of mine can be found in which I have advised buying any particular rifle or in which I have said what was the best rifle. I have said what I preferred, but preferred only because I wanted immediate results and no cripples, thereby clearly implying that other rifles would be better for those who enjoy hunting up wounded game.

For several years I have had but one opinion as to the best hunting rifle, the best for general use and for average results over a long reach of time. And that opinion is this: That (for one who cares nothing about how many cripples he makes) the rapidity of fire of the repeater overbalances all its own defects and all the advantages of any other rifle.

Few who have read what I have heretofore written would suspect that nearly all the time I was writing against small-bores as being cruelly wasteful of game, I was using a repeater for small game, and sometimes (on account of its convenience) for deer. I have used only the Winchester models, but I presume all others made on that plan are as good or good enough. And looking back over the years that I have hunted with and without them, I have no hesitation in saying that, throwing the convenience of their cheap and easily obtainable ammunition, their strength and perfect working under the shabbiest treatment, and other points entirely out of consideration, their speed of fire—in the long run—overbalances all else. A few days, or even months of hunting may indicate other results, and many will disagree with me in this opinion. But, as Pindar well says, the rolling years are the wisest witnesses. A double rifle delivers its first two shots a trifle more quickly than the best repeater. But when I look down the long line that stretches back into the dawn of my rifle hunting, I can see hundreds of instances where the third and fourth shots were worth oh! so much, yet were just a second or two too late. And many, very many times, they would be too late even for a hammerless double rifle with automatic ejectors.

The ease of obtaining ammunition and the absence of all "traps" commends the Winchester to me more than any other point. I don't care for killing much game, as I kill nothing to sell or to throw away; but in traveling about as I do, it is a great relief to have no loading tools, powder, lead, ladle, etc., to carry with me.

The question of its accuracy is readily disposed of. I shall not discuss the muzzleloading question again. I expressly stated long ago that what I said about the muzzleloader was said only to induce makers to improve still further the breechloader. I think Maj. Merrill goes too far in saying that the muzzleloader is the best hunting rifle. He is driven to the other extreme by that absurd, unreasoning idolatry of the breechloader that denounces as an old fogy and a fool every one who does not drop on his knees and remain there in blind adoration. Game is now so wild that no slowly-loading rifle can be the best hunting rifle, even though it be a breechloader, much less if a muzzleloader.

But there is still another point that the most devout worshippers at the shrine of the breechloader have entirely overlooked. They have been too busy in abusing as old fogies, etc., men who used the breechloader all the time, and would use nothing else for hunting, yet had the wicked audacity to hunt for defects in the great idol in the hope that its maker might remedy them. That point is, that the Winchester, as now made, will do better average shooting than any muzzleloader will do, unless the muzzleloader is in the hands of one who is both careful and expert in loading it. The loading of a muzzleloader, so as to insure better work than the Winchester will now do with its factory ammunition, is one of the fine arts of shooting. Not only is much experiment necessary to find the exact diameter of bullet and the exact thickness and quality of patch—matters in which the rifle is more whimsical than an old granny—but care must be taken in loading at every shot. I can make any muzzleloader throw as many wild balls as any breechloader, yet any one not an expert, and a keen one at that, could watch me load it all day without discovering any difference in the loading. This is one reason why some muzzleloaders, taken from the corner where they have stood for years, to compete with the modern breechloader, have failed to show the accuracy that Major Merrill and others besides myself have ascribed to the muzzleloader in general. The "fitting" has been forgotten, and it would take a day or two of experiment to regain it. And perhaps even its importance has been forgotten or never was known.

The chances are, therefore, very great that the breechloader will excel the muzzleloader in ordinary hands. And

as nearly all the hands into which the hunting rifle ever finds its way are extremely ordinary (in respect to care and skill in such matters), the question of the superiority of the breechloader even for accuracy seems settled in its favor.

While on this subject I will give my method of getting muzzleloading accuracy from a breechloader, without using a ramrod, so that those, who, like Major Merrill and myself, admire supreme accuracy, may not feel that a screw breech pin is essential. This may not work with all rifles, but in those in which I have tried it the shooting is absolutely perfect.

Take a new and clean shell and cut a hole through the rear; but leaving the rim intact so that it can be readily extracted. Into the muzzle of this empty shell patch and insert any ball, round or long, just as you would into the muzzle of a muzzleloader, and put it into the gun. Then make a small ramrod half an inch or so longer than the shell, having a shoulder that will not allow it to pass beyond the mouth of the shell. With this ramrod push the bullet out of the shell into the grooves. Then pull out the shell and insert one loaded with powder and wad. If properly done this leaves ball and patch in exactly the same condition as if pushed down from the muzzle and left in the grooves, the sole cause of the muzzleloader's accuracy. You need have no fears of "air space" as it would in any event be too trifling for injury. The same care in fitting ball and patch must be observed here that is necessary for any muzzleloader, and if the powder is forming dry hard dirt, the lower part of the grooves should be wiped for two or three inches. In this way a rifle may be loaded more quickly than with a ramrod, and it can be done in the field whenever there is no haste. More powder may also in this way be used, and by pushing the ball still further into the barrel and inserting a paper cartridge of powder in front of the shell, express charges of any desired size may be speedily loaded.

The safety of repeaters I judge of as of the safety of all other guns. I never heard of an accident with any repeater that must be closed tight before it can be fired, as the later models of the Winchester must be. Excessive recoil might explode a cartridge in the magazine, but there need be no such recoil if we can only get clear of the idea that a rifle needs a bullet at least an inch long. It is length of lead that makes recoil. The repeaters have, no doubt, been tested at the factory with vastly heavier charges than they are ever called upon to stand, and if the danger were at all real we should before this have been furnished with some positive proof of it. Any kind of rifle is liable to burst. Within a mile of where I am writing a Remington rifle with a factory cartridge burst, a few years since, in the hands of one of my friends, blowing the barrel to pieces at the breech and nearly taking his head off. The rifle can be seen to-day in San Diego. There is no absolute safety with any kind of a gun light enough to fire from the shoulder. Judging from the number of repeaters in use, the length of time they have been in use and the trifling number of accidents we can hear of, I do not see any evidence that the action is not as safe as that of any of our double rifles or shotguns. Undoubtedly the Sharps action is stronger, but if the Winchester is strong enough it is better. It may be said that in a gun nothing is strong enough if it can be stronger. If you say—just as well be stronger—I agree. But no one prefers Sharps action for a shotgun because its additional safety is handicapped with clumsiness. We all prefer a weaker action because we deem it strong enough and much neater. If the Winchester could just as easily be made stronger I would prefer it so. But if additional clumsiness is to be the price of the extra safety, then I say it is now strong enough; by strong enough I mean for short bullets. I once had an old musket barrel that I tried to burst by increasing the powder charge. Even four ounces of powder behind an ounce of lead failed to shake it. Then I tried four bullets with about half an ounce of powder, and I never found anything but the forward end of the barrel. I have shot a double charge of powder in both the Winchester express and .45-60—loading as above described—and am not in the least afraid of them. With twice the weight of lead in them I should be shy of even 100 grains of powder. Five hundred grains of lead makes a very long bullet for a .40-caliber, and is about equal to five round bullet of the same caliber. A round ball in a 16-bore shotgun corresponds.

In a 16-bore shotgun the round ball weighs the same as an ounce of shot. Five times that amount of shot would soon use up the gun, even with a small charge of powder, and with a heavy charge would be apt to burst it. It is not probable that such a gun of ten pounds weight or under would be safe with five ounces of shot, with one-fourth of an ounce of powder behind it. And it is quite certain that no shoulder could endure it. This is a powder and lead proportion of only one to twenty and yet there is too much powder. And comparing it with other loads, we may find that the strain upon the gun follows increase of lead in more than geometrical ratio.

It is true that the rifle is much stronger than the shotgun. But it is no less true that whatever element of danger there may be is increased in almost the same proportion by increase of length in the ball.

There are other reasons, however, why I think the proposed 500-grain ball too heavy.

First—It will be entirely too slow and cannot be given a high velocity.

Second—It may give such recoil as to cause irregularity of shooting as the balance of the gun becomes changed by emptying the magazine.

The evils of low velocity are generally unnoticed except by trial. Take a Winchester .44-40-200, and sight it with globe sights to the center of an inch bullseye at 30 yards. Then fire it with the same sight at 100 yards and you will find the ball somewhere about nine inches below the mark. With such a rifle how much small game can you hit even between 50 and 150 yards without knowing its distance and changing the sighting accordingly? And if the variation will bother one on small game, why not on big game, when it is necessary to hit it in exact spots with solid balls, and always advisable to do so with any expansive ball? Suppose now the fall of nine inches at 100 yards could, by increase of speed in the ball, be reduced to two inches. Do you see any greater improvement that could be made in the rifle?

The alteration of the ball's course by recoil is unsuspected by many. I treated this question thoroughly in these columns some six years ago. Suffice it now to say that if there be any considerable recoil about the rifle the ball will not leave it on the line of the axis of the bore formed at the time of pulling the trigger. It will be thrown off to one side in double rifles, and downward generally in single rifles—always downward if the barrel be long. In good rifles this deflection by recoil is so regular that the accuracy is not impaired in the least, although the rifle may be pointed so far off the mark that you cannot see it by looking through the bore when aimed for firing. It is scarcely necessary to add that where recoil is sufficient to require the axis of the bore to be turned off the mark—as would almost certainly be the case in a .40-90-500 of ordinary weight and length—a change in the balance of the gun from shot to shot might cause irregular deflection of the bullet. T. S. VAN DYKE.

CALIFORNIA.

Editor Forest and Stream:

I notice a correspondent in your issue of Dec. 27, advocates a 12-bore rifle for shooting grizzly bears. In India, double rifles of this caliber are very much used for dangerous game, though lately the .577-caliber express, a very powerful weapon of about the same weight, has come into favor, and has to a great extent superseded the lighter 12-bores, having a greater muzzle velocity and flatter trajectory, with great penetration and smashing power when used with solid bullets. Its charge varies from five to seven drams, and the usual hollow-fronted ball is 480 grains, but some are 50 or 60 grains heavier. The usual weight of the rifle is from 10 to 12 pounds.

The 12-bores built during the last few years, being mostly intended as special rifles for use against very dangerous game, have been made as powerful as this caliber and the powers of endurance of the sportsmen will allow, and carry from six to eight drams powder with a spherical ball. They weigh from 11 to 13 pounds, and if fitted with anti-recoil heel-plates, their recoil is not inconvenient. They can also take a short blunt-pointed conical bullet, which is generally of hardened lead when great penetration is required, as in the case of tough-skinned or heavy-boned animals, but as this ball is heavier than the spherical, a little less powder has to be used. Explosive shells are also sometimes used; a bullet of this caliber can take a good charge of explosive powder, which is generally composed of chlorate of potash and sulphate of antimony in equal parts by weight, the ingredients being ground into powder separately and mixed dry, a little at time, with the feather of a quill on a clean plate or piece of glass. Explosive bullets loaded with this mixture are perfectly safe to carry about and will stand rough handling without danger. Any hollow-pointed bullet can be made explosive by being filled with this mixture, the mouth being closed with wax.

Another variety of explosive bullet which carries a heavier explosive charge, is used in India; it carries the explosive in a copper core, which is held in position in the mold, on the bullet being cast, by the plunger, the withdrawal of which leaves a hole by which the explosive can be introduced—this hole is closed with wax or a shot pellet jammed in. Bottle-shaped cores are used for conical bullets, and spherical cores for spherical bullets, which are generally used with smooth-bore shotguns.

Opinion varies a good deal among Indian sportsmen as to the efficacy of these explosive balls. They are apt to explode at or near the surface of an animal's body or on a bone just under the skin, where they do not, of course, prove fatal, but when they penetrate well before exploding, they are very deadly.

Your correspondent's remark as to the incorrect sighting of English express rifles is very true, though it does not apply to the rifles turned out by the best makers. The high shooting of some English rifles at medium sporting ranges, though no doubt sometimes caused by an attempt to obtain an apparently long flat trajectory, is also due to the fact that some makers sight their rifles for the aim to be taken with the bead of the fore sight below the object instead of on it. This can be remedied by cutting the notch of the back sight deeper or by having the fore sight raised. These points should be attended to in ordering a rifle. Another very common fault of double rifles of the cheaper makes is that the two barrels do not shoot exactly alike with the same sight, one sometimes throws higher or lower than the other, and this is a very bad fault. Sometimes the shots from the two barrels cross one another, the right barrel usually throwing to the left and the left barrel to the right of the object fired at; this is not such a grave fault, but rifles can be made to shoot exactly alike with both barrels at all sporting ranges if enough trouble is taken by the makers in adjusting the barrels. This putting together the barrels correctly takes time and labor, and is the chief reason for the great cost of good double rifles. Double rifles should have back action locks; bar locks require the action to be much cut away and weakened to allow the main spring to be fitted. For heavy charges a double grip lever under the guard, with some good kind of top fastening in addition, is the best; the strain on the breech of a double rifle is much greater than in a shotgun. There is no doubt that a good double large bore rifle is the best weapon yet known for large and dangerous game.

BENGAL SEPOY.

LONDON, England.

Editor Forest and Stream:

I can readily understand why "W. N. B." should have such a prejudice against the present spiral spring magazine arms, or those arms with a magazine that permits the point of one bullet to rest against the primer of the one next in front. His experience is but the repetition of many others with the addition of frequent premature explosions caused by the point of the bullet striking the primer in front.

While seeking an effective arm, we should not lose sight of the fact that the first thing to be considered in a repeating arm is the safety of the magazine. It should be so constructed that the points of the bullets cannot strike the primer of the cartridge in front, either from the recoil or jostling on horseback. Unless your magazine is so constructed you are in danger from premature explosions; also the points of the bullets are so jammed that it is not possible to make a target with them, and in this jammed condition are liable to stop the working of the arm by sticking the chamber or corner block

There is but one repeating arm that embodies all the points required in a safe repeater, and that is the Chaffee-Reece repeating arm, which is now being manufactured at the National Armory, Springfield, Mass., by the Government for trial by the troops in the field. This is a .45-70-500, and has successfully passed through all the trials and tests that could be invented by an ingenious board of officers. The magazine of this arm is so constructed that each cartridge is held separate from the other by notched bars, and so locked that it is impossible for one cartridge to strike against the one in front of it from any cause whatever. This not only makes the arm safe but it also preserves the shape of the bullet and renders it suitable for target practice. If the zinc-pointed bullet suggested by Gen. Jacobs, of the Honorable East India Company's service, should be called into use, of all the magazine guns now before the public the Chaffee-Reece would be the only one that could safely use them.

The great objection to a .40-90 repeater is the length of cartridge it would require. A .40-caliber straight shell with 90 grains powder and a bullet crimped in, as in the Government cartridge, would be 3.40 inches in length or .52 inch longer than the entire length of the Government cartridge; the front end of the bullet projecting .60 inch beyond the end of the shell would give us a cartridge 4 inches long, which would be 1.12 inches longer than the Goverment cartridge.

This cartridge could be made shorter by the use of a bottle-shaped shell; but this is a thing of the past, it having been tried by the Government and long-range shooters and discarded; the straight shell is better for accurate shooting.

A repeating arm with the lever system for the use of the Government .45-caliber cartridge 2.56 inches long, required the receiver to be about 10 inches long. To use the .40-90 cartridge would add 1.40 inches to the length of cartridge, which of necessity would increase the length of the receiver, which would look to be about as long as the barrel, also requiring the lever to describe two-thirds of a circle to extract the shell and place a new cartridge in the chamber.

The change to a .40-90 repeater seems to have been suggested for the purpose of getting greater range and penetration. For the benefit of those interested in rifle shooting I desire to say that a .45-caliber 500-grain bullet with a charge of 80 grains of Hazard's F. G. powder, shot from a 32-inch barrel, will reach a target at a distance of 3,500 yards and kill. This is the record made by R. T. Hare, Government expert, while experimenting at Sandy Hook, N. J., to determine the extreme range of the Springfield and Martini-Henry rifles and carbines with their ammunition. The extreme range of the Martini-Henry rifle was found to be 3,200 yards; at a distance of 3,500 yards the 500-grain bullet went through the target, which was made of three thicknesses of one-inch spruce boards, and down into the sand on the beach eight inches. Is this not range and penetration enough to satisfy any one? To shoot this distance the angle of elevation was about 22°, the height of trajectory for the Martini-Henry at a distance of 3,200 yards with its 480-grain bullet was 2,700 feet, and for the Government 500-grain bullet at 3,500 yards about 2,800 feet.

A repeating or magazine arm is not only required to be a rapid repeater, but it must be a rapid single-shooter, admitting that the lever repeating magazine guns are rapid repeaters. At the same time we must admit that they are very slow single-shooters. The bolt magazine guns are the fastest single-shooters and they are very rapid repeaters, the Chaffee-Reece being able to fire eight shots in five seconds. The bolt system is conceded to be much stronger than the lever system. The repeating arm that is bound to win is the one that has a safe magazine. J.

SPRINGFIELD, Ill.

Editor Forest and Stream:

I concur fully with your correspondent "W. N. B." in his views respecting the relative merits of the magazine and hand breech-loading rifle. The fewer the parts and less intricate the apparatus, whether it be a watch or a gun, the less liable it is to derangement. Safety, efficiency and simplicity constitute, in my opinion, the chief essentials in the mechanism of the arrangement for loading at the breech, and these I think are fully embraced in the Remington rifle. But in the communications which have so far appeared upon the subject of sporting rifles, the fact appears to be ignored, if not entirely lost sight of, that the grizzly bear and Apache Indians are not the game of this country. There are few sportsmen who have either the opportunity or inclination to indulge in an encounter with that kind of game, and for strictly sporting purposes the necessity of an arm of large caliber and extreme range with heavy charges of powder and lead may be regarded as exceptional. The essentials for convenient loading at the breech being attained, absolute reliability in the accurate shooting at what, in the present target practice is called short range, must be afforded to give any value whatever to the improved rifle over the muzzle-loader for ordinary sporting purposes.

Thirty years ago with a muzzle-loading rifle made by James Doherty, of Petersburg, Va., I placed twelve shots successively in a one-inch bullseye at eighty yards with a standing rest, the shots forming one hole vertically across the center. At 200 yards, with a reclining rest, I could put all of my shots in a two-inch bullseye. This was the extreme limit in distance of my target practice at that day. The twist in this rifle increased from the breech to the muzzle; the bore was about .38-caliber and was loaded with a round ball and linen patch. From 200 to 300 yards every ball ought to be shot inside of a 2-inch circle. A hunter of tact can always get within that distance of his game, and a round ball of .38-caliber is ample, if put in the right place, to bring down the hardiest buck. Has the increasing twist been applied to any of our breech-loaders for imparting the rotary motion gradually to the ball as it leaves the gun, and has the round ball been tried for distances up to 300 yards in breech-loading rifles? There would be less powder required, less concussion and greater steadiness would ensue, and I think less liability to deflection with the round than with the elongated ball, it being more likely to preserve its rotary motion around the axis of its direction. I am making some experiments with a Remington .32-caliber to test the relative accuracy of the round and elongated ball at from one to 200 yards, and would like to know if any conclusive facts in this respect, and in regard to the adaptation of the increasing twist to breechloaders, have been already gathered by our rifle make and rifle shots. H. H.

PENNSACOLA, Fla.

KANSAS.—Independence, Jan. 20.—*Editor Forest and Stream:* Having been a constant reader of your valuable paper since the first of 1876, I thought I might venture to write you a word of the sporting prospects here. Chickens or pinnated grouse are here in some numbers, but the greedy market hunter and the prairie fires have very much lessened their numbers, though good shooting may be had in season within a day's drive of our town. "Bob Whites" are in abundance on every hand. I have known a party of two to go out for a three days' shoot and come in with 208 birds and 9 chickens. Bags of 40 and 50 birds are quite frequent among the practical shooters. The great opportunity here for sport is south, in the Indian Nation, where there is abundance of deer and turkey, besides small game, but the Indian is getting quite jealous of having his game destroyed, so that the sportsman is liable to get into trouble unless he has native friends with him.—JUDGE. ["Judge" can hardly blame the Indians for resenting the encroachment of game trespassers on their reservation.]

NEW ORLEANS, Jan. 22.—Last night a meeting of the hunters who are to participate in the annual hunt for a game dinner was held at the store of Cardona & Hunt, for the purpose of selecting teams for the shoot. Messrs. E. T. Manning and A. M. Aucoin were elected captains, and the teams selected are as follows: No. 1—Captain A. M. Aucoin, F. A. Cousin, Paul Chaudet, J. V. Guillotte, Martin Huber, Louis Cook, Emile Dupre, John Stumpf, J. V. Leveque, George Lessasier, Rene Sarrazin, E. Wash. Vinet, Albert P. Noll, Dr. W. H. Watkins, Walter Saxon, William A. Davis, Wm. Dupre. No. 2—Captain E. T. Manning, John K. Renaud, N. D. Wallace, Richard Frotscher, A. E. Livaudais, A. S. Ranlett, C. H. Wood, C. J. Lewis, A. Cardona, Jr., J. H. Maury, W. T. Coleman, Captain Octave F. Vallette, Thos. McGinty, J. C. Lyons, Jr., Wallace Wood, John R. Kent, Chris. Collins. The list of names of those to participate in the hunt will be kept open until Thursday next, and those who present themselves will be chosen by the captains of the teams. The hunt will take place on Saturday and Sunday, the 26th and 27th, and the annual dinner on Tuesday, the 29th. The points to govern the hunt are as follows: Robins, 1; doves, 2; snipe, 8; quail, 10; mallard duck, 15; other ducks, 10; squirrels, 10; rabbits, 10; hawks or owls, 25; woodcock, 25; prairie chickens, 30; geese, 50; turkeys, 250; deer, 500; bear, 1,000.

BROOKLYN, Jan. 21.—*Editor Forest and Stream:* I have been a reader of your paper for the past eight years, and have always read with great interest any communications on the subject of hunting rifles. I never had the time to go where I could hunt large game, but have had some very fine sport with squirrels, using a .22-caliber Ballard, but it is a little too small for foxes or woodchucks. I think it is very good sport to wait for a fox that the dogs have started and shoot at him with a rifle as he goes by, so when I read in your issue of Jan. 3 that a rifle of .25-caliber was going to be put on the market I made up my mind to have one. I also spoke to a friend and he told me to let him know when it was ready and he would go and get one with me. Now I would like to suggest one thing to the makers, and that is that they put a ramrod under the barrel. I do not think it would cost much more, and I for one would be willing to pay for it. Then we could put a primed shell in the gun and load from the muzzle if we wanted to, and it would be so handy for a cleaning rod. Let us hear from others.—MORO.

PENNSYLVANIA MARKET.—Williamsport, Pa., Jan. 21.—*Editor Forest and Stream:* There exists in this county, Lycoming, a noted organization called the Lycoming County Sportsmen's Association, which was established for the protection of game. Last Saturday I noticed hanging on poles in the market, large bunches of quail, grouse and rabbits, which were evidently killed after the first of January. This is certainly a flagrant violation of the law of this State, so far as it relates to the capture and sale of wild game. Do you know whether this town has any game wardens? If such officers are to be found here they should certainly be stirred to a performance of their duty, since the society referred to above seems to be dead to the interests of those matters which most pertain to it. I saw a jack rabbit the other day, sent to a gentleman here in town, from Akron, Ohio. Does this species of rabbits abound so far east as Ohio? —W. K. M. [We do not know whether Williamsport has a game warden or not, but possibly by inquiry our correspondent could find out. The jack rabbit is not found in Ohio.]

THAT IOWA SIDE-HUNT.—Decorah, Ia., Jan. 21.—*Editor Forest and Stream:* I see an account in your columns of a side-hunt, held at Rippey, Ia., Dec. 20. "Wild Doc" complains of game being scarce around there. No wonder, with such law-abiding citizens, or sportsmen, as they may call themselves. If they were to look at the game laws of the State they would find that it is unlawful to shoot prairie chickens after Dec. 1, and yet on Dec. 28 "Wild Doc" and his party of twenty-one men on each side go out to shoot them; and, worse still, he proposes to have the shoot over again in the spring, at which time all the birds will have mated. It seems strange, when we have game laws in the State, that "Wild Doc" and his party cannot be restrained from breaking them. He not only breaks them, but openly publishes the account afterward. Where Rippey is I do not know, but only wish it were near this part of the State, as then I guarantee we would make it hot for "Wild Doc" and his party.—FAIR PLAY.

BLACK BRANT ON THE ATLANTIC COAST.—I have learned of what I suppose to have been two black brant (*Brenta nigricans*) that were killed in Tuckerton Bay this winter. It was here that Cassin secured two of the specimens he writes about when he describes the variety. I did not learn the name of the gunner who shot them, but imagine he was a Parkertown bayman. I hear also that a more than usual number of white-fronted geese (*Anser albifrons*) have been seen passing over these waters, but none stopped in them. Will not Mr. Van Dyke who wrote of what he thought, and possibly might have been, black brant on the Pacific side, let us hear from him in reference to what he has further learned of this bird, and if possible forward the promised specimen. Brant have been very plentiful on our Atlantic coast this year, but each year they seem to be getting wilder and wilder and more difficult to stool. —HOMO.

RABBIT SHOOTING WITH PISTOLS.—My experience in revolver shooting will cover a space of fifteen years and I never could find one in all that time that wouldn't overshoot at short range, and to remedy that have had to take out the front sight and replace it with a higher one. Why wouldn't it be better for both the manufacturer and the buyer if the pistols were sighted so that if a man wanted to hit anything from ten to fifteen yards off he would not have to aim from six to twelve inches under. In order to do good shooting with a pistol it has to be sighted so that the object to be hit can be directly aimed at.—W. F. C. (Saco, Me.)

FELIS DOMESTICUS ONCE MORE.—*P. S.*—I neglected to write the P. S. to my Philadelphia cat story last week, just as my friend neglected to tell it to me until I had expressed my surprise. Upon careful investigation he found that the Tom which he had killed (cutting off his tail in the process) and buried was not his own, but that of his neighbor. His own cat had been away on a visit for two weeks and so had escaped a tragic end. Now let "Reignolds" stand up and tell the "postscript" to his story; we all know there is one. —M.

HE CAN CALL WOODCOCK.—Dyersburg, Tenn., Jan. 22.—Robins have made their appearance in considerable numbers at this place; very few snipe yet. Nat Tarrant, the sheriff of this county, and Rome Ferrell killed 130 quail in one day recently. They had only one dog to shot over, and one man to carry game. Mr. Tarrant is the best shot and best hunter in the State, and can imitate the notes of any bird, or the barking of squirrels, etc., etc. He tells me that he has caught young woodcock on the snow in March, and he can imitate the occasional note of a woodcock, or the guttural sound that is produced by them in spring. He has watched them by the hour in the plowed ground in the early morning or late evening, and is standard authority in this section on hunting and fishing. He has caught 'possums lately that dressed fifteen pounds.—T. L. W.

COWEENS IN THE NIAGARA.—Buffalo, Jan. 20.—Large numbers of cowcens and whistlers are wintering with us on Niagara River, and they afford considerable sport to those hardy enough to endure the cold. The fall duck shooting has been very good, being the best we have had for several years. We are waiting patiently for the reappearance of the ducks in the spring. Several days ago I noticed a bevy of a dozen or more quail across the river, the first I have ever seen in this vicinity. The State Sportsmen's Association will hold its next annual meeting in this city. The Audubon Club have the arrangements in charge, and it is expected that some of the best shots in the State will be present. The club will hold a meeting Feb. 1.—W. A. A.

RAPID MANEUVERING.—Lieut.-Col. Mabee and I were beating through very thick woods, being about 200 yards apart, but out of sight of each other, and working the Colonel's setter between us, when suddenly, with a whirl and a buzz like a St. Catharine's wheel, I received a smart blow on the forehead, knocking my hat off and causing me to stagger back a pace or so, more with astonishment than concussion. I did not wait long to take in the situation and circumstance, knowing full well that a partridge or "ruffed grouse" had flown in my face and was again "winging his way." I turned, fired and killed the bird before it had time to disappear even in those thick woods. Rather peculiar, but—VERAX (Port Rowan).

WHITE-BREASTED BEARS.—Fort Dodge, Jan. 18, 1884.—*Editor Forest and Stream:* In your issue of Jan. 10 you ask for further hints as regards the belief among hunters that a black bear with a white spot on the breast is more dangerous than those not having this mark. I once had an old hunter in Florida tell me that a bear with a white spot on the breast was the most dangerous of all the wild animals on the peninsula, the panther not excepted. I have also heard this belief spoken of among old hunters in parts of New Jersey.—H. E.

A FLORIDA WEST COAST RESORT.—Manchester, N. H., Jan. 23.—*Editor Forest and Stream:* If "G. G. F.," Cincinnati, desires good hunting and fishing, plain living, no "fuss and feathers," he can get it at Crystal River, Hernando county, reached by small vessels from Cedar Keys, which make trips two or three times a week. He could probably get boarded at E. R. Kings, a farmer, with whom I boarded some years ago.—A. B. D.

KANSAS—Independence.—We have very little of my favorite sport here (that is fishing), though we have some bass of the green or striped kind, here called black bass. I have caught some nice strings of them in the past season, running in weight from ½ to 4 pounds. We catch a good many catfish, some eels, and the market fishermen with their nets catch an abundance of buffalo, and others of the sucker family.—JUDGE.

REBOUNDING LOCKS.—Long Island City, N. Y., Jan. 24. —*Editor Forest and Stream:* After reading the communication in last week's issue, I tried the locks of my gun, a 12-gauge, bought a year ago, and found that if I raised the hammers almost to full cock and let them go they would sometimes strike and explode the caps. The hammers would not strike the plunger unless at as near half-cock as it would go.—TIP.

Sea and River Fishing.

BIG LAND-LOCKED SALMON.

ONE morning early in December as Messrs. J. L. Mayberry and W. P. Farr were hunting partridges in the woods bordering upon Rodgers's Brook, in Bridgton, Me., they met with the material for a fish story of unusual interest. Just above the first rapids in the stream, and but a few rods from where it flows into Long Lake, they found a "black spot" trout, or land-locked salmon. The fish, left there by a sudden fall in the water, had evidently been dead for several hours, and was only partly covered by the water, which was here but a few inches deep. The gentlemen took the specimen and carried it to the residence of Fish Guardian J. Mead. It was found that this fish measured thirty-eight inches in length, nine in depth, and weighed twenty-five pounds—proportions that considerably exceed those of any specimen of which there is an authentic account, at least in these waters. The hook on the under jaw of this fish was fully an inch and a half in length, and strong and hooked enough so that the fish was hung upon a stake by it and carried to Mr. Mead's, a distance of nearly a mile. This hook, which terminates the lower jaw, and, in this specimen, passed into and through an opening in the upper jaw, it is said, is fully developed only at breeding time. It then acts as an effectual muzzle, and prevents the wholesale slaughter which would be sure to result from the fierce battles between the males of this and every member of the trout family. The celebrated eleven-pound "red-spotted" trout in the possession of Prof. Baird, of the Smithsonian Institution, has this hooked jaw in a very marked degree. It was taken off the spawning beds at Nupper Dam, Androscoggin Lake, the last day of September, 1880, and is the largest specimen on record of that species of trout, the *Salmo fontinalis*.

Mr. Mead has in his possession an ancient sign which is a representation of a land-locked salmon, and is stated to be an exact model of a specimen taken from these waters half a century ago. This sign fish is forty inches long and nearly ten inches deep, and it is said that the fish from which it was modeled weighed thirty-five pounds. Hardly any one has believed the sign fish story until the finding of the fish mentioned above, owing to the formidable proportions, hooked jaws and other features which appeared to be monstrosities in the sign model. But placing the fish lately found and the sign side by side, it is seen at once that the sign is a faithful model of a fish, only a little larger.

The fish in Mr. Mead's possession has attracted a large number of visitors, and has awakened a renewed interest for the protection of these noble inhabitants of the mountain lakes from the havoc which is made among them by sneaking poachers, at breeding time. So plenty were these fish formerly in the waters of Sebago and Long Lakes that some of the older residents tell of canoe loads being taken in a very short time. An old gentleman of eighty years says that, when a boy, he and a companion captured two barrels of land-locked salmon during the time that a third member of their party was collecting wood and making a fire to cook their suppers. The untimely war waged upon them at breeding time had nearly depleted these waters a few years ago; but the protection afforded by the statute laws has already worked a marked change, and there is no question but that the fish are rapidly multiplying. In proof may be mentioned the noble specimen mentioned in the *Herald* the other day and the one above. Besides, a gentleman writing from Portland last week gives another account of a land-locked salmon, found stranded on the banks of the same Rodgers's Brook on Tuesday, which measured 27 inches in length and weighed 22½ pounds. The gentleman thinks that when first out of the water it must have weighed at least 30 pounds. It is evident that the fish, weak from terrible exertions in ascending the little stream to breed, were stranded by the sudden fall of the water after the rain of Monday.—*Boston Herald.*

TROUTING ON THE BIGOSH.

A TALK WITH JACK.

AFTER the party went out to initiate the Colonel into the mystery of lake ranges, and the Doctor into the capture of lake trout, Jack and I went along the shore to find an inlet which Uncle Ben said did not exist. I had, on several occasions, seen a line of fog above the swamp on the west shore of the lake, in the morning, and felt sure that it indicated a stream of water, so, with our wading boots, hatchet, landing-net lined with mosquito bar, and a preserve jar filled with alcohol and slung in a net, we started. Coming to a small spring stream, flowing into the lake from the hills which rose high on this side, we put the net below some stones in it and then lifted them.

"Lobsters," said Jack.

"They are not lobsters," I answered, "but crawfish, or crayfish, as the older name was."

"If that isn't a little lobster, then I don't know one when I see it. You may call it a crawfish, because it lives in fresh water and never gets large. There are the big claws and the other eight pairs of legs, head, tail, and all. I'd like to know why it is not a genuine fresh-water lobster?"

"Jack, things are not always what they seem. This animal differs from the lobsters in several important points, and, although closely related to the lobster, it is as distinct as a panther is from a lion, or as a trout is from a salmon. One of its differences is that in the crawfish their young when hatched are perfectly formed and cling to the tail of the old one. See here! this one has young now hanging on to the appendages under the abdomen or tail. The egg of a lobster hatches out a larval form that does not appear a bit like its parents. Save these alive, we may want them for bait if we conclude to try other kinds of fishing to see what is in the lake."

"What are these other things?"

"These long stick-like things, and the tubes made of small snail shells are the cases of what are called caddis worms. They are larvæ of a large fly which is about the water and on which trout feed; put them back in the water. This dirty-looking grub is the larva of a very destructive water-beetle; put it in the alcohol, it is not often that we find the larva of this beetle on the hillside; it is usually in ponds, where we also find the young of the dragon fly. Let us go on and keep as near the edge of the lake as the boulders and fallen timber will allow. If we had a boat we could explore to better advantage, yet Uncle Ben has been over the lake, both in boats and on the ice, and declares that there is no inlet in the swamp, but that the lake is entirely fed by springs. If this is so then my fog-line theory amounts to nothing."

"Look there," said Jack, pointing at a crow on a dead limb a short distance ahead, how I wish I had a gun."

"And I am glad that you haven't. Why do you wish to kill that poor crow? He has never harmed you and is of no use if you had it. Never kill anything that you do not want unless it is liable to injure you in some way. If you want to shoot you can learn to have as much pleasure in hitting inanimate objects as in taking life. I tell you what it is, Jack, in this free country of ours there is too much freedom for men and boys to roam about with guns shooting robins, song birds, and harmless things. There is hardly a spot within ten miles of any city or village, where one can sit and observe wood life, because all that has not been killed has learned wisdom and keeps out of sight. Not one idle fellow in a hundred, who had a gun in his hand, would pass a rabbit, squirrel, woodpecker, or even a little chipmunk in summer, when they have young dependent upon them, without shooting it. Now I beg that you will pass the poor crow when out gunning, and will confine yourself to legitimate game."

"But," said Jack, "the crow pulls the farmer's corn and carries off his young chickens, and is a nuisance, anyhow."

"Then let the farmer shoot him, if he will, but as you have neither chickens nor corn, I don't see why you should trouble yourself about the matter. There are plenty of worms boring into the farmer's apple trees, but you do not go around probing their holes with a wire to kill them. Your excuse is a poor one, and as to the question of the crow being a nuisance, there are two sides to that. The crow could show you a list of grubs, cut worms, etc., that he destroys, which might balance his account. I think, Jack, that you only try to excuse your natural desire to kill, and this desire seems an instinct born with man and only eliminated with age or education, which in this sense may be synonymous. Now watch that crow! See, it has something in its mouth, and there it goes across the lake into that tall pine where perhaps may be a nest with young ones that will greet the coming of their mother with open mouths. Had you killed the old one there might have been starvation in the now happy family in yonder pine. There runs a little 'teeter-snipe' along the beach, there is no reason to kill it, certainly it is a beautiful object, and its life lends a charm to nature. I can conceive of nothing more desolate than

these woods without animal life. Of course there are certain kinds of this life which are recognized as game, and the lawful killing of which, in season, cannot be objected to, but to kill a nesting bird should be a heinous offense."

"Well," replied Jack, "what you say may be true, but it is a sore temptation when a quail rises before you while shooting woodcock in summer, and I think that if I don't kill it some one else will."

"Now, Jack, that is no excuse at all. What would you think of a man who saw another asleep on the road and said that if he did not rob him of his watch and pocket-book some one else would. Never mind what others might or might not do. Do what you know or believe to be right and you will have no cause to regret having passed by the quail in the forbidden season, even though you know that some pot-hunter will bag it inside of an hour."

"This," said Jack, "is a new way to look at it. Father always told me not to kill certain things at certain seasons, but he never took the trouble to explain why. I will never again shoot a crow, nor a bird during the breeding season. Here is the edge of the swamp, but there is no inlet to be seen. What shall we do, go back?"

"No, we have wading boots, let's change our shoes for them and go in. Leave everything here except a creel and the landing-net, and we will see what the swamp looks like."

In half an hour we had penetrated the swamp by wading, going around deep places, climbing over fallen trees, and dodging under vines and limbs, and then we struck a fine stream, which yielded small shiners and chubs to our landing-net, and we saw evidences of trout that we knew would gladden the Doctor's heart, for he was a wading fisherman, who only fished the Bigosh from a boat because there was no other way to do it. With a good collection of Cyprinoids, for which Jack said I could lie awake all night inventing jaw-twisting names, of which neither I nor any other man knew the meaning, we returned to camp to hear how the Doctor had succeeded in getting a lesson in fishing for lake trout and how the Colonel had found the ranges.

FRED MATHER.

EELS DEVOURED THE TROUT.—The Hartford, Conn., *Times* says: "In the middle reservoir, at West Hartford—one of the reservoirs which supply the city with water—were placed several years ago 13,000 young trout and 1,000 land-locked salmon. Mr. J. G. Lane contributed 5,000 trout, and Mr. J. Holcomb as many more. The salmon, we believe, were put in by the fish commissioners. Occasionally some lucky fisherman has landed a nice trout from this reservoir, but the catch was not commensurate with the expectations, and it was surmised that the trout and salmon families were becoming depopulated by some agency besides the hook and line. When the reservoir was drawn off a discouraging state of things was revealed to those who had advocated the feasibility of stocking the reservoir with trout and salmon. Not a salmon was found and only about one hundred trout could be discovered. But there were twenty bushels of shiners, the size of one's fingers, and a few carp weighing half a pound, and also thirty eels of large size, but no small ones to speak of. The eels as they were killed and stretched out upon the bank, side by side, were a sight to look at. None of them were less than three feet in length and three inches in diameter, while the largest was 45 inches in length and plump 3¼ inches in diameter. The man who attempted to strangle the large one with his naked hands was subjected to a very lively shaking up, and he was willing to let out the job long before the lively eel showed any signs of yielding. Now the supposition is that the eels had trout and salmon diet until these fish were nearly exterminated, and the few that escaped had grown out of their reach and were able to take care of themselves. After the trout and salmon had tickled the epicurean palates of their enemies, till no more could be gathered in for the sacrifice, we are at liberty to guess that shiner diet was not ignored by the greedy eel, though their number would indicate that they had not been seriously thinned out. President Clark, of the water board, put into the big Farmington reservoir, last fall, about one hundred German carp, and as nothing has been seen of any of them since, he is of the opinion that they may also have become rations to some rapacious bigger fish. But he may be wrong, as this reservoir is so large that one hundred little fish could easily keep out of the way for a few months. Mr. Clark proposes to get some more of these carp and keep them by themselves in some running stream until they become large enough to take care of themselves and then put them into the reservoir and watch results. The German carp grow to be of large size—some weighing as high as seventy pounds. They take on weight at the rate of three pounds a year. Another thing. Of the trout caught in the reservoir after it had been drawn off, the largest ones were not fit to eat, while the half-pounders were equal in flavor and taste to the nicest brook trout."

EXHIBITION OF FISH.—At the second annual display of the New York Fanciers' Club, held at Madison Square Garden during the past week there was a fine exhibit of fish and fishculture. Mr. E. G. Blackford had an array of tanks and hatching jars which contained black bass, carp, tench and gudgeons from France, goldfish, catfish, axolotls, crayfish, terrapins, gars, sea anemones, eggs of whitefish from Michigan, and fry and eggs of brook trout. The South Side Sportsmen's Club of Long Island, exhibited rainbow trout of from half a pound up to three pounds weight, brook trout, salmon and land-locked salmon of fair size. This display of fish, in charge of Prof. H. J. Rice, was one of the principal features of the exhibition and held the crowd longer than any other feature.

UNIFORM NUMBERS FOR HOOKS.—We notice from FOREST AND STREAM that American anglers are agitating to get their rod makers to adopt one uniform size for winch plates. It would be very desirable for our English rod makers to adopt some uniform size. The present system of making the fastenings of different sizes causes the angler an endless amount of entirely unnecessary worry, while it does not add one farthing to the profit of the maker, in fact, the reverse, for an angler frequently declines to purchase a winch he has taken a fancy to when he finds it will not fit his rods. In the same way the present bewildering system of numbering hooks is of no advantage to the makers; indeed, it only gives them and their customers an endless amount of unnecessary trouble. Why should there not be as much certainty of getting what you want when ordering hooks as when ordering a gun or cartridges? We are certain that the sporting papers and anglers generally will warmly support any combined action of the trade for the purpose of establishing a uniform size for winch fastenings, and a uniform numbering of hooks. We would gladly aid our manufacturers by giving illustrations, drawn to scale, of any standards that might be decided upon. We recommend these suggestions to the attention of the hook makers of Redditch and Kendal, and of manufacturers of rods and lines generally. They could not show their known willingness to please those for whose use they make their goods better than by remedying a long-felt grievance—one which has been complained of by every angler and angling writer.—*London Fishing Gazette.*

PICKEREL FISHING THROUGH THE ICE.—Saco, Me.—*Editor Forest and Stream:* A party of four of us spent five days on the Parsonfield Pond and had fair success with the pickerel. We cut holes in the ice, but the first two days were too cold to fish. The third day was better and we took several fine fish. One of our pickerel weighed five and a half pounds, and measured twenty-seven inches in length, and an eel was taken that was twenty-eight inches long. In all we took twenty-eight pickerel.—W. F. C.

CANADIAN SALMON RIVERS are advertised for lease, in our advertising pages.

Fishculture.

FOOD OF TROUT.

I AM in receipt of the proceedings of the American Fishcultural Association, at their meeting last June. I notice that the discussions partook largely on food for fish. This is an important subject in artificial fishculture, and has been heretofore somewhat overlooked. We might as well expect John Bull to go without his roast beef, as a fish to live and be in good condition, without an abundance of good food, and such food as is suited to its wants. Some fish feed largely on crustaceans, some on small fish, and others on insects. The wants of all can be easily ascertained. The trout of the Castalia spring, near Sandusky, mentioned in a former paper of mine, feed largely on a small crustacean, that abounds in the extensive banks of aquatic moss, found in that famous spring.

This moss also abounds in two species of the little fish, known as the stickleback. The trout feed largely on this fish, which is of the genus *Gasterostrus* (Linn.).

The brook trout of Lake Superior, in many places, feed largely on this fish. At one time I was fishing for trout at Partridge Island, near Marquette. I took a large trout with a fly; after landing it, she threw out of her stomach a live stickleback, which swam off lively enough. I have at this time over a half-dozen of the five-spined stickleback fishes in my aquarium, in my dining-room. They are a very interesting fish, and a favorite pet with me. They are a nest-building fish; the male builds the nests, and takes care of the eggs and the young. The nest is built among the aquatic plants, some distance above the ground, and is shaped precisely like a lady's muff, and the material is little bits of plants that he picks up, cemented together by mucus that he secretes. The male builds the nest in one night (or did with me, once upon a time).

I have never seen a stickleback over two and a half inches long; we have at least two species in Ohio; the three-spined, and the five-spined. While lying at anchor at Fort Mackinaw one day, I saw myriads of them near the surface of the water, and captured a lot and brought them to Cleveland, alive. I would say more about this interesting little fish, but I am too sick.

T. GARLICK.

BEDFORD, O., Jan. 19.

REPORT OF THE CONNECTICUT COMMISSION.

THE eighteenth report of the Fish Commissioners of this State opens with the question of the pollution of waters, and says that this is a matter which was not deemed worthy of an investigation by the last Legislature. After referring to a bill which was introduced in 1882, and which provided for a Commission to examine and report on this subject, they say that the question is a serious one, and one that will be sure to command attention again at no distant day.

There is no doubt that the pollution of rivers, streams and harbors by individuals and corporations in their greed of gain is a great and growing evil. Why the people of Connecticut, New York and other States have allowed their fisheries to be injured by manufacturers, whose only excuse for making sewers of our streams is that it would cost them more to dispose of it in any other manner, is beyond our knowledge. The report quotes from a Hartford paper concerning the growing scarcity of shad in the Connecticut River as follows: "The reason for the falling off is laid to the failure to pass stringent laws to prevent the taking of young shad, and the unwillingness of the fish to enter a stream so polluted by sewage and manufacturers' chemicals as the Connecticut is becoming."

A comparison of the fishing twenty years ago and now is thus made: "There are always people fishing off the docks at the river, but the catch is pitifully different from what it used to be, even twenty years ago, and the change is probably due more to the pollution of the water by manufactories on the main stream and its branches than to any other cause. At that time there were great numbers of perch, and in the course of a season a good many striped bass were caught, running usually from half a pound to five or six pounds. In the shad season, boys fishing for the perch with shad roe for bait used to get long strings, and, occasionally at such times, the water was fairly alive with small perch that could be caught litterally as fast as the line could be thrown in. All through the season there was a possibility of getting a reasonable quantity of good fish. Those who had occasion to drive across the river frequently will remember the bass fisherman who could usually be seen in a boat, anchored just above the bridge, and who kept at it day after day. Ten-pound bass were not so rare but that several were usually taken in a season. At present, very few of these fish are caught, and the idea of going out to fish all day for striped bass hardly occurs to any one. It is very probable that the putting in of black bass has done something to reduce the numbers of other fish, but those familiar with the river and with the ways of fish, attach more importance to the change in the water, and instance, among other things, the decrease in shad, which is sufficiently indicated by the fact that, with all the stocking of the stream from year to year, the supply does not reach the point that would be expected. Something is to be inferred also from the decrease in dace, a fish of no particular food value, but handsome, active fellows that thrive in clear water, and were large and abundant a few years ago, but are now much reduced in numbers, while comparatively few large ones seem to be left. The failure of the attempts to stock the river with salmon points in the same direction. Of all the young fry put in, very few reached maturity and returned; not nearly as many as might naturally be expected to escape the perils that attend small fish. The actual condition of the water may be seen by any who will examine it. In appearance, taste, and smell it is very different from what it was. The same process is going on that has been pretty well carried out in such streams as the Hockanum, where the mills have almost killed off all the fish that used to abound in the stream. One curious thing in both cases is, that though the fish are not nearly as plenty as before, there are still considerable numbers of young ones, apparently one year or sometimes two years old, while larger ones have disappeared. Allowing all that can be allowed for the use of fine meshed nets in the spring, it still seems as if the fish did not find food enough to thrive on in the contaminated water, or become diseased and died off. The fish that are now most abundant are the poorer sorts, that do as well in foul water as in clean. Artificial propagation partly meets the difficulty, as in the case of shad, but it cannot take the place of suitable natural conditions for the fish; and good judges maintain that the flavor of a Connecticut River shad is not what it used to be, even of those caught far up the stream so as to allow for the slight difference that used to exist, or was said to exist, between fish caught as they entered the river and those that had spent some days in fresh water. *As long as the river receives so much poison from factories, and so much sewage from cities, it is probable that the supply of fish will remain small in quantity and poor in quality.*"

The catch of shad in the Connecticut for the past three years was: In 1881, 351,678; in 1882, 272,903: in 1883, 177,308. In the Farmington river it was: In 1881, 11,505; in 1882, 3,800; in 1883, 1,155.

These facts are serious ones to reflect upon. Are the present modes of fishing so destructive to the shad as to lead to their extermination? The Commissioners have always believed this to be true, unless the natural increase be aided by artificial propagation. In fact they predicted exactly what has occurred. By referring to page 15 of the report of 1879, these words will be found: "For various reasons, but chiefly for want of a sufficient appropriation, the artificial hatching of shad at Holyoke has been discontinued for the last three years. A decrease in the catch of these fish may consequently be looked for during the next three, or perhaps four years." This prediction was based upon the fact that three or four years are required for a young shad to attain maturity. The above-mentioned figures show how just was the prediction. In 1881 artificial propagation was again commenced on the Farmington River, and each year since it has been continued as far as possible, though the location is far inferior to that in Massachusetts below the Holyoke Dam.

The report of the Superintendent, Mr. H. J. Fenton, gives a total of 3,215,550 shad fry planted. We will refer to the report again.

MARYLAND.—Elkton, Md.—*Editor Forest and Stream:* Col. Thomas Hughlett having been appointed clerk to the Court for Talbot county, has resigned the office of Fish Commissioner for the eastern shore of Maryland. During the time he held the office just vacated, he distributed twenty millions of fish to the waters of the eastern shore, against eighteen hundred thousand distributed by his predecessor. It is a matter of regret that the services of so efficient an officer should be lost to the lovers of fish and fishing. His successor has not yet been appointed.—T.

The Kennel.

FIXTURES.

BENCH SHOWS.

March 4, 5, 6 and 7.—Cincinnati Bench Show, Melodian Hall. Entries close Feb. 25. Charles Lincoln, Superintendent, care of B. Kittredge & Co., Cincinnati, Ohio.

March 12, 13 and 14.—New Haven Kennel Club's First Annual Bench Show, Second Regiment Armory, Edward S. Porter, Secretary, Box 657 New Haven, Conn.

March 26, 27 and 28.—The Dominion Kennel Club's Second Annual Bench Show, Horticultural Gardens. C. Greville Harston, Secretary, Toronto, Canada.

April —, 1884.—The Cleveland Bench Show Association's Second Bench Show. Charles Lincoln, Superintendent. C. M. Munhall, Secretary, Cleveland, Ohio.

May 6, 7, 8 and 9.—The Westminster Kennel Club's Eighth Annual Bench Show, Madison Square Garden. Entries close April 21. Chas. Lincoln, Superintendent. R. C. Cornell, Secretary, 54 William street, New York.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **744.**

DOGS AND GAME IN TEXAS.

Editor Forest and Stream:

Texas sportsmen do not take as much interest in "feathered game" as the sportsmen of the more Eastern and Southern States, owing to the fact that we have always had an abundance of larger game, such as deer, antelope, bear, panther, cat, fox, etc., etc., and until quite recently plenty of buffalo inhabited the unsettled part of the frontier. Hence, we have but few good wing-shots as compared with the older settled States; and we are even further behind on dogs and dog-training than we are on good shooting. However, we have some fine shots and here and there a good dog. As a general rule, however, they are quite imperfectly trained, owing to the fact that each sportsman trains his own dog, professional trainers not being accessible. This has resulted in an entire absence of system throughout the State.

Dogs thus trained are entirely worthless except to the one who trains them, as they have by such a system only learned their master and not the science of hunting. For instance: I have a dog (a pointer) that I trained myself, or rather he and I have learned each other by constant association from his puppyhood, for I know nothing about training. To me he is a good dog, and with him I venture to say that I can bag as many birds in a day as Mr. Crawford with his matchless Gath, because he knows me even to a frown and I know him as well; but he cannot be handled by any one else at all. Neither can I handle him effectively in the field with other dogs without interfering with them. Nor can I instruct others how to handle him, because I have no system about it.

A good working dog is the very life of a hunt, and as one of your correspondents has remarked, "of infinitely greater satisfaction than a well-filled bag."

And here I would call the attention of Texas sportsmen to the importance of organizing a State kennel club, to the end that we may bring order out of the present chaotic state of affairs and drive the mongrel from the field. Besides, such an organization might materially aid in the preservation of game, which is now so abundant, but which under our present system is subject to devastation from every conceivable quarter.

Texas at present is indeed a fine field for the sportsman. Game of all kinds is abundant. Of the feathered class, we have the wild turkey, prairie chicken, geese, ducks innumerable, both as to quantity and kind, plover, various species of snipe, and two species of quail—the Bob White and blue quail, as he is called here. The Bob White is the most abundant and by far the best game bird, indeed, with me he is the ace of all birds. The blue quail is about one-third larger than the Bob White, bluish color, with speckled breast and crested head, presenting a handsome appearance. They are usually found in coveys ranging from 25 to 60; are fleet of foot, and will not

take to wing except when hard pressed. While the covey remains unbroken they will not lie from a dog or anything else. When broken and very much scattered, if they have good cover, will sometimes lie, though are quite unreliable. They are "no good" for the sportsman, but are the chief delight of the pot-hunters, who frequently kill as many as a dozen at a shot. As a table bird, they are about the same as the Bob White. They inhabit only the extreme western part of the State. Plenty of them in this immediate vicinity, and pot-hunters are now daily bringing in large quantities. M. M.

SAN ANGELA, Texas, January 1884.

A HOME FOR PET DOGS.

Editor Forest and Stream:

There are in the city of New York a very great many gentlemen who wish to keep a dog as a companion, but complain that they have no place to keep one. If they live at home there are many objections, and if they live at any of the hotels or boarding houses there are still more. To obviate all this I would suggest that a certain number of gentlemen get together and form a club, the object of which shall be to hire premises in a convenient neighborhood, say some stable where suitable kennels can be made, and rented by members by the year, and a good man and assistant be engaged who shall take charge and feed the dogs. The owners would then take an interest in the kennels, and it might then be further extended for the summer months by taking some place in the country, where the breeding and improvement of dogs could be thoroughly gone into. I think this idea would reach a class who are lovers of dogs, but perhaps have not the time or money to indulge in their hobby. We must commence in a small way. What we do afterward must be determined by the club or a committee appointed by the members. I shall be glad to receive any communications from your readers, and will say for myself, that finding the difficulty of keeping any of my dogs in city, I would like to meet with a few who are in the same fix, willing to rent a stable or some suitable place where we can have the pleasure of seeing our canine friends, and take them for a walk. I also think that if we get a sufficient number of members, we can institute a home for friendless dogs, and if we are sufficiently prosperous we can engage the best veterinary talent and institute a dog hospital; but this is all in the future, what I want to do now is to get enough men together who will share the expense of a kennel in New York for companionable dogs.

JOHN E. I. GRAINGER.

THE MASSACHUSETTS DOG LAWS.

THE present agitation of the question of the dog laws of our State, is due, so it is said, to the efforts of those acting in the interests of the sheep owners, with a view to encouraging the pastoral ambition of our people.

Let us look at the matter then from the sheep owner's standpoint. Let it be conceded that our legislators should look with a single eye to the development of the prosperity of such persons as desire to lead the guileless life of shepherds, and let it be conceded that other interests, even if they are those of a majority of our citizens, must be subservient to the small shepherd class. Then let us examine our statute books, and briefly, or fully, investigate the results of our present law, and it must be at once apparent that the gentle shepherds are amply provided for.

Chap. 102, of the Public Statutes of Massachusetts, Sec. 98, is to this effect: "Any one who suffers loss by the worrying, maiming, or killing of his sheep, lambs, fowls, or other domestic animals, may inform the chairman of the selectmen of the town, wherein the damage occurs, the chairman shall then decide whether the injury was caused by dogs, if so he shall appraise the amount thereof, provided he does not think it exceeds $20, if he thinks the amount of damages greater than that sum, he shall appoint two other appraisers to act with him; in either case a certificate of the appraised loss shall be made, which is to be allowed by the county commissioners, if no objection to the appraisal is proven before them; whereupon they shall issue an order for the amount of the certificate, which is paid from the dog taxes received and in the county treasury." This generous law does not compel the suffering farmer to prove his actual loss, nor to demonstrate that any particular dog, or, indeed, any dog did the mischief, the declaration of the omniscient selectman is sufficient, and upon it the dogs are convicted, his judgment is usually to the effect that the sheep or fowls came to their deaths by some means unknown, probably a dog.

Should the dog be decreed to be the criminal, the selectman then receives a fee of one dollar for making the appraisal of damages, but should he decide that any one of a thousand other possible causes led to this loss of the complainant, then such selectman receives only his mileage fee. Under such circumstances is it to be wondered at that only by a direct interposition of Providence are the dogs ever declared innocent, and is it not natural that the amounts disbursed from the county treasuries, on account of damages alleged to be caused by dogs, are so enormous? The decisions of the selectmen or the appraisers are, of course, chiefly based upon the ex parte statements of the complainant, and damages are assessed accordingly.

Here is a fact within my own knowledge to illustrate the working of the law:

In a certain town, which could be named, a certain farmer discovered one morning that several of his fowls had departed this life during the preceding night. Conscious that this apparent misfortune is in fact a real bonanza, he complains to the selectmen, and his loss is promptly assessed at about $40, to be paid from the dog taxes; after the certificate of damage had issued, a neighbor of this farmer confidentially informed the writer, that upon the night of the slaughter of the poultry he himself saw a fine fox emerging from the farmer's hen roost. "But," said he, "I shall say nothing of this, because there is no reason why my neighbor should not get his money."

But we have recited but one of the remedies allowed by our impartial law. When, as is rarely the case, a farmer has any legal proof that a dog did the mischief of which he complains, he may then recover from the owner of such dog, in an action of tort, double, or in certain cases triple, the amount of damages caused. This remedy is an alternative to the one first mentioned. Are these facts of a nature to bear out the assertion that sheep cannot be profitably bred in this State because our law does not afford the farmer adequate protection?

Having considered the case of the sheep owner, we may now fairly devote a few lines to the interest of the dog owner. He is taxed two dollars per year for every male dog over three months old, and five dollars for the same time for every female dog, and these taxes are further increased by municipal regulation, a perfectly enormous percentage when the average market value of dogs is estimated. These taxes are paid into the county treasuries to meet the drafts of the county commissioners under the provisions of law already cited. This charge is then, strictly speaking, rather of the nature of an indemnity fund, than a tax, and is deposited in order to rescue all possible losses attributed to the injuries caused by dogs. The ease with which this deposit may be drawn upon by claimants, and the want of any proper restrictions as to proof of claims, have been sufficiently illustrated. Yet in spite of the exorbitant drafts upon this fund, there is still a large surplus paid back to the towns every year for the purpose of maintaining schools or libraries. Why dog owners should be fixed upon as the victims to bear this burden, though it be to support excellent institutions, is certainly not clear. Nor is this all; any owner of a dog which has actually caused a loss for which damages have been paid from the county treasury as already mentioned, is still liable to the county for the damages so paid to be recovered in an action of tort.

Further than this, any person, be he of good or ill-repute, may, by simply making oath that he believes a certain dog to be dangerous, and giving notice of such oath to the owner, cause such dog, however innocent he may be, or however valuable to his owner, either to be killed or kept constantly confined; and any person may kill such dog if it be afterward found outside the inclosure, or away from the immediate care of its owner, however harmless the dog may be at the time.

Thus, under the sanction of the law, an evil-minded person may maliciously cause loss and suffering to an honest, peaceable citizen, either by compelling him to kill an unoffending animal, or at least to keep him perpetually imprisoned.

If an exhaustive investigation be made into the condition of things under the present law, there can but one result follow, the public will learn how, for the benefit of a few, the many labor under an unjust and overwhelming burden, and if any change in the dog laws be made, it should certainly be in the direction of relief to the dog owner.

It would seem to be wise then for the sheep owner and his friends to hold their peace, and be at least satisfied with the existing undue favor shown to them. Let them consider well the experience of the farmer in the fable, who in seeking too much, lost what he had, in killing his generous goose. LEX.

CINCINNATI DOG SHOW.

FOLLOWING is the premium list of the bench show to be held at Cincinnati, O., the first week in March: Mastiffs, St. Bernards, Newfoundlands, greyhounds, Scotch deerhounds, Irish water spaniels, field spaniels (over 28 pounds), cocker spaniels (under 28 pounds), foxhounds, beagles, dachshunde, bull-terriers, black and tan terriers (over 7 pounds), Bedlington terriers, Skye terriers, hard-haired Scotch terriers, Irish terriers, Yorkshire terriers, pugs, toy terriers, King Charles, Blenheim and Japanese spaniels, $10 for the best dog or bitch, and $5 for the second best; champion English setters, Irish setters and pointers, $20 for the best dog and $20 for the best bitch; champion Gordon setters, $20 for the best dog or bitch; champion fox-terriers, collies and pugs, $10 for the best dog or bitch. Open classes, English setters and Irish setters, $15 for the best dog, $5 for the second, bitches the same, puppies $7 and $3, dogs or bitches; black and tan or Gordon setters, $15 for the best dog or bitch, $5 for the second; puppies $7 and $3, dogs or bitches; pointers, dogs over 55 pounds, pointers, dogs under 55 pounds, bitches, any weight, $15 and $5; puppies $7 and $3, dogs or bitches; fox-terriers, collies, bulldogs, dogs, $10 and $5; bitches the same; fox-terrier puppies, $5 for the best dog or bitch; miscellaneous, three prizes of $5 each, making a total of $840 distributed among fifty-one classes.

DUKE.

DUKE—plain Duke without any extras. A common enough name, but no common dog, thank you! Of Irish extraction, which accounted for much of his wit and humor. Left an orpan at an early age, his youthful owner raised him on the bottle, sleeping on the sitting-room lounge that he might conveniently feed the puppy during the night. At two months of age Duke would retrieve nicely, and in due time became a reliable field companion. It is not of his field qualities that I am going to tell, but some of his pranks and misdoings. His original owner presented him to a brother-in-law, an official at Washington whose residence was in the country, fifteen miles from Washington and four miles from the railroad station. While his master had time to hunt, Duke was a model of perfection; but when business at the capital required the daily presence of his owner, Duke grew restless and cast his eye about for employment and recreation.

Duke wished to follow his master's carriage to the station each morning, but fearing to lose him, Mr. H. always fastened the dog in the house before starting. This grew monotonous to Duke, so he changed the programme by disappearing on the appearance of Mr. H. at the breakfast table. All search for him was fruitless, but at the sound of wheels going out the lane, Duke's head would appear around the corner of the barn, and setting off across the wood he would meet the carriage at a curve two miles from the house, and smile just as sweetly as if he was there by appointment, and there was no resisting that smile. Returning with the coachman, he would rest for a half hour and then start on the war path. After overturning the feed troughs of the chickens and turkeys, he would gnaw the halter of a favorite horse and race him down the lane. If the oxen were in the pasture, he would drive them into a corner and keep them there until some person called him away. He was contented if anybody would stay and play with him, but he must play, and if left alone would seek company among the stock, or amuse himself at the expense of somebody or something.

Phyllis, the cook, was invited to a wedding which would take place on Monday, and accordingly her best "fixings" had to be dusted, aired and trimmed up to the height of fashion. By Saturday noon all was ready and laid out on the bed of Phyllis's room in the "quarters."

"Golly! Dey's prone!" said Manuel, Phyllis's husband, as he watched her spread them out. "Guess dar won't be many 'coons dar dat 'ill take de shine offen dem fixins."

"Um, well I 'specs not. Jis' you go an' stir dat soup while I go fotch missus to look at my boardrobe," and the darkies left the room on their respective errands.

"Yessum, 'tis mighty putty, an' dem dar niggers 'ill be bilin' ober wid jellesum," said Phyllis, as she ushered in Mrs. H. to admire her outfit

"Very pretty, Phyllis!"

"Yessum, and dat dar—um, I 'specs—whar's dat—bonnit? Manuel! Manuel! What you do wid dat dar bonnit? I 'specs he's jis put dat bonnit on an' gone down stars to show off. Come back yer, Manuel!"

"Why, Phyllis, I haint got no bonnit. Fo' goodness sake, honey, what you tink I want wid yoo bonnit?" and Manuel rolled his eyes and gazed around the room, while Mrs. H. went to the window and looked out on the lawn.

Down stairs and out doors flew Phyllis. Duke was lying quietly on the grass, and raised his head and heaved a deep sigh as he looked sleepily at Phyllis. "Mighty funny—dat dog's bin asleep, else I'd b'leve he'd bin dar. Um, what's dat doin' dar," as she picked up a large red feather from a flower border. "You Juke, come yer!" but Duke stirred not. Her repeated calls only caused him to spread himself flatter and blink uneasily.

When Manuel appeared at the door Duke arose cautiously from a mass of tangled green silk, red ribbons and bonnet wire, which he had been lying on to hide, and bounded off to the woods. Mrs. H. made it all right with Phyllis by giving her another bonnet and a pair of earrings, and when Duke reappeared with his master's carriage no one would dream that he was anything but an orderly, rather sober dog.

M. VON CULIN.

THE BEAGLE CLUB.—We have received several ballots for officers of the new American-English Beagle Club. Blanks for voting will be furnished by Mr. W. H. Ashburner, No. 27 North Thirty-eighth street, Philadelphia, Pa. The nominations are: For President: W. H. Ashburner, General R. Rowett. For Secretary and Treasurer: A. C. Krueger, O. W. Rogers. For Executive Committee (three to be elected): J. M. Bergold, Dr. J. W. Downey, F. D. Hallett, General F. A. Bond, Dr. C. E. Nichols, A. Butler Duncan. A. D. Barber, Louis Sloan, T. T. Phleger, Jas. A. Stovell, J. N. Dodge. In compliance to the request of those who are interested we will receive and count the votes, which, the committee states, must be in hand by us not later than Feb. 5. We shall be very glad to see this club established, and we hope that all our readers who take an interest in the beagle will add strength to the club by enrolling themselves in its membership.

CURRENT DOG STORIES.

XXIV.

Madame Christine Nilsson's heroic rescue of a dog from the clutches of a parcel of boys caused a great deal of favorable comment among the members of the Society for the Prevention of Cruelty to Animals yesterday, and it was suggested by one of them that the society might present one of their new $1.50 silver medals to the songstress. The face of the medal bears the seal of the society. This represents a fencing match between Justice—with a sword—and a drayman—with a club—over the prostrate body of the latter's horse. The same member of the society who suggested the giving of the medal thought that Madame Nilsson—having probably a foreigner's contemptuous ideas of American art—might consider the scene portrayed on the face of the medal to be an attempt at a description of that enacted between herself and the boys. Neither Mr. Abbey nor Charles Mapleson had seen Madame Nilsson's new dog. Mr. Abbey had called, but the dog was "not at home." The occurrence has revived in theatrical circles many touching stories about actresses and dogs, most of which are comparatively new.

"Long before Mr. Abbey—I mean Madame Nilsson—rescued that dog," said John Stetson's representative at the Walnut Street Theater, "Miss Sara Jewett's dog fell out of the fourth story window of the Continental Hotel. This was last week, during the engagement of the Fifth Avenue Company here. Two legs and a rib were broken. Dr. Agnew was sent for and repaired the damages. Miss Jewett bore the shock with great fortitude. She took it as one of the trials of a star's life. When she was in a stock company her dogs never fell out of the window. Speaking of dogs, have you seen our pug?"

"Miss Jewett's dog is just a little too previous," said Manager Rice, at the Arch Street Opera House." Miss Marie Conron lost her dog, a beautiful Skye, when the Duff Company first came here. It was one of the first things that Mr. Duff did—I mean it was one of the first misfortunes that happened to the company."

"One of the saddest incidents that I ever beheld," said Mr. Gilmore, at the Grand Central Theater, "was when Miss Lyddy Denier's dog, a toy terrier, hardly larger than a mouse, leaped from its mistress's arms as she was leaving this theater, and was positively crushed to a jelly by a passing coupe. Miss Denier was the leading lady of the Buffalo Bill combination, which I need hardly say was here before the Duff Company. I hardly like to accuse Miss Conron's dog of plagiarism, but I think that Skye is a trifle left, so to speak."

"All these people forget," said Stage Director Frank H. Wade, at the Arch Street Theater, "that Miss Rose Eytinge's bulldog which appeared in 'Oliver Twist' leaped from the lightning express train, while on its way to this city from New York, at the very beginning of the season—way back in September—and has never been seen since. Kate Claxton lost her diamonds a little while before. The bulldog recognized the crisis and leaped."

Mr. Zimmerman met the *Times* reporter as he returned to the Chestnut Street Opera House after his round of the theaters. "The dog stories of this season are all very well," he said, coldly, after listening to them, "but the original canine calamity befel a member of Mr. Abbey's company nearly two years ago. I have just been given by M. Maurice Grau the real reason of Signor Campanini's absence from this country last year. Most people who witnessed his farewell performance at the New York Academy of Music nearly two years ago will remember that among the evidences of popular favor which followed his superb rendition of Manrico in 'Trovatore' was a small dog collar. The singer hid the breaking heart with which he accepted the gift under a smile. Its intended recipient was no more. On that very day the English pug in whose existence the first of living tenors was wrapped up had broken his neck in striving to touch the high C of the final 'Addio,' which his master reaches with such ease in the tower scene. Signor Campanini vowed never to revisit the scene of his anguish. Colonel Mapleson was unable to cause him to change his determination, but he yielded to Mr. Abbey's arguments. I think you might just as well suggest to those other gentlemen the propriety of calling in their dog stories."—*Philadelphia Times.*

BEASTLY BUSINESS.—Jefferson, O., Jan. 18.—*Editor Forest and Stream:* They had a "deer chase" at Newburg, near Cleveland, day before yesterday. I send you the following extracts from the *Leader*'s account of the indecent scrimmage. For their next hunt these gallant "sports" will probably employ a pet lamb. The account says: The excitement was heightened when there arrived from the city a heavy vehicle in which was a fine buck deer. The long wooden cage in which it was secured was lifted to the shoulders of four stalwart hunters and carried within the barn, where an opportunity was given to view the prisoner. He was a beautiful specimen of his much hunted race, but looked anything but savage or ferocious. His weight, as announced with something of a tinge of pride by his keeper, was 240 pounds. A reporter rode out to Newburg on an early train and started to walk to the scene of the great hunt about two miles distant. The event that was to take place could have been guessed if it had not been known. Great sleigh loads of men and boys, some of them carrying rifles or shotguns, dashed by. Sleek black and tans and speckled hounds were being led to the scene of conflict, and at their heels snapped and snarled a bevy of inferior curs. A more perfect day for the chase could not have been desired. The air was crisp and imparted a ruddy glow to the cheeks, but the cold was not severe enough to put a too heavy crust upon the snow. Scores of men had walked in from Bedford, Independence, Brooklyn and Newburg. They were gathered about in groups, and were discussing the merits of the various hounds. The hounds were corralled in the woodshed adjoining the hotel. They howled incessantly, and were apparently anxious for the chase. "We're ready for the chase now," shouted one of the hunters, whose dogs were yelling and howling inside. The management, however, didn't seem to be ready, and for about thirty minutes the prospects for a first-class row were quite flattering. The management wanted just $3 more, they said, to make up the cost of the deer. Ed. Lamb scratched around, and hustled together the cash. "Now for the hunt," he cried. "Not yet," yelled another member of the management, coming through the door. "You said you would go on when we raised $3 more," said Lamb. The management said they must have $5 more. Then the hunters kicked. They were not ferocious looking citizens, but they seemed to mean what they said when they told the management that either the deer would run or they would have their money back. Then the excitement became almost unbearable. The deer's cage was dragged out of the barn and the crowd jammed around it. A boy climbed upon the fence and lifted the door. The deer walked out and looked around him. A man jumped at him, but the animal didn't run. Then one of the hounds was led up close to him, but still the wild and untamed child of the forest didn't gallop away in that ferocious way that it is generally supposed anything but a pet deer moves. Finally the crowd yelled in unison and the deer started off through an orchard. That wasn't the way he had been expected to go, and the crowd chased him. A young fellow caught him and he was brought back and put in the cage. Then the deer, and cage, and boy on top were loaded into a wagon and driven off into a field. Again the door was lifted and again the crowd chased after the deer to make him run. A hound was finally let loose, but did not venture very close to the animal. A crowd of small boys then induced him to gallop slowly down the hill toward the river. A five-rail fence surrounded the lot and the savage animal couldn't get out. The crowd drove him around to a low place and the deer got into the road. He wanted to go back to the barn, but the

crowd blocked the roadway. A dozen little curs were set on his heels, and the deer started on a slow run down the road, four boys trotted along after him on horseback. The crowd came back to the hotel and the dogs were chained up to wait until the bloodthirsty animal had been gone an hour, when at the rate of speed he was under way when he disappeared he would have been about two miles away. The deer, however, is said to have exhibited considerable mettle after getting away from the crowd of men and the snarlings of the petty curs, and dashed away at a lively rate across the country. About forty minutes after his disappearance down the road the dogs were turned loose on the trail. Kuss, owned by H. Miller, of Bedford, took the lead early in the chase, and in about two hours overtook the deer in a field near Bedford. Hookaway's dog was close behind with one of Stanton's hounds a good third. Men in sleighs and on horseback had followed the general course pursued by the dogs, and were soon on the spot. The animal's throat was cut and he was loaded into a sleigh and taken to Gray's Hotel, Bedford, where one of the quarters was cut up into steaks, broiled and passed around among the hunters.

THE PHILADELPHIA KENNEL CLUB.—In the Kennel department of FOREST AND STREAM you stated, in reference to the non-holding of a bench show this year by the Philadelphia Kennel Club, that "if an exhibition was not to be given you could not imagine for what purpose the society was organized." I have been talking to several members of the club and feel that the executive committee was perfectly justifiable in reporting against the giving of a bench show this year and to wait until a better organization was effected. The present society is composed of the members of the old and parties, as it were, of another, and is, in a certain sense, the joining of two clubs. The great object in view in answer to your question is the holding of successful dog shows each year, which of course tends to improve and perfect the different breeds of sporting and non-sporting dogs. When the Philadelphia Kennel Club can secure the proper building and has thoroughly perfected its organization a show second to none will be held each year. The society has now sixty odd members and comfortable rooms for meeting and social intercourse, and those whose names are on the roll are practical sportsmen who, if the truth was known, would much rather discuss the merits of the setter and pointer in the field than on the bench. —HOMO.

THE GERMAN DOGGE.—Pittsburgh, Pa., Jan. 24.—*Editor Forest and Stream:* In last week's issue of FOREST AND STREAM a short piece headed "The German Dogge," claims that an article written by me some time since on the "Great Dane" has "many geographical as well as canine mistakes." Let us dissect his first charge. By running my eye over the article in question I see the sentence, "In Germany, at Aix, and in Prussia," this being the only geographical mention. I presume my accuser must refer to this when he says, "Aix la Chapelle belongs to Prussia," and then says, "Prussia is in the great German Empire," two important truths which I do not, nor never have denied nor affirmed. So much for the "geographical mistakes." As regards the remainder, Mr. Solms, of the Austrian Consulate, translated the words "Deutsche Dogge" as "German dog," and I respectfully refer the gentleman to him for further argument.—E. P. HODGES.

SALE OF RECTOR.—Mr. J. K. Emmet, the well-known actor, has purchased the rough-coated St. Bernard dog Rector, recently imported by Mr. E. R. Hearn, of Passaic, N. J. Rector is the largest known dog in the world, measuring close to thirty-five inches, standard, at the shoulders, and when sold weighed 195 pounds. During the past year he was very successful at the English shows, in the hands of Mr. S. W. Smith, and he certainly is a most commanding dog. His defective point is his head, which tapers so much as to quite deprive him of the dignity so much desired in a St. Bernard. In all other respects he is a splendid specimen, and is worthy of the encomiums bestowed on him by Col. Stuart Taylor, in his letters to FOREST AND STREAM. The price paid was $4,000.

EASTERN FIELD TRIAL CLUB.—At the annual meeting of the Eastern Field Trial Club held on Jan. 22, it was voted to close the entries for the Derby of 1884, on the 1st of May. The report of the treasurer shows that the club is in a very prosperous condition. Following is a list of the officers for the ensuing year: President, Elliot Smith; Vice-Presidents, Henry F. Aten, M.D., J. Otto Donner; Treasurer and Secretary, Washington A. Coster; Board of Governors, S. Fleet Speir, M.D., Chas. H. Raymond, A. E. Godeffroy, H. E Hamilton, R. C. Cornell, George DeF. Grant, George T. Leach, Jno. Heckscher, Jno. E. I. Gringer, J. W. Orth, D. S. Gregory, Jr., Alexander Taylor, Jr.

THE PHILADELPHIA KENNEL CLUB.—*Editor Forest and Stream:* The Philadelphia Kennel Club have secured pleasant and roomy quarters at 138 Market street for their own use and are now in a flourishing condition. The club now has seventy members on the roll and have an active executive committee. It has been decided best not to hold a bench show the coming spring, but hope to in the future, when it will become a fixture here. The rooms of the club are made attractive and all the leading papers are subscribed to and are on file. Besides the regular meeting nights, one evening a week is spent by the members in social enjoyment.—W. H. ASHBURNER, Corresponding Secretary.

THE GILROY FIELD TRIALS.—San Francisco, Cal.—*Editor Forest and Stream:* I note in your report of the Gilroy trials that it has been edited so carefully as to make it inaccurate in several little points. At page 460 of FOREST AND STREAM, where the report of the running of the second brace in the Puppy Stake is given, my recollection is that Paine's Belle was described as a smooth collie. That is what she is, and I was anxious to have her appear as such, because her owner manufactured a pedigree for her, and may think now that your reporter could not tell a collie from a Gordon. —FRANCISCO.

NEW HAVEN DOG SHOW.—The bench show to be held in New Haven next March, under the auspices of the New Haven Kennel Club, will undoubtedly bring out a large number of dogs. The classification, with one or two minor exceptions, is similar to that of the last show of the Westminster Kennel Club. The prizes will be silver medals, suitably engraved, for the champion and first, and bronze medals for second prizes. Mr. James Watson will judge the setters, pointers, spaniels and hounds, and Mr. James Mortimer the remaining classes.

THE DOGS MUST GO if they are advertised for sale in the FOREST AND STREAM. See what Mr. Elmore says (in Kennel Notes), and here is a line from Mr. George Laick, who recently advertised two dogs: "Please say to many inquirers that I have sold both my dogs, one twenty-four hours after the advertisement came out and both inside of ten days after. I have had a great many letters from all parts of the country from my advertisement in FOREST AND STREAM.—GEORGE LAICK (North Tarrytown, N. Y.).

STOLEN.—On the night of Dec. 16, some one stole from the Rory O'More Kennel, Albany, N. Y., the red Irish setter bitch Lady. She has a small white spot on breast, and is heavy in whelp. Mr. Callender offers $500 reward for information that will lead to the conviction of the thief and the recovery of the bitch.

THE LARGE POINTER CHALLENGE.—Luzerne, Pa., Jan. 27. *Editor Forest and Stream:* I have just learned of the acceptance of my challenge by Mr. C. H. Mason with his dog Beaufort. Owing to some mistake or delay our newsdealer failed to receive the issue of FOREST AND STREAM which contained Mr. Mason's reply, so I know nothing of its character. It gives me great pleasure to think that I shall have an opportunity to show my dog against Beaufort. It is my honest belief that in a fair and impartial trial I can beat him. If I am beaten I will accept the defeat like a man. All I ask is, no matter where the competition takes place, that I get fair play.—GEO. W. FISHER.

PITTSBURGH, Pa.—The Western Pennsylvania Poultry Society have elected the following officers: President, Edward Gregg, of Allegheny; Vice-President, B. F. Wilson, of East End; Treasurer, C. A. Stephen, of Allegheny; Secretary, C. B. Elben, of Pittsburgh; Directors—T. Booth, of Allegheny; Wm. Myer, of Sharpsburg; J. P. O'Neill, of Sewickley; Wm. Wade, of Pittsburgh, and Howard Hartley of Pittsburgh. This election retains the president, who has held the position for fourteen years.

INFORMATION WANTED.—*Editor Forest and Stream:* Can you or any of your readers give me the name, or any information regarding a bitch imported about twelve years ago in whelp by Bang Bang or Bonny Bang, owned by James Shaw of England. She had her pups in Syracuse or Auburn, N. Y., and one of the pups, Ponto, took the cup at the Montreal bench show, which was presented by the champion pigeon and rifle shot of Canada.—POINTER.

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, or breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Whisper. By Mr. C. K. Drane, Burnside, Ky., for black and white English setter dog, whelped June 20, 1883 (champion Gath—Lit).

Lufra. By Mr. H. W. Smith, Worcester, Mass., for fawn greyhound bitch, 5 years old (Ferret—Little Bess).

Ringweld and Chimer. By Mr. S. C. Graff, Pittsburgh, Pa., for black, white and tan beagles, dog and bitch, whelped Aug. 31, 1883, by Mark Antony (Major—Diana) out of Wicklow (Dyke—Ringlet).

Diamond Vic. By Mr. S. C. Graff, Pittsburgh, Pa., for white, black and tan fox-terrier bitch, whelped Feb. 6, 1883, by Curate (Rector—Vic) out of Gipsey (Viper—Vernon).

Gibbie, Luath, Coilus, Dugald and Ronald. By the Kilmarnock Collie Kennel, Boston, Mass., for sable and white collie dogs, whelped Dec. 4, 1883, by champion Robin Adair out of imported Isle.

Monica, Elsie and Nannie. By the Kilmarnock Collie Kennel, Boston, Mass., for two sable and white and one black, tan and white collie bitches, whelped Dec. 4, 1883, by champion Robin Adair out of imported Isle.

KILMARNOCK COLLIE KENNEL.

Mr. T. C. Faxon, Boston, Mass., claims the name of Kilmarnock Collie Kennel for his kennel of rough-coated Scotch collies.

BRED.

☞ *See instructions at head of this column.*

Smut II.—Lava Rock. The Locust Grove Kennel's (Manton, R. I.) English setter bitch Smut II. (Pratt's Trim—Earle's Smut) to their Lava Rock.

Lucid—Emperor Fred. Mr. E. A. Herzberg's (Brooklyn, N.Y.) English setter bitch Lucid (A.K.R. 176) to his Emperor Fred (A.K.R. 33), Jan. 28

Queen Bess—Friday Night. Major Lovejoy's (Bethel, Me.) greyhound bitch Queen Bess (Leo—Juno) to Mr. H. W. Smith's champion Friday Night, Jan. 25.

Belle—Beaufort. Mr. D. S. Gregory, Jr., 2d's, pointer bitch Belle (Sensation—White's Grace) to Mr. C. H. Mason's Beaufort (A.K.R. 691), Jan. 23.

Josephine—Tippoo. Mr. John E. Thayer's (Boston, Mass.) bull bitch Josephine (A.K.R. 388) to his Tippoo (A.K.R. 390), Dec. 9, 1883.

Judy—Romulus. Mr. John E. Thayer's (Boston, Mass.) bull bitch Judy (A.K.R. 322) to his Romulus (A.K.R. 389), Dec. 23, 1883.

Floss—Rex. Mr. Jason Houghton's (Milton, Mass.) collie bitch Floss (A.K.R. 675) to Mr. J. Lindsay's Rex (A.K.R. 149), Dec. 14, 1883.

Princess Eugenie—Buckellew. Mr. Sheriden's English setter bitch Princess Eugenie to Mr. W. A. Coster's Buckellew (A.K.R. 30), Dec. 15, 1883.

Ace of Spades—Obo II. Mr. G. H. Gilbert's black spaniel bitch Ace of Spades to Mr. J. P. Willey's Obo II. (A.K.R. 432), Nov. 30, 1883.

Lofty—Obo II. Mr. J. P. Willey's (Salmon Falls, N. H.) spaniel bitch Lofty (A.K.R. 430) to his Obo II. (A.K.R. 432), Dec. 15, 1883.

Ruby—Fennel. Messrs. Morris & Baldwin's (Deer Park, Ont.) fox-terrier bitch Ruby (A.K.R. 741) to Mr. R. Gibson's Fennel (Spice—Bloom), Dec. 7, 1883.

Vision—Bang Bang. Mr. F. R. Hitchcock's (New York) pointer bitch Vision (Croxteth—Vinnie) to the Westminster Kennel Club's Bang Bang (A.K.R. 394), Jan. 26.

WHELPS.

☞ *See instructions at head of this column.*

Madge. The Ashmont Kennel's (Dorchester, Mass.) mastiff bitch Madge (A.K.R. 548), Jan. 26, ten (six dogs), by their Diavolo (A.K.R. 543).

Pearl. The Rory O'More Kennel's (Albany, N. Y.) red Irish setter bitch Pearl (Dash—Kate), Dec. 6, 1883, eleven (six dogs), by their Pat O'More (Rory O'More—Norah O'More).

Sylvia. The Rory O'More Kennel's (Albany, N. Y.) red Irish setter bitch Sylvia (Rory O'More—Sampson's Nora), Dec. 20, 1883, nine (six dogs), by their Rexford (Berkley—Sampson's Nora).

Sybil. The Rory O'More Kennel's (Albany, N. Y.) red Irish setter bitch Sybil (Larry—Anne Boleyn), Jan. 1, ten (six dogs) by their champion Rory O'More.

Rose. Mr. Gardner G. Hammond's (New London, Ct.) Chesapeake Bay bitch Rose (A.K.R. 142), Dec. 19, 1883, seven (two dogs), by Mr. J. A. Loring's Sport. All since dead.

Rusk. Mr. Gardner G. Hammond's (New London, Ct.) Chesapeake Bay bitch Rusk (A.K.R. 144), Dec. 9, 1883, eleven (five dogs), by Mr. J. A. Loring's Sport. Three bitches living.

Lorna II. Mr. John E. Thayer's (Boston, Mass.) deerhound bitch Lorna II. (A.K.R. 330), Dec. 27, 1883, eight (five dogs), by his Lance (Brau—Maida II.).

Daisy. Mr. John E. Thayer's (Boston, Mass.) pointer bitch Daisy (A.K.R. 395), Dec. 27, 1883, two dogs, by his Bramble (A.K.R. 265).

Brenner. The Chequasset Kennel's smooth-coated St. Bernard bitch Brenner (A.K.R. 706), Nov. 2, 1883, six (five dogs), by Alp II. (A.K.R. 705).

Rube. Dr. S. H. Green's (Newmarket, N. H.) spaniel bitch Rube (A.K.R. 734), Dec. 18, 1883, ten (six dogs), by Obo II. (A.K.R. 432).

SALES.

☞ *See instructions at head of this column.*

Whisper. Black and white English setter dog, whelped June 20, 1883 (champion Gath—Lit), by Major J. M. Taylor, Lexington, Ky., to Mr. C. K. Drane, Burnside, Ky.

Rory O'More, Jr.—Lady Biddy whelp. Red Irish setter dog, whelped Nov. 19, 1883, by Mr. Chas. R. Thorburn, Ridgefield Park, N. J., to Dr. J. M. Allen, New York.

Sherwood. Red Irish setter dog (A.K.R. 641), by Mr. Chas. R. Thorburn, Ridgefield Park, N. J., to Mr. W. W. Sharpe.

Ridgefield. Red Irish setter dog (A.K.R. 637), by Mr. Charles R. Thorburn, Ridgefield Park, N. J., to Mr. H. M. Drake, New York.

Lenox. Red Irish setter dog (A.K.R. 625), by Mr. Charles R. Thorburn, Ridgefield Park, N. J., to Mr. E. S. Tappen, New York.

Bush. Black, white and tan beagle bitch (A.K.R. 39), by Mr. W. H. Ashburner, Philadelphia, Pa., to Mr. Albert H. Wakefield, Providence, R. I.

Harry S.—Fanny Fern whelps. Red Irish setters, whelped Nov. 10, 1883, by Mr. Henry May, Augusta, Ga., a dog to Mr. W. D. Wilson, same place; a bitch to Mr. Thos. Dortie, same place; a dog to Mr. Holmes Johnson, Macon, Ga.; a dog to Mr. A. Long, Athens, Ga., and bitch to Mr. Bennett Conyers, Conyers, Ga.

Rexford—Anne Boleyn whelp. Red Irish setter bitch, whelped Oct. 10, 1883, by the Rory O'More Kennels, Albany, N. Y., to Mr. Ira N. Hanly, same place.

Dell. White, black and tan beagle dog (A.K.R. 319), by Mr. P. H. Horne, Stoneham, Mass., to Mr. Geo. B. Inches, Boston, Mass.

Rake—Rose whelps. Chesapeake Bay dogs, 9 months old, by Mr. Gardner G. Hammond, New London, Ct., a dog each to Messrs. I. W. Griffin, C. Kendall and D. H. Talbot, Minneapolis, Minn.

Sensation—Rose whelps. Lemon and white pointers, whelped Oct. 29, 1883, by the Westminster Kennel Club, a dog to Mr. H. K. Powell, Newton, Ill.; a dog to Dr. O. M. Keyes, Dana, Ind., and a bitch to Mr. Wm. H. Colcord, St. Joseph, Mo.

Goliath—Fly whelp. Newfoundland dog, whelped Oct. 26, by Mr. J. A. Nickerson, Boston, Mass., to Mr. W. H. Tuck, Wilkesbarre, Pa.

Fertig. Rough-coated St. Bernard dog (A.K.R. 475), by the Chequasset Kennel, Lancaster, Mass., to Mr. Francis Lynch, Newburgh, N. Y.

Folko. Rough-coated St. Bernard dog (A.K.R. 477), by the Chequasset Kennel, Lancaster, Mass., to Mr. A. A. Whittemore, New York.

Black Ned. Black spaniel dog (A.K.R. 726), by Mr. J. P. Willey, Salmon Falls, N. H., to Mr. W. Warren, same place.

Bloody. Orange and white spaniel dog (A.K.R. 727), by Mr. J. H. Rushforth, Yonkers, N. Y., to Mr. Andrew Laidlaw, Woodstock, Ont.

Bruce. Liver spaniel dog (A.K.R. 728), by Mr. J. W. Rushforth, Yonkers, N. Y., to Mr. Andrew Laidlaw, Woodstock, Ont.

Flash. Black spaniel dog (A.K.R. 652), by Mr. Forest W. Forbes, Westboro, Mass., to Mr. Geo. M. Howe, same place.

Busy. White, black and tan fox terrier bitch (A.K.R. 435), by Mr. W. S. Jackson, Toronto, Ont., to Mr. John T. Cable, same place.

Rory O'More—Gay whelps. Red Irish setters, whelped Oct. 13, 1883, by champion Rory O'More out of Gay (Elcho—Fire Fly), by the Rory O'More Kennel, Albany, N. Y., a dog to Mr. W. K. Trimble, Princeton, Ill.; a dog to Mr. W. R. Roelofsen, Jersey City, N. J.; a dog to Mr. M. H. Brensinger, Harrisburg, Pa.; a dog to Mr. C. P. Craven, Uniontown, Pa.; a dog to Mr. Alexander Perrin, Thibadeaux, La., and a bitch to Mr. Daniel Miller, Baltimore, Md.

Rory O'More—Quail III. whelp. Red Irish setter bitch, whelped Aug. 6, 1883, by the Rory O'More Kennel, Albany, N. Y., to Mr. Jas. A. Stinson, Cohoes, N. Y.

Rector. Rough-coated St. Bernard dog, whelped Nov. 6, 1879 (E.K.C.S.B. 11,753), by Mr. C. R. Hearn, Passaic, N. J., to Mr. J. K. Emmet (Fritz), New York. Price, $4,000.

ENGLISH BEAGLE SALES.

The following English beagles have been sold by Mr. N. Elmore, Granby, Ct. Mr. Elmore writes: "It may be a satisfaction for you to know that almost all of these sales were made through FOREST AND STREAM, and I could easily have sold as many more if I had had stock to fill orders with." The sales are:

King—Mary whelps. (Oct. 11, 1883.) White, black and tan dog, by King (Victor—Lucy) out of Mary (Flute—Lucy), to Mr. W. F. Streeter, Lehigh Tannery, Pa.; white, black and tan dog to Mr. N. Randall, North Scituate, R. I.; white, black and tan dog to Mr. H. C. Bailey, New Britain, Ct.; white, black and tan dog to Dr. H. K. Leonard, Plymouth, Pa.; a bitch to Mr. O. S. Presbrey, Cheever, N. Y.

Pussy. White, black and tan bitch, whelped June 18, 1882, by imported Ringwood (Ranter—Beauty) out of Maida (Victor—Lucy), to Mr. George Miller, Ithaca, N. Y.

Flute—Collette whelps. (June 5, 1883.) All white, black and tan, by Flute (Rattler—True) out of Collette (imported Chanter—Beauty), a dog to Mr. H. M. Ward, Grovestend, N. J.; a bitch to Mr. I. S. Hodges, Beeville, Tex.; a dog to Mr. W. W. Mills, Barton, Vt.; a dog to Mr. Chas. S. Krebe, Tamaqua, Pa.

Flute—Lucy whelps. White, with mottled ears, bitch, whelped April 16, 1883, by Flute (Rattler—True) out of Lucy (Juno—Old Bess), to Mr. T. F. Durant, New York City; white, black and tan dog, whelped Nov. 1, 1883, to Mr. James E Lobby, Hammondville, N. Y.

Flute—Pussy whelp. White, black and tan dog, whelped July 8, 1883, by Flute (Rattler—True) out of Pussy (Ringwood—Maida), to Mr. Richard Moon, Morrisville, Pa.

Flute—Queen whelps. (Aug. 11, 1883.) Both white, black and tan. A bitch to Mr. J. S. Hodges, Beeville, Tex.; a dog to Mr. M.V. Blydenburg, Bay Shore, L. I.

King—Chase whelps. (July 22, 1883.) White, black and tan dog and bitch, by King (Victor—Lucy) out of Chase (imported Ringwood) (Ranter—Beauty), to Mr. T. F. Durant, New York City.

King—Music whelp. White, black and tan bitch, whelped July 16, 1883, by King out of imported Music (Rockwood—Faithful), to Dr. C. E. Nichols, Troy, N. Y.

Ringwood—Roxy whelps. White, black and tan ticked dog, whelped March 13, 1883, by imported Ringwood (Ranter—Beauty) out of Roxy (Rattler—True), to Mr. T. B. Curtis, Danbury, Ct.; a bitch, whelped Sept. 17, 1883, to Mr. Jas. E. Lebby, Hammondville, N. Y.

Ringwood—Silver whelps. (May 30, 1883.) White, black and tan ticked bitch, by Ringwood out of Silver (Flute—Bess), to Mr. John Fitzpatrick, Waterbury, Ct.; white, black and tan dog, to Mr. M. G. Plimpton, Medfield, Mass.; three dogs to Mr. A. Rogers, Hyde Park, N. Y.

Ringwood—Thorn whelps. (Aug. 16, 1883.) White, black and tan dog, by Ringwood out of Thorn (Victor—Lucy), to Mr. W. F. Streeter, Lehigh Tannery, Pa.; white, black and tan dog to Mr. B.W. Richards, Philadelphia, Pa.; white, black and tan dog to Mr. J. S. Leig, Akron, O.; two white, black and tan bitches to Mr. A. H. Wakefield, Providence, R. I.; white, black and tan dog to Mr. Abraham Bennett, Hammondville, N. Y.; white, black and tan ticked bitch to Mr. Jas. C. Bennett, Poughkeepsie, N. Y.

Ringwood—Maida whelps. (June 29, 1883.) Both white, black and tan, by Ringwood out of Maida (Victor—Lucy), a dog to Mr. O. A. Wheeler, Utica, N. Y.; a dog to Mr. Charles D. Goodrich, Lima, N. Y.

Ringwood—Queen whelp. White, black and tan ticked bitch, whelped Jan. 14, 1883, by Ringwood out of Queen (Victor—Lucy), to Mr. A. H. Wakefield, Providence, R. I.

Ringwood—Roxy whelps. (Sept. 17, 1883.) White, black and tan ticked bitch, by Ringwood out of Roxy (Rattler—True), to Mr. Geo. Laick, North Tarrytown, N. Y.; white, black and tan ticked bitch to H. M. Ward, Grovestend, N. J.; white, black and tan dog to Mr. John Heinemann, Colegrove, Pa.

Ringwood—Bunnie whelp. White, black and tan dog, whelped April 16, 1883, by Ringwood out of Bunnie (Ranger—Lucy), to Mr. F. W. Bronson, Waterbury, Ct.

Ringwood—Collette whelp. White, black and tan bitch, whelped March 5, 1883, by Ringwood out of Collette (Chanter—Beauty), to Mr. W. H. Coldwell, North Westport, Mass.

Ringwood—Dime whelps. (June 3, 1883.) All white, black and tan, by Ringwood out of Dime (Flute—Queen), a dog to Mr. T. F. Durant, New York City; a dog to Mr. T. T. Phlegar, Pearisburg, Va.; a dog to Mr. A. Rogers, Hyde Park, N. Y.

Ringwood—Maida whelps. (June 23, 1883.) All white, black and tan, by Ringwood out of Maida (Victor—Lucy), a bitch to Mr. Geo. D. Carrier, South Windsor, Ct.; a bitch to Dr. J. B. Enos, Belle Vernon, Pa.; a bitch to Mr. Geo. Laick, North Tarrytown, N. Y.

Flute—Queen whelps. White, black and tan dog, whelped Aug. 11, 1883, by Flute (Rattler—True) out of Queen (Victor—Lucy), to Mr. C. H. Parks, Mystic River, Ct.; white, black and tan dog, whelped June 3, 1883, to Mr. W. J. Percival, Palo, Mich.; white, black and tan ticked bitch, whelped Jan. 14, 1883, to Mr. Joseph A. Blake, New Haven, Ct.; white, black and tan dog and bitch, whelped Aug. 11, 1883, to Mr. A. H. Wakefield, Providence, R. I.; white, black and tan dog, whelped Aug. 11, 1883, to Mr. Geo. Fentch, Southington, Ct.

Flute—Victress whelp. White, black and tan bitch, whelped Sept. 10, 1883, by Flute out of Victress (Victor—Lucy), to Mr. Enos A. Messenger, Hartland, Ct.

DEATHS.

☞ *See instructions at head of this column.*

Tom. Lemon and white pointer dog (A.K.R. 405), owned by Mr. James P. Swain, Jr., Bronxville, N. Y., Nov. 16, 1883, from distemper.

Kate. Lemon and white pointer bitch (A.K.R. 460), owned by Mr. James P. Swain, Jr., Bronxville, N. Y., Nov. 20, 1883.

Grace. Lemon and white pointer bitch (A.K.R. 352), owned by Mr. James P. Swain, Jr., Bronxville, N. Y., Dec. 18, from pneumonia.

KENNEL MANAGEMENT.

☞ **No Notice Taken of Anonymous Correspondents.**

R. R. W., Albion, N. Y.—Clip the hair evenly. It will soon grow again.

F. E. L., New Market, Md.—The pedigree is in such shape that we can make nothing of it. Write to Mr. Pollock.

POINTER, Thomaston, Ct.—Your dog has probably caught a severe cold, and with careful nursing will be all right in a few days.

H. M., Princeton, N. J.—Give the puppy an occasional small dose of epsom salts, and wash the sores with a weak solution of sulphurous acid.

G. B. F., Dover, Me.—1. We are not aware that there is any agent in this country; write to the *Field*, 346 Strand, London, Eng. 2. We could not prescribe for your dog without a more definite description of the symptoms. Write again, giving full particulars of any cause that may have induced the trouble.

THE SOLACE OF RHEUMATIC OLD AGE.—A correspondent writes: "Although so large a number of sportsmen have contributed to the FOREST AND STREAM, there are many others—from whom we seldom or never hear—who are abundantly able to interest and instruct. I confess to a large degree of selfishness in this, for I have arrived at that point when I must get the most of sporting pleasure from the experience of others. So 'keep up the motion!'"

Rifle and Trap Shooting.

RANGE AND GALLERY.

THE NEWARK TOURNAMENT.

THE third match in the tournament series has just ended at the Celluloid Range. The clubs have greatly improved in shooting since last match, which will be seen in the scores. There are six matches to complete the tournament, three having been shot. The Essex Rifle Club have held the lead for the past three years by two or three points over all others. The Frelinghuysens, who have held a good second, are now coming to the front, having succeeded in winning two out of the three matches, and above all making the handsome score of 471 out of a possible 500 in the last match, placing them ahead of the Essex one point so far. The Domestic Club, numbering 120 men, are striving for third position, they being only 32 points behind, and three matches to shoot. The last match is given below. We now have in our association about 500 members; of these 100 are excellent shots; the remainder shoot on an average.

The fourth match of the Newark Rifle Association will be held on the Domestic Range, Market street.

Frelinghuysen Rifle Association.		Celluloid Rifle Association.	
A C Neumann	5555554555—49	W A Coe	5555454555—48
G Williams	5555555455—49	F Brant	5455555554—48
E O Chase	5555545555—49	W F Wilsey	5455455456—47
Geo Zimmer	4455555555—48	W A Vreeland	5554545555—47
Geo Weigman	5454555555—48	S T Simmonds	4555444555—46
R Westerman	4545545555—47	C F Jackson	5155545444—45
Wm McLeod	5445545555—47	C E Coe	4544455453—43
S Shackelford	5544454545—46	M Puder	5454545443—43
J L Tobin	4445545455—44	H Babbitt	4332455544—41
J K Walsh	4544444555—44	A Erhard	5444434454—41
	471		449

Essex Rifle Association.		Plymouth Rifle Club.	
Wm. Watts	5555555555—50	J E Pollard	5455555455—48
A Walters	5555545555—49	J L Sommers	5555444454—45
L Pahls	5555555554—49	H Greive	4454545545—45
J Coppersmith	5555545455—48	C H Townsend	4455445455—45
Ed Neil	5445555555—48	Wm Parks	5455555434—45
J Bayer	4555554465—48	G M Townsend	4445545555—45
Wm Felts	4445455555—46	J A Foster	5555444435—44
A Behrens	4455544545—45	M S Braell	4544545553—44
F Smehling	4555554444—45	P L Sommers	5453444445—42
N Deithrick	4445453444—41	H L Leibe	3435444535—40
	469		443

Domestic Rifle Association.		Warren Rifle Association.	
J Setz	5555554555—49	F Miller	4445555555—47
J Quinty	5544555554—47	A Welsher	5554454454—45
B Jefferys	5555554444—47	Wm Hunley	5354553445—43
J Veiser	4545554454—45	Wm Alexander	3445445555—43
W Wadams	5554444545—45	J Woffe	5544445444—43
A Valentine	5445554445—45	G Freche	5455444435—43
J Reynolds	4554444455—44	W Sidey	3354354544—40
W McConnell	4545444545—44	C Wagg	3354354434—38
McGuinness	4534435554—42	W Cobb	5444434433—38
F Millward	5245545835—41	W Cheesman	3335444434—37
	449		417

BOSTON, Jan. 26.—The fine, bright weather of to-day served to attract a large number to the comfortable and commodious shooting house of the Massachusetts Rifle Association at Walnut Hill, but on arriving there it was found that the bright promises of the morning were not to be fulfilled. The wind did not appear to be very strong, but it proved to be a difficult one. The light was good, and had the wind been a little less tickle it would have been plums for the shooters, but they would have lost much valuable experience. Next Wednesday the glass-ball and clay-pigeon shooters will contest. The following are the best scores of yesterday:

Creedmoor Practice Match.

J B Fellows	5554444555—46	P J Forest (mil)	5344444344—39
C B Edwards	4445455554—45	W Kirkwood	4454444441—39
A L Brackett	4455444553—44	A L Henry (mil)	4444444434—38
Samuel Merrill	4454445544—44	J L Towle (mil)	4434443453—38
C A Hunt	4555444354—43	P Johnson (mil)	4444533432—37
H A Lewis (mil)	4444444455—43	B J White (mil)	4343344334—36
E M Samuels	4534444444—40	Charles Peirce (mil)	4352433233—33
J Payson (mil)	4434544444—39		

Creedmoor Prize Match.

W Faber	5454545545—46	O M Franks	5444445444—42
H Withington	5454554554—45	A L Brackett	5534544444—42
J B Thomas (mil)	4544445445—44	J P Bates	4555343354—42
W F Franks	5444554445—44	J A Cobb	4444445444—41
H W Padley	5444454444—43	W J Look	4344445444—40
B A Lappin	4454454454—43	A Darling (mil)	4443445444—40

Combination Match.

W Gardner	7	7	8	8	10	8	7	9	8	7—79
A C Adams	9	10	7	7	9	6	8	7	7	6—76
W J Look	8	6	10	7	6	7	8	8	10	5—75

Novelty Match.

W Gardner	8	8	7	4	4	9	5	5	8	8—66
C B Edwards	1	6	9	10	7	3	7	9	6	4—62

GARDNER, Mass., Jan. 24.—The last regular meet of the Gardner Rifle Club was omitted. Yesterday the club went out to Hackmatack range for practice. They used the American decimal target. The shooting was off-hand, distance 200yds. Out of a possible 100 the following scores were made:

Chester Hinds	9	10	9	9	8	8	8	9	9	10—89
H Cheney	8	5	9	10	10	8	10	10	10	9—89
G F Ellsworth	9	6	9	9	9	9	9	9	9	9—87
G Fordyce	9	6	9	8	8	9	10	9	9	8—85
A Mathews	10	9	7	10	9	4	7	10	8	9—83
M Atherton	9	7	6	10	6	9	7	8	9	9—80
W C Loveland	9	7	10	6	9	8	8	10	8	5—80
L Warren	5	8	9	9	7	9	9	7	9	7—79
I Newman	9	8	7	6	10	10	4	9	5	10—78

The club are soon to shoot a match with the Brattleborough (Vermont) Club, they having received a challenge. The shooting is to be on the grounds of each club, the score to be exchanged by telegraph.

BOSTON SCHUETZEN CORPS.—The East Boston Schuetzen Corps held its weekly shoot on Friday at the range at Oak Island. The day was anything but favorable, but some good shooting was done. The newly-elected captain of the club had the van, closely followed by his predecessors. The following are the scores:

Captain Garney	5445545455—46	F Kline	4544545453—43
C M Gueth	5145445455—45	E Bennett	4544434455—42
O Crist	4454445545—44	M Sharp	4545355344—42
C Mirth	4445555444—44	E L Gibbs	5354234445—39
F Orth	4444445545—43	W Saunders	3433054544—35

LUTZOW vs. ESSEX.—New York, Jan. 23.—Match at Zettler's Gallery between the Lutzow team, of New York, and the Essex second team, of Newark; 12-ring target; 10 shots per man; possible 120:

Lutzow Team.		Essex Team.	
A Lober	114	C Rittmeyer	107
M Dorler	118	J Hiegel	100
B Zetzler	114	W Dutcher	90
G Bernius	106	F Helmes	101
A Ringler	105	G Vanburgh	98
L Zittmann	96	W Yaugmann	106
G Spanier	111	D Mannig	86
G Zimmermann	107	J Derapsey	103
W Berger	106	H Deathrich	103
V Steinbach	108	J Dorsch	113
	1,088		1,006

SARATOGA RIFLE CLUB, Jan. 12.—The following are the best scores of each man for this week:

H Wheeler	10	11	12	12	10	11	11	10	10	12—109
F D Wheeler	12	10	12	10	11	12	11	10	10	10—108
A G Hull	10	12	10	12	12	10	11	10	10	11—108
J D Davis	11	10	10	11	11	12	10	10	10	12—107
H Hays	8	11	9	12	12	12	11	11	10	11—107
W B Gage	12	11	10	8	9	11	12	11	10	11—105
A E Mitchell	12	11	11	11	10	9	10	9	9	10—102
J Hays	8	10	10	8	11	9	10	11	10	12—98
F A White	12	8	12	7	10	11	8	10	10	10—98
J Farrington	9	7	11	11	8	10	9	11	8	12—96
W Howard	12	9	11	11	9	8	9	8	10	9—96
J D Roods	6	12	10	9	7	9	9	10	9	11—92
A L English	11	11	7	9	11	8	6	11	6	7—87

Jan. 19.—Best scores for this week:

A G Hull	11	11	11	11	12	12	12	12	9	12—113
H Wheeler	12	9	11	11	11	11	11	12	12	11—111
W B Gage	11	10	11	10	10	11	9	9	12	11—104
J Davis	11	11	12	11	11	9	7	12	9	11—104
J Hays	10	12	11	9	9	9	10	9	10	12—101
F D Wheeler	9	11	11	12	10	10	9	9	11	9—101
H Hays	10	9	10	9	9	11	10	10	11	10—99
F A White	12	8	10	8	10	10	8	7	9	12—94
W Howard	11	12	10	12	7	8	10	11	9	6—96
O J Wing	8	11	9	9	12	8	9	10	9	6—91

ZETTLER RIFLE CLUB.—New York, Jan. 21.—Regular shoot, 12-ring target, 10 shots per man, gallery distance:

P Fenning	116	A Lober	111
C Judson	114	V Steinbach	106
Wm Kline	112	H Holger	105
C G Zettler	110	D Patterson	103
B Zettler	112	H Eibsen	103
T C Noone	95	H Buckhauer	98

N. D. WARD, Sec.

BULLSHEAD RIFLE CLUB.—Thursday, Jan. 24.—Twelve-ring target; possible 120.

G Zimmermann	116	H Gunther	110
M Dorrler	116	J J Jordan	108
E Holzmann	116	J Schneider	107
A Lober	116	W Roos	105
C Rein	114	G Wendelken	102
H Hackmann	114	J F Campbell	96
G Mehrbach	112		

H. LOBER, Secretary.

GALLERY SHOOTING.—Some very good shooting has been done during the past week by amateurs at the Mammoth gallery, Boston, and many who do not care to face the cold winds, resort there to keep up their practice at 50yds. range. The following are the best scores made during the week, off hand:

J Larkin	4444455555—45	R McRobbie	4454455444—43
P D Parker	4444445555—44	R E Bellows	3314455555—43
I Higgins	5544544445—44	I Ennen	4444444145—41
J E Leonard	5525444444—44	M A King	5444444444—41

A SOLDIER'S INVENTION.—An invention of great utility to the militia, and also of value to hunters, has lately been patented by a soldier of the U. S. Infantry. It is a device for the extraction of headless shells, in regard to which great difficulty has heretofore been experienced. The chief trouble has been to remove the impediment without injuring the grooves of the rifle. The present invention, which is a product of the brain of Mr. William Pratt, of the Seventh Infantry, stationed at Fort Laramie, seems to accomplish this, and so successfully that it has been recommended by General O. O. Howard and other officers of the Army of high rank who have tested it.

DEATH OF CAPT. BROCKHOFF.—Capt. William H. Brockhoff, a famous rifle shot, formerly a resident of this city, died recently on his ranch in Sonoma county from a fracture of the skull, caused by the runaway of a team which he was driving. The deceased was excellently well known here as the captain of a German militia company and abroad as the National Guardsman who made the highest individual score at the Creedmoor Centennial trials.—*San Francisco Chronicle, Jan. 6.*

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

RHODE ISLAND NOTES.

Editor Forest and Stream:

The game season now being over, the "boys" are beginning to take more interest in trap-shooting, and every Thursday, stormy or pleasant, finds a goodly company at the club grounds on Broad street.

How differently we are situated now with our comfortable warm club house, with a red hot stove diffusing its grateful heat, the "boys" drawn up in a circle around it, spinning yarns about the past hunting season, how old Trim stood that cock partridge on the edge of the "Great Swamp" and how Sancho roaded the big bevy of quails the whole length of "Long Meadow" and finally "nailed" them in the old cranberry bog; and as we glance upward and view the elegant specimens of the taxidermist's art that adorn our walls, not to speak of the tasteful oil paintings, etc., we can but think of the contrast of the old shed of but two short years ago, when a few of the "boldest spirits" among us used to gather on this same spot and "peg away" at glass balls. We had no fire then and the only way to warm our fingers was to shoot fast enough to heat our gun barrels. Speaking of glass balls, they are with us almost a thing of the past, we are now shooting clay-pigeons almost exclusively, and those from five traps; the object being to put ourselves in "trim" for the great event at Chicago in May next, where we expect to send a team providing our scores in practice seem to warrant us a fair show of success. The spring, however, is our season *par excellence* for trap-shooting, as after the long winter the boys creep out, like woodchucks from their holes, and make it decidedly warm for the clay-pigeons, glass balls, etc., although with our now comfortable quarters, we have more winter shooting than we formerly did.

The game season has been a remarkably good one with us during the past fall, though doubtless those sportsmen living in more favored sections would laugh "long and loud" at the idea of a half dozen partridges (ruffed grouse) or a dozen quails being considered a good day's work; but so it is here, and we have to make the best of it. Quail seemed to breed well here last season, and if we have the remainder of the winter favorable for them we shall probably have fair shooting again next fall, as there are a good many left over. Not so, however, with the partridges, as they have been snared terribly in most sections of the State. I was credibly informed that in one county alone 5,000 birds were snared and shipped to market, and on ground where, in September, another gentleman and myself killed thirty-five birds in two days in November; with three good dogs in two days' hard hunting we failed to start half that number on the same ground, although we left plenty of birds on the first occasion, the cover being very thick at that time; the woods were full of hedges, and that told the story. I think I heard some one ask why don't you stop it? Well, that is easier said than done. Most of the trapping is done by farmers' boys, and there is a clause in the game laws which allows one to trap on his own land; besides we do not wish to incur the everlasting hatred of the tillers of the soil, as by so doing we should "kill the goose, etc.," for we should be unceremoniously told to "git" every time we ventured on their lands, so there you have it, and we have to be thankful for the few birds we do get.

W. H. SHELDON.

PROVIDENCE, Jan. 20.

MASSACHUSETTS CLUBS.

THE Boston Gun Club held a tournament at Wellington Jan. 23, the same being the initial meet of a series of alternate Wednesday shoots. The attendance was over 60, including representatives from the various gun clubs of the State. The sweeps of the day are subjoined:

First event (7 birds, 18yds. rise, miss and out, 25 entries)—Wilbur and Williams first, Jenkins, Kirkwood and Johnson second, Sawyer and Sampson third, De Rochmont fourth.

Second event (7 birds, 18yds., 25 entries)—Jenkins and Wilbur first, Houghton and Kirkwood second, Clark, Williams, Allen and Webber third, Gerrish and De Rochmont fourth.

Third event (7 birds, 28 entries)—Perry and Clark first, Smith, Sampson and Davis second, Johnson, Gilman and Harrison third, Jenkins fourth.

Fourth event (5 pair doubles, 28 entries)—Gilman and Curtis first, Emerson second, Cooper, Tinker and Wilbur third, Smith fourth.

Fifth event (7 birds, 5 traps, 34 entries)—Cutting and Clark first, Tinker and Davis second, Schaefer and Wilbur third, Mann and Eager fourth.

Sixth event (3 pair doubles, 5 singles, 28 entries)—Williams, Harrison and Jenkins first, Perry and Stanton second, Davis, Clark and Schaefer third, Gilman fourth.

Seventh event (7 single birds, 37 entries)—Kirkwood, De Rochmont, Smith and Gilman first, Evans and Wilbur second, Davis and Emerson third, Schaefer and Paine fourth.

Eighth event (7 singles)—Emerson first, Evans and Kirkwood second, De Rochmont and Jenkins third.

Ninth event (3 pairs, Chicago rules governing)—Perry, Curtis and Nichols first, Jenkins and Wellman second, Smith third, Sawyer fourth. Much interest centered in the ninth match, the rules being similar to those which will be adopted in Ligowsky sweepstake at the Chicago meet. Altogether the shoot was of a most enjoyable kind. Over 3,000 birds were trapped, and the hum of the seven traps betokened the liveliness of the shoot. The next meet, on Feb. 6, will also be represented by the noted shots throughout the New England States, and of which you will receive report of same. Upon inquiry among our members, seven-trap shot is most used upon clay-pigeons.

D. K.

The Lynn Central Club held its ninth shoot for the silver cups Friday, Jan. 25. There was a good party present to contend for them. E. L. Beale of Newburyport, took the cup for clay-pigeons on a score of 17. J. P. Randall took the glass-ball cup on a score of 18 out of 20. There are three who have one chance each in the clay-pigeon cup, and four with one chance each in the glass-ball cup. There were twelve sweeps at clay-pigeons and six at glass balls. The next shoot will be held Feb. 1.

Quite a number of sportsmen were present at the range of the Malden Gun Club this afternoon to participate in the competition match for the gold badges. The conditions were unfavorable for good scores. Following are the winners of the medals: J. Buffum took first with 15, A. F. Adams second with 11, and F. J. Scott third with 9 out of a possible 20. W. H. Trebor was first in the match for a keg of powder, the conditions being 21yds. rise, both barrels, at 5 birds. In the match for a bag of shot, Fielding, Adams, Law and Hopkins tied, and in the shoot-off Hopkins won. This match was quite interesting, and was shot under the rules adopted for the coming Chicago tournament, the shooters standing back some thirty yards and then given from one to ten yards, the distance unknown to the shooters before the trap is sprung.

There was not a large attendance at the grounds of the Boston Gun Club, Jan. 26, and the weather conditions were unfavorable for good scores. Following are the winners in the sweepstake matches:

First event, seven birds—Law, first; Sawyer and Kirkwood, second.
Second event—Kirkwood, first; Sawyer, second.
Third event—Emerson, first; Chambers, second.
Fourth event—Emerson, first; Snow, second.
Fifth event, three pairs of double birds—Emerson, first; Chambers, second.
Sixth event—Sawyer and Emerson, first; Chambers, second.

ONTARIO MATCHES.—Several shooting matches came off at St. George on the 21st, opening with a match between Wayper, of Guelph, and Stroud, of Hamilton, for $25 a side, at twenty-five birds each.

Wayper.....1110101111111111111110111—22
Stroud.....0110000111011111110001111—16

The second shot was Woodstock v. Branford, in which Woodstock had the best of it; ten birds each.

Woodstock.		Brantford.	
J Forbes	7	T Westbrook	8
G Grant	8	F Westbrook	9
— Walker	7	W Baxter	2

A sweepstakes followed, at five birds each.

Forbes	1 1 1 0 1—4	T Westbrook	1 0 0 1 1—3
Turnbull	1 1 0 1 1—4	Mackenzie	1 1 1 0 0—3
Baxter	1 1 1 0 1—4	Passco	0 1 1 0 1—3
Wayper	1 1 1 1 0—4	Stroud	1 0 1 0 0—2
Grant	1 1 1 0 1—4	Miller	1 0 0 1 0—2
Walker	1 0 1 1 1—4		

In shooting off ties, Forbes won.

The meeting wound up with a match between F. Westbrook and Walker, five birds each. Each killed three in the match. Westbrook winning on second tie.

NEWTON CENTRE GUN CLUB.—Boston, Jan. 27.—The Newton Centre Gun Club was formed the past summer. Starting with ten members, it now numbers twenty-eight, and is a wide-awake organization. It has secured a club room, and during the winter has the use of a bowling alley, and meets occasionally on its shooting ground for glass ball and pigeon shoots. Next week, by invitation of one of its members, the club goes on a sleighride, and lots of fun is sure to come. We number a few crack shots, and have accepted an invitation from a neighboring club for a team shoot, which will come off within ten days.—H. H. R.

SIZE OF SHOT FOR CLAYS.—In last issue I notice a request from a correspondent for opinions as to proper size of shot to use in shooting clay pigeons. I have had some experience with this festive bird and I find from repeated trials that No. 7 chilled gives the most satisfaction.—OCTO.

RIDGEWOOD, N. J., Jan. 21.—Match at twenty-one birds each; 21yds. rise, trap and handle; R. Busterd, 101111000100001001—8; D. Hopper, 111110011110111011—13.

Canoeing.

FIXTURES.

Winter Camp-fire.—Tuesday, Feb. 19, 8 P. M., No. 23 East Fourteenth street, Room 16.

Secretaries of canoe clubs are requested to send to FOREST AND STREAM their addresses, with name, membership, signals, etc., of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to FOREST AND STREAM their addresses, with logs of cruises, maps and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.

AMATEUR CANOE BUILDING.

Fifth Paper.

THE lines of the drawing now show the outside surface of the plank, but the moulds over which the boat is built must, of course, correspond with the inner surface of planking. In large work the model is often made to the outside of the frames only, then the breadths when taken off show the actual size of the frame. If the working drawings are made to include the plank, the thickness of the latter is deducted at some stage of the drafting prior to laying down. In our canoe, for convenience, the drawings will all include the plank, so in making the moulds its thickness, ¼in., must be deducted.

To copy the frame lines, a piece of thin board or cardboard, A B C D, Fig. 3, is slipped under the paper of the large drawing, adjusted under the line to be copied, and held in place by a couple of tacks. Setting the points of the compasses ¼in. apart, a row of spots is pricked through the paper into the board, ¼in. inside the frame line, shown by the small circles in Fig. 3. At the same time points on the center line, E F, load water line and the diagonals D1 and D2 are also marked. The board is then removed, a batten run through the spots, and the wood trimmed away to the line. If the drawing is made on a board or floor the lines may be taken off, as in Fig. 4.

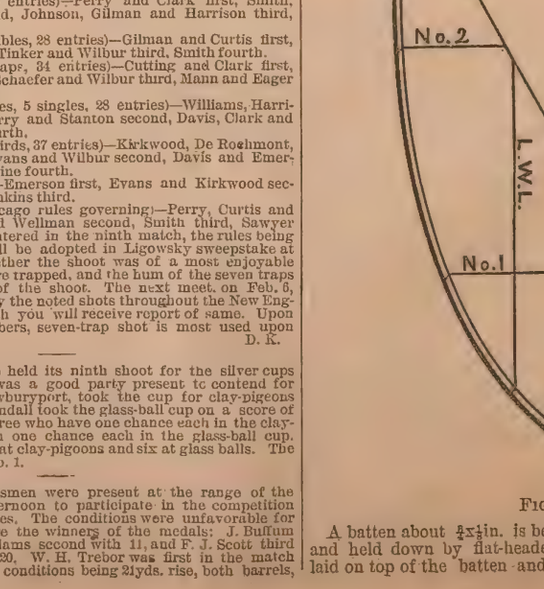


FIG. 6.

A batten about ¾x¼in. is bent along the line on the floor, and held down by flat-headed nails. A piece of board is laid on top of the batten and a mark scratched on its under

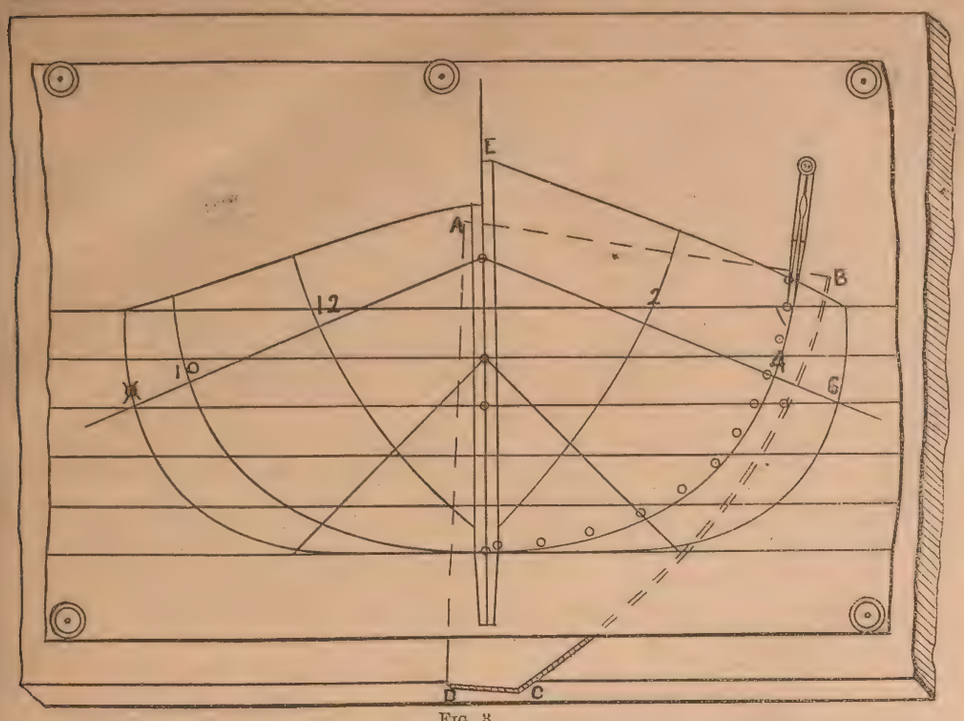


FIG. 3.

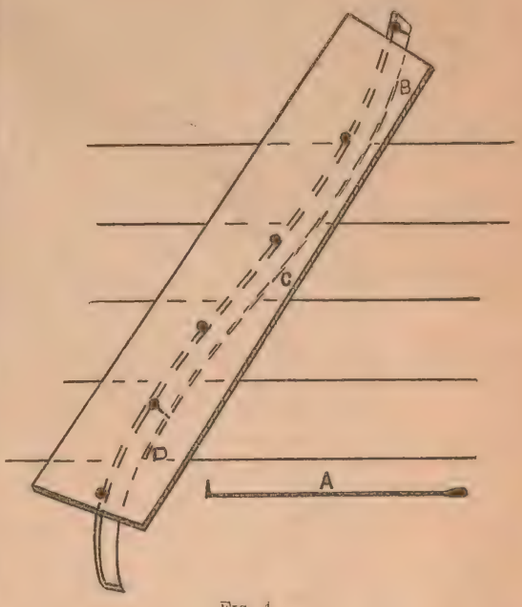


FIG. 4.

side with the piece of bent wire shown at A. In this case, after cutting to the mark another line must be gauged ¼in. inside the edge, and a second cut made to it, after which it is laid on the drawing and the center line, water line and diagonals laid off on it.

To make the complete mould, a piece of 1in. pine is planed up on one edge, H I, Fig. 5, a center line E F, is drawn at right angles to it, and also the load water line, then the pattern is laid on this board, adjusted to the center and water lines, and one-half marked off; then the pattern is turned over, adjusted on the other side of E F, and that side also marked off, the diagonals being marked at the same time.

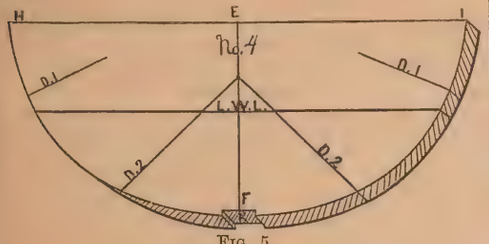


FIG. 5.

As the boat tapers from midships to the ends, it will be evident that the after side of the forward moulds will be slightly larger than the fore sides, and the reverse will be the case with the after moulds, No. X having both sides the same in most canoes. To allow for this bevel, moulds 2, 4, and perhaps 6 must be sawed out ¼in. larger than the marks show. The bevels at the deck height and on each diagonal are now taken from the drawing with a common carpenter's bevel, applied in turn to each of the above points, and the edges of the mould are trimmed accordingly.

To complete the mould, a notch K must be cut at the bottom to admit that portion of the keel or keelson inside of the rabbet, as will be explained later.

Besides the moulds described there will be required a stem mould (Fig. 6) giving the outline of the stem, a rabbet mould made to the rabbet line (if the stern is curved similar moulds will be required for it) and a beam mould, showing the curve and depth of the deck beams. These should be made of ¼in. pine. They are taken off by either of the above methods.

The tendency of light boats if to spread in width in building, to avoid which in a canoe, where a small excess of beam may bar the boat from her class in racing, the model and all the drawings are sometimes made about one inch narrower amidships than the desired beam of the canoe, and the sides are allowed to spread when the deck beams are put in, if they have not done so previously, as often happens unless great care is taken.

METHODS OF BUILDING.

While but few of the many different methods of building are adapted to the purpose of the amateur, a description of the principal ones will enable him to understand the entire subject more clearly. Of these, two are by far the most common, the carvel, and the lapstreak, also called clinker or clincher. In the first, usually employed for ships' boats, yawls, Whitehall and other boats, where lightness is not of first importance, the planks (six to eight on each side) are laid edge to edge, not overlapping, and nailed to the ribs or timbers that make the frame, the latter being spaced from nine to fifteen inches apart. To prevent leakage, a small thread of raw cotton, lamp wick, or in large boats, oakum, is driven into the seams with a mallet and caulking chisel, and the seams afterward filled with putty, marine glue, or if oakum is used, with pitch. To stand the strain of caulking and to hold the cotton, the planks must be at least three-eighths of an inch thick, which would be too heavy for a canoe.

In a lapstreak boat the planks lap over each other a distance of one-half to one inch, the edges being held together by rivets, some of these also passing through the ribs. In all cases the upper board laps on the outside of the one below it. Three objections are made to this mode of building—liability to leakage, difficulty of cleaning inside, and the obstruction that the laps offer to the water.

As to the first, it is almost entirely dependent on the skill and care used in the construction, and although a lapstreak boat may sometimes leak when first put in the water after drying out for a long time, it will very soon be perfectly tight. While the second point is an objection, it is by no means a serious one, and with a little care the boat may be kept perfectly clean, if not, a stream of water from a hose will wash out all dirt. The third point is the one most emphasized by the opponents of the lapstreak, but they overlook the fact that the laps, or lands, as they are usually called in England, are very nearly parallel, not with the water lines, but with the course of the water, which is largely down and under the boat. At the ends the lands are diminished to nothing, if the boat is properly built, and that they detract nothing from the speed is well proved by the fact that a very large majority of all canoe races have been won by lapstreak boats.

As to their advantages, they are at least as light as any other boat of the same strength, they are easily repaired when damaged and they will stand harder and rougher usage than any other boats of their weight without injury. The lands on the bottom protect it greatly when ashore, and if anything they add slightly to the initial stability.

The oyster skiffs of Staten Island Sound and Princess Bay, boats from 18 to 25ft. long, lapstreak, of ⅛in. plank, are considered by the fishermen to be stiffer and to rise more quickly than smooth-built boats of the same model. As after some experience with different modes of building, we have settled on the lapstreak as the best for canoes, and the easiest for amateurs, we shall later on describe it in detail.

In order to obtain a smooth skin, canoes are sometimes carvel built, as before described, but of ¼in. stuff, and as this cannot be caulked, a strip of wood about ¼in. thick and 1in. wide, is placed on the inside of each seam between the timbers, the edges of the planks being nailed to it. This is called the "rib and batten" plan, and is largely used in Canada.

Another and similar plan, the ribbon, or more properly ribband carvel (not "rib and carvel") is used in Massachusetts and Connecticut for whaleboats, and in England for canoes. In these boats the ribbands are of oak or ash, 1¼x ¼in., slightly rounded on the back and as long as the boat. They are screwed to the moulds, when the latter are in position, just where the seams of the planks come, and as each plank is laid on, its edges are nailed to the ribbands for their entire length. When the ribs are put on they must be "jogged" or notched over the ribbands. In both of these methods the boat is improved if a strip of varnished or painted muslin is laid along the seam, under the ribband, but this is often difficult to do.

In a similar way the boats of the yacht Triton are smooth built, with a strip of brass inside each seam instead of a ribband of wood. While having a very fine surface these boats are usually not as tight as the lapstreak, and are more easily damaged.

In another method sometimes employed for canoes, the skin is double, the boat being first planked with ¼in. boards and then with a second layer, crossing the inner one. The first layer sometimes is laid diagonally, sloping aft from bow to stern with the second layer sloping the other way, so as to cross it nearly at right angles; a method used in U. S. Navy launches and lifeboats.

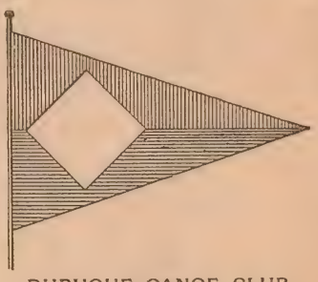
Sometimes the inner skin runs across the boat, and the outer fore and aft, as in the well-known "Herald" canoes, and sometimes both run fore and aft, the seams of one skin coming in the centers of the planks of the other, rivets being placed along all the edges, a method of building followed also in some of our largest cutter yachts.

With either of these methods a thickness of muslin is laid in paint between the two skins, and both are well nailed together. While making a very strong boat, it is often heavy, and when water once penetrates between the skins, as it will in time (with the thin plank used in boat building), the leaks cannot be stopped, and the wood will soon rot. Another serious objection to it is the great difficulty of making repairs.

JERSEY BLUE.

NEW CANOE CLUBS.—We learn of clubs being formed at St. Lawrence, Fulton and Rondout, N. Y.; St. Paul, Minn., and Chicago, Ill. This speaks well considering the recent weather. Canoeists are still alive and looking for spring. Send in your signals to FOREST AND STREAM as soon as possible.

THE LOCAL MEET.—Mr. Smith, of Newburgh, has laid out courses on the ice opposite to the proposed camp ground of one-half, three-quarters, one, and one and a quarter miles. Also, a three-mile course for sailing. The course for paddling, one-half mile, is directly in front of the camp.



DUBUQUE CANOE CLUB.

ORGANIZED Oct. 1, 1883. Membership limited to eight canoe owners. Captain, Eugene A. Guilbert. Signal, upper half red; lower, blue, white square.

THE GALLEY FIRE.

PRACTICAL COOKERY.

THAT the canoeist has a heart is evident from the fact that the turnpike reaching it leads through the stomach; and the way to win it, I suppose, is by that prescribed route of old.

As the "galley fire" is kindled by that slightly traveled roadside, let us keep it burning, not smouldering, but blazing; and when the coffee pot is removed, let it be replaced by the kettle, the frying pan, or the gridiron.

That model rig, fixtures, water courses, etc., need discussion, and the discoveries and improvements therein spread among the brotherhood, is now evident, but let the cuisine keep pace with the advancement in other respects. Accustomed to our meals at home, with none of the attending trouble on our part, we are apt, in the contemplation of a cruise, to neglect giving them the consideration they deserve; 'tis hard to see a future appetite, with a full stomach. But it matters not how beautiful the hills among which you float; if the stomach is fed on badly cooked food, the "inner man" rebels, and the glory of the cruise has departed. Yes, the rills may murmur and the pine tops sigh, but

"Man is a carnivorous production
And must have meals,"

and neither murmurs nor sighs fill the stomach as they fill the heart; there is a sympathy between the last mentioned articles which will allow no encroachments from either side.

There are many dishes agreeable in camp which any one with two hands and a limited amount of wit can produce when on a comfortable cruise. By a comfortable cruise I mean one in which time is taken to "camp by the way," and not live on cold lunches, canned goods, Brunswick soup and hotel dinners, as is too frequently the case. There are those among canoeists (and very few I trust) who mark out a route, which would require four weeks to properly accomplish, and rush through in a week, as if after the pot of gold at the end of the rainbow. Then they tell with pride how many miles they made this day and that. They must be "through by daylight" or burst the boiler.

As the pot-hunter's enjoyment is measured by the weight of his bag, so is he delighted by the number of miles covered each day. He is in search of solitude, and the moment it is found rushes again for the society of men. There are times when camping places are "few and far between;" then this undue haste may be excusable. That a few such canoeists exist I know, and they do not tend to uphold the idea that the paddler is that independent individual upon whom the railroad and hotel have no claim.

If there is a being on earth who is not the "sport of circumstance," it is the canoeist; rain or shine neither sends him from any location or holds him to it if properly equipped. He is pre eminently a man of leisure; he has been "cast upon the waters," and the "world has found him after many days;" he is the product of the nineteenth century, a hurrying age 'tis true, though he came not in a hurry. "No fashion makes him ape of her distortions." He sails, he eats, he sleeps in his diminutive home, and why should not the art of cooking be as much a part of his education as the handling of his paddle or mainsheet. Do not the preparation and consumption of food bring their share of pleasure? Is not that a happy moment when, after a long paddle, you sit down with a ravenous appetite to a meal prepared by one acquainted with the mysteries of the cuisine. The novelty of the position brings it a charm, and when cruising in company does not the good cook command the respect and admiration of all? and when he has produced something extra to the "bill of fare" to tickle the palate, how he is looked up to in his wisdom, and how all wonder in what mysterious way the delicacy was produced. Ah! is he not their "bosom" friend? Verily, he rules the roast.

The best place to get ideas, certainly, is the kitchen; try it yourself under the supervision of "your sister or some other fellow's sister." Carefully note each operation, then, when in camp, you may trust greatly to the "necessity which compels you to do these things," as Virgil used to say. A good plan is to carry a small book and when anything pertaining to the "art" is found that may be of use, jot it down; when the eye rests on "Camp Cookery" in FOREST AND STREAM, or when you see any dish whose simplicity allows its production in camp, put it down in black and white; then when the "critical" moment arrives you are not bothered by the "thousand and one" minute difficulties which beset the amateur cook.

One of the most common products of every camp, canoeists or otherwise, is, or should be, a game stew. With it every one is familiar, and each cook, I suppose, makes it after a manner peculiar to himself. Its preparation is most simple, and that must be the reason it is never seen in print. There is one ingredient, however, which may not agree with the "knights of the paddle." That is time. A stew must be stewed. Fish, or eggs, or steak may be flopped in and

out of the pan in short order, but a stew takes time and a steady fire, and why not? Is the paddler always on the go? Does he never spend a quiet hour or two under the pines? He does not want a stew for every meal, but when he does what has an hour or two to do with it. This is the *modus operandi* with us:

Put game (anything from a goose to a sparrow, biped or quadruped), after being washed, into a kettle with pork and good supply of water, over a slow fire. Let boil well and skim. Cut up three or four good-sized onions, and add with seasoning, salt, pepper, parsley and summer savory. Boil slowly for one and a half or two hours, and when game is nearly done, put in pared potatoes, the large ones cut into two or three pieces. Mix three tablespoonfuls flour in a little water, and stir after thirty minutes, and all is ready. Water may be added when necessary.

Here is another simple method of cooking squirrels: Cut up squirrels into about four pieces each, put in frying pan with a few slices pork, and cover with water. Put cover over pan, boil well and skim. Cut a few onions over all, add pepper and salt, cover tightly again and cook to a nice brown. Remove meat, and to make gravy, dredge in enough flour to thicken, and stir well till blended. Q.

CHICAGO C. C.

Editor Forest and Stream:

The banquet of canoeists held at the Matteson House on Friday evening, Jan. 11, was a grand success in every particular, and the result, from present indications, will be one of the largest and most active canoe clubs in America.

Twenty-two canoeists were present, all but two or three being canoe owners. An informal reception was held in the hotel parlors till 8:30, when the company adjourned to the dining-room. In the center of the artistically arranged table, elevated on a standard entwined with smilax, stood a model Racine canoe some four feet long, filled with the rarest of cut flowers. This beautiful center-piece, the gift of Thos. Kane, Esq., of the Racine Boat Co., was deservedly much admired. The dinner and service were in keeping with the decorations.

About 10:30 the meeting was called to order, with Mr. J. F. West as chairman pro tem. The Chicago C. C. was organized and the following officers were elected:

President, Mr. G. M. Munger; Vice-President, Mr. J. W. Keogh; Secretary and Treasurer, Mr. F. R. Seelye.

A committee consisting of Messrs. Seelye, Pullen and Ellis, was appointed to draft a constitution and by-laws to be submitted at the next meeting, to be held on Friday, Jan. 25, at the office of Messrs. Thos. Kane & Co. on Wabash avenue. Other business was transacted and meeting adjourned at 12:15.

As a direct outcome of the banquet two new canoes have already been ordered and several others are being talked of. There is great enthusiasm and every prospect of an immense boom during the coming season. QUI VIVE.

CHICAGO, Jan. 14, 1884.

A NEW A. C. A. BADGE.

Editor Forest and Stream:

The question of a badge for the A. C. A. being now agitated, I have just forwarded to Commodore Nickerson for his approval, and afterward that of the committee, a design which I drew up last season with the intention of bringing the subject before the last annual meet. This I was prevented from doing on account of my not being able to attend the business meeting of the Association. The design consists of a rope arranged in a circle and tied at the lower side in a sailor's knot; inside the circle is a canoe with mutton-leg sail set (the mutton leg being the simplest for design), the prow and stern of the canoe and peak of sail touching the edge of circle; beneath the canoe, extending from keel to edge of circle, are the letters A. C. A., the whole being suspended from a double-bladed paddle by two single blades arranged vertically, one on each of the upper edge of circle. The design should be in gold, with the exception of the sail, which should be chased silver. This design combines as many of the distinctive apparatus of canoeing as can be worked in with neatness; represents the Canadian as well as the "States" method of propulsion, the sailer as well as the paddler, and combines a contrast of color in metal. I hope the Association will not adopt a burgee as a badge. It is so common and represents nothing. It may be worn by a patron of a militia company or a fire laddie, the engineer of a steamboat or a member of a secret organization, so far as the general public would know. Let us have a badge we may be proud of, as typically representing the most perfect and manliest of all outdoor sports. ORANGE FRAZER.

COLUMBUS, O., Jan. 21.

THE SAIRY GAMP.—I have a letter from J. H. Rushton. He writes well. He has taken in your camp-fire and he has seen the Sairy Gamp in your office. He speaks well of her. She is still staunch and tight. She is a beauty; a corky light-weight. I can paddle her from the Battery to the Lower Quarantine, Swash Channel, without shipping a quart of water. My dexter pectoral to the canoeists who meet around your camp-fire. My next cruise shall be a rattling, racketing, canoe-down-stream tumble, from the meadow dams to Philadelphia. I reckon this will test the endurance of a canoe. I believe, on my soul, that I can cruise the Sairy Gamp from the Battery around the lightship and bring her back all right.—NESSMUK.

[Yes, the Sairy Gamp is tight. We filled her half full of water the other night and launched a yacht model by gaslight. There is a chance for some one to work up a poem.]

RONDOUT C. C.—A meeting was held at Rondout, N. Y., on Wednesday last to organize a canoe club, as there have been several cruisers there for some four years past. The following officers were elected: Commodore, Grant Van Deusen; Vice-Commodore, Jansen Rasbrouck, Jr.; Secretary and Treasurer, H. S. Crispell. The remaining members are C. W. Crispell, C. H. De La Vergne, C. V. A. Decker, F. B. Hibbard, E. W. Knapp and Julius H. Marsh. The club expect to have four or five boats at Newburgh, and at least three at the A. C. A. meet.

TORONTO C.C.—Mr. Johnson is having a 16×28 canoe built for next season, and with his 18×24 and open 16×31 will be well prepared to make a pace for all comers.

Yachting.

THE STAYING OF MASTS.

SINCE the springing of Ileen's mast a great deal of correspondence has been going on anent the subject, the principal burden thereof being an erroneous impression that spars cannot be as well held in a narrow boat as in a broad one. This is an entire misapprehension. There is no reason why the springing of masts should be considered a special weakness of cutters simply because one of them recently had a misfortune of that kind. Plenty of instances can be found in the history of last year in which broad boats met with the same mishap. But everything which happens to a cutter is at once laid at the door of her form, while similar troubles of broad boats appear to make no impression upon the public mind. The schooner Ruth not only sprung but carried away her foremast going into New Bedford harbor last summer in smooth water. The schooner Agnes sprung her mainmast upon being knocked down in a summer squall in smooth water in the Sound. The schooner Clytie was overtaken by a similar accident without even being struck by a squall. The sloop Schemer rid herself of her stick in New York harbor last fall and the Aueto did the same. Now one and all of these were beamy boats, some of them the broadest of their class. All had great spread to their shrouds, yet this was of no avail, for the sticks went by the board just the same. We might with just as much reason point to those casualties as "proof" that wide boats could not hold their masts, as they seemed to be continually springing and carrying them away upon very slight provocation.

The Ileen had some excuse for getting into trouble. She was caught in a winter blow and steep sea off Hatteras. That alone would palliate her case to a great extent. But Ileen's mast was sprung on the *after side*. Her chain plates did not pull up, nor did her rigging or lanyards strand or stretch in any manner, showing very plainly that the mast did not go for want of lateral support at all, but that it pitched over forward beyond the elasticity of the stick in direct consequence of the breaking of the iron strap of the mainblock of the weather runner tackle or "backstay." We have before us a photograph of that block showing the fracture as stated. It was, therefore, not for lack of spread to the shrouds that the accident occurred, but for the sudden giving out of support to the masthead from aft for which no amount of thwartship spread to shrouds could compensate. It is true that narrow vessels pitch through a somewhat greater arc than flat-floored craft, which bring up with a kachunk to each oncoming wave. But it is also true that a narrow boat pitches with much greater ease and cushioning, and that the masts of such boats are not as taunt. Hence it is likely that their mastheads whip through no greater arc than those of vessels of slower speed and acquire no greater momentum. At all events the difference is not material, and as likely sometimes to be against one type as another, according to angle of oscillation and length of spar.

Now to provide against accident, it is evident that the greater the angle between mast and backstay, the better can the mast be held. Narrow yachts with short lower masts offer a better lead to backstays than beamy boats with lofty spars. So far then from charging cutters with especial liability to springing spars, their sticks can actually be held to better effect than in yachts of great beam. Furthermore, the support from shrouds cannot be judged by a simple comparison of beam, but by the angle from the masthead down. A beamy sloop with lofty stick may show no greater angle than a narrow cutter with shorter lower mast. So far as we could judge by a view end on, the angle of the shrouds of the cutter Bedouin is exactly the same as that of the sloop Gracie in spite of the latter's excessive beam. Again, the midship breadth of a narrow boat is held well fore and aft, and regular "channels" in wake of the rigging add to her breadth, but a wide boat pinches in rapidly unless suffering from objectionable flare in the bow frames, and the mast of a cutter is also stepped further aft than in a sloop, so the difference in spread to the shrouds disappears to a great extent, and the effective angle of their lead is often as great in the cutter.

There is no more danger of Ileen's mast going square over the side than the mast of a beamy boat. In fact it is a physical impossibility if the work about her has been at all honest. And against pitching the mast over the bow she presents a better lead in her backstay than would be found in a broad boat. The recent ill fortune which overtook the Ileen was due solely to the giving out of some iron work, which, in view of the treacherous nature of all blacksmithing, is liable to happen to any yacht at any time. It must also be remembered that Ileen did not cut down her spars and butcher her rig as customary with our beamy yachts when fitting out for the foreign cruise. One thing can be carried out in beamy boats better than in narrow ones, presupposing the spread athwartships between deadeyes to be greater in wide boats. The after shroud or "swifter" can be set up further aft, allowing the boom to swing off to a given angle when sailing free. In this manner the after shroud can be made to serve somewhat as a backstay. But its lead as such is so manifestly unequal to that of the runner of a cutter that it cannot compare with the latter in efficiency.

So little weight is put upon the shrouds of a cutter for staying the mast, except in a lateral direction, that the rigging has been set up closer and closer right along. In old-fashioned boats of considerable beam, the fore and aft spread used to be 2ft. 6in., but nowadays this is reduced to 1ft. 6in., which serves just as well for lateral staying, while the jump and spring forward is provided for by a special backstay of good lead, in the shape of the runner and its tackle, and this can have a larger angle of trend more directly aft in a narrow boat than in a wide one, as before explained. This is not put forward as a "defense" of the Ileen. She needs no apologies. But it is meant to remove another popular misapprehension which is not borne out by the mechanics involved in the staying of masts. Rigging of narrow spread does not risk the mast at all. What it does risk is the pulling up of chainplates or topsides, as the strain upon these is greater than with more spread. This can easily be provided against in toto by cheap and simple, yet very effectual measures in construction, to which we have reverted often enough in these columns. Furthermore, a narrow boat is so very much easier in her lateral oscillations and general behavior than a wide, hard-bilged yacht, that it is still a question whether the pull on her chainplates would be greater even with less spread to the rigging. Cutters are proverbially economical in wear and tear aloft, and it needs only one day's sail in such boats to make the reasons self-evident.

NEW CUTTER.

THE details of the new cutter building by Lawley & Son for Dr. W. F. Whitney from plans by Burgess Bros. are as follows:

Length over all	35ft. 4in.
Length water line	30ft.
Beam on water line	8ft.
Beam extreme	9ft. 2in.
Draft	6ft. 6in.
Least freeboard	2ft. 7in.
Displacement, long tons	12.75 tons.
Iron on keel, long tons	6 tons.
Iron inside	0.5 tons.
Area amidship section	27sq. ft.
Area immersed longitudinal section	150sq. ft.
Area loadline plane	134.5sq. ft.
M. S. aft center of L.W.L.	1.5ft.
Center lateral resistance ditto	2.56ft.
Center buoyancy ditto	1ft.
Area cruising lower sails	987sq. ft.
Center effort forward C.L.R.	6in.

This handsome addition to the fast swelling fleet of cutters in America will be named Rondina (Italian for Swallow). She has full flush deck with quadrant companion hatch, and a 4ft. skylight over the cabin. The forecastle hatch will be of iron. A watertight well aft for the steersman will be 2ft. 9in. by 2ft. 4in., with the hatch to sail room abaft of it. The cabin is 11ft. long with 3ft. floor, and 5ft. 9in. headroom under the beams. Lockers and sideboards at ends of sofas, and the run devoted to stowage and clothes press. The backs of the sofas lift up and sling from above as bunks so that four seperate berths can be had for the night. There will be a porcelain cabin stove in the bulkhead; meals will be served on a "swing table," so that soup can be had in a gale. In the forecastle there will be two swinging bunks, which stow up against the side in daytime, icebox, china closet, cook stove, etc. This cutter will be used mainly for cruising, and will have large, cool, and airy accomodations for the hot summer months, it being well known that the cabins of a cutter are more refreshing than those of sloops with wide superstructures upon which the July and August sun beats down until the heat below becomes even more sweltering than on deck.

THE COST OF YACHTS.

TWO weeks ago reference was made in these columns to the cost of yachts here and abroad. In a conversation with the Boston *Herald*, Mr. Lawley, the well-known builder of Boston, expressed the opinion that we had overestimated the difference and that he could build for 15 to 20 per cent. above the English prices. This "interview" has since been going the rounds of the press in more or less garbled form. Now, we are not in the habit of making statements without the fats to back them, and if Mr. Lawley will undertake to duplicate the Ileen for one-fifth more than she would cost in England, we can give him an order on the spot and guarantee him half a dozen more during winter. According to the London *Field* a forty-ton cutter like the Ileen can be built for $12,000. That vessel here cost over $25,000, thereby more than justifying our statement as to the excessive cost of building fine yachts in this country. If Mr. Lawley will agree to build a new Ileen for $15,000, which is 25 per cent. above the figure given by the *Field*, we will be most happy to accommodate him with a raft of orders at once. But Mr. Lawley must also be able to sink $10,000 on each job and grow fat on it. People here do not understand what constitutes prime yachting work and finish. That the difference may be made clear we append below the average custom in America and England for so-called first-class work.

AMERICAN.	ENGLISH.
Soft plank.	Hardwood throughout.
Wood floors.	Yellow metal floors.
Iron keel fastenings.	Copper rod.
Iron spike and nail work.	Clench copper fastened.
Wood knees.	Iron knees.
Spiked floors and garboards.	Through bolted to keel.
Single skin.	Double skin or composite.
Plank waist.	Stanchion waist.
Bare bottom.	Coppered bottom.
Iron wire rigging.	Best steel wire.
Seven sails.	Fourteen sails.
Anybody's chain.	Chain to Admiralty test.
Light gear and meagre fittings.	Strong and very complete.

We might go on to enumerate a great many more things of the same kind. Of course all yachts are not built as stated above in either country, but it represents the general practice nevertheless. Add the amount of work entailed by more completely arranged accommodations below customary in English yachts, the greater attention to detail and finish in all parts, and there is very good reason why English yachts should be classed superior to our own. Of course we are making rapid strides in quality of build as well as in model, rig and outfit, and we do not expect to remain in the wake of our cousins very long in any respect.

A large, beamy and deep yacht of the Itchen type, say 26ft. loadline, 32ft. deck, 8ft. beam and 6ft. draft, with 5 tons lead ballast on keel, metal floors, hard wood all through, copper fastened, mahogany, teak and brass fittings, 14 sails for a full racing cutter's rig, with housing topmast and reefing bowsprit, anchors, tested chain, all fittings such as brass rudder cap, leaders, cleats, cavils, pin rails, best steel wire rigging and backstays, water tank, dingey and appurtenances of every kind except upholstery, linen and silver-ware, can be turned out by a crack English builder for $2,000. A similar boat equal in quality would cost all of $4,000 or more here, and without full plans and specifications she could not be turned out at all for love or money.

The little Mona, with English sails and recent improvements is held at $5,000. The amount expended all told on keel, spars, American sails and her fittings, in the first place, reached over $4,000. The Mona is a light displacement cutter of 36ft. by 8ft., and could be built in superior style for $2,800 to $3,000 abroad. The Orivo 50ft. by 11ft. 6in. cost here $12,000. She could be duplicated abroad for $8,000. The Vayu, of Boston, 31ft. loadline, with iron ballast and fastenings, cost $3,500. She could be duplicated in England, quality for quality, for $2,400.

CRUISING IN THE GEM.

Editor Forest and Stream:

Reading the account of Mr. Osgood's predicament with Gem reminds me of some experience I had in bringing Gem around from Boston. We were out in rather nasty weather, and had occasion to put reef in jib, when she came up in the wind. Captain called out to give her a little jib to get her off. I don't remember who it was had occasion to go out on the bowsprit; however, I am positive it was not the cook, who was holding coffee pot in one hand, kettle in the other, and frying pan with his teeth. I don't think it was that fellow whom the captain had just caught hold of by the leg in his attempt to make a full flood in that locality, and was just about to take a header; but it was that old veteran, Joe D., of the Jersey City Yacht Club, who went out on the end of bowsprit, and as he did so Gem got a full instantly. We went on about our business, fixing jib at our leisure. I know another thing or two about Gem. One is that she is the best boat of her inches, properly handled, in our waters or in Boston, and Mr. Osgood may well feel proud of her; she is worthy of his confidence. The other thing is, I would have those ordinary iron bolts which hold the lead to keel changed for gun metal, or some day she may drop her lead.

After our tussle with wind and sea for a night and day, necessary articles, as our cook can vouch for, including compass, binnacle and yawl, were all lost. I never will forget the look of despair and disgust that came on the faces of our cook and that other fellow the captain caught by the leg. "Breakers ahead," shouted the look-out. "Every one on deck," roared the captain. "Where is that life-preserver?" screamed the cook. The other fellow was looking around for the cuspidor. Finally, after considerable delay, the remaining crew got their oil skins and appeared on deck, time enough, as the captain said, to have run ashore half a dozen times. "Hard-a-lee!" Cook came up with life-preserver on and wanted to know if we had seen land. At that moment the fog lifted and we sighted Point Judith. Captain thought we would run for Newport, and word was sent down below to the cook, who immediately commenced to get his things ready to say good-bye to us as soon as that harbor was made. "Hard-a-lee!" again and again came from the captain. That evening we got into the quiet waters of Long Island Sound. Our cook wanted to know what time we would get to Newport. Next morning all hands reported for breakfast, an unusual event. After a delightful sail down the Sound we anchored safe and all well, having had the most pleasant sail in my life. So much confidence had the cook and that other fellow developed in the ability of our Gem, that they both suggested we continue our trip down to Florida. I am only waiting for the time of my bondage to expire before I will take another flyer at just such a boat as Gem, only a little larger, a little deeper, and a little more lead away down about eight feet.

H. C. W.

EVIL EFFECT OF LENGTH MEASUREMENT.—That a length rule ostracises all forms but one, and that the most expensive and difficult to manage, is generally known. We find this well illustrated in the experience gained in Solent waters in recent years with the "length classes." It forces the greatest beam and depth with the greatest displacement and largest sail plan. An Itchen boat of 30ft. loadline has something like 13 tons displacement, 7 tons of lead and 7ft. 6in. draft, all of which is in excess of an ordinary cutter of same length. Already there is an outcry in Southampton waters against the "simple length" rule, and a demand that boats of moderate proportions shall not be driven to the wall by the monsters the length rule fosters, but that all shall be recognized through the adoption of a sail area and length rule, which will make the big ones pay for their size. We quote from a letter in the London *Field:* "I am glad to see there is a recommendation by the Y. R. A. sub-committee to introduce the length and sail area rule in the length classes. It is time that a fair chance were given to boats that are not of any extreme type. The length rule has already produced boats that are capable of carrying such large sails from their great stiffness, that they are almost unmanageable in rough water, being overwhelmed by the weight of their spars and gear. This stiffness is the result of excessive draft and beam, a boat of 30ft. long having a draft of 7ft. 6in. and beam of 9ft. 6in. or so."

THE NEW RULE.—The sail area and length rule is working its way into favor abroad. It seems to be the only rule likely to class varying types, until the day when the equity of bulk shall be more fully understood. The Thames Sailing Club will arrange four matches for next season on purpose to give the new rule a trial in practice. On the other hand, *Land and Water* rather hastily gives an opinion adverse to the outlook for the new rule. But one fact like the foregoing is worth more than tons of opinion. For our part, we think it quite certain the sail area rule will come into very general vogue. All innovations start slow, like a railway train, and gradually gather momentum, just as we have seen in the change from centerboard trap to yachts of good depth in America. At first nobody would listen to the change, now everybody wants a deep boat. Concerning the silly proposal to substitute handicaps for time allowance proper, it was never seriously entertained by any one, and *Land and Water* is safe enough in its remark that "handicaps are not likely to become popular, and we neither expect nor wish to see them on many of the programmes during the coming summer."

SMALL BOATS.—There is or ought to be just as much and even more dignity attached to the ownership of a small yacht valued at a few hundred only as to the possession of the biggest frigate in the fleet. It is more creditable to take charge of your own boat and work her throughout the season than to lay off in an armchair and be driven about by a hired crew, who look upon you as nothing more than a victim, privileged to act as their paymaster. It is of more importance to nautical sport that one little twenty-foot yacht be launched and skippered with spirit than the building of a two hundred-ton schooner whose wheel never passes out of professional hands. Neither money nor tonnage should be the criterion in yachting, but the best models and equipments and the greatest proficiency in the theory and practice of seamanship, navigation and kindred acquisitions. The manly instructive and athletic sides of the sport should constitute the field for emulation, and not the squandering of money with ostentatious lavishness in the race for display or the indulgence in luxury, sensuality and mental imbecility.

KEELS.—We hear of a number of boats to be altered into keels this winter. It should be remembered that the keel of a flat-floored boat should have considerable rocker and be cut up to nothing with a long sweep from midships forward and a slight round-up to the heel in order to be effective. A year ago Mr. Rathborn altered the sloop Sparkle into a keel with a great deal of rocker. She proved very handy, much abler in every way, and lost none of her speed. Long straight keels are neither handy nor effective. If ballast is bolted up from below, as it ought to be in every good boat, the flitch keel of a centerboard can easily be strengthened to any extent by a keelson over the floors with chocks between, the keel bolts going up through all. The gain in room by such a change in a small boat is astonishing.

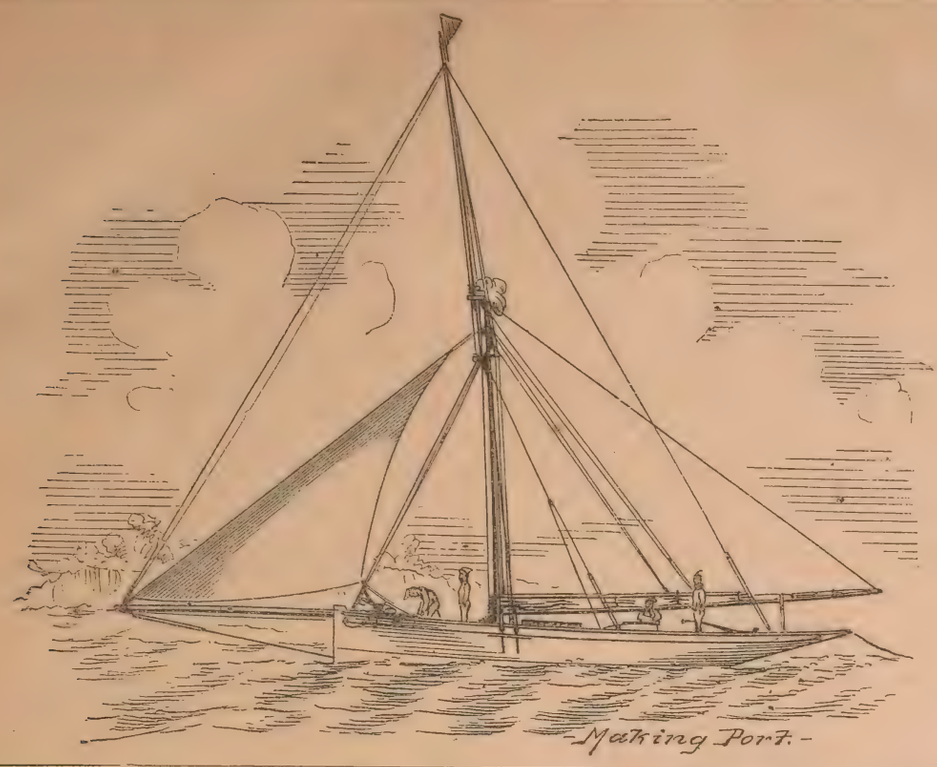
YACHTING IN HUNGARY.—On Lake Balaton there is at present great interest developing in yachting. A club has been organized and an English builder has established himself on the lake, having already turned out some sixty boats of all kinds. A large fleet is stationed on the Plattensee, including one schooner, several steamers, cutters, yawls and sliding gunters ranging from twenty tons down to one ton. Most of the yachts are owned by noblemen of the country, among whom yachting has become quite a fashion.

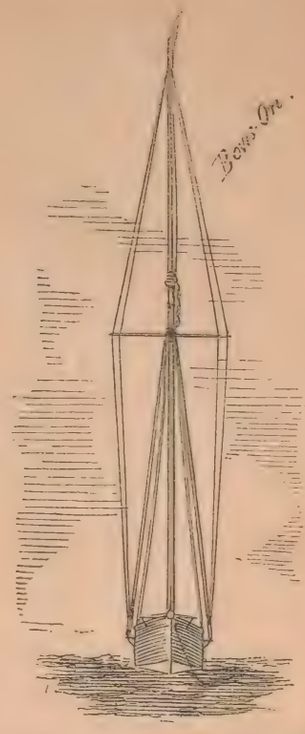
NEW MODEL.—We have seen a very handsome and well-proportioned model by "Ezekiel" for a large keel schooner likely to be built by a salt-water yachtsman accustomed to extensive cruising. Length over all, 105ft.; water line, 94ft.; beam, extreme, 20.6ft.; hold, 12ft.; draft, 12½ft. There will be 55 tons of lead on the keel. Mainmast, 88ft.; foremast, 83ft. Will carry staysail, jib and outer jib. The stem is plumb and the counter fashioned after the style of a cutter.

LIGHTHOUSE ILLUMINATION.—The results of several years of experiment with the electric light in French lighthouses seem to have been sufficiently satisfactory to encourage a more extensive use of the light for that purpose. Of the 332 lighthouses along the Atlantic and Mediterranean coasts of France, 45 will be furnished with the electric light immediately, and there is every prospect of an early addition to their number.

THE NEW STEAMER.—We learn that the new steamer building at Poillon's for Mr. Munro is one of the best-looking craft of the kind yet turned out in New York. The lines are due to Mr. Hubbe, who has made some handsome drawings, from which the yacht is being laid down. Mr. Hubbe has served his time and has seen experience abroad.

PUBLIC OPINION.—Says the Boston *Herald:* "There are many inquiries of builders regarding cutters and deep keel sloops, and a large number of new yachts of this type will be built before the next season opens. Mr. George Lawley says, judging from the letters he receives, that the days of flat centerboards are nearly gone."





A NOVEMBER DASH IN A SEVEN-TONNER.

[CONTINUED.]

AFTER driving through the Brothers passage sheets were checked all round, and merrily the cutter bowled along, going through clear as a knife, scarce leaving a ripple in her wake. The wind had sensibly abated with the sinking of the sun, and only at times did dark streaks chase over the broadening expanse of the waters as we flew across Flushing Bay. Abreast of Hunt's Dock, a sort of landmark, known to East River racers as the finish of many a hot contest, a black hull was made out steaming upon us rapidly. It required but a glance at the way she loomed up to make her out one of Herreshoff's far-famed high speeds. She stole up on our weather and screwed noiselessly by like a fleeting apparation, pursuing the even tenor of her way straight as an arrow without a quiver to the hull nor a throb from the engines. In form she was a beauty, and in style she was smart, for with the rig of a three-master and a yellow-washed stack, orthodox and à l'Anglais, there was an air about this steamer which put us in mind of the nobbiest screws to be met with abroad. She turned out to be the first Parmelia, but recently returned from Michigan waters, and now the property of Mr. W. P. Douglas, N. Y. Y. C. Like all the Herreshoffs, she was light as a feather, with a grace and pose peculiar to the Bristol conceptions, and with her high side, straightish sheer and long, easy body, a very good sea boat withal, who could drown out any of the sprawling, low-waisted things which New Yorkers have been brought up to consider good steam yachts. She was bound to Little Neck Bay, and had aboard a number of passengers, who looked lost and forlorn as they stood on the quarter-deck in great overcoats, shivering, against the bleak, cold scenery in the background.

A steam yacht is after all an anomaly which cannot easily be classed. There seems to be nothing for any one to do or with which to occupy one's mind, so you are forced to take it out in gaping, unless you are amateur mechanic enough to strip long togs and revel in grease and oily smalls, keep an eye on hot boxes, and listen for thumpings in the mysterious inner of cylinders and steam chests. Or maybe the doctor has recommended a warm climate and athletics, in which case you go in for a roast with furnace doors open and fire up with a shovel which I could scarcely lift. Or perhaps you dote upon the intricately scientific and love to riot in square roots, Marriott's laws, parallel motions, vacuums, cushionings, back pressures, slips of all kinds, helical curves, thrusts and frictions, and the endless snares and complexities of steam engineering. Or possibly you pride yourself on pilotical proficiency, and a trick at the wheel, sheering all over the river, with toots at the whistle to vessels going by, is the redeeming attraction for the mint of money expended. I can imagine all this being very great fun. Once upon a time I used to stand upon the bridge, lord of all I surveyed, and know the pleasures of skillfully navigating a steam vessel over trackless seas and along coasts unknown, with the chart and lead as their interpretation. But this listless screwing up a river and then screwing down again, without taking a hand in the mechanical management of the vessel whose decks you tread, is to me the feeblest kind of a pastime and as a sport quite beneath mention. Yet that is the style in which steam yachting is altogether pursued in this country, so after all, owning a tea kettle resolves itself into a match at doing the most gaping. The most tired, ennuied and helpless looking object in this world is the American owner of steam tonnage. Nothing can be a greater bore to him than "yachting," for it means only a crowd collected aft, the steward actively making the rounds, a bottomless consumption of viands and wines, with the pleasure of paying therefor, the usual contest of insipid jokes and lubbers' yarns, and a surfeit of swagger and exaggeration as to the speed of the particular rattletrap for which you happen to have paid double her value. I confess it makes me very tired to talk about the speed of steam yachts with their owners. Experience teaches me to divide their estimates by two and then there is generally margin left before hard pan is reached. It is conveniently customary to get knots and miles mixed up, and for land miles the owner has a weakness. The number of steam yachts in America which can maintain an average of 10 knots are extremely scarce. Those which can reach 12 knots can be counted on one's fingers, and few, if any, can make more on a stretch. With the exception of some Herreshoff launches, we have no such things as "high speeds" in the country and the 17 to 25 knot vessels exist only in the wild imaginative powers of "quick transit" schemers, "mastless dome vessel" quacks and like humbugs. Let the sanguine possessor of a skinny knife bladed as his taffrail log unbeknown to the builder, and with normal boiler pressure and his fanciful dreams of railroad speed will sink as fast as the mercury in the vacuum gauge of the condenser. For mere travel, as implements of locomotion from place to place, the fleet of so-called steam yachts in our waters will serve as well as anything else. But as affording indulgence in a maritime life for the sake of sport, give me the genuine steam cruiser, built to cover the greatest distance at sea upon a minimum of power and coal consumption. Put me on the bridge, in the engine room or even in the stoke hole, and I can see some point to the whole business. But ask me to own one of the low-wasted, light-draft knife-blade imitations, whose only recommendation is their visionary investment with a speed which cannot be maintained, and I respectfully decline to become party to any such imbecile picknicking. The steam cruiser as well as the steam cruising yachtsman are hardly yet to be found in America, but time will develop that sport with us in the near future, just as the present is witnessing the transfer of affection from smooth-water dawdling in sailing craft to blue-water cruising.

It is now high time I got back aboard the cutter. Night had fairly set in, and the silvery stars winked at us through the frosty atmosphere above. The moon had not yet risen, but the sky to the northward was lit up with flashes of bright borealis every now and then, as broad pale shafts warmed with reddish glow shot up from the horizon, illuminating feebly our surroundings for a few moments, then as suddenly expiring, only to appear again. We had been reeling off knots and fathoms with the quartering wind, keeping the Sunnyler light on our weather bow, sheering a trifle now and then to give a good berth to some lumbering coaster seeking hard to buck both wind and tide for an anchorage in Flushing Bay before trying the Gate on the next ebb. There was a frisky little ripple off Throgges Neck denoting the meet of the two floods, one coming through Long Island Sound from the eastward, the other, the favoring current, we brought with us pouring up from the Atlantic through the pent up rocky intricacies of world-known Hell Gate. We kept off half a point to be sure of clearing the black spar buoy until we could make out that sentinel in the dark. "Now boys, aft to the mainsheet," cheerily echoed fore and aft. In a moment three hands had collected, one threw off the turns and passed the hauling part along to the rest, while the fourth, our man with the iron grip, fumbled across into the lee waist ready to give head sheets a pull. Rapidly we closed in with the buoy which was bobbing up and down, and chasseying across in a double shuffle all to itself. As we reached up abreast, it was "In with the boom, trim flat headsheets." No sooner said than done, for the bracing air made all hands take to hard work with a will. It is strange how old yachtsmen tumble into their respective berths by intuition without any prearranged programme.

Our heavy weight selected the heaviest jobs and no one interfered. The others tailed on as required, and my long apprenticeship at unravelling knotty questions peculiarly fitted me for clearing turns and giving the gear a fair lead. Upon these lines we settled down at once, and all through the cruise the same policy was obeyed. Whether the heavy man thought it a square deal or not is unknown. As he did not grumble or kick, no one else was going to do it for him, and I disliked to disturb the peace of the family too much to get into his way. So that mainsheet cleat came to be considered my share, and quite an affection sprang up between us. If slacking away or preparing to flatten in called for no muscular contortions, the duty was highly responsible, as every one knows who has tied up his thumb in the turns or let the parts get away through his butter fingers. "Haul again, once more, another pull, so! belay," and the boom was in two blocks, jib trimmed down and foresail flat as a board, almost chafing the mast and clump blocks scraping the deck. It is always so. Never knew it to be different. The moment we had got everything two blocks, down came the wind in vicious blasts out of revenge, as if to take the starch out of us, and luff skipper out of his wits and boat up on the beach, or compel us to check all round and half spill to save our bacon, fetching to leeward way below your scientific calculations.

This time the wind got awfully fooled. It had tackled a cutter, and the cutter just smiled all over as she prettily hove down to business, never sailing plank sheer under even in the hardest of knocks. That wind retired disgusted. It had been accustomed to frightening the flat traps and making light sport of such flimsy game, had come for us cheeky fellows with topsail masthead in the muchly mistaken notion that we would flinch like the rest of its victims. We had to pinch for all we could to fetch up to our objective anchorage off Byles's Yard on City Island, and the yacht was rammed through everything without let up. Sheets were belayed all round, crew loafing about decks with hands perfectly at ease, and the skipper toying with his hand lightly on the helm. No one said boo to the blasts. No one cared a continental for the ire of old Boreas and the cutter cared less than anybody else. Every time she was hit she merely rolled down slowly and easily, looked higher than ever and gathered additional way, which she carried along through the flaws without check. Such sailing was glorious. It was her game and her play. A cutter sails best on her side, and the further over she is pressed the faster she foots and the more she soaks bodily out to windward as long as you do not overcrowd her with sail beyond what her form will admit to advantage. So far as her heeling is concerned, I will back a cutter to put in her best licks to windward when rail to, don't care what fairy tales theorists may compose to the contrary. I derive my conclusions from actual test, which knocks the stuffing out of theory every time. No one ever discovered that Madge "slid off" or could not hold her wind in the memorable tanning she inflicted upon the sloops some seasons ago, nor can any authentic cases be mentioned where a good cutter can truthfully be charged with greater lewardly tendencies than any other kind of vessel. Fact seems to be they have enough to hold on with and to spare, and maybe, as the lead goes down when the yacht rights, the top is cuffed over to windward as well, and then the pressure on the sails when heeled way over has not as much effect to drive sideways as when nearer the plumb.

Yes, but how do you explain the Newport race of last August? Well, we are now driving along nicely, fetching under the lee of City Island, so I may as well answer that question, foreign as it is to this log. Three cutters started in that race. No one found the least fault with Bedouin's close windedness, nor has it ever been hinted that she did not hold as high as the sloop Gracie after the leeward mark had been turned. No one found any fault with Maggie on that score, for she was beaten by Vixen through faster footing, and that only. But Wenonah had to make a hitch up to weather the committee at the finish, and upon this a great deal of fairy tale has been spun, all the performances of the same and similar yachts upon this and other occasions being entirely overlooked. They flatly contradict the charge that Wenonah lost the match for lack of weatherly powers like those of the centerboard sloops, and as we have it direct from credible source that Wenonah's masthead had to be nursed, and that she suffered more than the others through the backing of the wind, her defeat is sufficiently explained without drawing upon any imaginary shortcomings in respect to close-windedness which cannot be reconciled with numerous other tests and the fall races which followed.

But we are closing in on the land now and have to keep wits about for coming to. It was dark as pitch mixed with a little whitewash and difficult to separate beach and water, but the twinkling lights along the shore served as beacons. The wind got the worst of the fight with the cutter and had subsided, so that we skimmed the island at an easy jog. But where was Byles's yard, who could tell? No fences could be seen, no houses could be made out, nothing but a low wall of general blackness. All of a sudden the cutter got a last little blast over the trees, and the skipper being on his feet peering into darkness with the helm slack between his understanding, the yacht first bowed down a couple of strakes, then with a long sweep rounded up, slowed and rattled her canvas head in the wind. She had come to right off the yard which had seen her birth, like the steed who can smell his stable miles down the road. "Here we are, and here I am going to stay. If you galloots don't know where I belong, time I showed you." We did not argue the point with the yacht but took the hint. After dropping the lead in 2½fms. word was passed to stand by and let go the port anchor. It went to the cook's gentle persuasion. Then there was a short musical racket of rattling chain as it battled its way through the hawse hole and the active man, assisted by his cousin, had the jib on deck and the bunt snugged up at the same instant, the foresail having been taken off upon closing in with the land. "Hold on forward, wait till she takes it." A moment or two and the yacht gathered sternboard and then fetched up with a scarcely perceptible snub as she tailed to the full extent six fathoms allowed. The skipper stepped clear of the helm. The dash for that evening had come to an end. "All hands furl sail," was the next hail from the quarterdeck. "Topsail clewline, hand by the halliards. Clew up. Go the halliards, clew down!" After some tugging, the extent of which is known only to the active man, the jibheader was snugged down on the cap in a pucker, fisherman fashion, and so left for the night, as an early start was contemplated next morning. I broke out the gaskets from the sail-room below and passed them over the boom, beef forward getting a top up on the lift, while the skipper shipped the crutch to receive it. After dropping into proper housing, the mainsheet was hauled taut and made fast to prevent the boom getting adrift. In the meanwhile gear had been cast off from the jib, the cousin held the bag and others rammed the sail into a snug bundle, which was then tossed down the hatch into the sail-room for the night. Foresail was furled, the clew lifted clear of all by a tricing line forward the mast. Mainsail next received attention. Halliards were let go and the gaff came down by the run, with that clicking of the patent blocks which is sweet as music to the nautical ear. All hands ranged along one side, leech was passed in, topsail sheet not forgotten, and then with an "altogether, boys," the bunt was rolled up and lifted on top of the boom, the gaff settled riding the sail, and the gaskets speedily tied. "Cook down below. Clear up the decks fore and aft." Just imagine yourself half frozen through, hungry as a bear awakening from his winter's doze, smoke curling out the Charley Noble giving rise to gastronomic anticipations, and the last command which pipes down for the night sounds as welcome as the clock in the steeple when it strikes five to free you from the slavery of money grubbing for the day. "Every man a rope," so I turned to my old love, the mainsheet, and under the cover of darkness coiled it away against the sun in a tangled mass with the leadline. The active man, of course, had the riding light, regular Fresnel lense, trticed up to the forestay, burning like a miniature sun, shedding friendly beams over the forward part of the vessel, enabling me to suspect the grandest effort of the cook's life was being consummated in the forepeak below. Once more the good little ship was quietly riding to her chain in wonted fashion. We lay a cable's length from shore pretty well protected, with the best of prospects for peaceful slumber. Off our starboard quarter a sickly flickering denoted the whereabouts of a sloop, smack or freighter, as the only company close aboard. Other lights some distance off on our beam told of a batch of schooners and coasters waiting for purposes I could not divine. How they all make a living is to me a mystery, seeing the competition of endless miles of railroads ashore, and the numerous steamship lines afloat. But there will always be coarse freights, such as brick, coal, lumber and hay to collect from out of the way ports, for low freight rates, the loads all being poured into the vast maw of metropolitan consumption, never to be appeased, but ever expanding toward the colossal. The night was extremely fine, the edge was taken off the cold with the lull in the wind. The barometer had slowly and steadily been on the rise and fine weather was prognosticated for some days to come.

But what am I doing shivering on deck? The skipper had found his way below. Warm and homelike the cabin lamp shone forth through the glass of the skylight, and delicious odors rose from the companion. Eight bells had just gone. I was leaning back up to the boom in a reverie upon the romance of yachting, ever and anon glancing aloft into the gloom, seeking to follow the dim outline of the cutter's jaunty rig as it faded away in the darkness overhead. From the bottom of my heart pity went out for those benighted heathens on shore, to whom this noble, manly, hearty, life-renewing sport, with its roving and devil-may-care, its whole-souled Bohemian attributes and benign, broadening influences is a sealed book, into the leaves of which they will not peer, shuffling off this mortal coil without as much as a dip into the paradise, at the gates of which they all stand clamoring for that which is at their command within. Did I owe the fraternity of mortar and pestle a grudge and sought the anihilation of their fees; did I wish to starve them out of their living, I would spread broadcast o'er the land this new dispensation from the fount of life. Get afloat, get afloat, and don't be long in doing it! Away with you from the noxious smells, contaminated food, poverty-stricken atmosphere, petty cares and nervous worries of the hissing, poisoned swirl of city life. Turn upon your prison pens, fling aside the load which is luring to an early age and grave, and makes life one harrassing burden beneath which all but the most rugged sink and few succeed. Once more join bright glowing nature in her virgin purity, and wealth of powers to receive in turn from the one great Mother of All life which shall be life, and not its counterfeit, strength of body and force of mind, with the faculties for thought and action rescued from the dwarfish crippling of the baneful artifice imposed through the relentless race for wealth and vain display. Get afloat as fast as you can in a box, a scow, on a raft, in a yacht, anything you wish, so you meet Dame Nature to draw from her limitless supply fresh draughts from fresh sea breezes, freighted to the gunwale with balmy, rich ozone. One cruise breaks in the novice, the second sees all his fears and aversions overcome, the third he starts upon with expectation, the fourth has wrought an enthusiast from the most dismal beginning, and the fifth finds him laughing Medicus out of house and home, for he will no more know the stupid, dizzy topheaviness arising from a torpid liver, nor the dull pains of indigestion, nor listlessness and pallid hue of countenance, nor nerves unstrung, nor wakeful nights, nor any of the evils to which flesh succumbs in the contamination with that which is vile.

"On deck there; better come down if you want any grub," was shouted from the cabin, and with one jump I made for the hatch, tumbled down below, landed in my place, and went for scouse and dough—please pronounce duff, it's the nautical for it—in a way which would have thrown aback that unknown scribe who ventured the opinion, in an evening paper, that you could neither recuperate brains nor body aboard of a cutter. I won't say anything about the brains, perhaps there is no room for more, but as for recuperating the body,

just ask the cook! It was a caution how the grub was stowed below. Topping off with *caffé noir*, fire was started on pipes and weeds, and fragrant wreaths and rings gently steered their way to seek dissolution through the skylight overhead, as the cook cleared the wreck for the evening's entertainment.

The leaves of the swing table were collapsed and the four passengers coiled away in the four cosy corners of the cosy little cabin. Yarns then flowed upon yarns, and reminiscences took trick and trick with current topics until the clock warned all hands and a general move was made to berth for the night after the skipper had given a practical illustration in the delicate art of concocting eggnogg. By that perverse ruling of things or some base conspiracy the strongest potion of the aromatic composition fell to my share, and for a while after stretching the length of my berth in the after cabin there was a strange humming in the head, due to the eggs; but it could not have been long after the light was turned down before I fell a willing victim to the seductions of Murphy, cradled to a mellifluous lullaby played on the gamut of the deeply-tuned proboscis of the active man of the party and the swish of the wavelets close to my off ear. And now, if after this dose the gentle reader fails to drop into cast-iron slumber, he will not fare as well as did the crew who made this dash sometime last November. C. P. K.

KELPIE.—Mr. Winslow is having the centerboard ripped out of the Kelpie, Seawanhaka Corinthian Y. C., and an 18in. keel substituted. One more keel and one less board makes a difference of two in the footing. If the work is properly done, Kelpie will be much easier on her helm and need not loose any speed.

DAUNTLESS.—This schooner arrived at Fayal from Madeira in a leaky condition on Jan. 22. There is no dock or slipway in Fayal, or there was neither when we were there last, so the Dauntless will have to depend upon her own means for effecting repairs. She probably opened her seams in a rough sea.

BIGGEST KEEL EVER CAST.—Fay, of Northam, is building an 85-ton racing cutter for Mr. Jameson, of the Samœna. She will be 84ft. loadline and 15ft. beam, with 75 tons of lead in one solid chunk on the keel. This has been successfully cast, and is the largest on record.

SHARPIE RUDDERS.—Mr. Clapham writes that the balanced rudder was adopted because a skag was found to make sharpies slow in stays. Mr. Pike added a skag to his schooner Ellie with beneficial effect, and on the lakes a skag is universally used.

YACHTING NEAR PARIS.—The Cercle de la Voile now has 254 members, with 176 yachts, of which 32 are steamers. Total tonnage 3,862. Income $7,000 and expenses $5,600. Races sailed 39, for which $1,750 in prizes was given.

CUTTERS IN BOSTON.—The 28ft. cutter at Lawley's yard is planked up. Another cutter for Messrs. Taylor & Smith is nearly finished. The keel has been got out for Dr. Whitney's 30ft. cutter.

SOLENT WATERS.—There are twenty different sailing organizations on a coast line of twenty-five miles devoted to the interests of small yachts in waters adjacent to the Isle of Wight, England.

A POPULAR BOOK.—The third edition of Dixon Kemp's "Yacht and Boat Sailing" has been exhausted, and the fourth is now in preparation, of which further notice will appear.

BIG FLEET.—The Royal Southampton Y. C., of England, has 450 members, 230 yachts, footing up 19,000 tons, and $5,000 it does not know what to do with.

KNICKERBOCKER Y. C.—Second lecture will take place Feb. 6, corner Third avenue and 133d street, Harlem. All yachtsmen are cordially invited.

NEW YORK Y. C.—Will rent the premises known as the Municipal Building, Madison avenue, and occupy the whole house.

THE FOUR-BEAM CUTTER.—The new yacht illustrated last week was designed by A. Cary Smith, of this city.

THETIS.—This is the name chosen for Mr. Henry Bryant's 70ft. centerboard compromise cutter.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

W. E. H., Fairview, W. Va.—Address Estes & Lauriat, Boston, Mass.

C. S. Y., Orange County, N. Y.—For fur dealers see our advertising columns.

A. J. S., Plumsteadville, Pa.—The firm is Schoverling, Daly & Gales, New York City.

R. P. A., Boston.—See FOREST AND STREAM for Nov. 8, 1883, for waterproofing receipts.

J. M. F., Middletown.—Consult Stoddard's "Guide to the Adirondacks." Price, 50 cents.

C. H. S., Dorchester, Mass.—If you want a gun for game shooting do not invest in an air gun, it will not give you sufficient penetration. The arm is fairly accurate at very short range, but one of the cheap Flobert rifles has all the good points of an air gun, and is much more effective. Go into some of the Boston gun stores and examine the guns for yourself.

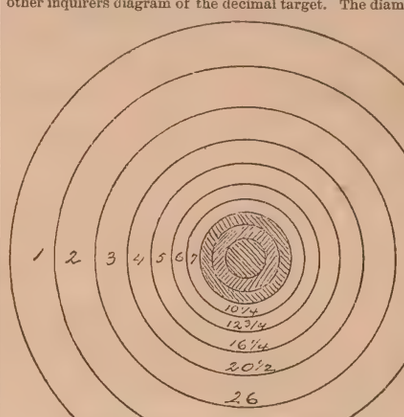
J. A. P., Norfolk, Va.—Do the deer of this section of the country shed their horns every year, or not? Ans. They do.

H. L. B., Valdosta, Ga.—The note by "A Veteran Killer" in regard to an outlawed gun should be taken with 95 parts humor and 5 parts "salt."

L. K. M., Hastings, Iowa.—We have printed several communications from those who have used the gun named, and like it very much.

E. S. R., East Corinth, Vt.—You will probably find the deired information about Newfoundland in the book recently published by Rev. M. Harvey, of St. John's. We can supply it. Price, $3.

J. H. McE., Ohio.—We reprint for your benefit and that of several other inquirers diagram of the decimal target. The diameters of the



black rings are 3½in., 5¾in., and 8in. respectively; of the other rings as noted in the diagram. The distances shot at Walnut Hill are 500, 800, 900 and 1,000yds.

H. E. M., Hazelton, Iowa.—Does chokeboring a gun improve its shooting of coarse shot. Ans. It improves its shooting with all sizes of shot, so far as close pattern and penetration are concerned.

S. R. D., Brooklyn, N. Y.—1. For names of standard repeating rifles see our advertising columns. 2. Train your dog by the directions relating to retrieving in Hammond's "Training vs. Breaking," which we can supply you. Price, $1.

J. H. D., Poughkeepsie, N. Y.—To settle a question, please state what is the color of the barred owl's eyes. A. says they are blue; B. says yellow, the same as the horned and most if not quite all other owls. Ans. Both wrong. They are brown.

NEWSDEALER.—There are a number of anti-fouling paints in the market, to be had of ship chandlers in seaport or lake towns. Tarr & Wonson's anti-fouling paint is much used. A composition of verdigris for boats' bottoms can be had of paint dealers.

D. C., Toronto, Canada.—A. says a dog uses his nose to find the trail of a bird; he follows the trail and points on sight of bird. B. claims that a dog finds and points the bird by scent; as regards his pointing on sight it is quite accidental. Ans. B. is right.

DEER'S HORNS.—Two or three correspondents are informed that deer do shed their horns every year. This is the rule, to which there may be now and then a very rare exception. See the very full and explicit description of the growth of deer's horns, printed in our issue of Oct. 25, 1883, Vol. XXI., page 245.

COBWEB, Boston, Mass.—What is the present status of the N. A. K. C. Stud Book, Vol. II.? Ans. This is an enigma that we cannot solve; nor do we know whether, having passed through the vicissitudes of flood and field, it will ever see the light of day in time to be classed in any other category than that of ancient history.

W. K. N., Marissa, Ill.—A friend says he can kill the game on his own farm in or out of season, and take the case to the Supreme Court and gain the trial. Is the game law constitutional? Has it ever been tested? Ans. We are not aware that a case of this kind has ever been carried to the Supreme Court of the United States, but it has been decided by the Supreme Courts of some of the States. Some game laws may contain certain provisions which are unconstitutional; we believe the discriminations against non-residents to be so; but the State's authority to regulate the seasons in which game may be killed is unquestioned. This is one of the police powers of the State, like the power to forbid the sale of "bob" veal and skimmed milk. This power extends over all the wild game on private properties. See our issues of Aug. 9, Aug. 16 (particularly), Aug. 30 and Sept. 6, 1883, where the subect is discussed at length.

W. A. I., Liberty, Neb.—You can use buckshot in your new hammerless chokebore with perfect safety, if you will take the precaution to chamber the buckshot according to the choke. Push a rod in from the muzzle to the point of most constricted boring, put the buckshot in on it, and see how many will fit sung in a layer. Then when loading your shells make your layers correspond to this.

W. H. DuB., Pennsylvania.—Works relating to large game and the modes of hunting them are: Hallock's "Gazetteer" (which is perhaps best adapted to your purpose), price $3; Murphy's "Sporting Adventures in the Far West (unreliable and second-hand) and Van Dyke's "Still-Hunter" (very good for deer), $2. Caton's "Antelope and Deer of America" is the most exhaustive and reliable work on that subject.

C. P., St. Louis, Mo.—The Savannah, Florida and Western Railway (Savannah, Ga.) publish gratis a pamphlet descriptive of the parts of Florida reached by their lines. D. Appleton & Co. publish a book entitled "Florida for Tourists, Invalids and Settlers," by Geo. M. Barbour, price $1.50 or $2. C. K. Munroe (140 Nassau street, New York), publishes "The Florida Annual," which will probably best answer your purpose. Price 50 cents.

WESTERLY, R. I.—What is the use of a click on a fishing reel? I can see the advantage of a stop and drag but not a click, as I don't know what it is for. Ans. A click is usually a drag or brake, made to give a sound by which the angler can gauge the speed with which the line runs out. Most anglers love the singing of the reel, but there are those who prefer a silent drag. A click reel is too free running when the click is broken, but when in order needs no other drag.

N., Germantown.—Could you tell me of some good place to go this summer for shooting, either to camp out or to board? I would like to go to some place where it is healthy (as Colorado), where there is a variety of good shooting within tramping distance, as deer, ruffed or pinnated grouse, quail, ducks and geese. I only have July, August and September for sport, and would like to spend most of that time shooting. Ans. See article entitled "Where to Camp Next Summer," page 476, Jan. 10. It will be difficult for you to find a place where all the game named can be found within tramping distance.

W. G. M., Brooklyn, N. Y.—What would be a good State to live in for a person with weak lungs? I want to find a place where the climate is not changeable, but healthy, and where there is little or no cold weather. I also wish to get where there is good hunting and fishing, if possible. How would Southern California do? Ans. We advise you to consult a competent physician, or to write to some of the journals that give advice of this kind: for instance, *Dio Lewis's Monthly*, Bible House, New York. Southern California is very highly recommended; but we prefer not to take the responsibility of giving advice in a matter of this kind. It can be done intelligently only by some one who is familiar with the person and the place. Some doctors who cannot cure their patients send them off to a distant State as the easiest way to get rid of them.

BROWNING GUN BARRELS.—For the benefit of half a dozen inquirers we reprint the following receipt for browning gun barrels, premising it with the advice that the gun be sent to a gunsmith, who will do it better than an amateur can: "Tinct. of muriat of iron, one ounce; nitric ether, one ounce; sulphate of copper, four scruples; rain water, one pint. First, securely plug up both ends of barrels, leaving one plug in each end of sufficient length to be used as handles, then thoroughly clean with soap and water, after which cover with a thick coat of lime, slacked in water, and when that has become dry remove it with an iron wire scratch brush; this is to remove all dirt and grease from the barrels. Then apply a coat of the fluid with a rag, and let it stand for twenty-four hours, when a slight rust will have appeared; then take barrels and immerse them in a trough containing boiling hot water, after which scratch them well with the scratch brush. Repeat this until the color suits, which will be after three or four applications. When completed let the barrels remain in lime water a short time to neutralize any acid which may have penetrated. Take great care not to handle the barrels during the operation, for the least particle of grease will make bad spots."

H. G., Milwaukee.—Hallock's "Gazetteer" gives the following as the method of Indian-tanning skins. The skin is stretched either on the ground or on poles, and all fat or flesh removed. When well dried it is washed in soap and water to cleanse the fur; the brains of any animal are then taken and mashed into a paste with hot water, and this paste is thoroughly rubbed into the flesh side, and the skin hung out to dry. When dry it is scraped, and exposed to the dew for one night, and next morning rubbed and pulled until soft. Buckskins are made by rubbing off the hair with a horse-rib, while the skin is fresh, or, after soaking in a weak lye; then dressing with brains, and staining a reddish color in a decoction of Wasatchie bark. Alum and salt are very good, but alum is rather scarce in the chapparal, as also are doors and boards. Some stretch skins on the ground. Care should be taken, by the way, not to use too much salt, as it causes the skin afterward to absorb moisture too readily. Smoking a skin is done by first dressing with brains, sewing it up into a funnel-shape, and suspending over a slow fire of buffalo chips, or dry prickly pear, built in a hole in the ground. The tips of the funnel being pinned down close around the hole; a clear, calm day, is selected, and the smoking requires about two hours. It gives a velvet-like finish, and the skin never shrinks or gets stiff from wetting, but washes like cloth.

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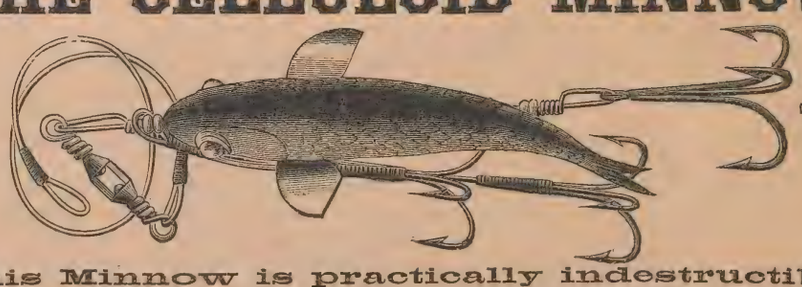
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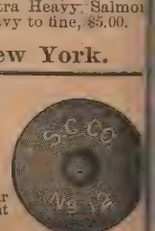
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A WEEKLY JOURNAL OF THE ROD AND GUN.

TERMS, $4 A YEAR. 10 CTS. A COPY. SIX MONTHS, $2.

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CORRESPONDENCE.

THE FOREST AND STREAM is the recognized medium of entertainment, instruction and information between American sportsmen. Communications upon the subjects to which its pages are devoted are respectfully invited. Anonymous communications will not be regarded. No name will be published except with writer's consent. The Editors are not responsible for the views of correspondents.

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THE CAMP-FIRE VOTE.

IN our issue of Dec. 20 we reprinted all the "Camp-Fire Flickerings," and asked for a vote on their respective merits. The interest manifested in the voting has exceeded our anticipations. It was not thought that more than one thousand votes would come in. That number has been more than doubled. We have received two thousand and one hundred and twelve (2112) lists. They have come from a very wide extent of the FOREST AND STREAM'S territory. All the States have been represented and most of the Territories. From Canada and British North America, from England, from Scotland, Ireland, Germany, Bermuda, Cuba, Mexico, the mails have brought them; and one from the Sandwich Islands.

No conditions were made as to the character of stories to be selected. Each voter was asked to choose the ten which he thought "the best" and to write them in their order of merit. This was giving very wide latitude, and, as was to be expected, the ballots have shown very diverse opinions respecting what are "the best" of the ninety-six. Many of the voters have explained why they voted as they did. One puts a certain story at the head of his list "because it's a whopper." Another selects his ten "because they are all true ones, and the lies ought not to be counted." Of the seven winning stories, the first five are told as having actually occurred, and the last two are what the writer of the card just alluded to meant when he said whoppers. The list of winning stories shows this diversity: The first five of the seven are told as true; of the last two one is a Southwestern version of a Munchausen yarn, and the other a combination of "fish" and "snake" stories.

Probably few of those who voted thought of the vast possibility of change opened in the simple demand, that out of the ninety-six stories offered each voter should pick ten stories, arranging them in what appeared the order of merit. There was not only the wide range of selection for the choice of different numbers, but there was an arrangement of them as well, and this might differ. Thus in the latter case of arrangement the possibility runs up to 3,628,800. That is, for instance, ten persons might sit down to dinner for that number of consecutive days (if they should live long enough) and on no two days would the persons be placed in the same relative position. The same, of course, applied to the placing of the ballots on the list of ten.

The case in the "Flickerings" vote was, however, a different one, it was with a certain number of different things being given, how many changes can be made out of them, by taking any given number of quantities at a time. The rule in this case is a simple one, and in the problem immediately before us requires the multiplication of the numbers 96x95x 94x93x92x91x90x89x88x87, and the result is found to be 42,294,851,716,696,972,800, which is the total possible number of different ballots which the editor and the *Herald* expert might have had brought before them; but luckily, owing to a lack of voting humanity, that task was not set.

The method of determining the winning stories was announced as follows:

When a ballot is received, each story named on it will be credited with a certain number of units, determined by its position in the list. The story named first will be given the highest number, 10; the next one 9, the third 8, and so on to the tenth or last, which will receive 1. Then each of these credits will be transferred to the accounts of the respective stories, and the story receiving the greatest aggregate of credits will be adjudged the winning story, and to its author will be given the first prize. The story receiving the next highest aggregate will take the second prize, and so with the others until the total credit of each of the stories has been ascertained, and the seven prizes for stories awarded.

This has been done. For example: The story No. 36 was named in the first place on 130 lists, for each of which it received a credit of 10 units; it was named in the second place on 105 cards, for each of which it received a credit of 9 units, and so on through the other places on all the 868 cards on which the story was named. Its total score of credits was thus determined to be as follows:

SCORE OF NO. 36.

First Place.....	(value 10), on 130 cards.....	130×10=1,300
Second Place...	(value 9), on 105 cards.....	105× 9= 945
Third Place	(value 8), on 110 cards.....	110× 8= 880
Fourth Place...	(value 7), on 96 cards.....	96× 7= 672
Fifth Place....	(value 6), on 97 cards.....	97× 6= 582
Sixth Place.....	(value 5), on 69 cards.....	69× 5= 345
Seventh Place..	(value 4), on 78 cards.....	78× 4= 312
Eighth Place...	(value 3), on 73 cards.....	73× 3= 219
Ninth Place	(value 2), on 48 cards.....	48× 2= 96
Tenth Place....	(value 1), on 62 cards.....	62× 1= 62
Grand total of credits.....		5,423

By like calculations the scores of the seven winning stories were found to be:

LIST OF WINNING STORIES.

First Prize.....	No. **36,**	The Parker Gun Story.....	Total, 5,432
Second Prize..	No. **53,**	The Commercial Traveler.....	Total, 4,735
Third Prize.....	No. **31,**	Gus and the Cow.....	Total, 4,480
Fourth Prize...	No. **45,**	The Saw-Horse.....	Total, 4,346
Fifth Prize.....	No. **37,**	"Let's Put Both Gaffs In.".....	Total, 4,105
Sixth Prize	No. **93,**	The Peach Tree.....	Total, 4,017
Seventh Prize..	No. **42,**	The Snake-bitten Wagon.....	Total, 3,301

For purpose of comparison we also give below the detailed scores of the first fifteen stories. The table shows their order, the number of times each one was written in each place on the cards, the total number of votes it received, and the total value of credits obtained in the way explained:

SCORES OF THE FIRST FIFTEEN.

POSITION AND NUMBER.	1st Place. Value 10....	2d Place. Value 9....	3d Place. Value 8....	4th Place. Value 7....	5th Place. Value 6....	6th Place. Value 5....	7th Place. Value 4....	8th Place. Value 3....	9th Place. Value 2....	10th Place. Value 1....	Total No. of Votes.....	Aggregate of Credits.
I.....No. 36..	130	105	110	96	97	69	78	73	48	62	868	5423
II.....No. 53..	100	82	95	83	92	79	74	70	70	63	808	4735
III....No. 31..	114	103	91	67	67	50	60	58	55	40	705	4480
IV.....No. 45..	83	82	79	93	72	79	69	76	58	48	739	4346
V.....No. 37..	103	86	76	68	62	64	62	51	42	40	654	4105
VI.....No. 93..	145	82	58	46	48	56	44	42	50	73	654	4017
VII....No. 42..	51	73	53	83	52	74	52	39	44	34	555	3301
VIII...No. 10..	50	71	68	58	42	37	52	54	47	39	518	3029
IX.....No. 33..	68	63	43	67	47	41	46	33	35	31	473	2938
X.....No. 20..	79	55	57	37	47	49	42	34	37	37	474	2908
XI.....No. 7..	71	60	60	36	49	37	28	40	37	37	451	2831
XII....No. 62..	66	49	43	54	55	43	40	37	39	47	473	2764
XIII...No. 43..	41	42	50	53	52	53	51	43	47	38	470	2601
XIV....No. 38..	40	39	42	61	63	41	41	49	44	47	470	2558
XV.....No. 91..	53	45	48	38	44	39	42	53	51	56	469	2529

No. 1, 1,494; No. 3, 1,317; No. 8. 1,257; No. 9, 1,461; No. 13, 1,626; No. 14, 2,067; No. 15, 1,278; No. 16, 1,183; No. 17, 2,412; No. 18, 1,824; No. 22, 1,533; No. 23, 2,157, No. 27, 1,362; No. 29, 2,435; No. 34, 1,272; No. 35, 1,659; No. 47, 1,099; No. 48, 1,886; No. 56, 1,581; No. 63, 2,350; No. 72, 1,433; No. 76, 1,927; No. 86, 1,816; No. 88, 1,098; No. 92, 1,152; No. 94, 2,151.

The winning voters will be announced in our next issue.

Will the writer of the winning story, No. 36, please send name and address to this office.

YELLOWSTONE PARK BILL.

THE Senate committee on the Yellowstone Park have completed their bill, which will now be reported for amendments. As it stands at present, the bill provides that the Park shall be enlarged thirty miles on the east and ten on the south, while from its borders on the north and west a strip two miles in width is cut off. The extension on the east carries the Park very nearly if not quite over to Cedar Mountain, and thus takes in the headwaters of the Stinking Water, including the wonderful Clark's Fork Cañon so graphically described in these columns last winter by our correspondent "P." The strip of ten miles added on the south extends the bounds of the Park down to the neighborhood of Two Ocean Spring, but of course does not include Jackson's Lake or the Tetons, which we should have been glad to see within the reservation. The bill further brings the Park within the jurisdiction of Gallatin county, Montana, and provides for the use of troops to capture and expel law-breakers. It provides for the appointment of a superintendent and fifteen assistants.

The bill is thus an improvement on the previous law in relation to the Park. The increase in size of the reservation was demanded by public opinion. It should be made stil larger, but then, after all, half a loaf is a good deal better than no bread at all. The increase in the number of assistants is a good provision, but we hope that they will be carefully chosen and thoroughly well equipped, for if they are faithful and painstaking, their labors will not be light. The provision authorizing the employment of troops to assist in protecting the Park is very well, but the Honorable Secretary of the Interior had this authority granted him by last year's Sundry Civil Bill, and, although the violations of the law last summer were flagrant and open, we never heard that any troops were sent into the Park for the purpose of protecting its wonders, its game, or its forests.

The fact of the matter is that the care of the Park depends wholly, or almost wholly, on its superintendent. If an energetic and faithful man fills the place, he can do a vast amount of good. If he is slow and lazy, the law-breakers will have things all their own way.

The provisions of the bill in regard to game and fish are, we are glad to say, very stringent. The killing of either is absolutely prohibited under a penalty of not less than $20 nor more than $100 fine, or imprisonment for ninety days

As regards leases, the bill is generally like the old law: The Secretary of the Interior is authorized to lease for not exceeding ten years small portions of ground in the Park, not exceeding ten acres in extent for each tract, on which may be erected hotels and the necessary outbuildings; but such leases shall not include any of the geysers or other objects of curiosity or interest, or exclude the public from the free and convenient approach thereto, or include any ground within one-quarter of a mile of any of the geysers or the Yellowstone Falls. Only one tract shall be leased to any one person, association, or corporation. All contracts, agreements, or exclusive privileges heretofore made or given in regard to the Park, or any part of it, which are inconsistent with this act, are declared to be invalid.

And while we are talking about the Park, a word or two about the great-hearted Improvement Company, which tried so hard last year to acquire the whole reservation for its very own. This estimable association appears, from the reports which are flying over the wires, to be in trouble. In the first place, it is stated that Rufus Hatch, whose name was so prominently connected with the incorporation of this company, has been sued by it for failure to take up the $500,000 of stock to which he pledged himself to subscribe. Then we learn from the West that the property of the Improvement Company has been attached by a Livingston (Montana) trader, who supplied the Hotel Company with supplies and who is now unable to collect his little bill.

The Company and its principal organizers being in difficulties, they may perhaps have less time to devote to lobbying in Washington this winter, and so the friends of the Park may have less trouble in securing the legislation which is so essential to its protection. There is an old saw relating to the condition of things when honest men get their dues, which obtrudes itself upon us; but let that pass.

Our readers will watch with interest the efforts which will be made by the land grabbers and for the Park during the remainder of this session of Congress. Public opinion insists so strongly, however, on adequate legislation on this subject, that we cannot doubt that it will be had. The people demand that their Park shall be kept for them, and that it shall be carefully guarded from injury. Its geysers, its forests, its game, must be preserved for its owners.

OUR CANOE COLUMNS.

THERE is no special necessity of calling attention to our canoeing department. It speaks for itself. It is newsy, helpful, practical. We are doing now, and mean to do in the future, for the canoe just what we have so long been doing, are now doing, and will keep on doing, for the gun, dog, rod, rifle, trap and yacht. The readers of the canoeing columns ought not to be confined to canoeists. Canoeing, and angling, and shooting, and camping, and the study and investigation of wild life are all connected. The subjects are blend. Anglers will find hints in the canoeing columns, and canoemen may profitably read the angling columns.

In fact, our advice is to read the whole paper. Even the yachting man, once in a while, says something that landsmen may find amusing if not instructive.

But what we started out to say is this, that the sport of canoeing is in the ascendant. It is no transient "boom."

The canoe has found its way into popularity. It has come to stay. We propose to make the canoeing department of the FOREST AND STREAM so complete that it will be regarded by those who read it as a worthy exponent of the subject. Communications on canoeing are welcome. When you write up your log book send it in. Tell us of your outfit, culinary triumphs, news notes about routes, hints and help about fittings, handling, and the care of the boats. In short, put in your paddle and add to the momentum.

COLLAPSE OF LENGTH MEASUREMENT ABROAD.

THE recent investigations of a select committee of the General Council of the British Y. R. A. has made the clear and positive declaration that length entirely fails to fairly compare boats of different types. It sets forth that the largest boat on a given length has inherently the greater possibility for speed, and that differences in size are properly subject to taxation, inasmuch as they enable larger sail spreads to be carried and contribute to greater ability in performance.

In other words, the highest authority in Great Britain once for all officially subscribes to a fundamental proposition long known to every intelligent person, that increased length not accompanied by corresponding increase of bigness is not a true gauge upon which speed can be compared. The committee simply reiterates the old, old story that a forty-foot canoe is not a match for a forty-foot yacht several times as big, and that to tax a fifty-foot canoe for the extra ten feet is to tax her for presumed possibilities for speed which the canoe does not possess, because lacking the bulk enabling her to display the superiority hitherto wrongfully attributed to the extra ten feet of length. Hence, between the two, or between the small chittywee and the big Itchen boats of like loadline, the length rule "entirely fails" to equitably match boats which differ so much in size. There is nothing new or startling about such an enunciation. We have sought to make that clear all along. Simple as such a proposition may seem and self-evident as it is from examples in practice, it is strange and almost inconceivable that in this age any one can still maintain the equity of racing a small boat against a large one without an allowance, should they happen to coincide in the one special feature of length. Yet it is upon the crass and glaringly false assumption that like lengths afford like chances for speed, whatever the bulks may be, that the length rules of the day are founded. "All other things being equal," the committee says further, "the speed of yachts will vary as the square root of their lengths." But as in no two yachts are "all other things equal," no rule can be built upon an assumption which does not apply among vessels of a length but varying in "all other things," said other things drawing their existence from the varying bulks found on the same length. Very properly, then, the committee has concluded that the errors of comparison by length must be corrected by the introduction of some expression equivalent to the difference in bigness of the boats entered for competition. It is true the committee does not recommend measurement of bulk in so many words, but beats the devil round the bush in advising the measurement of sail in connection with length. As sail area, broadly considered, will vary with beam and depth, the sum total of the operation is nothing less than a rough equivalent to the multiplication of the three chief dimensions of a vessel, in plain words, a gauge of her bigness or bulk.

There are, of course, instances in which, through differing mechanical provisions for ballasting, the sail area rule will fail to compare correctly the bulks of two vessels, and to that extent the rule will exhibit faulty application in practice. Upon the assumption that every man attends to the best mechanical provisions for racing, and that a match should be truly a test of model, the new rule will work with approximate equity. Where, however, inferior ballasting or rig is brought to the line, the rule offers an allowance for such shortcomings, as the area of sail will be correspondingly less, and it may be supposed the vessel also crippled to the extent of the allowance she receives. As long as the time granted is not so great as to put a positive premium upon the butchering of rigs, the neglect of proper ballasting or the shrinkage of bulk, as in a sharpie for example, there need be no fear but that the sail area and length rule will be found to permit the classification of yachts of all kinds, and for that reason free play to every man's preferences as to the form most suitable to his objects apart from racing only. To the degree that the sail area and length rule approximates a measurement of bulk, it will work with equity. To the degree it fails so to do, it will be open to further modification in the future. As a final quietus to "simple length" and piloting a truer course to the ultimate haven, the conclusions of the British Y. R. A. have our approval, and those conclusions cannot be without immediate beneficial effect in our own waters.

ONE SATISFACTION.—One source of greatest satisfaction in the work of conducting the FOREST AND STREAM is the promptness with which its patrons meet their pecuniary obligations. Subscriptions are always paid promptly, we have no list of "poor pay" readers, whom it is necessary to coerce by editorial threats into paying up. We conduct our business on business principles. The rule is that subscriptions must be paid for in advance. The practical working of the rule is that they are paid in advance. Indeed, very many (in a continually increasing ratio) have taken advantage of our "long term" rates and forwarded $10 for a three years' subscription in advance. Perhaps the reason why subscribers to the FOREST AND STREAM pay so promptly is that the paper is worth the money. "Nothing very occult about that, you see."

IMPROVED SMALL ARMS.—The reports from Switzerland, given in our rifle columns, show that the little republic is struggling with the small arms question. In Europe it is a problem of immediate and pressing importance and none of the nations there can afford to fall behind in this department. It may safely be said that compared with the small arms here, there is a general aspect of antiquity about the arming of European armies. The metallic central fire cartridge is not in common use and unsatisfactory substitutes of paper are employed. The inventors and improvers are, in most cases, military men with very set and circumscribed opinions, and a disposition to reject, even without examination, anything coming from outside sources. In no department of human invention is there more necessity of full information on foreign progress than in this of military weapons, and no class seems less disposed to give and take than military-bred critics. A trip through American armories would be, no doubt, fruitful of good results to our Swiss experimenters.

BOOKS FOR OUR READERS.—Our notification some weeks since that we would send any book published on receipt of the publisher's price, has evidently been appreciated by our readers. We knew that to do this would be a convenience to a great many, but the number of those who have taken advantage of it has surprised us. So many of those who read the paper live in places so far from the bookstores that it is a real blessing to them to be able to write out the titles of the book required and send it to us to be forwarded to them. Moreover, in ordering a list of books it is a great saving of time and postage to have to write but one letter instead of half a dozen. Although the filling of these book orders consumes no little time and trouble, we will furnish any of the books published in the list in our advertising columns, or any other book published, on receipt of the publisher's price. We will also send any magazine or periodical on the same terms. The name of the publication desired should be written plainly and the order must invariably be accompanied by the money.

THE BROOKLYN WATER WORKS SCHEME.—A bill has been introduced at Albany which gives the Department of Public Works of Brooklyn power to enter upon any lands or waters in Suffolk county, and by paying a certain appraised amount, occupy the same in perpetuity for the erection of pumping works, reservoirs, conduits and such other appurtenances as may be deemed necessary. As Queens county lies between the city of Brooklyn and Suffolk county, it is to be presumed that the waters there are either insufficient, or not to be obtained. Suffolk county comprises the eastern half of Long Island, and has long been noted for its trout streams, which now are threatened with confiscation by the city. The bill specifies no particular streams, but allows the tapping of every spring and stream in the county. Added to this is a clause exempting all the works and improvements made in robbing the county, from taxation. The streams of Suffolk county contribute the greater part of the fresh waters to Great South Bay, the home of the "blue point" oyster, and to the influences of these streams is due the excellences of this famed mollusk. The trout streams of both sides of the island so dilute the salt water of the harbors that they make suitable spawning grounds for many species of coast fishes, and with the streams taken from them the bays would soon become as salt as the ocean. We hope that the oystermen, fishermen, owners of trout streams, and all who are interested in preserving both our inland and marine fisheries, will protest against this bill being passed in its present shape. The streams of Suffolk county add greatly to the value of property there, and if they are all liable to confiscation every time the Department of Public Works of Brooklyn may issue a decree, then owners of streams will feel insecure in their possession. The Supervisors of towns should at least have a voice in this matter.

AN INTERESTING SERIES OF EXPERIMENTS is described in our angling columns.

The Sportsman Tourist.

HOW DO THEY LIVE?

AYE, that is the question. How do they live—these bright-eyed wood-folk, that the human biped pursues and persecutes with dog and gun, not only in season, but with snares, traps, and all villainous devices known of men, out of season. And when at last the human persecutor lets up, nature comes in with a heavy fall of snow, topped with a sharp crust. The ground is inaccessible. The trees are covered with ice. The beechnut and thorn-plum are the size of marbles. Seeds and buds become balls of ice. How do they, how can they live?

Truth to say, a large percentage don't live at all. They die. Notably, the quail, who is the first of gallinaceous birds to succumb. The wild turkey holds out longer, but is beaten at last. And the beautiful, gamy, hardy ruffed grouse is the last to give in. But a winter like the present tries even his powers of endurance. How does he live?

Well, so long as there is no ice-glaze on the trees, he will live like a fighting cock. Four feet of snow with a crust on top does not beat him. So long as beechnuts, thorn-plums, and buds are not embedded in a thick coating of ice, he will keep in condition. But there are seasons (I have seen three of them), when nature chooses to envelope all her food resources in an ice-armor that no bird can break through. In such a season the ruffed grouse does not live; he simply dies. And he is a bird that you cannot help. You cannot feed him. Once gone, he is gone forever.

But you may, and can, feed the quail. Next to the grouse, he is our finest game bird. Feed him when and where you can. In a heavy ice-glaze at the north, he perishes by the thousand. But he thrives and multiplies on grounds where you would never look for ruffed grouse, and is first favorite with those who affect wing-shooting.

If the wild turkey were sufficiently prevalent to make him a common object of pursuit to the sportsman, I would accord him first place, as the most magnificent game bird on the list. Far ahead of the n'embu, the cassowary, or the capercailzie, the latter being the grandest game bird of Europe, but nearly extinct. But the turkey is fast becoming remote, and is soon destined to become phenomenal. He can stand a pretty hard winter; but an ice-glaze beats him. Once, in Southern Michigan, thirty-six years ago, I saw a drove of thirteen turkeys making their way to the southward. They halted in the barnyard, skirmished around for a few minutes in the vain hope of grain, took the lane that led to the main road, crossed the road, crept through the fence on the other side, crossed an open meadow and disappeared in the forest beyond. As they clambered over the single bar that divided the lane from the main road more than half of them tumbled over through sheer weakness. But they gathered up and went on. The snow was three feet deep, with a crust, and the thermometer 24° below zero. How did they live? Probably not one of them lived a week. Heaven be my judge, that I would have given my rifle for a bushel of corn that I could have fed them. But it was impossible. They went away to starve—after the manner of wild turkeys. During the same winter, quail, in bevies of fifteen to thirty, were found frozen *en masse*, packed snugly together, as they had huddled for warmth. Even the omnipresent and pestilent squirrel failed to raid the cornfields the next season. Grouse and quail were very scarce for years thereafter. How did they live? Well, the few that managed to pull through had exceptional feeding grounds, if birds; and, if squirrels, a supply of nuts stowed in a hollow tree.

Fifty-three years ago the 20th of last November there came a snow storm that lasted without intermission for nearly four days. This was in New England. When the storm passed away the snow laid thirty-six inches deep on the level. The weather changed and there came a rain, followed by zero weather. On the first of February roads were of no use. The farmer hauled wood across lots, over fences and through woods on a hard snow crust that made the best of sleighing. This lasted until the 20th of March without a let-up. It was a fine winter for business, but it nearly exterminated grouse, quail and squirrels in Eastern Massachusetts. During the previous October they had all been very plenty; one could scarcely cross an open field without flushing a bevy of quail. There were grouse in every thicket, and the average country boy could make a decent bag of gray squirrels with a club and a cur dog. During the following summer and autumn I was in the fields and woods a large part of the time, and did not see or hear a single quail, and only two gray squirrels. The remnant of the grouse family was represented by a few hard-billed, strong-winged old cocks, who had managed to make the riffle by burrowing under the snow and raiding the nearest orchards for fruit buds. But I do not recollect that a single clutch of young grouse were seen the following season.

In a winter like the present, with only three feet of snow, with two crusts, but no ice on the trees, the ruffed grouse is at home every day. You will not find him in the low-lying thickets and hemlock swamps. If you look for him where you found him last October you will be apt to think he has emigrated for good.

Follow me for a little and I will tell you just how he lives—and lives well, in a winter like the present. Two years ago it would have taken several hours of cold mountain travel to reach the little lumbering hamlet of Ansonia from Wellsboro. Now, we take a comfortable seat in a passenger car of the P. C. & J. S. Railroad, and make the trip in thirty-five minutes. The road has not been in operation long enough to destroy the wild features of the region; and, as we glide down the romantic valley of Marsh Creek we have a steep mountain slope on the left, covered to the summit by a dense growth of hemlock, the trees near the foot of the slope and on the narrow flat more or less weighted with large patches of snow. It is in these trees, under the snug shelter of these snow tents, that the grouse loves to hide, spending the greater part of his time in keeping himself safe and comfortable. As we are traveling westward, the high slope on the right, with a southern exposure, shows a different growth of timber entirely. There are few pines or hemlocks, but large thickets of scrub oak, birch and poplar, and here is where the grouse makes his living. So long as the buds of the poplar and birch are not enveloped in a thick coating of ice, he will keep in good condition, though every species of ground food be covered with four feet of snow and a crust on that.

Twenty years ago, on this very slope, I was following a doe's track just at night in bitter winter weather, and her cute ladyship chose to foil me by keeping along the side hill and in the thickest growth of small timber. There was a track-

ing snow of eight inches which concealed all treacherous, slippery sticks, and I fell frequently—always with head up hill. At length I got an extra noisy tumble, and three grouse darted out of a low poplar, scaled down the mountain on level wings, like hawks, and disappeared in the dense hemlocks below. On looking around I became aware that there was a rather large gathering of the birds in plain sight, and, despairing of a shot at the doe, I clipped the head off the nearest cock. He made a deal of unnecessary fuss about his head, flapping, drumming and turning back somersaults down hill, making the snow fly as he went. This started a few of the nearest; and, as I got in another and last shot, the stampede became general. It was interesting, almost exciting, to see the game, beautiful things, a dozen at a time, glide like arrows down the steep slope without moving a wing, and, as they neared their favorite trees, turn sharply upward, put on the brakes with a thunderous clatter, and disappear in the dense, dark foliage above. I am not going to say how many I think there were on the feed at that time and place. At least one hundred. Perhaps thrice as many.

I have had the same experience on the mountain side two miles below Ansonia, on the head of Asaph Run, or Long Run, and on the side hills along the Canisteo, in Steuben county, N. Y.

I only give these jottings as illustrative of how they live in the long, hard, close season. The sportsman puts away his shooting gear at the close of the open season, and it is only the woodsman and naturalist who takes to the forest in January and February to find out the winter ways of the elfin woodfolk.

Not of game birds and game quadrupeds alone, for these are few in number, and it is our selfishness that leads us to give precedence and importance to them at the expense of other woods dwellers quite as sagacious and interesting. The wildcat, the owl, the fox, each and all have hard work to pick up a respectable living when there is a deep light snow on the ground. The two first named often perish with cold and starvation. I am not sure that the fox ever does, though he becomes fearfully emaciated. The mink and weasel manage very well. The former is a skillful fisherman and the latter a capital mouser. Both are model poachers and pot-hunters. They kill as long as anything is left to kill, with no reference to present needs. They deserve neither mercy nor sympathy.

Then there are fortunate individuals among the forest population who, on a sudden contraction of woodland currency, can go into winter quarters and sleep comfortably until the advent of better times. These are notably the bear, the skunk, woodchuck and 'coon. They remind one of Calverly's lines:

> "Friend, there be those to whom mishap
> Or never, or so rarely comes,
> That at the very thought they snap
> Derisive thumbs."

And there are some few quadrupeds and birds that thrive in the roughest winters. I do not think the deer—when unmolested by enemies, is ever beaten by hard weather alone. While the hare, the rabbit and the red squirrel can afford to "snap derisive thumbs" at Siberian weather with a heavy ice crust thrown in.

I would like to say something about the muskrat, the most intelligent animal of his size with which I am acquainted. No matter whether he elects to pass his winter on a rattling trout stream, a river or a lake, his industry and forethought always pull him through in condition. He has one foolish attribute that militates against his general intelligence: he will continue to stick his fool feet into naked steel traps until he loses his last foot. I have caught an old rat by his fourth and last foot, the others having been left in traps. And once—it may be a hard yarn, but it is true—I shot an old male rat swimming near the shore without any feet at all. They had all been left in traps; and he was swimming very well on the stubs.

When I remember that I have murdered more than 5,000 of these bright-eyed innocents and stretched their skins for an average of twenty cents each, I am quite prepared for the gospel of evolution.

I shouldn't be surprised to know that a few thousand years back my ancestors wore hair instead of cassimere, and lived mostly in trees. NESSMUK.

Wellsboro, Pa.

MY CAMP-FIRE.

IT was such a fire as an old campaigner loves. Heaped high with lusty logs, it blazed merrily into the dark blue sky of the autumn night, and sparkled and flashed through the linden leaves which overhung my couch. And the more welcome, because unexpected.

I had taken the Kelpie, rather late in the afternoon, intending to row quietly down Central Lake to Bellaire, remain there over night, continue my journey down the Intermediate River, through Grass and Clam lakes, and take the steamer Queen, at the mouth of Clam River, for Elk Rapids, where I had business which required attention.

I rowed leisurely on, taking little note of time, until, as I rounded the point known as Buzzard's Roost, I perceived that the evening twilight rested on the lake, and that I had allowed the beauty of the scenery to interfere with the plans of the expedition. Then I reflected. If I should attempt to run the Intermediate Rapids by moonlight I could not disguise from myself the fact that, however seductive the performance might appear when viewed from a distance, there was a strong possibility that, just when I should come to the liveliest part of the entertainment, I might chance to find myself caught in one of the log-drives of Messrs. Richardi and Bechtold; "in which case," said I to myself, "I shall, in the language of our late lamented friend, Mr. William J. Snelling, have 'cooked up a pretty kettle of fish, and brought my calf's head to a fine market;' and, to quote another early acquaintance named R. Crusoe, there would then undoubtedly be 'the devil to pay, and no pitch hot.' These be the facts. Shall I, like the Danish rover, lie on my own proud deck, before the sea and sky? No, the deck is too short. Shall I risk the rapid? No. By St. Bryde of Bothwell, I will camp!"

It was the eleventh of October, the night was fine, and though my camp equipage was scanty, it yet comprised an overcoat, a tea kettle, and an axe, and provident hands had stowed the mess chest, or more accurately, the bucket, which usually accompanies the boat.

I scanned the serried lines of cedars along the shores, and the dark hues of the evergreens blended with those of the upland maples in one sombre tint. Turning my course, I rowed for the western shore, and after a time, shot silently into a shallow cove, backed by tall cedars; a fringe of reeds advancing to the waves. Seated in the stern of my light, narrow craft, I laid my hand upon a projecting branch, and strove to force the boat further into the reeds, when a startling rush of wings burst from the tangled thicket, and I loosed my hold on tree and paddle, and grasped my gun as a dark object whizzed close past my head. Twisting myself in the narrow boat, somewhat after the manner of Davy Crockett's owl, my gun swung into line, and the moonbeams glimmered for a second's space on the brown Damascus barrels, as they ranged upon the fast disappearing shadow. A stream of fire lighted lake and forest, and showed the outlines of the distant shores, and a silvery fountain sparkled up, some forty yards astern. "It is a duck, sure enough. I thought it was a grouse," was my thought; as I paddled alongside the floating object, and lifted it into the boat.

When at last I stepped ashore I found that, with one exception, I had made a good selection of a site for a camping ground, but this one was decidedly condemnatory. The leaves were soaked with the recent rains, and the density of the foliage had prevented the sun from taking any active measures toward preparing them for the couch of a lone wayfarer like myself. Now, wood and wave are to me as home, and this being the case, I am accustomed in the presence of Mother Nature to do much as I would if under the shelter of my own roof-tree, namely, to make myself as comfortable as the nature of the circumstances will permit. I have found much comfort in a bed of wet moss on Echo Island, in Lake Winnipesaukee, and also in sleeping on a flat rock, in the Indian "Nation;" but at this time I had the whole night in which to seek a couch, and all Michigan to find it in, and I turned my course toward the nameless island—most northerly of the three which adorn the lower portion of Central Lake. I had passed this islet scores of times, but never landed there. I reasoned, however, that if I should find as much solid land as the son of Godwin proposed to give Hardrada, the afternoon sunbeams should by this time have fitly prepared it for my reception.

The Kelpie grounded on a little beach of hard, smooth sand, and I stepped into the bushes and paused under a jolly old clump of basswood trees, with wealth of drift scattered along the shore. "Behold," quoth I, "this is the very place I have been hunting. Here will I camp, there build my fire, 'and the low shiver of the linden tree may bring to me a joy.'" Then rang the strokes of the hunting axe, and up against the spangled night there streamed a mighty blaze.

Now, thought I, as, half an hour after, I sat at meat, with a mug of tea in one hand, and the gambrel joint of the luckless bird before mentioned, in the other; this is something like. Talk about the banquets of the gods—nectar and ambrosia, or the beer and bacon of Walhalla. The highest hall in Gladsheim wouldn't touch the roof of my camp, and I would not give the hind leg of this mallard for the whole outfit of Olympus. I only wish that the professor, or the cashier, or the barrister, were here, or that "Nessmuk" sat fornent me, just over against the teakettle, with his beard wagging over my commissary department, and the fragrance of the Formosa floating up to his nostrils. Did you ask if that gentleman and myself had ever met? Not that I know of, but let him come paddling in the Sairy up to my camp, and before many minutes we should, likely, be as old acquaintances. Aye, and we'd have a night of it. We would gang up the glen with "Bonny Kilmeny," and we'd have the "Witch of Fife," and, mayhap, all the rest of the "Queen's Wake," and a shy at "Holy Willie's Prayer," if he liked, with, maybe a dab at the Talmud, and a dig at the Targum of Bere Oziel, and perhaps a screed or so from the "Devil on Two Sticks." Any other literary *morceaux* which our repertoires might furnish, would of course be in order. There is the ballad—the very mournful ballad of "Peter Gray," who—

> "Went trading to the West,
> For furs and other skins,
> And he was caught and killed, a-a-and drest,
> By the bloody In-ji-ins."

Do my ears deceive me? or did I hear from some unappreciative person the word "nonsense?" Yes, I was right. My dear sir, before you pass over in disgust the remainder of this paper, oblige me by remembering that the Kelpie and myself are at present in unquestioned possession of this island, the uttermost coasts of which may from this point be swept at any moment with grape and canister; and further, that our camp-fire was not built for your exclusive benefit. I readily admit, however, that as the elder Weller might say, the evening's discourse "werges" on the nonsensical. Thoreau said that going into camp was with him a solemn affair, and I believe that I appreciate his meaning, but I am happy to say that in this close communion with nature solemnity does not always come to the front, or even make itself unpleasantly conspicuous. Those who are "forced to drudge for the dregs of men," and all the rest of it, often manage during business hours to get enough sense drummed into them to last over an infrequent evening by a camp-fire. Were you, O man of the long and rueful visage, to be wrecked at this moment upon the shores of the islet where at present I hold supreme authority, you should be welcome. I would seat you in the place of honor by my camp-fire; would share with you my duck and dhudeen, and would sit silent and attentive to the wealth of wisdom which your lips let fall. Under certain limitations you should discourse of what might seem to you most instructive—Moschus or Marcus Antoninus, Bion, Bacon, or Brillat-Savarin. I bar the ever-increasing list of German metaphysicians from them, for this night at least. My camp-fire is sacred. Do you remember the old Scotchman's definition of metaphysics? "Weel, sawney, fin the mon wha hears disna ken what the mon says wha speaks, and fin the mon wha speaks disna ken what he says himsel', that's metafeesics."

Are you a scientific don? I would gladly learn from you. We would discuss the relative density of a half-baked, three years old army hard tack and a piece of porphyritic granite, and tell each other how the ptermiognastis builds its nest. Are you a speculator, or a man of commerce? I would sell you a town lot, or talk of the late extraordinary fluctuations in the price of putty. If you should—bad luck on it—prove to be a lobbyist or a ward politician, bent upon obscuring the light from my fire with the murky cloud which muddles the brains of your particular following, I would reach for my gun, and, first having seen that the charges were in a trustworthy condition, would look in the direction of your boat; and, while carelessly playing with the locks, would relate an episode in the life of the late Captain Simon Suggs, of the Tallapoosa Volunteers, which, in the language of that distinguished warrior, ran much as follows:

"He kep' up a most a dingnation growlin', t'well I rolled up my sleeves, which it was a tollable warm day, and my coat was off, and says I: 'You see that hos yender?' 'I do,' says he. 'He's yourn, aint he?' says I. 'He is,' says he. 'Then,' says I, 'if you don't want to be most boddaciously cet up, you'd better get atop of him, and make tracks.'"

The tea things having been cleared away, and the cloth removed, I knocked the ashes out of my pipe, and uplifted my voice in song. (I sometimes commit these indiscretions where there is no danger of being arrested for disturbing the peace and dignity of the realm.)

I was just in the midst of a Northland saga when my dulcet strains roused grave remonstrance from a flock of geese just passing overhead. Truly, thought I, even though "my voice has been tuned to the notes of the gun," there seems no good reason why I should scare the lives out of these unoffending birds. All hail, ye cleavers of the wind! Your ancestors on the Grand Prairie could have told you that the crack of my old muzzleloader, "Dora Dean," or a hail from the iron throat of its companion, "Punkinslinger," was even more dangerous, though perhaps less irritating to your sensitive natures, than the roar of the Aristophanic anapests you heard but now.

Those who may have chanced to read such papers as I have contributed to the columns of the FOREST AND STREAM will perhaps have observed that there is little bloodshed in them, and it is true that I have in a great measure outgrown any taste I may formerly have had for, mowing swathes through swarms of birds, or for pumping a Winchester rifle while a band of retreating antelopes should remain in sight.

My experiences in shooting and in fishing belong, for the most part, to the days when breechloaders were infrequent, not to say unknown, and were by most sportsmen regarded as a nuisance. We loaded quickly, however, in those times, and even now. My preference for a breechloader arises not from the rapidity with which it can be discharged, but from the readiness with which its charges can be changed or removed without firing. I have been a persistent angler, and have burned much powder in my time; and a man does not acquire skill in the use of firearms against game without some waste of innocent blood.

I may some day tell how "the deer was hung up before the camp," or of the grouse in countless hundreds which could formerly have been seen on any bright winter's day, sitting in peaceful enjoyment of the farmer's corn in the great fields of Central Illinois.

In my time, I have made some shots which, in one way or another, I thought remarkable. I think so still, but—have no fears. All sportsmen have done the same, and who believes the tales? While "Major Verity" lives I shall not publish mine. I should as soon think of telling you how with my red right hand I calmly choked to death a grinning bear, while the iron hilt of the bowie in my left, clashed against the cuspids and incisors of its wailing mate, and the keen blade caused such serious abrasions of the internal tissues, that the poor animal ceased its wailings and calmly gave up the ghost.

Almost any one can tell you how he caught his fish, or killed his game, and the story shall lose nothing in the narration. I am, nowadays, seldom disappointed, if I return with a brace only of birds from a shooting excursion, and it is a pleasure to remember that since mere boyhood I have not wantonly wasted life. He who goes forth amid the sights and sounds of nature, doth sadly miss his opportunities, if slaughter is his only mission. It is a case of "eyes and no eyes."

I toss more wood upon the fire, and merrily doth it blaze. The lines of light stream southward, and in the distance Lewis's Island looms. That is the place, as I suppose, where one should seek the sad and wandering ghost of the "rude, but comfortable camp," immortalized by the gentleman (I had written "the magnificent pestle-head," but erased the words), who makes, or made a certain guide-book devoted to a description of this portion of Michigan. Had I employed the term "pestle-head," it would have been advisedly, for, as the autocrat says of "boodle," it is a "diabolish good word." Nevertheless, had I in camp a "Thesaurus of English words," I might, perhaps, select another more fully expressive of my feelings.

Every copy of the aforesaid guide-book which has chanced to come under my notice states (I quote from memory) that at Central Lake will be found a "rude, but comfortable camp," and this is about the extent of the information concerning the lake and its surroundings, vouchsafed by the editor of this interesting periodical.

I believe that Frank Lewis did, six or eight years ago, build some sort of a shanty on his island; but it had gone down the stream of time before I saw its site. [N. B.—Nothing contained in the foregoing remarks is so to be construed as to convey the slightest intention on my part of giving offense to the editor of the guide-book to which I have made allusion. I like editors—they are harmless beings—and their knowledge is as the knowledge of Allah. I have seen several, and gazed upon them from a distance with wonder and admiration. There was S., of the Chicago *Alliance*—bless his little heart—who, because of the fact that during the season when the woodland leek appears above the ground; the butter, in localities favored with the presence of this plant, is often tainted by its odor; gravely, through the columns of his paper, informed the "moss-back" farmers that "salt, duly administered to the kine," would prevent them from eating this weed. He also volunteered the information that the air of Torch Lake was more healthful than that of the Intermediate Chain, for the principal reason that the first named sheet of water is so much higher, and therefore feels the Mackinaw breezes. Dear, dear. If I only could see that noble specimen of manhood carrying a surveyor's chain up the Intermediate Rapids, with a pound of leeky butter under his nose! I had been under the impression that Central Lake discharged its water into Torch, through some thirteen miles of river, lake and rapid, and was therefore the higher of the two. But we live and learn.]

The fire burns low—more wood—more wood; and up the sparkles fly; and I spread the sheepskin rug which I use as a cushion in the boat, and draw over my head the hood of my nor'west capote. The lindens whisper overhead, and the soft waves stir the reeds.

The mists hung lightly over the lake as I rose in the early morning light, shook myself clear from my heavy coat, and after mending my fire and setting the inevitable tea kettle about its business, prepared for my morning toilet. Looking through a low clump of brushwood, I saw upon the surface of the water that which attracted my attention. Stepping backward I reached my gun (having in my haste slightly disarranged my camp outfit), and moved forward, just as a couple of mallard ducks flashed up on sudden wing and sped away. No, they are too far; and without shooting at too long a range, I returned to the fire and at once perceived that all was not precisely as it should have been. Whew! *Omne tulit punctum qui miscuit utile dulci.* Just so—the useful with the agreeable; though why I should seek to

parade my slender stock of Latin I'm sure I cannot tell; but do you suppose that that old heathen ever camped out and managed to kick his sugar into his cartridges?

Breakfast is finished; gun, axe, overcoat and bucket each in its appropriate place, and hey for the swift, strong river. The Kelpie floats once more, held only by the tip of the old rock-maple paddle, which has guided me well in the long-gone years, amid the lonely beauty of the lordly hills, on the flashing foam of the Pemigewasset, and over the treacherous quicksands and the turbid current of the pestiferous Arkansas. Now, then, the old Canadian paddle song:

"Les pommes, les poires, l'arabe, les choux;
Les feines, y on a là bas partout."

KELPIE.

CENTRAL LAKE, Michigan.

BETWEEN THE LAKES.

Third Paper.

INCIDENTS OF CAMP LIFE.

WE carried with us during our travels a light hunting boat, the Wa Wa, which served us many a good turn. Our Indian boatman, Jim Kishkatog, and his companion, Dan Sky, carried it across to Beaver Lake the first afternoon we reached our camp-ground, and that night they killed a deer and left with us the saddle, and as long as that lasted the Judge nor the Greek Professor made any special effort to kill another. Indeed, according to the rule of law as laid down by the Judge one evening while sitting around our camp-fire, it would have been inexcusable, to use no harsher term, to kill another deer so long as a supply of steaks was in the cache we had made in the cool sand at the foot of a neighboring pine. "Some writers on sporting craft maintain that there are two laws," said the Judge, oracularly, as he puffed a cloud of smoke from between his lips and looked upward to the waving tops of the Norways, "two laws, the law of the land and the law of the woods. But these writers are guilty of a solecism. There is but one law—the law of the land. The mistake these writers make is in confounding an exception to a law with the law itself. The law is, that no deer shall be killed in the Upper Peninsula before the 13th of August. This is the 'law of the woods' as well as the 'law of the land.' And so it is the law that one man shall not kill another. But suppose a man is attacked by his neighbor? He may then kill that neighbor, if it be necessary to do so, in order that he may escape with his life, or even to save himself from great bodily harm. The books all lay this down as the rule. Suppose an enraged buck should attack a man and put his life in jeopardy. Might he not kill it and not violate the law in so doing? Certainly. Every jurist and moralist in the land would so decide; and they would predicate their decision on the necessity of the case. Necessity, then, we may conclude, rises superior to the law, or, to state the case in the language of an old and approved maxim, 'Necessity knows no law.' What state of circumstances or condition of things will amount to necessity may not be so easy to decide in every case. No Legislature by enactment nor any judge by decision has ever undertaken to define this necessity that rises superior to the law. It is like fraud in this respect. Judges and text-book writers scrupulously abstain from defining fraud, lest some rascal will invent a form of fraud that will be outside the scope of the definition. Every individual case must be tested by its own surroundings. What would amount to an overruling necessity in one place, might not in another. Thus, in the settled parts of the country, a man would not be justified in killing a deer in the close season for its meat, because beef, pork or mutton could be obtained. In the woods, however, it is different. Take our own case for example. We are nineteen miles from the nearest accessible habitation—Munising—and even there the pork is extremely fat and the beef tainted. Surely the necessity of the case would justify us in killing a deer for its meat. I do not remember of ever seeing a case reported in the books deciding this point, nor of a discussion of the question in any of the text books; but any jury of woodsmen would acquit us on the plea of necessity, I am very sure."

As soon as the Judge had concluded, the Greek Professor rubbed his hands in a pleased manner, and nodding his assent, said that he was "thoroughly convinced" that the argument was sound. "Indeed," said he, "I remember to have read something similar to it in 'Calvin's Institutes' or 'Edwards on the Will,'" he had forgotten which. This cordial approval and reference to those great theologians and controversalists pleased the Judge mightily, and he not only lit a second cigar, but generously extended one to the Greek Professor, though he knew that gentleman to be unalterably opposed to smoking.

As for myself, I said nothing, but it occurred to me that while our venison steaks were yet in plenty, both Judge and Greek Professor had each been poking around with gun on shoulder, ready to kill the first deer that showed itself. But our steaks were not only out now, but brook trout had become a little tiresome, and it was decided by the Judge and the Greek Professor that a clear case of necessity existed, and that we must have a deer at all hazards, and so we went one night "shining" for one. The Judge greatly deprecated this method of hunting. He said it was "undignified and unsportsmanlike." But it was insisted by the Greek Professor that if this were so, yet, as venison was a necessity, we could not be over-particular as to the method adopted for taking it.

I shall never forget that first and only night's hunt. As we coasted along the shallow shore, monster pikes and bass, blinded by the light, floundered in the shallow water and rushed terror-stricken to the deeper. From out the dark forest came at intervals, strange, weird sounds of beast or bird, that in spite of me sent the blood flush to my heart. The Judge held the paddle and the Greek Professor the shot-gun, while I sat between, with nothing to do but obey my masters for the night and keep still. But I never had such a task imposed upon me before. My throat tickled and I wanted to cough; my back itched and I wanted to rub it; my body was cramped and I wanted to shift it. I wanted to sneeze, to clear my throat, to rest my legs, and although I made no noise whatsoever, ever and anon there came from my two masters in shrill whispers: "Do—keep—still!"

From safe retreats along shore, unseen deer were heard to stamp defiantly a snort in terror, but none were seen till a late hour. We had passed the narrow strait connecting Beaver Lake with its west and unnamed neighbor, and were coasting around a mud-bottomed bay covered with pond lilies. I had been studying the heavens in an effort to keep awake. I remember that I counted the stars in the Northern Crown and traced the outlines of the Great Serpent, and looked in vain for the fiery Scorpio. Then memory left me, and the next I knew, we were coasting around a little brushy point, and there, close into the shore, stood an astonished deer—cream-colored it seemed to me and bright-eyed by the lantern's light. I felt the boat leap forward under me, as the Judge gave a strong stroke with his oar, and I held my breath in expectation of seeing a flash and hearing the roar of the death-dealing gun. But I heard nor saw neither. Another stroke, more powerful than the former, shot the boat well up to the bewildered animal. Now, Greek Professor, blaze away! But no, the Judge jabs his oar into the soft mud and gives one more strong push and at the same time he screams "S-h-u-t-e!" The deer gives one or two terror-stricken leaps and disappears in the brush, while the Greek Professor, sweeping the horizon with the muzzle of his gun, fires a tremendous charge toward Arcturus.

"Darn it!" exclaimed the Judge, as the last echo returned in a whisper from the distant hills.

"Don't swear, Judge," said the Greek Professor, in a tender voice.

And then the two hunters held a brief consultation, during which the faintest color of recrimination blushed to the surface; but it faded away at once, and in the best of humor we returned to camp.

It was midnight when we got there, and we were astonished to hear voices from the beach. Advancing to the crest of the hill, through the darkness we could see the outline of a boat and figures moving on the beach. I went down the hill with the lantern and discovered that our visitors were Indians. Five men were busy transferring bedding from the boat to the beach, and seven muffled women sat squat on the sand in solemn silence. After the bed makers had spread their reed mats on the sand and their blankets on the mats, I returned to our tent. Next morning three of the men came up the hill to our camp and we held an interesting pow-wow with them. We learned from them that they were from the Waiska Bay Mission, in the vicinity of the Sault Ste. Marie Rapids, and were on their way to attend a camp-meeting then in progress near Munising. Seven days before they had set sail, but calms and contrary winds had detained them. The day following the meeting was to close, but they hoped to get there in time for the final exercises.

One of these men, the Rev. Gerrit Smith, a Presbyterian minister, we found quite intelligent. At a former time he had carried the mail along this south shore of Superior and knew the trails as but few, if any, white men knew them.

Among other things, our visitors told us of a trout stream that entered the lake about three miles, they surmised, east of our camp. "We ate supper there last evening, and my father said there were trouts there," said the Rev. Smith. We had noticed on the map that a stream entered the lake below our camp and had talked some of making it a visit; and now, when we were told that it was a trout stream, we determined to go the first convenient day, and that day happened to be the Fourth of July. Early that morning we were awakened by a faraway boom, and we said, "That's thunder: it's going to rain." Boom followed boom, and although a dense fog enveloped the lake, we soon saw from the regularity with which the sounds came that gunpowder and not electricity was the cause. The Munisiugers were, as we afterward learned, giving vent to their patriotism by anvil firing. Providing ourselves with a good lunch, at an early hour we set forth on our journey. Our path was the wet sand along the beach, and we found it very slavish walking. The Greek Professor, a spry, short-legged, ambitious man, put the Judge and me on our mettle that day. The former, with his 220 pounds, plunged along like a porpoise in a rolling sea, and every few rods he took off his hat and mopped his forehead. His spectacles gave him great trouble, for the fog covered them with a mist, and he was compelled to frequently stop and cleanse them of it. I yet remember the quavering feeling in my rather slender legs as I footed it along in the yielding sand, in the wake of my rolling, puffing legal friend, and in sight of the ghostly-looking outline of the sturdy little Greek Professor.

Many articles we passed on the beach that morning reminding us of the dangerous navigation sometimes experienced on these shores. The wreck of a yawl some one had propped up against the bank. An oyster can, unbroken and containing its original contents, lay at the water's edge. A broken mast was half buried in the sand, and countless broken bits of boats' furniture told of past wreck and ruin. As the day advanced, the anvil firing at Munising ceased, but the fog increased. It rolled landward in great clouds. Twenty yards off my companions resembled specters, and seemingly from near at hand, but out of sight, came in quick succession shrill whistling from a steamer uncertain of her way. Once we stopped to inspect a hedge hog that we came across gnawing at a castaway pork barrel. The Greek Professor upended the barrel with the beast in it, and then quoted a strophe from a Greek poem at him, after which the Judge, not to be outdone, pelted him with some law Latin and, turning the barrel down again, he left the ugly creature to suck salt and comfort out of his barrel as best he could.

At the end of an hour we sat down on a log to rest and, after a few moments spent guessing how far we had come and how far to go, we resumed our journey. At the end of a twenty-five minutes' brisk walk the Greek Professor suddenly asked, "Where's the lunch bucket?"

Then the look that overspread the Judge's face was worth seeing. He had assumed the care of that indispensable part of our impedimenta, and had left it at the log where we had rested. "Darn it!" said he, and dropping his gun and his rod, he went back for the truant lunch. The Greek Professor and I went on and soon came to the creek, where we sat down and listened to the whistle of the befogged steamer. The Judge presently came rolling up with the unlucky lunch, and after a brief resting spell, we left the lake shore and ascended the creek, fishing as we went. A few hundred yards up we found the winding stream abounding in beautiful woodland views. Its sparkling and cool waters flowed between not overly high, but well-rounded wooded hills, that in places came close to the creek's margin. Plots of blue violets grew in sunlit spots, and clusters of delicate ferns waved in the little damp nooks set in the hollow sides of the hills. Moccasin flowers grew here and there upon the hillsides, and under the hemlocks on the hilltops, the Indian pipe, that beautiful waxen looking flower, was seen. The sun came out while we were on the stream, and its rays struggling through the thick foliage above, dappled the pools and illuminated the beaded ripples. Golden robins from the leafy coverts vied with each other in piping their most musical lays, and a cock grouse, alarmed at our too near approach, on swift and thunderous wing disappeared in the green woods. Seldom have I seen forest and stream present so much of wild beauty. And then, under the shelving rocks and logs and in the deep pools, trout of good size and rich in their coloring and gamy to the last, took the hook freely. But alas! This wilderness, the true home of water nymphs and dryads, was likewise the home of myriads of mosquitoes and "no-see-'ems," and their persistent and savage onslaughts drove us back to the lake shore, where we soon forgot the rippling waters and flower-covered hillsides and leafy woods and forest sprites, over a birch bark platter of freshly broiled trout.

The fog lifting in the afternoon, we saw a few miles down the lake, a steamer apparently anchored near the shore, which we subsequently learned was the same one that sounded the alarm whistle all morning, and that it had ended its career that same morning by blindly running upon a ledge of rocks and breaking in two. We also learned that the creek visited was known as "Seven Mile Creek," so called because it was seven miles from the Ahmeek-we-se-pe.

We had walked that day not less than sixteen miles (the Judge more than that), and for a man who a few weeks before had been doctoring for a "lump in his throat" and for one who, as the old weak-minded mendicant in the "Hoosier School Master" was wont to say of himself, had "tater head," the walk was a pretty good one. But a good many far more laborious than that we took while between the lakes, and we found ourselves daily growing stronger for the exercise. The Greek Professor and I were agreeably surprised to find the atmosphere of the region so invigorating and healthful. It was bracing at all times and in all places. The Upper Peninsula lies wholly between the forty-sixth and forty-seventh degrees, the same latitude as at Quebec, but owing to its lake surroundings the average of temperature during the summer months—June, July and August—is 57° to 68° at Quebec, 11° difference. With Lake Superior, 460 miles long, and nearly or quite 150 miles between its north and south shores opposite two-thirds of the western part of the Peninsula, with its waters deeper by a hundred feet than any other of the great lakes, and cold as spring water the summer through, and with the prevalent winds of the Peninsula blowing from off this great cold water sea, it is easy to understand whence comes the delightfully cool, pleasant and invigorating summer climate.

All the south shore of the lake, from Kewena Point down well on to Whitefish Point, three hundred miles or more, presents almost a continuous succession of healthful sites for summer resorts. In accordance with the fashion of to-day, thousands of summer tourists visit the northern parts of the Lower Peninsula, a region possessing a climate so delightful and healthful as compared with the climate of the great corn regions in the Mississippi Valley, that the denizens of that valley who go there think they have breathed the most salubrious air in the world. But the Upper Peninsula, when it comes to be known as well as the Lower, which it will when it gets a little more out of the woods and has its comfortable hotels, will present attractions so superior to the Lower, that I venture to guess that it will draw the great majority of Western summer travelers to it.

In the meantime we

"* * who love the haunts of nature,
Love the sunshine in the meadows,
Love the shadows in the forests,
Love the wind among the branches,"

will set our tents by the "pleasant water courses" of this new land, where we will "get the odors of the forest," breathe its unpolluted air, and beguile with hackle or gentle its unsophisticated trout.

D. D. BANTA.

LIFE AMONG THE BLACKFEET.

BY J. WILLARD SCHULTZ.

Eleventh Paper—Folk-Lore.

THE OLD MAN MEETS A WONDERFUL BIRD.

AS the Old Man was walking in the woods one day he saw something very queer. A bird was sitting on the limb of a tree making a peculiar noise, and every time it made this noise its eyes would go out of its head and fasten on the tree, then it would make another kind of a noise and its eyes would go back to their place.

"Little Brother," cried the Old Man, "teach me how to do that."

"If I show you how to do that," replied the bird, "you must never let your eyes go out more than three times a day, for if you do, you will be very sorry."

When the bird had taught the Old Man the trick he was very glad, and did it three times, then he stopped. "That bird has no sense," he said, "what did he tell me to do it only three times for? I'll do it again, anyhow." So he made his eyes go out a fourth time, but alas! he could not call them back again. Then he cried to the bird: "Oh, Little Brother!" come help me get back my eyes." But the little bird did not answer him. It had flown away. The Old Man felt all over the trees with his hands but he couldn't get his eyes, and he wandered all over crying and calling the animals to help him. A wolf had much fun with him. The wolf had found a dead buffalo, and taking a piece of the meat which smelled, he would hold it close to the Old Man's nose, then the Old Man would say, "I smell something dead," and he would grope all around in hopes to find it. Once when the wolf was doing this, the Old Man caught him, and plucking out one of its eyes put it in his own head, then he was able to find his own eyes, but he could do the trick the little bird taught him no more.

Moral: Do as you are told.

THE OLD MAN RUNS A RACE.

One day the Old Man killed a jack rabbit and quickly built a fire to roast it on. Far off a coyote smelled the cooking, and coming up limping very badly, holding up one of his paws, he said: "Old Man! Old Man! Give me a little. I am very hungry."

Then the Old Man said to him: "Go away! If you are too lazy to catch your eating I will not feed you."

"My leg is broken," said the coyote. "I can't run. I am very hungry."

"Go away," said the Old Man; "I will not feed you."

Then the coyote limped away. Pretty soon he came back again and asked for only one leg of the rabbit.

"Here," said the Old Man, "do you see that butte way over there? Let's run a race to that butte, and whoever gets there first will have the rabbit."

"All right," said the coyote. So they started. The Old Man ran very fast, and the coyote limped along after him. But when they had got close to the butte the coyote turned round and ran back very fast, for he was not lame at all.

He had been fooling the Old Man. The Old Man ran back as fast as he could after the coyote, and when he got to the fire the coyote was sitting upon a little hill eating the rabbit.

"Oh, my little brother," cried the Old Man, "give me a piece of it."

"Come and get it," said the coyote, as he swallowed the last piece of it, and trotted off on the prairie.

Moral: Feed the hungry. Things are not always as they look to be.

THE OLD MAN PUNISHES A THIEF.

One night the Old Man sat by the fire roasting a piece of meat. It was a very large piece of meat, and he went to sleep before it was cooked. A lynx, which had been watching him, now crept up and began to eat the meat. The Old Man woke up, and seeing what was going on grabbed the lynx saying, "Oh, you thief," and he pulled off his tail, all but a short piece, and pounded him on the head, making his nose very short. "There," said he, throwing him out into the brush, "that's the way you lynxes will look after this." To this day the lynxes have short tails and noses.

[Note.—Many of the best legends which explain the different phenomena of nature are related with the doings of the Old Man, but unfortunately they are so indecent that they cannot be translated and printed.—J. W. S.]

Natural History.

WILDCATS.

THE name of "wildcat" is very generally applied to the two species of *Lynx* (*L. canadensis* and *L. rufus*), which occur more or less abundantly throughout the Dominion of Canada from the Atlantic to the Pacific. The French-Canadians call the smaller of the two (*L. rufus*) "chat-cervier," and the larger (*L. canadensis*) "loup-cervier," which latter name in the modified form of "loocervee" is used in the Maritime provinces to distinguish the larger from the smaller wildcat.

Neither of these animals can be properly called "cats," for although they are classed with the *Felidæ* and have numerous feline characteristics, they differ from the typical cats who are represented in the American forests by the panther, ocelot, etc., distinguished from the lynxes in external form by their more cat-like appearance, their short, glossy fur and long, tapering tails, the absence of long, black pencil tips to the ears, and the high forelegs—in lynx the hind legs are much the longer.

The correct vernacular name of *Lynx canadensis*, instead of "loup-cervier" or "wildcat," is Canada lynx, and the smaller of the two (*Lynx rufus*) is properly bay lynx, called so from the bay or rufous color the fur assumes during the summer, though the Canada lynx also wears a tinge of rufous in the warmer weather.

Among those interested in the subject there has been considerable discussion as to the validity of the species *canadensis*, some claiming that the differentiations were due to the differing conditions of environment. Even so close a student as Dr. Garnier has stated: "I have long been of opinion that those two varieties—species if you will—are one and the same; that *Lynx canadensis* is merely a more northern form of *Lynx rufus*, the variety being produced by climate and food."

There is a very good opportunity for studying these lynxes in New Brunswick, as both species are common here, and the result of my observations leads me to take friendly issue with the learned authority, just quoted, and to agree with those who consider *canadensis* a valid species.

Between the two there is certainly a very close superficial resemblance. They have much the same general form and coloration; the same high hind legs, rather long body, ears with long black pencils of hair, and short stubby tails tipped with black.

The two species can, however, be readily separated by a differential diagnosis. The Canada lynx—the loocervee of these Provinces—is much the larger of the two, and has longer fur, which, while not so fine in texture, nor so compact, as is that of the bay lynx, has a prettier appearance and feels more silky. The inner fur or "wool" of the bay lynx is yellowish at the base and the remainder is of light brown, while the inner wool of the Canada lynx is of a dull leaden gray for the basal half, terminating with rufous. In the Canada lynx the feet are very much the larger, both by measure and comparison, and are so thickly covered underneath with short close fur that the pads are almost entirely concealed, while in the bay lynx the pads are naked. In the Canada lynx the tail is dull gray, tipped with black, the black terminal patch entirely covering the end; in the bay lynx the tail is gray above and white beneath, the tip being about equally divided, black and white. The bay lynx has several black half-rings on the tail, above, and dark bands on the inner sides of the legs, both of which are wanting in the Canada lynx.

When met with in the woods the bold, fierce nature of the Canada lynx stands out in very marked contrast with that of the bay lynx, the latter lacking the courage as well as the determined energy and self-reliance of its cogener.

The apparent dauntlessness sometimes displayed by the loocervee has been the cause of much controversy on the question, "Will a wildcat attack a man?"

Judging from my own observations, I should say that the bay lynx will get out of a man's way if possible, and when cornered will act strictly on the defensive. Usually they skulk off at one's approach as timidly as a hare. I once followed one that was trying to carry off a lamb which was a trifle over-heavy for it, and whenever I came in sight the lynx would utter a short growl, pick up his load, and move on. At length, becoming over-fatigued it dropped the carcass, that it might more readily get out of my way, muttering some dissatisfaction as it trotted off.

As to whether or not a Canada lynx will attack a man, unless under aggravating circumstances, I do not feel justified in offering any positive opinion, although my own experience with the brutes would lead me to distrust them.

On one occasion I was walking on a logging road talking with a teamster when his horses, hauling a load a few yards in advance, abruptly stopped, giving a snort of alarm. Upon moving to the front we discovered a loocervee lying in the middle of the road some thirty paces beyond, his head turned toward us. While slipping a couple of heavy cartridges into my gun we moved about ten paces nearer and shouted several times to try the effect, but the loocervee paid no more attention to us than raising his head slightly and cocking its ears. A charge of buckshot put an end to any further trial of its courage.

At another time I was collecting specimens of small birds and had followed one, that I was anxious to secure, into a grove of heavy timber which was strewn with "wind-falls." I had just climbed over a rough pile of upturned trees, reaching about as high as my head, when a hare ran across my path, and about eight or ten yards off, paused to look at me; a fatal pause, for before it got under way again a lynx had sprung from an adjacent tree and pinned it to the earth. The loocervee, for such I saw it was, keeping one paw on the hare, at once raised his head and gave me a most unattractive look. The ears were thrown back, close to the head; the eyes were dilated, and flashed with fierce anger; the mouth was open, disclosing two long rows of large glistening teeth, while tongue and throat gave form to a rapid succession of spits and growls, which were not at all reassuring.

I have never had reason for considering myself more cowardly than the average man, but at that particular moment there came into my mind a strong desire that the lynx would go away and leave me alone. I found that standing face to face with an enraged brute, as large as a setter dog and more powerful, who seemed bent upon asserting by force his right to hunt undisturbed where and when the chances of the chase might lead him—to face such an one was not quite as interesting as I had heard it proclaimed. I would gladly have retreated, but the wall of dead trees behind me could not be mounted without turning my eyes from the lynx, and that I considered too dangerous an experiment to attempt, while piles of dead roots and brush on either side shut off all hope for a successful flank movement, leaving me no chance of escape from the brute without passing close to him—and I was quite as close, where I stood, as I had any desire to be.

It soon became evident that the lynx had no intention of retreating, and there remained no alternative for me but to fight. But what should I fight with? I had no knife; and although I had a gun, my only ammunition was "dust" shot, which is about half the size of No. 12. At that moment I remembered that in the left barrel was a cartridge loaded expressly for extremely long shots, containing a full ounce of "dust," backed by three drams of strong powder, and I resolved to try the effect of it. Without any definite idea of the probable result of the discharge, and in something of a drowning man's straw-clutching mood, I swung back my foot for a brace and raised my gun. As I glanced along the barrels I saw that the lynx had taken my movements for a challenge, and had crouched for a spring, so rapidly aiming for the space between his eyes I pressed the trigger. Simultaneously with the report I heard a short, fierce scream, and through the smoke saw the lynx bound into the air toward me, but ere he reached the ground he was dead.

My friend, James Straton, Esq., tells me of being one of a party who were followed for a mile or more by a lynx while they were walking on a wood road one night in the vicinity of Andover. The lynx sprang from tree to tree above them, growling continuously. Among other instances of their fearlessness of men which have reached me, I remember hearing some years ago of Colonel Wetmore, of St. George, having been attacked by two or three while he was out deer hunting, and though a keen knife and a strong arm saved his life, he was severely lacerated.

The food of both species consists of hares, grouse, mice, squirrels, etc., and such odd plunder as they can carry off from the barnyard. There is an idea current that they hunt in couples, separated some hundred yards or so, to drive the game toward each other, but the more experienced and reliable trappers with whom I have talked about the matter, think that this is an error. It may have arisen from the habit of the bay lynx of following on the trail of its more enterprising relative, and gleaning the scraps left from its feast; many a good square meal they find, for it is not an uncommon thing for the loocervee to kill simply to gratify its love of slaughter, and after sucking a little of the blood of its victim, to leave the entire carcass.

A few years ago a farmer residing near St. John had two or three sheep killed in a pasture quite close to his house on each night for several in succession. The carcasses were found with a few scratches on the quarters and a ragged tear across the throat, but almost undisturbed.

Many a graphic story of the wildcat's assault upon its prey is written on the snow. A dainty tracing, made by a wee mouse as it ran along, or the sharply defined foot-prints of a grouse, end abruptly just where the marks of four broad paws are deeply impressed; a few small patches of bright red color, and, perhaps, a feather or two complete the tale.

I once witnessed a fight between two male lynxes that was rather exciting. Sleeping under a "lean-to" I was awakened about sunrise by a prolonged scream of most unearthly tone—more wild and fierce than anything which had reached my ear before. "What is it?" I asked under my breath of the Indian who had slept at my side, and who was also aroused; he whispered back "Ahpeek-wuseekun," the Malisect name for the loocervee, at the same time pointing in the direction from which he thought the sound came, for after the opening scream there had ensued a continuous growling, which I thought came from all around the camp, and the Indian had divined my thought.

However indolent the red man may be when the occasion will permit, when his hunting blood is up he is no laggard, and my friend Lola was not an exception, for so soon as he had determined for certain the direction of the sound he started on the war path.

I was soon ready to follow, for one's morning toilet, when "roughing it," is never a very serious matter, and on tieing my moccassin strings and buckling my cartridge belt I was prepared for any emergency. We crept forward under cover of a clump of young firs which stood some thirty paces off from where he had slept; and in an open space beyond, not ten paces away from us, we discovered two large loocervees facing each other and some two feet apart, evidently bent upon settling an affair of honor, after the rules of their code; on a hummock a few paces beyond lay a female, presumably the cause of said "affair," stretched at full length on her side and watching the contest with an air of playful indifference as to the result.

Both combatants seemed in earnest and neither displayed the slightest sign of trepidation. They were occupied in a preliminary fencing when we came up, and their actions were closely modelled after those of a pair of domestic tomcats under similar circumstances. The arched backs and bristling hair; the right paws, with uncovered claws, raised to strike; the lowered ears and fierce glaring eyes, the spits and growls were all very much like those we may see and hear any summer night in the backyard; but when the loocervees closed they gave a scream peculiar to themselves.

Over and over they rolled, biting and scratching, being particularly active with their hind feet, and all the while growling or screaming. They fought in rounds, and during one of these breathing spells, having seen as much fur fly and blood run as I had any stomach for, we let our guns have a say in the matter, when the combatants employed their remaining energies in kicking the dried leaves under their feet, and the female started in search of some other mate.

MONTAGUE CHAMBERLAIN.

ST. JOHN, N. B.

THE LEAST BITTERN.

I AM not surprised that your East Onondaga correspondent has "more trouble" over your statement that the *Ardetta exilis* is not very uncommon, and yet you are right. The sly and retiring habits of the least bittern, from which, no doubt, it takes its "last name," *exilis*, are well calculated to keep even a keen observer in ignorance. I have had a casual acquaintance with the bird for twenty-five years, but my earlier interviews were limited to a brief glimpse of a yellow-brown bunch of feathers awkwardly flitting from an alder clump, at the head of some pond, in the spring. For ten years I was satisfied to be told by my companions in pike fishing that the queer bird which thus changed its lurking place on the near approach of our boat, was "a rail," "a mud hen," "a poke," or "a quak." Then I was favored with more light. In company with a friend, Mr. Henry Wainright, now the genial host of the Union House at Manasquan, N. J., I was one day tramping the salt meadows around Squan Inlet. It was in the spring, and although I am not certain now, I think as early as April. We were gunning without dogs, and probably with no definite game in view. Pretty soon, from the sedge at the border of a salt pond, there rose before me a bird. Its flight was not slow, but deliberate and tempting, a peculiarity of the whole bittern tribe. Any one who has started on the Absecon meadows the larger species, called by the natives "butter-box," "dunkadoo" and "hunchapunchy," will remember the expectant look that the bird always has when flushed from the grass, as if to say, "Are you never going to pull that trigger?" Well, I was tempted, and the bird fell. Another rose, and Henry yielded. We found that the meadows were literally full of them.

The apparent size of the bird and our ignorance of the proportion of feathers and flesh made us exultant, as one after another came to our pockets. We thought of the wonderful roast down, or mammoth pot-pie that our birds would make, for we had long known, what many who read this have gone hungry by not believing, that the flesh of all the *Ardeidæ* frequenting our coasts is palatable when the bird has had abundant feed, and the cook knows her business. Is it too much of a digression to say that after the "full of the moon" I would not turn away from a dinner of well browned "quaks" or even "pokes" for a common beef steak or a store chicken. But never mind. When we reached home and picked our game, we found that there was no need to call the neighbors in. The fifty birds that had afforded us so much sport on the meadows looked awful slim in the pan, and we were sorry that we killed them. I have never sought for them again on the meadows at that season, or seen them anywheres in such numbers. In fact, when I think of that day's work I imagine I feel a little as the "sportsman" does after a day's shooting of pigeons from a trap.

So I first made the acquaintance of the least bittern, and since that time I have met him every year, and learned that in all our fresh-water ponds, at the time the alder leaves are beginning to show color, a pair or two of them are likely to be found. How long they stay I cannot say, as I only seek their retreats during the time for spring pickerel fishing, but I suppose they breed here, as I know the green heron (*Butorides virescens*) does. A little caution exercised, and you can approach very near to them, near enough to see that they are a most beautiful bird. The plumage of the male is especially rich in the bronze-green lustre of its breast tints, and a pair of them mounted by Sauter, the taxidermist, made the handsomest panel group I have ever seen.

T. B. A.

HIGHTSTOWN, N. J.

PICOIDES ARCTICUS IN NEW ENGLAND.—*Editor Forest and Stream:* Your issue for Jan. 10, 1884, contains a note by Mr. W. A. Stearns, recording the capture of the black-backed three-toed woodpecker in Massachusetts. After giving the details, Mr. Stearns says: "Several instances of its capture in New England, and especially in this State [Massachusetts] are on record." Although right in the main, this statement is misleading, inasmuch as it does not go far enough. Dr. T. M. Brewer states (North American Birds, Vol. II., p. 531) that "Audubon says it occurs in Northern Massachusetts and in all portions of Maine that are covered by forests of tall trees, where it constantly resides;" and continuing, that "Professor Verrill says the bird is very common in Western Maine, in the spring, fall and winter, or from the middle of October to the middle or end of March." Messrs. Brewer, Dean, and others have placed on record from time to time captures in Massachusetts and elsewhere in New England, In the final volume of the *Bulletin* of the Nutall Ornithological Club, Mr. Brewster has given us an extremely interesting note, from which I extract the following: "An unusual influx of the three-toed woodpeckers into Eastern Massachusetts.—I am indebted to Mr. George O. Welch for the following interesting notes: Some time in the summer of 1860 a fire swept through a piece of heavy white pine timber in Lynn, killing most of the trees. In the natural course of events the charred trunks became infested with wood-borers, and during the following winter (1860-61) the place was a favorite resort of various kinds of woodpeckers. In what manner the news of the feast was advertised in the remote forests of the North is not explained, but certain it is that with the first cold weather both species of *Picoides* appeared on the scene. Of *P. americanus* only three specimens were actually taken, a female by Mr. Welch, and a fine pair by Mr. N. Vickary. *P. arcticus*, however, was actually abundant, and remained through the entire winter. Mr. Welch often saw as many as six or eight during a single visit to these woods, and numerous specimens were killed and preserved. Most of the individuals seen were females, the yellow-crowned males being comparatively rare. Since 1861 only two three-toed woodpeckers (both *P. arcticus*) are known to have been taken in Lynn." Although I have by no means exhausted the testimony, I think that I have given sufficient to show that the statement was misleading and that more than "several instances of its capture in New England are on record."—LOUIS A. ZEREGA (New York City).

[To our mind the most interesting fact in Mr. Stearns's note was the date of capture—August. As our correspondent states and the records show, it has been taken a number of times in New England, and this is known to every one who keeps abreast of our ornithological literature. The summer capture of this northern bird in Massachusetts is, however, certainly an extremely interesting note.

The Ground Hog Came Out.—As a sequel to the prose epic in our last issue, "The Court of Arctomys Monax," this report in the Baltimore *Sun* of Feb. 4 is in order: Saturday was Candlemas Day, and the ground hog, in accordance with time-honored tradition, came out of his winter quarters to inspect the weather and see if he should retire again for six weeks to avoid the rigors of winter or stay out and enjoy the salubrious air and gentle breezes of a moderated season. There is a universal superstition throughout Christendom that good weather on this day indicates a long continuance of winter and a bad crop, and that its being foul is, on the contrary, a good omen. The ground hog has been credited since pagan times with the ability to discern by an observasion on Candlemas Day the quality of the weather for the balance of the winter. If when he comes out to make his meteorological examination he sees his shadow he returns to his hole for six weeks. If he does not see his shadow he stays out, thus proclaiming to all men that the winter is broken. Saturday he saw his shadow and hastily retreated, thus demonstrating to many people the continuance of winter weather for six more weeks. The ground hog at Druid Hill Park was an object of great interest Saturday. The story published in the *Sun* last fall of the rough joke to be played on him was remembered by many who went out to watch his movements on Saturday. An area of ground near the zoological building in the park was walled in so the ground hog could not get out by burrowing. Over this was placed an elevated roof, so the weather prophet could not have the benefit of sunshine and shadow when he came out to ascertain the weather arrangements for the future. The ground hog came very near falling a victim to this joke. Mr. Henry Christler, keeper of Druid Hill Park Zoo, while discoursing on the subject to a representative of the *Sun*, said: "I looked for him to come out at sunrise, and had always heard he came out on Candlemas Day at that time. I watched patiently all the morning, and at 11:30 sharp he came slowly crawling out of one of his regular holes. He had not been out since he went into winter quarters, Oct. 20. He looked as fat and saucy as when he went in. He had an inquiring, intelligent air, and in the absence of his shadow seemed undaunted by the bright sunlight which did not shine on him. On Friday I threw some corn in the inclosure to tempt him out, but it then had no effect. After looking round for a little while he went to this corn and commenced eating. He sat up while eating like a squirrel, only more erect. A beam of sunlight fell slantingly through the inclosure, and in moving about for the corn the ground hog crossed it. He saw for an instant the shadow of his tail and a part of his body. This settled it, and he flew to his hole. He was out altogether about fifteen minutes. I am working round his premises and intend to watch his future movements closely. He has six weeks to stay in the ground on account of seeing his shadow, and his time will be up March 21. Until that time I will watch him every day from sunrise to sunset. He is the only one in the Zoo. We have had several, but they all escaped by burrowing. I shall not believe in the matter until the six weeks are out. If he does not come out before that time I shall believe in the ground hog. I have never watched one before; have heard of them, but never saw one until I came to the park. A great many persons were here watching for him to come out, and about a dozen ladies and gentlemen were on the look out when he appeared. They were much pleased, but the ground hog paid no attention to their exclamations. Some of the workmen at the mansion say that in the mountains, when the ground hog comes out and is satisfied about the weather, he barks."

Another Fog Rainbow.—I need scarcely say I was exceedingly interested in an article in the issue of Forest and Stream of Jan. 17, written by "J. H. D.," of Poughkeepsie. Now, of course I am willing to add an item from my own experience, which I was scarcely willing to make very public (I had, however, noticed it in our local paper) for fear that I might be thought as imposing on the credulity of your readers. It was my good fortune in my vacation last summer to take a canoe trip with Dr. G., of Brooklyn, on the lovely waters of the Madawasca, in Canada, taking a trip down stream of about 130 miles, with excellent fishing all the way. We had encamped at Cold Brook, at the foot of Squattuck (or Squa-took) peak. This brook runs into Squattuck Lake No. 3. It was a foggy morning in August, and as the mist was lifting from the lake I looked in the direction of the outlet and there saw a phenomenon I had never seen or heard of before, and called the doctor and guide to witness it. As the rays of the sun came through the mist a mile away there could be seen at or near the surface of the water all the tints of the rainbow in their order—red, orange, yellow, green, blue-indigo, violet—stretching a distance of about twenty rods in width. It was indeed singular to see these colors horizontally displayed, especially as neither of us had ever heard of the like before. I have thought it worth while to drop you a line concerning it, corroborative of the assertion that such things do exist, although some are very incredulous concerning it. But my eyes are A No. 1, and, like "J. H. D.'s," were not "glazed" or "befogged" by stimulants. My fog was at a distance; his was near at hand, it seems. There was no arch in mine, simply a band of colors like the continuous spectrum, lying horizontal. Will some scientist rise to explain?—C. Jacobus (Matawan, N. J.).

One Hundred Dollars for a Huge Green Snake.—United States National Museum, Washington, Feb. 1, 1884. —*Editor Forest and Stream:* The inclosed slip was cut from the *National Republican* newspaper of this city: "As a couple of gentlemen were riding down the Roanoke Valley, Virginia, recently, they saw a huge green-colored snake writhing and twisting at the root of a beech tree. Going closer they discovered it to be one of the horned species of the hoop snake. It had formed itself into a hoop by taking its tail in its mouth and rolled down the hill in pursuit of a rabbit or other small game. So great had become its velocity that it couldn't guide itself, and it had struck the tree with such force as to drive its horn into the solid wood to the depth of an inch or more, holding it tight and fast. There are a great many trees in the vicinity that have been struck in the same way, and they invariably die. So deadly is the poison that the leaves on young oaks have been known to wither within an hour after being struck." You will perceive there is still room for good missionary work in the benighted region from which the "huge green snake" comes. If any inhabitant of the locality would furnish to the undersigned at the National Museum a specimen of huge green snake from Western Virginia, possessing a veritable horn, a large amount will be promptly paid for it, in fact a dozen specimens will be purchased at $100 each. It is of course understood that we do not wish any of the small green snakes found in Virginia which are perfectly harmless and have no horn.—H. C. Yarrow (Cur. Dept. Rept. Nat. Museum).

Birds and Electric Lights.—Cleveland, O., Jan. 15.—*Editor Forest and Stream:* I send you a list of birds picked up under the electric light masts, which have come to my notice. Undoubtedly many other species have fallen victims, but these I name I have seen and handled. With one or two exceptions they were all secured between Sept. 15 and Oct. 15 of last year: Wood thrush, catbird, red-bellied nuthatch, titlark, black and white creeping warbler, blue yellow-backed warbler, Nashville warbler, Tennessee warbler, black-throated green warbler, black-throated blue warbler, blue warbler, yellow-rump warbler; Blackburnian warbler, blackpoll warbler, bay-breasted warbler, chestnut-sided warbler, black and yellow warbler, Cape May warbler, yellow redpoll warbler, golden-crowned thrush, Connecticut warbler (19 specimens in three mornings), scarlet tanager, red-eyed vireo, warbling vireo, blue-headed vireo, savanna sparrow, Lincoln's finch, white-throated sparrow, white-crowned sparrow, rose-breasted grosbeak, pewee flycatcher, acadian flycatcher, sanderling. If you think this list would be of any interest to your readers, insert it, please.—H. B. Chubb.

Ornithophilologicalities.—In the first number of the *Auk*, Prof. A. C. Merriam, in a paper entitled "The Coues Lexicon of North American Birds," criticizes with some sharpness this work. The review is written wholly from the standpoint of a philologist, and is entirely devoted to criticisms of the derivations assigned by Dr. Coues to certain ornithological terms. Prof. Merriam is a purist, and the very slightest variation from his standard of correctness in the etymology of any term, furnishes him with a text on which he preaches at length. Being purely a philologist, he does not appreciate the value of the work which he is reviewing, but devotes his whole paper to finding fault. He is hypercritical in his own special department, and has not a word to say about the vast good that has been and will be accomplished by the "Check List." It is scarcely necessary to say that in any matter where the pen is the tool to be employed, Dr. Coues is abundantly able to take care of himself. In the same number which contains the review of his work he prints a reply to the criticism under the title "Ornithophilologicalities." This rejoinder fairly bristles with valid and sharp points, which Prof. Merriam will have much difficulty in answering. At the same time, it is written in such good natured and happy style, and is so full of humor, that notwithstanding the appalling character of its title, it is very amusing reading.

Camp Fire Flickerings.

"That reminds me."

100.

TWENTY-FIVE years ago the present winter the first little band of pioneers had gathered in Colorado at and near the spot now known as Denver. They were in the heart of the wilderness, six hundred miles from other civilization; cut off in the winter from all intercourse and commerce with the States and almost as completely isolated as if upon an island in mid-ocean. Supplies were scarce, and they had to "rustle" for grub. This was largely supplied by hunting, and fortunately game was plentiful.

Among the settlers was one Andy Slane, a tough, illiterate man of about thirty years, much given to profanity. Upon one occasion he and several others went to the foothills near Platte Cañon for a hunt. Scattering out each went his way and Andy soon "jumped" a mountain lion with a couple of half-grown kittens. They were within speaking distance, but Andy courageously attempted a shot, when his gun snapped, leaving him helpless. The old cougar appeared to understand the situation and accepted the challenge. She moved leisurely upon Andy's works showing her teeth, and Andy's hair began to lift his hat. Meantime he was fingering at his gun trying to get a new cap on the nipple. But "haste makes waste," and time was growing precious when Andy thought a compromise might be best, and he sang out: "Look here you cussed old varmint, if you'll let me alone I'll let you alone."

Just at that moment one of Andy's companions happened to come over the ridge behind him—of course, out of his sight but in plain view of the cougar, which stopped, as Andy thought, in response to his proposition, looked steadily at Andy for a moment, then at the reinforcement beyond, turned around and slunk away looking back over her shoulder.

About that time Andy got his gun in order, or thought he did, and his courage rose accordingly. He made a motion to bring his weapon to an aim but recalled it, and, shaking his fist toward the retreating animal, he yelled out, "So that's your game, is it, you old she cat, now that I'm fixed for you; I'd give you a dose yet if I hadn't promised you that I wouldn't."

The other fellow told the last part of the story, and then Andy had to give the beginning. Andy has since become rich on cattle. W. N. B.

Denver, Jan. 6, 1884.

101.

One of the most interesting essays I ever read was Max Müller's "Migration of a Fable," in which he relates how different versions of the story of the Milkmaid (who, indulging in [illegible]ful dog dream, spilled her milk) has been told in all co[illegible]nd in all languages. A bit of my own experience may enter[illegible]ou as illustrating how in every clime we sportsmen play the same old tricks on ourselves. One moonlight evening last year, I found myself among a number of marshes and small ponds near the sea shore, on a small island in the Pacific. It was about 10 o'clock. I had visited every pond in the neighborhood, and had succeeded in getting only one shot so far; but I did not like the idea of going home with only one duck, so I went back to a pond I had visited about three hours before. The pond was surrounded by a low bank, covered in some places with bushes. I crept up and looked over; and to my great delight saw two ducks. They kept so still that I thought they must either be asleep or dead; but anyhow I raised my gun to my shoulder and fired. "Confound you," yelled a voice the other side of the pond, "what are you shooting my decoys for?" I saw that I had been fooled and felt so mad that I gave the only duck I had shot to the owner of the decoys and made tracks for home.

Fact.

Honolulu, Sandwich Islands.

THE CRITICS' CORNER.

Editor Forest and Stream;

I have been looking over the "Flickerings" with great amusement at the many pleasant tales told therein. To me it seems that in the phrase of nowadays, "Shadow" must "take the cake," but while he takes that, let me take him to task for his ruthless murder of the New English, the dialect of Yankee land. Being a Yankee of the sixth generation of Yankees born to the manners, customs and speech thereof, I can say that I never heard a native of any corner, border, or middle of New England call a raccoon a "keun," and am sure that "Shadow" never heard such a barbarous twist of the name of that animal from any but a stage Yankee. We talk of "kyows" naow and then, perhaps tew often, but never of keuns. No; rather than rob the robber of our cornfields of one o, we would rather give him more than he owes us, and roll him out two or three extra o's, calling him a coooon. Neither did "Shadow" ever hear a genuine Yankee talk of our canine friends, except in fun, as "dorgs" or "purps." To the Yankeest Yankee that ever whittled stick or chawed gum, they are dawgs and pawps, or may be in severe cases paw-ups. Make all the fun you please of our dialect, but give it as it is spoken, dear "Shadow," and may you never be less nor more infrequent in the "Camp-Fire Flickerings," is the wish of your friend,

Adironda, Dec. 28, 1883. Maj. J. Verity, U. S. H. M.

["Shadow" explains that "kewn" is better than "keun." "Kewn," he insists, is good Yankee in the "parts" where he "was raised."—Ed.]

Editor Forest and Stream:

I am fond of a good story, and like to read one, but it always annoys me to have the point of a story shown me. I want to be let alone and laugh when I get ready. For example, when I read over the "Camp-Fire Flickerings" and got my pencil ready to mark my ten, I found it rather hard to discriminate and mark the best. If you will look them over, you will find that in many, after the rub is given, and when the reader should have been allowed to laugh, he is compelled to read three or four lines descriptive of how much somebody else laughed or swore, or took his hat and left, or threw something at some one. The result is, like an interrupted sneeze—the good of it is all gone when it comes. I beg of your correspondents when they have told their story, then stop, let the reader laugh if he sees the point, if he does not let him sit in silence. J. A. H.

Jefferson, O.

Editor Forest and Stream:

Your remarks on "Angling Slang" in this week's number of your paper are worthy of extension to other departments of sport. No sportsman should rank as a gentleman in the full meaning of the word until he ceases to use the phrases that partake of vulgarity. There are, however, many expressions used in the language of sportsmen that do not exactly come under the classification of slang phrases, but that are very objectionable to those that desire correct and refined speech. I have sometimes thought to make a list of words and phrases that sportsmen should avoid. Such a list might include the following: At the head of the list and the most to be avoided of all is the phrase "speckled beauties" or "spotted beauties" for trout.

Then next I would place those expressions that give the name of the maker of a sportsman's weapon for the weapon itself. For instance: "My Parker" for my gun; "my Leonard" for my rod; "my split bamboo" for my rod, and all that genus.

The author of the "Bread Winners" speaks in his book of the heroine throwing away his "Reina Victoria." This style of setting forth the fine quality of one's guns or cigars is unpardonable.

I recommend that you make up a list of such phrases and keep it at the head of your columns as a warning, and means of instruction.

Lindley Murray.

New York.

Editor Forest and Stream:

Your "Angling Slang" in the issue before me fills a "long felt want," so far as I am concerned. I don't think I ever wrote "speckled beauties" before this moment, for I have always hated that and kindred words and especially the slang of the fraternity. I did write in my paper "speckled trout," hesitatingly, but the Indians never say anything else. What I want to suggest is, give the hunters a stirring up, especially those fellows who "pump lead." That is abominable and for mercy's sake do suppress it. D. D. Banta.

Indiana.

[Next!—Ed.]

Editor Forest and Stream:

Why do you not have an *Index Expurgatorius?* It is a good deal of an institution in its way. As you know, the *Evening Post* has one or at least did have it in William Cullen Bryant's time, and I make no question it was a benefit to the editors, reporters and readers of the *Post*. There are about eighty words and expressions now in some what common use among sportsmen, which ought to be dispensed with. The phrase by whose "damnable iteration" I am most wearied is "true sportsman." Why not "sportsman?" What does "true" mean? We need simplicity in speech and writing. Expurgate the superfluities. Senex Septimus.

THE WOOING O'T.

A LAWYER once, unlike most of his class
A modest man, fell dead in love. A lass
He worshiped quite, but still his secret kept
Till up the scale his cautious courage crept,
And, well assured no one his purpose knew,
He started out with this sole aim in view—
To wit, to woo.

His way led through a wood, the shadows fell,
His waning courage shadowy grew as well,
Until he asked himself, disheartened quite,
"Why am I here at this time of the night?"
An answer from a treetop loud and clear,
In legal language couched, fell on his ear—
"To wit! to woo!"

He fled in fear, although he no one saw;
For fear, like many a lawyer, knows no law.
The bird of wisdom perching overhead
Slow flapped his wings, winked warily, and said:
"Why should this be? Such haste I never knew;
He sure an unwise purpose had in view—
To wit! to woo!"

ENVOY.

Take well to heart this text drawn from the wood:
Your modest wooer never comes to good.
Though all the world your secret clearly knows,
And through unheard-of shades your pathway goes,
Let not your courage fail whate'er you do;
Your wit keep always clearest when you woo.

—*William Howard Carpenter, in the Century.*

Game Bag and Gun.

ONLY A BRACE.

ONLY a brace, but as I strayed homeward in the late afternoon of that glorious October day, with the mottled beauties sleeping side by side in the net work of my game bag, I was happy, supremely happy. I had been out since morning, tramping across the crisp stubble and along the edges of the likeliest grouse covers. My dog, a small field spaniel, was now content to trot soberly at my heels, tired with his long day's work. He had done splendidly, and I could not forbear every now and then stooping to put his head and speak a word of well-earned praise. We had found the birds scarce—very scarce—and yet a jolly day we had had, Cruso and I. We felt as though we had made the best of our opportunities, and if the bag had been ten times as heavy it couldn't have given us more pleasure than we had in securing that handsome brace, that filled the netting so nicely.

We had seen—let me see—five birds; seen, mind you, not shot at; two of them were quite out of range. The first was in a little narrow swale, that lay in half-moon shape, in the center of a field between two larger pieces of cover. The swale was thickly grown with young poplars and blackberry bushes, and I knew in my bones, as I drew near, that there must be a grouse lurking there. Steady, Cruso! There, now you may go. Hide cock! I raised the hammers of my gun, and stood near the inner curve of the swale, alert, with nerves a-tingle, while my spaniel worked the cover. I could hear his feet pattering in the leaves. He passed me, then suddenly caught scent. Through a little opening I could see him nosing the cool ground, his tail vibrating at a furious rate. Now—now be ready! *Quit, quit, quit*—whirr! The noble grouse rose within six rods of where I stood, and dashed out of the cover at whirlwind speed, bound for the patch of woods to the east. Bang! a miss, by all that's execrable! Bang! She swerved a little, but it was too far away for that second shot to take effect, I guess. Wonder if I hit her at all? Steady, Cruso—down! It was too bad, old fellow, wasn't it? But you must remember I haven't got my hand in yet. It's been more than six months since I drew trigger on the hurtling grouse. There, now; we'll cross over and see if we can't put up that bird again. Steady!

I dropped a couple of shells into my gun, and Cruso and I hastened across the field to the opposite cover. Now, old boy, be sure you work around her and drive her this way. Cruso's eye sparkled with a gleam of intelligence and away he went. I have never seen but one dog who knew how to literally circumvent a grouse, and that dog is Cruso. He will do it three times out of four, and drive it out just where you want it. This time he ran for about twenty rods down the edge of the cover and then plunged in. I knew he would work back my way and stood in readiness. He had not been in the cover a minute when I heard the palpitating whirr of wings—coming, sure as you live—coming right toward me. See! a gray gleam among the leaves, and in another instant the bird breaks cover close to me. I can see the frightened and yet saucy gleam of its eye, and the ruff of feathers angrily raised around the neck. Oh, my pretty lady, you are vexed at our persistent attentions, aren't you? Now to retrieve our fortune. Steady, nerves! steady, eye! The brown barrels spring to a level with the shoulder; a quick glance along the rib, with both eyes fastened on the pert head of the rapidly flying bird. Now is the auspicious moment. Intuition flashes along the nerves and gives the electric signal. Bang! The bird turns in air, hurtles down upon the stubble and bounds twice from the ground with the strong momentum of its flight. A little cloud of feathers floats behind to mark where the fatal shot took effect. Cruso comes leaping out of the cover, his long ears flying about his head and his eyes shining with excitement. Yes, old fellow, you shall taste feathers. Dead bird—fetch. Isn't that a pretty picture, now? The little brown spaniel, with his head raised in air, stepping so daintily and proudly with the glorious grouse dangling from his mouth. I would give something to have a magic frame about that picture which would keep it so forever. Drop, Cruso! that was nicely done. There, now, steady! The bird is bagged and we will turn our attention to the pleasure in store.

Nor more birds in the larger cover. It's a fine place, but they have been scattered by boys, and we will have to keep on to fresh fields and pastures new.

We crossed the old abandoned railroad track, and skirted a thick pine and hemlock cover for some distance; but, although the spaniel worked every rod of ground, we did not find a bird. It was too early for them to have sought the thick woods. Further on lay a sort of tamarack and alder swamp—a capital place in times past—and calling the dog to heel, I made my way to it across the fields. It was now approaching high noon, and as I knew of a nice cool brook near the other edge of the swamp, I determined to work around first on the lower side of the cover, and then stop for lunch when I reached the brook. When out with my spaniel I make it a point never to enter a cover unless I am obliged to, as the dog is trained to work the brush for me and bring the birds within shot. This I believe to be the only proper and legitimate way of using spaniels for grouse. They should be used as flushers, never as treers.

I had hardly reached the edge of the cover when Cruso scented game. I stood in readiness to shoot, expecting every moment to see a grouse swiftly dashing over the alders, and so intent was I listening for the whirr of the rapid wings, that I suffered a fine plump woodcock to get up and twitter out of sight in the deep thicket without pulling on him. Just as he disappeared I recovered from my surprise sufficiently to fire, but as Cruso did not make game where I saw him last, I concluded that I had missed, and called the dog to heel. A few rods further on I sent him into the cover again and waited. Whirr—whirr—whirr-r-r. I declare! a whole flock of young birds—four of them. Not a very large flock, to be sure, but fully as large as are the majority of them, a month after the opening of the season, in this vicinity. Two of them were within easy range; the other two flew deeper into the swamp. Why didn't I shoot? inquired Cruso, as plainly as eyes could speak, as he came dashing out in the wake of the two birds he had driven toward me, and mounted the low fence to see where they had gone to. Yes, why didn't I shoot, old boy?—that's the question. Guess it was because you surprised me so by driving two birds at once out of that cover, a thing that doesn't happen very often in this part of the country. However, we'll look them up; come along.

But it was more of a job to find those birds than I had expected. I saw them dive back into the swamp, and sent the dog in near the place where I thought they must be lying, but no grouse could be found. Then I ventured in myself and looked the ground over carefully, but they were still missing. Finally I came to the conclusion that they must have joined their companions in the deeper part of the swamp, where there was a thick clump of young evergreens, and in some of these young trees I was confident they must be hiding. I resolved to keep on to the brook, eat my luncheon, take a little rest, and then look for them again. Perhaps they would be back on the ground by that time.

After lunch I went into the heart of the swamp and looked around for a long while—nearly two hours—but not a bird could I find. This was discouraging, besides being a kind of work to which I was not used, and did not like. So I called Cruso out, and we took another rest by the brook. The sun was beginning to slide down the last curving slope of blue sky, and my watch informed me that it was high time to start for home. Still, I was unwilling to go without at least one more sight at those modest and retiring birds.

I went back to the edge of the swamp where I had first started them, and sent the dog in. Ha! he has one of the recreants up! See! It dips down in that little clump of pines in the very neck of the swamp, just out of range. I called the dog to heel, and slowly crept into the swamp. There was a little open space between me and the clump of pines, and when I reached this I stood still, and gave the word to Cruso. He understoood me, and, making a wide detour, entered the cover from the opposite side. There was a suppressed bark of excitement, a whirring of wings, and the grouse came sailing out into the open space. When she saw me she made a quick turn to the right, but I caught her flight in a moment, and holding well on, pulled trigger. The smoke hid the bird from me, but immediately afterward I heard a thump in the grass, and then the rapid throbbing of wings which announces a fatal shot. Cruso comes bounding through the grass, and claims his usual privilege of retrieving the warm bird. Thanks, old fellow! I should never have got her if it hadn't been for your help. Now we will consider our day's sport finished, and start for home. The bag is not heavy, but it is worth its weight in gold. We have earned what we have fairly, and that, after all, is the sum of a true sportsman's delight. PAUL PASTNOR.

WITH THE DUCKS ON DELTA BAR.

TAKING the ducking season through, it is doubtful if there is a place anywhere that the sportsman is more uniformly and generously rewarded than right here in the harbor of Vicksburg. Since 1876, when the river cut through the tongue of Louisiana that projected, a narrow peninsula, in front of the city and away to the north of it, the lake left by this action has been gradually filling up with mud till, immediately in front of the former landing, in the dry season, there is no water whatever, and pedestrians can cross the original bed of the river on foot dry shod. Just at the foot of the little island left by this cut off the willows, in some places, have already grown to the height of twenty feet, and it will be but a short time before the entire old channel, next to the city, will be simply an almost impenetrable willow thicket. During the past summer quite a sum of money was expended by authority of the Government in dredging with a view to opening up a canal from the city front to a point where the main river now strikes the shore, a distance of about a mile. It was found some time after the work had been in progress that the sediment which had been deposited to the depth of over eighty feet in less than seven years, was not much thicker, if any, than molasses in winter time, and that it ran in and assumed a level as fast as the dredging machine took it out. So this experiment was discontinued.

In the upper mouth of the lake the deposit has not been so great, so that even when the lower mouth is dry the larger boats can still enter the lake and steam around to the old city landing. In the fall, however, the river is generally so low that no boats come in at all, the wharfboat having been moored at the new landing below. Within the last four years the point on the Louisiana shore has been sheathed with mattrasses, which have stopped the caving, and thus prevented the current on the Mississippi side striking the shore further from the city. All around the lake are bars and mud flats and coves running up into the willows, and during the season of low water, in summer, these become covered with a rank grass, prolific in seed, which seems to tickle the palate of the ducks, and especially the gamy little teal. Ordinarily about the time the ducks begin to come down from the North the river begins to rise and the water to cover these grass plats and to float the seeds that, in some places, nearly cover the ground. The ducks at once flock to those localities in great numbers and furnish excellent sport to the hunter. My brother and I, who have been shooting here in the harbor for the last five years, have made it a rule to keep an accurate record of the stages of water when it reaches the various places mentioned, and by that means, by keeping our eyes on the gauge, we can always know when to pull out for any particular point with our decoys and other paraphernalia. The ducks seem to learn when and where to go for food by intuition, for almost the very moment the water pushes upon a new territory covered by grass seeds, they put in an appearance at that point, although but a short while before not a single one could be seen in that vicinity. It is a knowledge of these facts, and by acting upon it, that have brought to my brother and myself what our friends here are pleased to term good luck. Our scores this winter have been exceptionally fine.

During the holidays and for the first ten days in January, the ducks were unusually abundant just in front of the city and within rifle shot of the elevator at the landing. They were mostly teal, with an occasional sprigtail and, at rare intervals, a mallard. One day my nephew and I picked up a pair of canvas-backs. It was a common thing for a couple of fair shots to bag from 40 to 50 ducks in half a day. On the day after Christmas this nephew and I bagged 75 by 11 o'clock. The next afternoon Mr. E. H. Raworth and I picked up 65 from the same blind. Other parties did nearly as well. This constant hammering did not seem to drive the ducks away. When a volley was fired at them they would whisk briskly away to dab down among or sail in the vicinity of another batch of decoys. But finally the river rose, pushed out into the fields and the swamps, covering new and prolific territory, and the disturbed fowls hied themselves thither and for a time at least were comparatively secure. But then came the severe cold wave early in the month, and freezing up the ponds and lakes and all still water inland, drove the ducks to open water, and sent millions further south. This state of affairs lasted so long that the larger ducks especially found it a difficult matter to secure their accustomed food. They evidently became demoralized, for they alighted in the oddest of places, in open and barren fields, on the public highways, along the most insignificant branches and on the ground in the woods. Of course, during this period, they became an easy prey to the most clumsy darky with his old muzzleloader, and the market was glutted with them and the price of them nearly reached zero. When, however, the weather moderated, the thaw came and the ice disappeared, the river having kept on rising, the ducks sought the heart of the swamps to quack and quack and stuff themselves with acorns to their heart's content without much danger of molestation.

On the 8th day of January, one of the coldest of the season, when a stiff wind blew from the north and the earth was hard frozen, and the trees were groaning from their solid coating of ice resulting from the big sleet of the day before, my brother "bonced" me to go a-ducking with him down on Delta Bar. This bar is the point of Louisiana southwest of the city, and to reach it one has to row out of the lake and then across the broad, swift current of the river. Then to reach the ducking ground at the stage of the river then existing it was necessary to row down around the bar to the old main shore and pull up through the switch willows back toward the city, where open water could be found near taller willows in which to run the skiff as a partial blind. The entire distance is something over five miles. When the proposition was made to me to take a hunt under such circumstances, I declined it in a very peremptory manner, whereupon I was twitted with being a "parlor hunter," and had fun poked at me because, being a Nebraska man, I could not brave a Mississippi day. My brother, after hunting among our sportsmen for some one to accompany him, and finding all of them of my way of thinking, declared he would go alone. I had never let him do this and would not let him do it on this occasion.

So we came out home and put on our hunting gear. As we walked down the street on our way to the fish dock, where we keep our skiff, the decoys and other things, the few people whom we met stared at us as though we were a pair of escaped lunatics. The idea that two sane men would venture out in such cold and stormy weather for sport seemed to stagger them. But for all that we got to the dock, cleaned the ice out the skiff, thawed out the row-locks with hot water, loaded up and struck out about noon, the only difficulty we had being at the start in keeping our hands warm. Later we did not even experience this trouble.

As we passed down around the edge of the bar, where the water had reached the little willows, we frightened up great flocks of ducks, and we could see them in the air all over the territory just being submerged. When we came to the lower end of the bar and started up toward the upper part of it we discovered that it was entirely covered by mush ice, through which it was very difficult to propel our skiff. So stiff and unyielding was this ice that as the willows were bent aside by the passing boat they remained in that position to plainly mark our path. About half a mile from the open river we came upon an open spot, a sort of nook surrounded by larger willows. Here we put out our four dozen mallard and teal decoys, by setting them in the slush ice. It was a very tedious and laborious task to turn or move the skiff about, and we avoided doing this as much as possible by setting a decoy on the blade of a long oar and then placing it as far from us as we could reach. In this way we were enabled to make a pretty fair display without much moving of the skiff.

After the decoys were all placed we worked the skiff a few yards into a point of willows near by, which was a hard and disagreeable job. The ice had to be broken wherever we moved, and the willows being coated thickly with sleet from bottom to top were not a pleasant thing to tackle. We were poorly concealed if, indeed, it could be said we were concealed at all, and the willows, standing between us and the decoys, made the shooting quite difficult and uncertain. But for all that the ducks decoyed reasonably well; for we soon had some twenty or thirty lying about on the ice. Then they began to flare up out of range as they came in. On viewing the field we came to the conclusion that the dead ducks lying on their backs and the many bloody pools where their carcasses lay, frightened the others and kept them from coming within range. So we determined to go out and retrieve those we had already killed. This proved hard work, and we broke one oar working our way through the ice. While we were out some hunters got up clouds of ducks around the outside of the bar, all of which were lost to us, of course, as our exposed position prevented their coming near us. There were some of our ducks that had fallen on ice too thick for us to work through, and others so far away that we did not think it would pay to go after them. So after picking up between twenty and thirty, we went back into the willows, having been out about an hour.

This time we shot till the stars came out. It had been very cold all the afternoon, and we became aware that as the day advanced it was growing colder still, and at the eleventh hour we began to fear we might be frozen in so tightly as not to be able to get out to open water at all. We found on leaving our position and going out that the ice had become much more compact and that even where the skiff had made its way when we first retrieved it had frozen tight again and had to be broken as before. We succeeded in picking up all the decoys and the larger number of dead ducks, after working till the perspiration ran down our faces, when we started to work our way to the river. My brother sat at the oars while I kneeled on the bow of the boat and broke a road in front of us.

At the end of an hour, just as we were nearing the end of our labors in the ice, I broke another oar smack in two, and my brother split nearly half the blade off one of his, thus leaving us with but one oar and a piece with which to make our long journey home. But after getting through the willows and into the open river we did not find the breaking of these oars as great a calamity as we at first imagined. I used the sound oar on one side at the forward rowlock, and my brother, who is much the stronger man, used the crippled one on the other side aft. In this way we worked our way around the bar, then up the bar toward the Delta light, so as to be well up the river before attempting a crossing, then across the main channel and finally up the lake to the elevator, where our fish dock was moored.

It was after 9 o'clock and we were nearly exhausted. My coat, upon which I had kneeled while breaking ice, and which had gotten very wet from the splashing, was frozen so stiff it had to be thawed out before I could put it on. Everything else was coated with ice, though we were as warm as a day in midsummer. Our ducks counted out sixty-four, all teal, except a few old shovelers and one or two sprigs. These were left at the dock to be sent for next morning, and we trudged out home in as light gear as possible, reaching there a few moments before 10 o'clock to find the folks had begun to grow very uneasy about us. On look-

ing at the thermometer we found the temperature to be fifteen degrees below the freezing point. For once I gave my gun the promise of attention on the morrow, and roiled in bed as soon as practicable, about as weary a man as you ever saw or heard of.

My brother and I think we left between ten and fifteen dead ducks lying on the ice which were not included in our count. And there was an "if" in the case, in the bargain. If we could have made a reasonably good blind, I think it would have been an easy matter to have bagged at least one hundred ducks. BURR H. POLK.

VICKSBURG, Miss., Jan. 23.

SOUTHERN SHOOTING GROUNDS.

Editor Forest and Stream:

When I left Washington, my object was to take a route that is comparatively new, and which promised more interesting details and inducements to sportsmen and tourists than any old line that was familiar to me. Hence, after leaving Warm Springs, I took a route to this place that proved a source of remarkably pleasing interest and delight, and I think very inviting to those who come with dog and gun.

As there are numerous well-known game fields on the line, and a vast variety in the character of the grounds, I will give those who are interested some of the details. Taking Knoxville, Tenn., as the initial point, perhaps the first best thing to do is to visit the superintendent's office of the E. T. V. & Geo. R. R., and get all the information you desire and permission to stop off by your ticket at any place or places that may be decided on as inviting shooting grounds. This gentleman, Jas. F. O'Brien, General Superintendent, has a very warm heart toward hunters, and a splendid appetite for game, and that argues that his subordinates will treat men, guns and dogs in a royally proper manner. If you wish to remain a few days in that charming and singularly interesting city, you will find a very spirited and eager set of young sportsmen, who are thoroughbred gentlemen and remarkably hospitable. The fields within easy reach are found very attractive and of every character that sportsmen may want to test. There are hills and dales, dry fields with clean, closely laid grasses, and just enough grain lying about the roots to seduce birds from covert places in the brier-filled or sedge-laden corners of worm fences. So that when birds are started, they furnish the prettiest and clearest shooting one may desire, and let me tell the oldest and best among you who shoot, it will require sharp eyes and the quickest of touch to drop your birds anywhere in those well farmed fields in the grand and lovely regions of the Clinch and Holstein rivers in East Tennessee.

In the hillside coverts and brier patches, with innumerable rills and springs and streams babbling along their stone-tuned courses, black haw and other delicious berries induce birds to harbor and linger until their flesh acquires a delicacy that is delicious as were the golden grain fed ortolans that made the feasts of Lucullus the standard of all gustatory comparisons in all ages since that luxurious period. On the mountain sides there are pheasants, the rich flavor and rare excellence of which will repay one for the labor and skill required to bag them. They are in elegant condition from feeding on wild berries and farm grains, all of which gives their flesh a most delicate flavor. The skill required to bring this kind of game to earth is one of the best tests that a sportsman can wish for. In the edges of thickets that lie along fields with numerous clumps of grass and brown caps of low bushes the wary birds often lie close, until the hunter and dog come within a few feet. Then with a sudden flutter, that takes away the head often of the coolest and steadiest of shooters, the brown mass goes straight through the leafless branches, and with a laughing whirr asks the man with the gun to answer its call of defiance. To shoot one of them under such demoralizing and tantalizing circumstances is a feat that entitles the successful sportsman to all of the credit he can proudly demand.

In the fields dogs find splendid and fine coursing, and retrievers have easy work. But in the heath and thickets on wild mountain sides, the brambles, laurel, rhododendrons, rugged footing and rough surface generally, present many formidable obstacles to finely bred, thin-skinned and delicate dogs. The well-trained animals that abound in that section, and are familiarly seen in nearly every farmyard throughout East Tennessee, are equal to an immense amount of work, and seem to be as hardy and enduring as are the mountain ponies that never die in that section. The sinewy legs and powerful arms of those mountain-bred dogs make an excellent sort of graft on good blood of other sorts.

If you wish to try your barrels over a stretch of water at those butter-balls which are found at every turn and in every eddy of the river, you can have as much fun and work as can be wished for. There is no need of decoys in any of the duck-laden harbors of the Pigeon, Holstein or Tennessee rivers. Even the innumerable army of sable pot-hunters who shoot with miniature mountain howitzers, and fish for them with nets and traps, are unable to lessen the supply to an appreciable extent. Bluewing teal, black and butterballs are in abundance, and will continue to offer inviting inducements to shooters for a month or two.

Leaving Knoxville you take an E. T. V. & G. R. R. ticket for Jacksonville, Fla., with stop-over privileges. Then you can drop off at any point that you fancy, and it does not matter at what place you want to try gun and dog, you will find a good field for sport. In every community or village or station along the entire line there is one or more persons who have a fancy for shooting, and hence you will find splendidly trained dogs everywhere, and the best of breech-loaders, as well as men who know how to use them effectively and successfully. Such persons, too, are remarkably hospitable wherever you find them in all sections of the South, and the only letter of introduction or passport necessary to make them kind and welcome you is an expression of that kinship that makes sportsmen fond of such fellowship the world over. I have met with it in the Mississippi swamps, foreign jungles, the swamps around New Orleans, and marshes of New Jersey, the fastnesses of the Rockies and grain fields of Pennsylvania and Ohio, and the prairies of the West, in the log cabins and palaces of the South, and the reserves of Europe. And I find that the polished gun barrel and password of shells and charges opens the warmest hearts of the fraternity of shooters and hunters everywhere throughout the world.

At Dalton, Georgia, there are some charming fellows with dog and gun. In Rome and vicinity, some more Nimrods of most excellent character and name are always ready to take a day in the fields. Along the line to Atlanta, the fields are new and very inviting, as they have not been investigated much by any one except local shots and amateurs. All of these, however, are well to do planters and merchants, who believe that it is a very gentlemanly sport and occupation to take exercise with gun and shoot over an intelligent dog in the fields.

In Atlanta and any of the towns and stations in the vicinity, there are sportsmen who keep in the advance of all the pretty and good things connected with life afield. With these, any one who has a mind that way, will find a vast deal of enjoyment and as much sport as can possibly be attended to, as birds are plentiful and within easy reach by any of the numerous lines that spread out like the radiants from that vast spider-looking town called the Gate City.

From there to Macon the trains glide over a track that makes one feel as if he was making the transit on a greased streak of lightning. I am told, too, that in the barrens and plantations there are vast numbers of those small and hard to shoot quail that abound in this region. In dear, old Macon, where live the loveliest, most charming and dearest people if has ever been my fate to know, there are men who know how to shoot, guns that are worth a fortune, and dogs that are far better bred and more intelligent than some college students with whom we have come in contact within the past fortnight.

With these Maconians you will find as much pleasure and game in a day as can be gathered in a month elsewhere. There is a delicious hospitality and charm of entertainment native to this class of men, and all that is necessary is for one of them to vouch for you to receive attention and courtesy such as pertains to a royal visitor.

From Macon to Jessup, and thence via Way Cross to Jacksonville, there are many haunts where birds, turkey, deer, bear, ducks, foxes, wolves, fish and all kinds of game are found in abundance, and one cannot go amiss by stopping anywhere for a day's sport. DR. I. E. NAGLE.

FLORIDA HOUSE, St. Augustine, Fla.

A VISIT TO CHATHAM COUNTY.

ACCOMPANIED by my friends, Teceel, Duffrey, Mud and LeG., it was my good fortune to have visited that part of Chatham county, called the Hickory Mountain during the early part of the month of December. With our dogs Nip, Bob, Pelham and Argo, and an ample supply of loaded shells, we took the train at midnight on Monday, the 10th, for Hamlet, a railroad junction six miles southeast of our town. At that point we got on the cars of the Raleigh and Augusta Air Line road, and at 6 the following morning were cosily sitting around a good fire in the reception room of Page's Hotel at Sandford. At this place the Yudkin Valley Railroad, which, at present, is finished to within twenty miles of Greensboro, crosses the Raleigh and Augusta Air Line, and up this road to a place known as Matthews's in the western part of Chatham, it was our purpose to go, and thence by road-wagon to our stopping place, a distance across the country of eight miles. But the schedule did not suit. If we waited at Sandford for the train we would have been obliged to remain there all day

Not being disposed to do this, we made arrangements with Mr. Page, the hotel keeper, to place our luggage on the cars, and we took the track, intending to hunt the old McIver plantation and board the train at Egypt, seven miles off, when it should arrive, and go on it to Ore Hill, the terminal point to which the mails are carried. We had been told that we would find plenty of game in the plantation mentioned, as well as in the fields on Deep River, lying in the vicinity of Egypt. After a fatiguing tramp of about four miles on the cross ties, rendered more fatiguing from the fact that we had had no sleep during the preceding night, Teceel with his setter Nip, and I with a little pointer named Argo—not after celebrated vessel "which took the fleece to the Thessalian city"—went on the right side of the track, while Jim LeG. with Pelham, and Mud as a supernumerary—for Mud has no dog, and does not want one, so long as any one else will allow him the use of his—took the left. Duffrey with his dog Bob had left us a half mile back, and was doing his best to fill his bag before the others commenced hunting. To our great disappointment we found but few birds, and when we reached Egypt at 1 o'clock we had not more than a dozen. Teceel and I concluded to walk on, and crossing the railroad bridge, determined that we would hunt up the river to the Gulf. The other party we left shooting south of Egypt. The distance between these two stations is but three miles by rail, but by the course of the river it is not less than six.

We found but few birds, and the most of these availed themselves of the proximity of the river to seek a covert into which we could not follow. When we got near the Gulf we heard the others shooting, they having taken the line of the railroad. Upon counting up the spoils, we had killed but thirty-three birds. After a hearty supper, upon chicken, sausages, etc., we patiently awaited the arrival of the train. It came, with our baggage on board, about 8 o'clock, and in less than an hour we were at Ore Hill. There is at present no hotel here, and all of our party except your correspondent had to sleep in the coach. Owing to his age, as it was said, he was kindly invited by Capt. Roger P. Atkinson, civil engineer, in charge of the work of construction, to share what was really a luxurious couch in an old building, once used in connection with some iron works at this place. Next morning he gave us all a substantial breakfast, and placing our luggage, dogs and selves on the construction train we were off for Matthews. Arriving, we were put off in a field, and the train departed for the scene of tracklaying. It was not long before we saw Jo Duffrey's wagon, driven by his kind-hearted and pleasant son Tommy, driving up. Some of our party had in the meantime got up two coveys of Bob White within fifty yards of the track, and managed to get about a half dozen of them. I got but one shot, which had no other effect than to knock off the feathers.

Putting our effects upon the wagon we started off to our place of destination. On the way a fine covey was flushed, and pursuing it, Teceel got five, Mud two and Wells one—his only shot. Another was started on the route, and we got three or four of them. When near Duffrey's, Jim LeG., not having the fear of the law—and he is a lawyer—trespassed upon forbidden territory, and killed two birds. In a short while we were at the house of our host, who gave us a kindly welcome—it was kindly upon the part of the wife and children, for they are an excellent family—shown to our quarters, and bidden to make ourselves "at home." Soon we heard the welcome announcement that dinner was ready, and to a table laden with substantial viands, and presided over by a genial hostess, we went, and all gave ample testimony that the food suited our tastes. Mud, in particular, showed his ample capacity to make a generous landlady's heart rejoice, and thus, if for no other reason, ingratiated himself into the good graces of that very important personage—a position which he held during our entire stay under the hospitable roof. Indeed, he rarely fails to render himself agreeable to the fair sex; and despite all his blunders, his follies and his peculiarities, possesses always the sympathy of matron and maiden.

In the afternoon we took a little jaunt into the fields, which had been hunted over by other parties, and were not entirely unsuccessful. At night all were tired and sleepy, and "bed time" came at an early hour. With me, on a hunt, it always comes early, and as a general thing I seek the downy pillow while the others sit up and talk, often regaling them, as they tell me, with sounds which do not remind them, except by contrast, of the sweet cadences of the mocking bird, "the lascivious pleasing of a lute," or the melodies of Miss ——; well, I have forgotten her name, but she sings "Baby Mine" and the "Maid of Dundee" to perfection. Candor compels me to say that, if human testimony can be believed, I have the unfortunate habit of snoring. The evidence of one who ought to know, because of abundant opportunities, I cannot gainsay. Besides this, I have heard it myself. When bed room is ample, this practice of mine deprives me of a bedfellow and a room-mate, but when it is not, my companions usually assign Mud to me, because of his philosophic good nature and his incapacity to distinguish sound. On this occasion, however, the sad lot fell to Jim LeG., who let no occasion pass in which he did not complain that I disturbed his repose. I am sorry that I so trouble my friends, but I cannot help it. That is all.

Next morning, after slumber, which the preceding two days' labor had made inexpressibly sweet, and a capital breakfast, to which ample justice was done, we got ready for our pleasant recreation.

Teceel and Jim, with Nip and Pelham, were to take the fields on both sides of the Pittsboro road, Mud and I, with Argo, were to go down a little creek, while Duffrey and his brother Jo, with Bob, went to some fields lying to the north. It may be as well that I say, Teceel shot a 16 bore 28-inch Scott, Jim LeG. a 12-bore Webley, Mud a 16 Scott, I a 16 Tolly, Duffrey a 14 Scott, and Jo D. a 16 Webley. When night came, and the weary sportsmen counted the trophies of the day, Teceel had 31, Jim LeG. 26, Wells 18, Mud 17, Duffrey 13, and Jo D. 3. The two last had combined business with pleasure and did not hunt assiduously. Besides, Jo is not a sportsman. Mud and I did some good shooting, and some that was no good. If I had bagged all the birds I shot down and wounded, and ought to have killed, I should have had over thirty, and so would Mud. But 108 birds in one day ought to satisfy reasonable men. We had more than enough for ourselves, and gave some to neighboring farmers, as we passed along.

I know I will be excused if I suggest that sportsmen can easily avoid some of the troubles to which they are sometimes subjected, by the use of a courtesy which costs but little and is always gratifying to landed proprietors. Whenever it is practicable, the gunner should always ask the consent of the owner to hunt over his premises. He should not shoot near the dwelling, nor when there is danger of frightening horses. If he meets the proprietor he should show his good breeding and good sense by speaking to him and engaging in a little friendly conversation, as well as tendering a part of the contents of his bag. Even if he does not know who the landlord is, he should give every man whom he meets a decent salutation. In the country every man expects it, and it is the universal custom. Gentlemen from the cities should always recollect that. In densely populated towns it is not practiced and is not expected. But city habits must be left off when men go to "the rural districts" and want sport upon the lands of others. Let them observe what I have said and they will not be the losers. But if an upstart, who has on a solar hat, a corduroy suit, leggings, hunting shoes, a gun and a dog, goes into the country, "treads down the grass and herbage" of another, passes him unnoticed, shoots around his house, his 10-bore gun, with five drams of powder, pockets and carries off all the game which he may chance to kill, without as much as a nod of recognition to the owner in fee of the lands or the tenant in possession, he is sure to be an unwelcome visitor, if he is not peremptorily ordered off the premises. Such fellows as these do much harm to gentlemen who observe the proprieties and decencies of life.

I do not mean to trespass so largely upon the columns of the FOREST AND STREAM or the patience of those who may honor me by a perusal of my effusions, as to give the incidents and results of each day's tramping. We got in about three whole days of hunting, and the game totalized something over 300 birds, besides an occasional "molly cotton tail," whose flight offered too great a temptation to Mud and Jim, who rarely let one pass without a salute, notwithstanding the bad effect it has upon the dogs. Our trip was an agreeable one, entirely free from accident. The heartfelt kindness of our host and hostess, and their children, all of whom strove to make our stay pleasant, added much to our enjoyment; and when we left the farewell was as cordial and unaffected as was the invitation to come again and partake of their hospitalities. We got safely back to our own friends, found all well and glad to see us, and even full of thankfulness, I think, for all the blessings and mercies which had been vouchsafed.

Before taking leave of my "gentle readers," I cannot forego the opportunity of saying a few words to such of them as are possessed of ample means to gratify their fondness for health-giving field sports. Among the patrons and lovers of the FOREST AND STREAM are quite a number of gentlemen of easy fortune. These can, without harmfully diminishing their estates, easily provide for an opportunity of much enjoyment for themselves and their chosen few. Along the line of the Yudkin Valley Railroad, and within easy reach of it, there are many tracts of land which can be purchased on reasonable terms. These tracts consist of from two hundred to five hundred acres, and on all of them birds abound. One of them the wealthy sportsman can buy, lease it to a good tenant who will pay a remunerating rent, and this estate would give the owner full access to the lands of the neighboring proprietors, especially if he showed by his intercourse that he was worthy of their confidence. This would be far better and less expensive than the purchase of shooting points at high figures and correspondingly heavy incidental charges, in other localities. He could build a small but neat and comfortable house, for his own occupancy during his visits; the wife of the tenant would prepare his meals, make his beds and air his linen, and a horse and wagon could be had on moderate terms. In addition to all this he could sport on his own land and the

lands of his neighbors, and be able to take himself away from the cares of business, freed from all "rumors of oppression and deceit, successful and unsuccessful war," and when the hunt was over, feel an invigoration in mind and body, which no frequented spot could give.

A Happy New Year to all. WELLS.

Dec. 31, 1883.

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

In spite of my resolution to the contrary, I find myself asking once more to be heard upon this subject, since I see that I am not clearly understood by all. With the opinion of Mr. Duane in your last issue, that the question is one of improvement of ammunition rather than of existing arms, I fully accord.

My theory as regards the effect of certain charges upon game has already been incompletely set forth at some length. My desire now is to more fully explain myself with reference to this division of the subject.

My experience, I need not repeat, has demonstrated sufficiently, to me at least, that upon heavy game a light bullet is not effective. Especially if it be hollow-fronted or the lead be soft, the tendency is too great to flatten out and to fly to pieces upon striking game, when a high degree of velocity has been imparted to the bullet. I also have found, theory to the contrary notwithstanding, that "shock" without penetration counts for very little on large game. Consequently, though with a large charge of powder and a light bullet we get one very desirable thing—flat trajectory—we are very apt to lose another and more desirable thing—good penetration and killing power.

But cannot we compromise? For it seems to me that by mutual concession we may still be able to get results which will happily combine the two, and which will give us sufficient penetration with the flattest trajectory possible when using a bullet heavy enough for the former purpose.

Bearing this in mind, cannot some one suggest a charge, a proportion of powder to lead whereby the best possible results shall be obtained? I need hardly add that he will thereby incur the lasting gratitude of all who love and use the "hunting" rifle. As to the chief principle involved in the effect of different charges upon game, it may be said that its best illustration is had when we speak of it as being the converse of that principle by which a tallow candle is driven through a board. Give this a low degree of velocity and it will be found to be mashed and demolished by the resistance of the board.

Give it a high degree of velocity and it is driven cleanly through the board, the resistance having been overcome. Now, the converse of this is our case. (Let me say that it is better demonstrated with a hollow-fronted or very soft bullet than with a hard, solid one.)

Conversely, then, since in this case we are driving the hard substance against the soft one, if we give the bullet a very low degree of velocity it will scarcely penetrate the skin.

Increase the degree of velocity and better and better penetration is had until a limit is reached, which we will call the maximum of penetration with this particular weight and character of bullet. This "limit" may be and in many cases no doubt is more than sufficient for game shooting.

Now, after this point has been passed, additional velocity will continue to give less and less penetration, until theoretically and sometimes almost practically we come back to the point from which we started, no penetration at all.

That is, in my humble unscientific opinion, after this limit has been reached, the skin and flesh offer more and more resistance as the bullet is driven with greater rapidity, which amounts to the same as saying that a bullet impelled with infinite velocity will not penetrate at all since it would meet with an infinite resistance. Flesh would become adamant as opposed to it.

The immense force of the powder remaining after the bullet arrives at its destination is thus reflective in its effect, and is expended upon flattening and mashing up the bullet. So thus it is seen that there is such a thing as too great a charge of powder.

Now we can probably better understand how it is when using light and hollow-pointed bullets (the latter feature of course greatly retarding the bullet in its course through flesh if it holds together, since it causes it to spread and present a greater surface), while we get flat trajectory and certain force, we do not get penetration and killing effect. Of course I do not care in what shape the bullet in its entirety reaches the "other" skin, the more battered and irregular in shape the better. But the prime requisite is that it should never fail to penetrate the vitals, the "hollow," and to break whatever bones it encounters from whatever point it enters.

For example, if I shoot an animal standing quartering away from me, and hit him in the left ham, I want to find that the bullet has broken the right fore shoulder. Let it never fail to go from end to end. Of course, further penetration than that is unnecessary. Get this effect first, and a certain weight of lead is indispensable thereto, then do what you can with regard to flat trajectory. I regard the order of merits of a hunting rifle to be:

First—Safety.

Second—Strength, durability and ease of manipulation.

Third—Sufficient accuracy.

Fourth—Killing power and penetration.

Fifth—Flat trajectory.

Sixth—Portability, to be determined, of course, by the individual strength of him who expects to use it.

Seventh—Freedom from recoil.

Eighth—Finish and ornamentation, which, while it counts for something and gives rise to a pardonable spirit of pride in the possession of the arm, yet detracts somewhat from the pleasure of a rough trip, since so much care is required to keep it bright and in good condition.

Now then, for all deer, sheep, antelope and like smaller game, and even elk, and presumably moose and caribou, 300 grains of lead is quite sufficient, and for game of this kind I would consider the .45-85-295 or preferably the .40-95-300 of Bullard manufacture, referred to by Mr. Farrow, just the thing. I need not say that I am delighted with the introduction of these rifles. But for large bear, and for buffalo, or for game in India, I would desire more lead at the expense of flat trajectory since we cannot have both, and greater killing power and penetration is needed; say about 400 to 500 grains.

A hard bullet of 450 grains, $\frac{1}{7}$ tin, with a very small hole extending one-third or at the most one-half its length, would be, as I at present, without having tested it, suppose, very effective upon such large game.

I quite understand "Bengal Sepoy's" answer to my objection to English express rifles. There is something unquestionably in the hollow-fronted bullet theory. But these are at present made to my mind incorrectly, *i. e.*, the hollow or hole is much too large and too deep; so also do I think that in the anxiety to get flat trajectory, the charge of powder employed is too great and good penetration and killing power are sacrificed in consequence since it acts reflectively, as is above shown, upon the bullet. Thus will be understood my present preference for a solid bullet.

Now could not this Bullard .40-90 repeater use two kinds of ammunition so that we might vary this, as suggested by "C. D.," according to the game we are likely to shoot at or according to the distance.

I should think that by careful loading with a tube the same .40-caliber shell which is now loaded with 90 to 95 grains powder and 300 grains lead, could also be loaded with at least 80 to 85 grains powder and 425 to 450 grains lead, hollow-fronted bullet or not, as desired, and yet maintain the same length of cartridge. The liability to get them confused could be readily avoided by putting one charge in a dark colored copper shell, the other in a bright brass one. That one size of shell could in this way use two charges does not seem at all unreasonable to me.

Thus equipped and with a good, reliable rifle one could saunter forth with the positive assurance that if any animal gets away from or with him it will be in no wise the fault of his "iron," a most comforting thought indeed. To be assured that no one else has a better, more serviceable or more effective rifle than yourself is a source of a great deal of self-congratulation. And it is equally true that to feel that some one in the party has a rifle better than yours gives rise to a proportionate amount of bitter reflection and self-condemnation of your poor judgment in its selection.

I have been extremely gratified at the interest taken in this discussion, and am glad to get the views of so many who use the hunting rifle.

I may say that I heartily agree with some of the participants, and have no doubt that some of the rifles, or more especially the charges advocated by them, are extremely satisfactory.

In concluding, allow me to express the hope that manufacturers have not turned a deaf ear to these suggestions of your correspondents, which are founded upon "practical experience and observation," but have followed the discussion closely. If this be the case, I feel certain that it will be fruitful in good results, and that in consequence we will soon be able to note many improvements both in rifles and ammunition. D. M. B.

PHILADELPHIA.

Editor Forest and Stream:

[*Continued from page 9.*]

The first objection to the proposed repeater, .40-90-500, is that the ball will have a low initial velocity, and cannot have anything else. Its long-range power and penetration will be sufficient to satisfy any one. But to accomplish that, a great sacrifice of short-range efficiency must be made.

It seems absurd at this day to ask, why should a ball crawl out of a rifle at the rate of one thousand feet per second, when it can fly out at two? And yet there are thousands of hunters, and good ones too, who see no difference and even think of no difference. If the ball will shoot lengthwise through a deer, and will make the dust fly close to a stump at half a mile, they think it perfection and never dream of the high curve the ball must make to fall into the mark at 200 yards, and which causes so many unavoidable misses by even the best shots, the best adjusters of sights, and the best judges of distance.

I believe I was about the first one to attack the low velocity of American rifles. The position I then took in the old ROD AND GUN, has since been thoroughly sustained by the best hunters and writers; even by those who dissent from me upon some points, such as your correspondent "P.," Major Merrill and others being most emphatic upon this question. So great has been the weight of intelligent opinion upon this side, that the question has become quite one-sided, and flat trajectory at 150 or 200 yards is now considered by all thoughtful riflemen the second requisite of a good hunting rifle—accuracy being, of course, the first. In fact, it is incomprehensible to me, how any really good shot, who knows where he holds his sights when he pulls the trigger, could hunt much without finding out the great defect of the long bullet and light powder charge, and finding out the supreme importance of flattening the 150 or 200 yard trajectory every inch that is possible.

The velocity attainable by a 500-grain ball in a .40-caliber with 90 grains of powder, would be about the same as that of the long-range rifle—.44-100-550. The trajectory of this up to 200 yards is so high that it is a perfect nuisance for shooting at unknown distances; a mistake of only twenty-five yards being sufficient to miss or only slightly cripple a deer. And this velocity cannot be increased to any practical extent by bottling the shell, or by any method of rifling or otherwise.

Suppose a rod of lead of the same weight as the gun taken as the projectile and fired with a few grains of powder, both gun and projectile being suspended by strings. At the discharge they would move in opposite directions at equal rates of speed. Suppose, now, that the rod be cut off at each discharge until it becomes a mere wad of lead. The speed of the rod would constantly increase; that of the gun constantly diminish. But a far more important effect than this may be noticed, viz., that the shorter the projectile—the rod of lead—the greater the amount of powder that can be used in the gun with safety, and the greater the effect of every increase of powder in raising the velocity of the projectile. You may see the same in a shotgun. Take a No. 12 gun and put in two ounces of shot. You will find that the difference between three drams of powder and four drams is perceptible mainly upon your shoulder and but slightly upon the game, especially if the latter be something tough, like a duck. But cut down your shot to one ounce, and the difference is at once changed from the rear to the front. Now, put in an ounce of shot and you get still more penetration—though of course more scattering—from the same amount of powder, and get it, too, with still less recoil. And you can now increase the amount of powder with safety and comfort, and also with more effect in increasing penetration.

Now if a gun were made long enough to burn all the powder and allow the inertia of the shot to be fully overcome, heavy enough to prevent loss of force by recoil while the shot is getting under full headway, and also strong enough to stand the strain while the shot is getting its full headway, a very high velocity could be given three ounces of shot in a 12-bore gun—high enough to shoot a duck through and through. But such a gun could not be held to the shoulder by any ordinary man. Precisely the same principle applies to the rifle, though in a less marked degree. And I do not hesitate to say that no rifle that is light enough and short enough for use in the field can ever give a respectable initial velocity to a projectile having five times the weight of the round ball of the same caliber. And it follows unavoidably that whatever velocity you may give by increase of powder to the ball five times the weight of a round ball will be greatly excelled by the one four times the weight of the round one, that one by the one three times the weight, and so on down. And when you can make me believe that as much penetration can be given two ounces of shot as can be given to one ounce with the same powder you can make me believe that a 350 ball and 110 grains of powder from a .45-caliber is perfection for 200 yards. Cut off 100 grains of lead and add 40 more of powder, you get no more recoil, you get a great increase of velocity and consequently a flatter trajectory.

The question then arises will this have sufficient long-range power and penetration? It would retain its accuracy to at least 400 yards, and lose but little up to 500. It might not have quite enough penetration for bear and buffalo, and certainly would not if the ball were made expansive with a large hole in it. But it would shoot the solid ball lengthwise through the largest deer, and shoot through two deer placed side by side. It is quite certain that good, long-range power and good short-range efficiency cannot be combined in any rifle light enough and short enough to use in hunting without change of bullets and, in most cases, change of sights. The sooner this fact is recognized the better. And I believe it to be equally impossible to combine a good grizzly bear and buffalo rifle with a good deer and antelope rifle without making the same change or increasing the caliber and the weight of the gun. The sooner this fact is recognized the better.

I believe the most general understanding of the term "best hunting rifle" to be about as follows: The rifle that in the course of a year or more will hit the greatest amount of game and give its owner the least bother during that time. My private preference is for one that will kill within sight the largest amount of game actually struck. There are many who side with me in this view, though they may differ as to the manner of attaining the proposed end. But I believe the prevailing view to be the one that will hit the most, no matter when or where the game dies. Such a rifle must be:

First—A repeater, and of the quickest action possible.

Second—It must have the flattest possible trajectory for 200 yards.

Third—It must retain sufficient accuracy at 400 yards.

To have the flattest curve for 200 yards two things are indispensable.

First—High initial velocity; 2,000 feet a second if possible.

Second—Sufficient actual weight in the ball to sustain that velocity as far as possible against the resistance of the air.

The round ball starts quicker than any other, but has no staying power. The long-range ball has the staying power, but starts too slowly so make the 200 yards in time. The one is a quarter horse, the other a four-mile racer. Each one is unfit for the other's task, yet each excels in his own sphere. A compromise must be made between the two powers. Where shall the line be drawn? The question is not difficult to decide. One and one-half times the weight of the round ball gives to a rifle of .50-caliber nearly all the staying power that is needed for 200 yards; so does one and three-quarters to a .45-caliber, and twice the weight of round ball to a .40-caliber. Any increase beyond these quantities will, by decreasing the starting speed, destroy the effect of the additional staying power, and increase the curve of the path of the ball. Some increase may, however, be necessary for accuracy at 400 yards.

The shape of the head of the ball also makes a great difference in its staying powers. Such bullets as the Winchester .73 are too flat-headed for their weight. I believe, upon the whole, that the following weights will be found sufficient for accuracy at 400 yards, and it is certain that the 200-yard trajectory will be straighter than can possibly be given by any heavier ball: For .50-caliber, 300 grains; for .45-caliber, 250 grains; for .40-caliber, 200 grains.

To insure the accuracy at 400 yards, twenty-five grains might be added to each which would be sufficient except in heavy winds where anything but a long-range ball is too light.

Whether the penetration of these would be sufficient for grizzly bears or buffalo I cannot say. But I know, that by hardening the ball and sharpening its head, I can shoot any of them lengthwise through the largest deer (unless heavy bones be struck). In all cases let the powder be the very best and the quickest that accuracy will allow.

In the case of a repeater the amount of powder may be limited by the action, as is probably the case with the Winchester repeaters. But the shorter the bullet the more the shell may be bottle-shaped without danger. It is difficult to see why the barrel cannot be made thicker at the breech and tapered toward the muzzle. Or perhaps the breech might be reinforced with steel shrunk over it. Ninety grains of powder would do very well in a .40 caliber, but 120 would be so much better.

There seems to be a foolish fear of a decent charge of powder. Many a man will stand and shoot off-hand fifty shots at a target with 70 grains of powder and 450 grains of lead from a .45 rifle without a murmur, who would faint at the idea of shooting a cartridge in which the powder was doubled and the lead reduced one-half or more. Yet for solid comfort and safety I would rather shoot one hundred of the latter than fifty of the former. Against this objection to a decent powder charge it is useless to argue.

It is said by others that a rifle will not burn so much powder. Though a less proportionate amount may be burnt at each increase of the charge a greater actual amount will be.

A .40-caliber rifle will, with a round ball, show the effect of every half inch of powder up to nearly five inches. With fine strong powder I have seen the difference plainly, even after the weight of the powder exceeded the weight of the ball. By firing through screens and taking the line of the first two bullet holes this may by easily tested.

By some it is said "too much powder drives the ball wild." This is an old idea, and is doubtless true for some rifles. But rifling can easily be made that will hold any ball to its place. I know rifles fifty years old that are accurate under any amount of powder. When I used a muzzleloader I used as high as five fingers of powder, and never less than four, and never had any trouble with its accuracy. Increased powder may require a change of sights, and in that sense may drive the ball wild from any rifle. But if the rifling be

made right, and especially if the ball be hardened, five inches of powder may be shot behind short bullets without danger, discomfort or want of accuracy.

Not only may so much be shot, but for light bullets there is more necessity for much powder than there is with heavy ones. With a .40-caliber round ball the difference between 40 grains and 100 grains of powder, as indicated by the fall of the bullet at 100 yards, is enormous. One great cause of this is that the effect of the air's resistance in stopping velocity is increased. As a round ball offers more resistance than a ball of any other form, and as it has less weight to force its way against the air's resistance, it must be started at tip top speed in order to make a good flight for any distance beyond 60 or 70 yards. Now if a heavy charge is needed to give good trajectory to a round ball, it follows that the nearer a ball approaches the weight of the round one the greater the necessity of a heavy powder charge to maintain as far as possible the starting speed of the ball.

It is said by some that if the heavier ball remains longer in the barrel more powder must be burned, etc., and therefore more force obtained, etc. More force, undoubtedly, because the weight of the ball is the most important factor in momentum or force; but always less velocity. Otherwise it would be like weighting down a racer so as to make him strain his muscles more.

Short bullets and excessive powder charges I consider indispensable to a good hunting rifle. Combine these two in a repeater that can be worked as rapidly as the Winchester and I can see nothing more to be desired that is at all attainable. T. S. Van Dyke.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

I think that your correspondent, "Backwoods," has started a very fruitful theme in his communication on "The Performance of Shotguns," in your issue of the 24th ult. My experience has been that for duck and fox shooting and all long range, heavy work, the muzzleloading shotgun goes far ahead of the breechloader in respect to penetration and pattern. An experienced duck shooter, who shoots for the Boston market in this vicinity every season, owns an armament of four double muzzleloading guns, ranging from eight to seventeen pounds weight, and he will not use a breechloader because ineffective at his ranges. I have heard others make the same criticism of the breechloader. Is it true? Let us hear from those who have had experience with both muzzle and breechloading shotguns. Paul Pastnor.

Burlington, Vt.

Editor Forest and Stream:

In your issue of Jan. 24, "Backwoods" has asked for just what I want to know; what a shotgun will do. There are no doubt a great many readers of Forest and Stream who have fired thousands of shots with breechloading guns, both at game and the target, let them give us their experience.

I have been greatly interested in reading "The Choice of Hunting Rifles," and hope that all letters about shotguns may be as plain and instructive as the letters regarding rifles have been. I have sold my muzzleloading shotgun and want a breechloader. I thought I would like a 12-gauge best, but several of my friends who have owned and shot both 10 and 12-gauge, advise me to get a ten, and as I can not afford two guns I would like to know which would be best for all purposes for quail, squirrels, ducks, and other small game, and if I ever should be lucky enough to go deer hunting I would want to use it to shoot buckshot.

What I would like to know most is how much further will a 10-gauge kill its game than a 12, both guns of same grade and bored on same principle. For example, if a 12 will kill at 40 yards, how much further would the ten kill the same game? Buckeye.

Summit Station, Ohio.

WASHINGTON TERRITORY GAME LAW.

Editor Forest and Stream:

I send you copy of the new Washington Territory game law, passed at the fall session of the Legislature in 1883. In many respects it is admirable. The provisions concerningnight shooting and sink-boxes were mainly introduced for the sake of the Columbia River shooting, in which Portlanders are as much interested as though the river was wholly in Oregon. No sink-boxes or swivel-boxes have ever yet been used on the Columbia (that is not to any extent), but no one wants to have them even tried, and fearing some Eastern speculators might introduce them, they have been anticipated. But night shooting is quite common and very pernicious. The law ought to have included swan, as the night shooting is chiefly while in pursuit of them. I hope the Oregon Legislature (this fall) will adopt all the better suggestions in the Washington law, and set as good an example by inserting some additional features. The "pheasant" referred to in the law will no doubt include the Mongolian pheasants, which have become quite numerous on some of the islands in Fuca Straits. The canvas-back pair here in the spring, and hence the necessity of protecting them after April 1, which if anything is too late. March 15 for all would be better. E. W. B.

Portland, Oregon, 1884.

Following is the full text of the law:

Section 1. Be it enacted by the legislative Assembly of the Territory of Washington: That every person who shall,within the Territory of Washington, between the first day of January and the fifteenth day of August, from and after the passage of this act, pursue, hunt, take, kill or destroy any deer or fawn, shall be deemed guilty of a misdemeanor. Every person who, after the passage of this act, shall take, kill or destroy any deer at any time unless the carcass of such animal is used or preserved by the person slaying it, or is sold for food, is guilty of a misdemeanor. Every person who after the passage of this act, shall hunt or pursue deer with dog or dogs, in the counties of Thurston, Cowlitz, Whatcom, Island or Lewis, shall be guilty of a misdemeanor.

Sec. 2. Every person who buys, sells, or has in possession any deer or fawn within the time the taking or killing thereof is prohibited, except such as are tamed or kept for show or curiosity, is guilty of a misdemeanor.

Sec. 3. Every person who shall, in the Territory of Washington, between the first day of January and the fifteenth day of August of each year, hunt, pursue, take, kill or destroy any elk, moose or mountain sheep, shall be guilty of a misdemeanor. Every person who takes, kills, injures or destroys, or pursues with intent to take, kill, injure or destroy any elk, moose or mountain sheep, at any time for the sole purpose of obtaining the skin, hide, hams or antlers of any such animal, shall be guilty of a misdemeanor.

Sec. 4. Every person who shall, within the Territory of Washington, between the first day of April and the fifteenth day of August of each year, take, kill, injure or destroy, or have in possession, sell or offer for sale any wild swan, mallard duck, wood duck, widgeon, teal, butter-ball, spoonbill, gray, black sprigtail or canvas-back duck, shall be guilty of a misdemeanor. *Provided*, that any person may kill on his own premises ducks or deer to protect his growing crops.

Sec. 5. Every person who shall, within the Territory of Washington, between the first day of January and the fifteenth day of August of each year, for any purpose take, kill, injure or destroy, or have in possession, sell or offer for sale, any prairie chicken or sage hen, shall be guilty of a misdemeanor.

Sec. 6. Every person who shall, within the Territory of Washington, between the first day of January and the first day of August, of each year, kill, injure or destroy, or have in possession, sell, or offer for sale, any grouse, pheasant, quail or partridge, shall be guilty of a misdemeanor.

Sec. 7. Every person who shall, within the Territory of Washington, during the months of November, December, January, February and March of any year, catch, kill, or have in possession, sell or offer for sale, any mountain or brook trout, shall be guilty of a misdemeanor. Every person who shall, within the Territory of Washington, take, or attempt to take, or catch with any seine, net, wier, or other device than hook and line, any mountain, brook or bull trout, at any time after the passage of this act, shall be guilty of a misdemeanor.

Sec. 8. Every person who shall, within the Territory of Washington, at any time after the passage of this act, trap, net or ensnare, or attempt to trap, net or ensnare any variety of quail, prairie chicken, grouse or pheasant, except for the purpose of propagating the same, or who shall in any county east of the Cascade range of mountains prior to year eighteen hundred and eighty-seven, kill any variety of quail, shall be guilty of a misdemeanor.

Sec. 9. Every person who shall, within the Territory of Washington, at any time after the passage of this act, destroy or remove from the nest of any mallard duck, widgeon, wood duck, teal, butter-ball, spoonbill, gray, black, sprigtail or canvas-back duck, prairie chicken or sage hen, grouse, pheasant, quail, partridge or other wildfowl any egg or eggs, or wilfully destroy the nest of any such fowls or birds, shall be guilty of a misdemeanor.

Sec. 10. Every person who shall, within the Territory of Washington, have any male deer or buck, or any female deer or doe, or spotted fawn, elk, moose or mountain sheep, swan, mallard duck, wood duck, widgeon, teal, butter-ball, spoonbill, gray, black, sprigtail or canvas-back duck, prairie chicken or sage hen, grouse, pheasant, quail, Bob White or partridge, mountain or brook trout, at any time when it is unlawful to take or kill the same as provided in this act, shall be guilty of a misdemeanor, and proof of the possession of any of the aforesaid animals, fowls, birds or fish, at any time when it is unlawful to take or kill the same in the county where the same game is found shall be *prima facie* evidence in any prosecution for a violation of this act, that the person or persons in whose possession the same is found, took, killed or destroyed the same in the county wherein the same is found, during the period when it was unlawful to take, kill or destroy the same.

Sec. 11. Every person who shall, within the Territory of Washington, take, kill, shoot at, maim or destroy any mallard duck, wood duck, widgeon, teal, butter-ball, spoonbill, gray, black, sprigtail or canvas-back duck, at any time between the hours of 8 P. M. and 5 A. M. shall be guilty of a misdemeanor.

Sec. 12. Every person who shall use any sink-box on any lake or river or other waters in Washington Territory, for the purpose of shooting ducks or other waterfowl therefrom, or who shall use any batteries or swivel or pivot gun on boats, canoes, rafts or other device at any time for the purpose of killing any waterfowl within the limits of Washington Territory, shall be guilty of a misdemeanor.

Sec. 13. Every person convicted of the violation of any of the provisions of this act shall be punished by a fine of not less than ten dollars and not more than three hundred dollars, or imprisonment in the county jail of the county where the offense was committed for not less than five days nor more than three months, or both imprisonment and fine. One-half of all money collected for fines for violation of the provisions of this act shall be paid to informers, and one-half to the prosecuting attorney in the district in which the case is prosecuted.

Sec. 14. All acts and parts of acts in conflict herewith are hereby repealed.

Sagadahoc County Association.—Bath, Me., Feb. 1.—The annual meeting of the Sagadahoc Association for the Protection of Fish and Game, was held in this city on the evening of the 29th ult., and the following officers were elected: Dr. Chas. A. Packard, President; A. Q. Gond and James H. Millay, Vice-Presidents. Executive Committee—S. W. Carr, A. Q. Gond, Geo. H. Nichols, Dr. E. W. Johnson and A. S. Alexander. Geo. E. Newman, Secretary and Treasurer. A special committee was chosen to take such measures as they might deem proper to prosecute violators of our fish and game laws. The public sentiment in regard to the necessity of a rigid enforcement of the fish and game laws is growing every day in this vicinity, and we trust ere long the destruction of our game during the close season will come to an end.

Sea and River Fishing.

THE STRICKEN TROUT.

Beneath a time-scarr'd oak, whose leafy boughs
Still in its age, when summer's sun beats down
In heat of day, throw grateful shade above
A grassy mound that slopes down to the brook,
Just where a little rill, with gurgling sound,
Creeps through the tangled grass, on further side,
To reach a deep, dark pool, an angler stands
In cautious silence, and with bated breath,
With rod, and reel, and line of braided silk,
End-tip'd with gut and trimm'd with chosen flies,
In hand uplifted for a skillful cast.
With circling glance his eye takes in the field
Of pastures fresh, where feed the luscious trout,
Who dine not always at the stroke of twelve:
But rising from their pebbly beds they seize
The luckless insects floating down the stream,
And straightway turn to hiding-place again.
The cast is made, and swiftly through the air,
With whistling sound, the feather'd hooks disport
Their gaudy wings, in life-like flutt'ring play,
Upon the glist'ning surface of the pool,
Above the place where, half embosom'd lies
A mossy log, low stretched across the way,
And deep below the darken'd waters glide,
With noiseless murm'ring, o'er their oozy bed.
Scarce settled they upon the liquid board,
When swirling water, and a silv'ry gleam,
Sure indicates the game at hand; but haste
To seize the lure thus temptingly displayed,
Made failure, and invites another cast.
The line recovered, now sweeps back and forth,
And glitt'ring wings flit gaily through the air,
As almost motionless the angler stands,
With steady nerve, and eye fixed on the spot
Where he again would spread the fatal cloth
To tempt this monster trout; or, if perchance,
Through gallantry, should he permit his mate
To choose the gaudiest fly, ere he should taste
What seems provision for their midday meal.
Alas for her! A splash, the water boils,
And centric circles, lapping on each shore
As tiny wavelets, break upon the sand,
And leave no trace of that which went before.
With magic thrill the angler feels his rod
Bend gently through the tight'ning line, that cleaves
With hissing sound the water's darken'd depth.
And strains the lancewood tip, as if 'twould break
The slender thing in twain; the reel, meantime,
Yields up its silken cord, as now the trout
Turns to his lair, and seeks a safe retreat.
Where he may gorge the dainty morsel caught,
And plume his speckl'd sides on slimy stone.
With gentle strike the fish is fairly hooked,
And feels the sting that fastens in his mouth
The strange device, that seemed a living thing,
Born but for a day of life's fitful dream,
Whose dawn is sunshine, but whose eve is death.
Alas! the fatal strike; 'tis now revealed,
That barbed steel was hid beneath the fold
Of wings, by man so cunningly devised:
And what seemed fair to eat at once, now shows
That joys delusive may be robed in gold,
Which glitters but to tantalize with pain.
In wild affright, the fish around the pool
Darts furiously, and, finding no relief,
Leaps high into the air, as if to spew
From out his mouth the tinseled, cheating bait,
That to his hungry eyes has proved deceit.
Now sulks he low, to nurse awhile his wrath,
Which waxes fiercer as the fight goes on;
Then, like an arrow from the bended bow,
He shoots athwart the stream to yonder rock,
Beneath whose shelt'ring ledge he fain would find
Some friendly hand to loose from out his jaw
The cruel hook, that tears his quiv'ring flesh,
Or snap the gut that joins it to the line.
Despairing now, in agony he flies
From out the pool, and seeks yet to escape
Adown the rapid's rough and rocky way,
Which leads into a deep and dang'rous hole.
Where logs and roots oft hid the lurking trout,
And fain would shelter one in saddest plight,
Who, stricken with the angler's fatal lure,
Now strives with all his might to reach alive,
In spite of rod and reel and silk to boot.
But fate yet lingers in the captor's hand,
Whose rapid footsteps, though they often sink
Deep into miry holes along the bank,
Keep with him apace, as, o'er brush and brake,
Deftly he bears the bending rod and keeps
Taut line on flying captive, lest the hook,
From loosened hold, should backward empty fly,
To his disgust, and let the fish go free.
The angler's quick-discerning eye detects
His victim's last resort, and how to check
This downward, mad'ning flight, and save the game,
Takes but a moment's thought. On further side,
Below a little spur of bank, he sees
The current eddying flow, where neither rock
Nor log can shield the trout, or rend in twain
The thread-like line that quivers in the air.
And, plunging in the stream, he wades adown
The rapid's fitful rush, while tip of rod,
In graceful modesty, stoops low to kiss
Its master's hand. The weary, stricken trout
Accepts the cunning ruse as for his good,
A resting place at last to find, where he
May strength by time regain, while quickly now
The angler, reeling up his line, seeks yet
To turn the fish's head up stream, that he
May still another chance for life try on,
And in the further struggle spend his strength,
So much exhausted. Gaining now the bank
At point below, he gently leads the trout
From out beneath the shelving bank, where he
With panting breath in moody silence lay,
In hopes that he may take the rapids back
To pool above. The strategy succeeds;
And click of reel and swift out-paying line
But lengthens out to him life's anxious span
One short moment longer. Oh, precious time!
How sweet to him, who fain would linger yet
Upon the shore of that dark, flowing tide
That bears the soul into eternity.
With nerve and muscle strained to utmost pitch,
The victim leaps amid the stream, and cleaves
The surging waters with his angry tail,
In one more desperate lunge for liberty.
But, no; the slack'ning line foretells the close
Of this unequal strife. The angler now
Plies rapidly his reel, through whose recoil
The fish and fisher come to closer terms,
And gleaming in the sun, on ripples' crest,
The stricken beauty yields to greater odds,
And ere he is aware, the treach'rous net.
A captive lands him gasping on the sand.

Canandaigua, N. Y. C. T. Mitchel, M. D.

MATERIALS FOR FLY-RODS.

In the hope that your readers may give their experiments, I send the following as a beginning, simply suggesting to those who can to give also the breaking strain. Two sticks of the same length, four feet, were used, one lancewood and the other bethabara wood. One end was held in a vise and the other fastened to a spring scale. They were drawn six inches from the natural line and so held five minutes, after releasing the curvature from the natural line was taken.

	Size.	Weight.	Power required.	Curvature.
Lancewood	⅞ square.	1 lb. 1 oz.	8 lbs.	½ inch.
Bethabara	13-16 square.	1 lb. 4 oz.	9 lbs. 14 oz.	⅛ inch.

Judging from the above, and allowing the breaking strain to be equal, I should prefer a rod of bethabara wood. The extra weight would be equalized by its greater life, and so may be made smaller. R. H. Dixon.

THE BEST COLOR FOR LEADERS.

SOME EXPERIMENTS TO DETERMINE IT.

EVERY angler has heard, or taken part in discussing the best color for leaders, and, if it be permissible to judge of the experience of others by one's own, then such discussions invariably amount to the expression by one of a doubt whether the color makes much difference, and a more or less ready assent to this on the part of the others. Never has the writer met any definite opinion on this subject based upon anything stronger than a guess.

This is not as it should be. Why cannot anglers discuss the mysteries of their craft with the fervor that "The Choice of Hunting Rifles" excites in those who seek their recreation in that direction.

As in past years, so every evening last September, a band of anglers, from many distant cities and States, gathered around the camp-fire at Parmachcene Lake in Maine, many of them artists in the use of the fly-rod, and true sportsmen all. And when the subject of this article had again and again been brought up, again and again with the same negative result, the writer determined that before the next season he would try to devise some method, if not to determine, at least to throw some light on this question.

His experiments have been tried for the information of himself and friends. The results are published in the hope that others may be induced to investigate the matter, and that lively discussion and an ultimate solution of this question may follow.

It seemed necessary to view the leader from the same direction as the trout. So a water-tight box was made 28 inches long, 6 inches wide, 4 inches in the remaining direction, all inside measurements, and painted mud color inside. One end was left open, and the other closed with a thick plate of glass. A frame was provided in which the box would swing like a cannon on its trunnions, and so arranged, that though the normal position of the box was perpendicular with the glass below and the open end above, yet it could be inclined and the upper end directed to any part of the sky.

For the purpose of experiment, uncolored, coffee-colored, and mist-colored leaders of three shades were procured. Also three samples of No. 4 enamelled water-proof line, yellowish, greenish and brownish in color.

The box was filled with water, the samples moved about upon and beneath the surface, while the writer with his head and the glass end of the box wrapped in a dark cloth, *à la* photographer, directed the apparatus toward the sky, and noted the result.

From viewing the under surface of a body of water contained in an aquarium through the lower portion of its glass sides, it was expected that the under surface of the water in the box or tube might look like a mirror, and vision of anything above the surface be cut off. Such was not the case. Objects above the surface could be seen distinctly as through a glass window.

The variously colored leaders were all alike conspicuous to a surprising degree, so much so as to cause wonder that a fish should ever rise to anything connected with them, and this whether above, on, or below the surface of the water. It seemed as though the coffee-colored leader was the most visible; but otherwise one could not be told from the other, all difference of color seeming lost. Then some drawn mist-colored leader was tried, quite dark in tint and as fine as a hair. Though about as plain to sight as a pencil mark on white paper, yet it was apparent that its small diameter made a great difference in its favor.

During all this, the idea was gradually gathering force that these experiments only tended to show how the object appeared when viewed by a fish lying directly beneath it. And upon trying some flies, and finding that only with difficulty could the gaudy be distinguished from those sober in color, the box was dropped and light sought in another direction.

A bath tub of considerable size, its length facing a window and the sky, was filled with water to the depth of fourteen inches. Two mirrors were submerged in the water, one at each end of the tub, and so inclined that by looking down upon them the reflected image of anything in or upon the water could be readily seen. A joint from a rod was used to manipulate a short line and the leader to be experimented with; and, by moving it to and fro in the water, it could be viewed at almost any degree of obliquity.

Here, again, the results were a surprise. Though I have always used a colored leader, still I had supposed color was of questionable utility. Such seemed not to be the case. The coffee color was still the most conspicuous, but it was but little more so than the natural colored gut, which latter in all positions and angles looked like a streak of silver. The mist-colored leaders in some positions had the same appearance, but always it seemed in a less degree; while at times, and at certain angles and directions of motion with reference to the light, they seemed to more or less disappear. The darkest tinted, a decided azure, gave the best result. I was unable to determine with satisfactory certainty in what positions in reference to light, etc., this partial or total disappearance took place. It certainly did seem that when the leader was moved toward the light it shone the most, and by the refraction of transmitted light, and I attributed the better result given by the darker leader to its greater opacity to such light. A piece of iron binding wire, black in color and, of course, totally opaque and of about the same diameter as the leaders, was, however, plainly visible in all positions, though not more so than uncolored gut. Indeed, I incline to think that at all times the least conspicuous leader that can be made may be plainly seen from some directions, while at the same time invisible from others.

Here, again, I was impressed by the great difference in result caused by varying the diameter. This dimension appears in the water to be much enlarged, and my experiments are emphatic as to the utility of fine tackle. This was demonstrated beyond question by the drawn gut; *i. e.*, gut drawn through a plate, which, as before stated, was quite dark in color and hair fine.

The various samples of line were all equally visible—"plain as a pike staff"—and not the slightest difference in favor of one over the other could be detected.

It is to be understood that the appearances described are those shown by reflection in the mirror; also that all gut used in experiments as to color was of the same diameter.

Quite a number of interesting phenomena presented themselves during this investigation, but it seems better to pass them by at present, until by repetition and variety of experiment mistaken deductions may be avoided. Indeed, while writing the foregoing, an apparatus has suggested itself which it would seem ought not only to settle this question definitely, but afford practical information as to the visibility to trout of objects situated above the water. But this must be used in the open air, so longer days and a temperature above freezing must be awaited.

In the mean time, if those who dye leaders would be kind enough to forward to the FOREST AND STREAM office samples of any color they wish tested, they will confer a favor. These should be about three feet long, and as near as possible No. 27 or 28 Stubbs wire gauge in thickness, so that difference in diameter need not be taken into account in the comparisons. It will be readily apparent that when two samples differ not only in color, but in thickness, it would be difficult to apportion to the thicker a just allowance for the difference.

The moral deduced for my own guidance from the above, is offered to others for what it is worth.

In the first place, neither anglers nor trout are anything like as smart as is generally supposed. The wiles of the former are by no means so well concealed, nor are the senses of the latter so very acute to perceive them. Use an azure or mist-colored leader, of considerable depth of color, but above all things let it be fine in diameter. The strain of the largest trout is trifling. The best of those that swim in the Rangeley Lakes cannot pull one pound on a flexible rod. (This article is not intended for "derrickers.") Upon trial last June, with a ten-foot rod drawing on a spring balance with one hand, butt away from body, the strongest among a half dozen anglers, and he a man of muscle, could with his utmost effort—such an effort that the rod fairly quivered—scarcely raise a strain of 1¼ pounds. The experiment was tried at my instance to convince a sceptic, and I myself took a pull and pulled "my level best." The very next morning I took a trout of five pounds and two ounces after a twenty-minutes' fight, and I am confident that at no time did his pull at the outside exceed half a pound.

The thickness of leader habitually used in the Rangeley region of Maine—and there if anywhere a large leader is excusable since the trout are there larger than elsewhere—is simply preposterous. Of course one should be prepared for the largest trout in the swim. If he is five pounds, a leader that will stand 3½ pounds strain with a spring balance is ample to withstand the roughest treatment that a flexible rod can inflict. If after a 10-pounder, a 5-pound test will meet every emergency. This can be had with very thin gut—No. 27 or 28 Stubbs wire gauge. With thinner gut than this, last September a friend fastened a trout of 4½ pounds (weighed to the ounce, not guessed at) in a dangerous place, and not only held him without giving an inch of line, but hung to him until his guide took the boat into clear water and towed the fish after—water slack and small salmon fly.

Last June with such a leader a trout of 1½ pounds was harnessed 4 inches in front of the tail at the head of heavy rapids, with what the lumbermen call "a driving pitch" on. Down current he went, taking nearly 45 yards of line. Then he was stopped, and derricked up against the current without a pause, unhooked, weighed, and returned to the water, larger fish only being at that time desired.

If any reader unfamiliar with this wire gauge, should wish to know the thickness referred to, it can be had by calling for wire of that number at any hardware store, but ask for Stubbs gauge, as there are others, and like numbers do not represent like sizes in all such measuring instruments.

But, and every letter of this "but" should be in three-inch capitals, such a leader, after it has been coiled up, whether perfectly fresh or after use, should never be attached to the line without first testing it with a spring balance. I think this equally true as to every leader of whatever caliber, but light leaders only are now under consideration. In these days when spring balances which are accurate—at any rate mine has been proved so—and which will weigh every two ounces up to ten pounds, can be bought for 50 cents, an angler should as soon think of being without one when on the war-path as without a pocket-knife.

Soften two leaders in cold or tepid water, not hot water, since it dissolves the gluten and impairs the strength of the gut. While a friend holds one loop of the leader on a match or similar slip of soft wood without sharp edges, hook your spring balance into the loop at the other end. Let each grasp the leader between his thumb and finger as far toward the middle as he can comfortably reach, so that if it breaks you may not have to hunt up the ends, and then put on the strain. It breaks at half a pound? Well, sometimes it has accidentally received a sharp bend when dry, and the gut has been partially cracked into. Tie it up, and try again. It stands four and a half pounds? That is enough for anything to be taken on a trout-rod. Put one leader to your line, the other wind round your hat, so that if you foul a snag and are obliged to break the first, you will have the other in reserve.

A friend last September was about to cast his first fly in Maine waters. Besides leaders fit to hold a shark, he had half a dozen nice ones that he had bought for Adirondack fishing. He was recommended to test, and if strong enough, to use the latter. Not one on the first test stood over half a pound. Some broke three times, but not one failed at last to come up to 4½ pounds with less than 9 inches loss of length. Gentlemen who have been in the habit of using heavy leaders, try it, and you will have no cause for regret. I have made four trips to the Rangeley region and beyond, on this theory and practice, two of five and two of three weeks actual daily fishing, and I have not lost a single fish during that time by the breaking of my leader.

There; I have said my say, and have given about all I now know of the matter.

Is there no other willing to ventilate his views on this, or any other kindred subject dear to the angler? There are a hundred things the fraternity thirsts for knowledge on. Take the subject of dyeing or coloring gut. Some black inks give the right color, but I find a loss of from 15 to 30 per cent. in strength from any method of coloring I have yet discovered.

Why cannot some one try this and give us the results. Soak his gut soft, tie in a loop at each end, pull it with spring balance till it breaks, knot it together and color, break it again in same way, compare its strength before and after, and he will soon hit on something that will be a boon to all, except possibly, the dealers in such articles.

What is the use of the customary dowel-pin in joining trout rods? For fourteen years I have been making rods as an amateur, and as yet I have discovered nothing in its favor. Who is the apostle of the dowel-pin? Subjects bristle on every side, a discussion of which would be profitable. Remember the dealers rely largely on the fishermen to suggest improvements. There is no one who has had any extended experience in the field who does not know something worth telling, and to tell it is a duty he owes to the craft. And now is the time to do this, when we can only angle in our dreams, and everything relating to it is relished as is the spring by him who wanders in the desert.

HENRY P. WELLS.

NEW YORK CITY.

TROUTING ON THE BIGOSH.

A NIGHT IN CAMP.

AS JACK and I reached camp Uncle Ben had supper ready, and the Doctor and the Colonel were just rowing in. A peep into the boat showed that they had not fished in vain, for there lay three lake trout of about four pounds each and some fish of other kinds, which they were disputing about, but the Colonel was too hungry to want them identified, or even talked about until he had an interview with the bean soup, broiled trout and potatoes roasted in the ashes. The account that the Doctor gives of the Colonel's appetite on this occasion appears to be so much exaggerated that I will not record it, believing, as I do, that it was prompted by a disappointment in the disposition of the last trout and baked potato. Besides, I hold firmly to the opinion that for a man who has gone to the woods to regain appetite and health, one quart of bean soup, half of a three-pound trout, eleven baked potatoes, a loaf and a half of bread and four cups of coffee ought to make a fair supper during his first week out, or until he has fairly come into his appetite. The Doctor certainly should understand this question better than I, and never should have allowed himself to reach for the last potato at the same time the Colonel did, and, when he missed it, to ask Uncle Ben what time he intended to have breakfast.

The stars were on duty by the time the pipes were lit, and the light evening breeze lapped and rippled under the boat, while from the opposite shore a deep-throated bullfrog sent echoes which reverberated from shore to shore. We smoked in silence, taking in the beauty of the moon-rise which, reflected on the rippling water, seemed a stream of molten silver. A bat wheeled round and across the moon and a musk-rat plunged sullenly from the bank into the water, startling a youthful frog, which squeaked with fear as it skipped over the surface and disappeared. The low, liquid note of some small night bird came through the trees like a lost note from some elfin flute, and the fiendish laugh of an owl on a dead pine floated across the water, suggesting a demon strayed into paradise.

The Doctor refilled his pipe and puffed in silence, absorbed in contemplation of the beauty of the scene. Even the unpoetical Colonel seemed wrapped in delight, and all were taking in the pleasures of the summer night that appealed to both eye and ear, when from the cove at the eastern end of the lake there arose a cry at once so weird, unearthly, and startling, that the Colonel dropped his pipe and asked in a low tone, "What is that?"

No one answered, for all knew the sound except the Colonel and Jack, and we enjoyed his surprise. A few moments of silence and the sound came again, louder and longer. "What in the world is it?" again asked the Colonel.

"It's one o' them air loons," answered Uncle Ben; "he's lost his mate. Keep still and you'll hear her answer him soon."

Once more the call sounded, louder and clearer, and a low gutteral answer came from the other side of the point, and all was still again for a moment. A fleecy cloud drifted across the moon, and when it had passed and the full rays again silvered the treetops and the lake, the frog rolled out its basso-profundo, the wood thrush trilled a low and sweet tremolo, and the lonesome owl expressed his contempt for their music by a scornful laugh. But the loon remained silent. It had found its mate, and was satisfied.

The Doctor knocked the ashes, which had long been cold, from his pipe and started for bed. All followed, each too full of his own thoughts to say much, except Uncle Ben, who deemed it his duty to break the silence by saying: "By gosh, this is a beautiful night." Some one said "yes," and then Jack asked; "How about the strange fish? Will you look at them before going to bed?"

"No, Jack, not to-night." And we slept to the rippling music of the water on the beach and its rhythmical lapping under the boat.

FRED MATHER.

TAKING SMELTS THROUGH THE ICE.

ON Monday afternoon a *Journal* representative took a tramp up the river among the smelt fishers. There are twenty-three cosy tents on the ice, fifteen of which are in a cluster, or rather in a row, close together off Kaler's mill. Four tents are off Beaver's Tail and the others are scattered along the western shore. The fishermen all said: "This is the best season for fish we ever knew, or at least for many years." As soon as the ice was of sufficient strength the fishermen placed their tents thereon. The smelts were there in plenty and took the hook readily. In fact, before the river was frozen Mr. Fred Cottrell caught large quantities from the shore with a line attached to a pole. Entering the tent of Mr. Joseph H. Trussell, one of the successful fishermen, he politely gave us his chair, and with a board across the head of a small keg he improvised a seat for himself. His tent is a frame about five feet square and six feet high, at the ridge pole covered with drilling. The covering is painted to better protect the fishermen from the wind. A small coal stove is at one side, the pipe leading out through the roof. The fire not only keeps the tent warm but heats the fisherman's dinner. The floor is boarded, with the exception of a square space with a corresponding hole in the ice. Through this opening and made fast to a rack above four lines are suspended, each having a single hook. The lines used in outdoor fishing have each two hooks. The lines are kept down by a lead sinker, to the lower end of which the snell and hook are attached. The hooks are baited with clam worms dug from the flats. Seated on a chair the fisherman thumbs his lines with as much comfort as though by the fireside in his own house.

Some of the tents are double and contain two fishermen with a double set of gear. The single ones are considered the best, as two persons will make more or less noise. The fish bite better on the ebb tide when they are moving down the river. This cannot always be relied upon, however, for some days they take the hook readily and at other times sparingly. It has been observed that the smelt bite better on cold, stormy days. Last Saturday as many as sixty pounds per man were caught. At such times the fisherman has brisk work with his four lines. Mr. Trussell thinks there are two different varieties of smelts—one he classes as the school smelt and the other as the permanent smelt—those that are always to be found in the river. The school smelt, he thinks, moves about from place to place and take the

hook most readily. This smelt has a very light-colored back while the other has a dark-colored back. The fishermen all thought that smelts would be more plentiful in our waters if the milldams were provided with fishways. Goose River, the Wilson stream and Gurney's are dammed so that the fish are unable to ascend to deposit their spawn, and are obliged to spawn along the rocks, where they are mostly destroyed.

A correspondent of the New York *Times* recently wrote an article on smelt fishing in Maine and gave the credit of first fishing in the covered tent to one Joe Secor, of Boston. The correspondent says that Joe froze his ears and feet while fishing out of doors on one of our Maine rivers and gave it up. "But he didn't go home. He went to Belfast and had a heavy wooden frame, ten feet square, made by a carpenter. He procured some sail canvas, and covered the frame with it, leaving an opening for a door. The frame was on runners. When the 'house' was finished he had it drawn upon the ice and placed over the holes he intended to fish through. Then it occurred to him that he might add still further to his comfort, and he bought a small box stove, ran a pipe from out of the house, started a roaring pine wood fire in it, and seated on a bench, fished as comfortably as if he were in his room at the hotel watching a stope-pipe hole in the floor. The house was secured to the ice by grappling irons. If smelt ceased biting in one spot he simply loosened his grapples, shoved his house along on the runners, and 'squatted' in more favorable quarters."

We inquired of the fishermen if they ever knew or heard of Joe Secor, but without avail. So far as Belfast is concerned Joe is a myth. John Richards is the pioneer tent fisherman of Belfast. He was the first to use the canvas-covered tent, which was seven or eight years ago. We found him on Monday seated in a comfortable tent with a fair catch of fish by his side. When the fish do not bite the men amuse themselves by singing, story telling and by chaffing with the teamsters who drive along the banks of the river. Occasionally one of the fishermen will fall into a fishing hole that has been covered over by the fallen snow. At such times the unlucky fisherman is pulled out in a sorry plight amid the shouts of his companions. The fishermen are a jolly set and make their avocation a pleasant one. Fair wages are made at a time when little else can be done. While in the tent Mr. Trussell gave the *Journal* local two lines. Now a fishing line is no new thing to us, as we have often handled it for both pleasure and profit. The fish did not bite very briskly, but after an hour's angling the newspaper man had the satisfaction of beating the proprietor. The fish are mostly sold to Sleeper & Field, in this city, who ship them frozen to the Boston, New York and Philadelphia markets. The fish are nicely packed in a box, back down, and will keep for a long time.—*Belfast (Me.) Journal.*

FISHING IN MICHIGAN.

THE past season here has been good for fishing, and has been thoroughly enjoyed by ye local fisherman and by some from outside, one party coming from Kentucky and stopping at Bear Lake Village, on the shore of Bear Lake, one of the most beautiful lakes I ever saw, being alive with game fish. Five miles from there is the head waters of Bear Creek, and it is eleven miles to the Betsy River; the latter has grayling and the river trout. Bear Lake is eighteen miles north of here; two daily lines of boats leave here and connect at Pierport with the narrow-gauge Bear Lake & Eastern Railroad to Bear Lake, five miles. We also have a daily line of boats from Chicago. Southern and Eastern routes are *via* F. & P. M. R. R. and C. W. M. R. R. Finer fishing cannot be found in any State or county. Au Sable Lake, thirteen miles south of here, is the largest one we have of the chain; it is twelve miles long, with an average width of one and a half miles. Partage Lake, eleven miles north; boats stop here daily at the Anickema Mineral Springs.

Messrs. John Higgins, Bidleman, Cox and Caraton caught in Partage Lake in three hours twenty-eight black bass, weighing 123 pounds. All were taken with flies on June 25, 1882. John Higgins, by the way, is a thorough sportsman and a gentleman that many are indebted to for favors shown being always ready and willing to help and assist others. He has fished all of the streams and lakes in this country. Should any of the readers of FOREST AND STREAM come this way, I will assure them of cordial treatment if they are lucky enough to fall into genial John's hands. I wish to say to my readers that this is no scheme to advertise any hotel (and we have good ones), railroad or corporation. Trout hogs and counters are not wanted, but gentlemen will find friends and well-wishers. Any information I can give to your readers will be cheerfully furnished.

S. E. B.

MANISTEE, Mich., Jan. 12.

LAW BREAKERS IN MAINE.—Oxford, Me., Jan. 27.—*Editor Forest and Stream:* There have been many complaints from this State concerning the persistent breaking of the game laws, but I do not think there have been many instances where these laws have been broken so boldly and defiantly as is being done now on Thompson's Pond, in Oxford. Since about the 26th of October our trout and togue with which these waters teem have known no peace. The torchlights of a dozen boats engaged in spearing these fish could be plainly seen from the streets of the village, any still night last fall. One boat brought in sixty-five trout, weighing from two to three pounds each, one night last fall, from off the spawning beds, and how many more were destroyed by killing these fish I will leave to the public to decide. Over 800 trout have been caught through the ice since it first froze. The fishermen boldly declare that they will catch what they want for their own use and the surplus they will sell. These trout are being sold at Norway and Mechanic Falls, and strings of them are being carried in plain sight daily through the streets of Oxford. Now for my part I can't see where the harm comes in catching the trout through the ice, but if one can't do it stop all. I am strongly against spearing and think that a stop had ought to be put to it at any cost in this paradise for the angler. Our local papers have an account nearly every week of some one making an unusual catch, so you see how badly these laws are broken.—JOSH JEEMS.

ANGLING SLANG.—New York, Feb. 4.—*Editor Forest and Stream:* The editorial note on "Angling Slang," in your last issue, struck hard at the use of certain low phrases which pass for wit among a certain class, who either do not write for FOREST AND STREAM, or, if they do, their obnoxious pet words are stricken out. Some time ago I read in a paper (casually picked up at a country hotel) an article containing all the vile words mentioned by you, as "rodster," "chucking a bug," etc., and which wound up by speaking of a gentleman who was an expert fly-caster, in this way: "They all saw that he was master of the art, and he certainly slings a nasty fly." If, as I suppose, the writer thought it a clever saying, it is doubtful if the gentleman who was intended to be complimented thought so. I think that "rodster," for angler or fisherman, is of English origin, but, "bug chucking" is of native growth. I rejoice to see you attack this evil practice.—G.

THE LEAP OF THE GRAYLING.—It is now in order to discuss the leaping powers of the grayling. The subject has been brought up by the following extract from a note written by Mr. D. H. Fitzhugh, Jr., to Mr. Fred Mather anent the latter's article in "Fishing With the Fly. Mr. Fitzhugh writes:

"I have just been reading your article on grayling fishing in 'Fishing With the Fly.' You have made a very grave error, which should be corrected in some manner. You assert boldly that the grayling never leaps from the water in taking the fly. As you were with me on all the fishing trips for grayling which you ever had, and on these occasions we were after the fish in the spawning season for the purpose of getting eggs for propagation, and it was particularly the depth of winter. You are right as far as your experience goes; they do take the fly just as you say, at or below the surface. But take the grayling at the proper season, and it is as 'leapin'' a fish as a trout. On several occasions I have lost the tail-fly or stretcher, and with nothing on the line but the hand-fly, have trailed it some inches above the water, when the fish were rising, to see them leap and take it, and have caught many in that way, hooked six inches in mid air. Moreover I have never seen a trout leave the water in his struggles after being hooked, over two or three times, while I have seen the grayling leap six times for all he was worth. I hope to have you with me on the old streams."

Fishculture.

THE MENHADEN QUESTION.

Editor Forest and Stream:

The communication from Mr. Daniel F. Church, in your issue of Jan. 24, on the menhaden, and the great quantity of fish existing at the present time, stirs the antagonistic element of my constitution into making a few remarks:

Mr. Church claims that fish are as plenty as formerly, and cites dates and years to sustain his assertion. To rebut his mistaken statement we refer to all the hook and line fishermen in Newport, R. I., or of Narragansett Bay, or extending south to Sandy Hook, or east to Cape Cod, to sustain us in the assertion that he is as far from correct as the sun is distant from the earth. We also refer to Caleb Haley & Co., H. N. Rogers and Moon & Lamphere, all of Fulton Market, New York, all of whom will testify to the constant diminution of fish on our coast since the introduction of pounds, or heart seines, and steamer fishing, as carried on to the enormous extent it is at the present date.

To cite one instance that comes under our own personal notice, Mr. Wm. M. Rogers, of South Portsmouth, R. I., who was engaged in the fish business from 1830 to 1860, and is a member of the firm of M. Rogers & Co., of Fulton Market, N. Y. In 1854 he bought of the trap and seine fishermen of the Seaconet River, 1,200 barrels of large green head sea bass, scup, and other edible fish, delivered on the shore, for sixteen cents per barrel to spread on his farm for manure. He further informs us that at or about this time he bought for the market sea bass by the sugar box for $1.50 per box. Now we ask for an instance in the past few years, when these fish could have been bought for any such prices, or anything approaching them? A greater part of the time they have been nearer sixteen cents per pound than sixteen cents per barrel. When has there been such a quantity of fish caught by hook and line as there was prior to the introduction of the pounds and steamer fishing? Since the wholesale slaughter by these agents began, there has been a constant diminution in all kinds of fish, until the hook and the net fishermen do not find enough fish to meet their expenses, in many instances. Again we refer to the wholesale dealers of New York and Philadelphia for proof of the limited quantity of late years compared with what there was in the year mentioned.

I claim, as well as every other fisherman who has not got his capital in steamers, seines and pounds, that there is, has been, and furthermore will be, a gradual decline in all kinds of fish, which can be traced directly from the above causes, viz., steamers, semes and pounds. Unless a law be passed by the United States Government, to prohibit these destructive agents from plying their vocation within three miles of the shore, thus giving the migratory fish a chance to follow the old-time habit of leading the shore, this depletion will continue.

To explain somewhat one of my theories, I will make use of a simple illustration: If we were accustomed to walk each morning in a beautiful park without molestation, and upon going some morning, should find at the entrance two men, each armed with a club, a third man just back of these two, and the three were bound to have a clip at us as we entered and returned, we would soon shun that place as we would the plague. Just so with the fish. The two men are represented by the pounds on each side of our rivers, the third man is the steamer, waiting for the fish in the spring, when they arrive, and they not only get one or two clips, but they pound and harass them, from the time of arrival to their departure in the fall. Is it a wonder they grow scarce? No! The only wonder, to my mind, is that there are so many left, after being constantly caught and driven off.

Mr. Church says the striped bass might feed on the menhaden. They would, undoubtedly, if they found them on the grounds they were accustomed to feed. But they have been driven from these grounds. In 1883 you could not get a menhaden for love or money, in this locality, fresh enough to use for bait. What was the consequence? Less striped bass were caught than any time in the recollection of fishermen for the past thirty years. He speaks of bass not being caught in purse seines. Why? Because they require depth of water to make their sets. It is a well-known habit of the bass to follow, or lead, the shores; and if purse net fishermen could set their seines, or had cause to, in shoal water, they would catch bass; for they are destroyed by the barrel by the pounds, and are first caught in them on their appearance in the spring, and well up Narragansett Bay at that. We know of two being caught the past season that weighed over fifty pounds each, and they were caught three miles up the bay. These are facts which will disturb the statement that they are located outside of the bay. We have followed bass fishing for pleasure more or less for the past seventeen years, and for the past three years as a business. And have caught and cleaned bass that have had parts and whole menhaden in them, full-grown fish. One in particular of fifty-six pounds weight, had no less than parts of nine full-grown menhaden, and I contend that they do and will feed on them when they can. Mr. Church speaks of a glut, and dealers refusing, or saying "Snip as few fish as possible." The cause of this glut was from the reason of sudden catches of large schools of fish in pounds and seines, and all shipped in one day, and that without ice, the fish then glutting the market in a decaying state caused by lack of knowledge in packing them.

I could cite cause and instance after instance in this connection, but will not try your patience or weary your readers further than to say that it is time that more attention is given to the diminution of fish by steam fishing gangs, pounds and seines. I heartily wish there could be interest enough aroused among the disciples of the hook to inaugurate a movement that would in time suppress the above causes of wholesale destruction of our fish. If no such move is made it will soon be a thing of the past to catch with the hook one of those noblest of game fish, the striped bass. We shall not only be deprived of our sport, but what is far more important, we shall be deprived of all kinds of salt water fish as a staple food, and in a short time they will only be found on our tables as an article of luxury. To close this humble effort to express the ideas of a fisherman against the monopoly by capital, we would say that we fully agree with your correspondent, "Fisherman," in his opinions advanced in your issue of Jan. 10, and would also say if we cannot arouse interest enough to secure a law to protect the fishing interest, let us have the appropriation he speaks of.

We also respectfully ask the United States Fish Commission to investigate this matter fully, not from our standpoint alone, but let them take both sides of the question, and they will soon discover that there is urgent need of the protection, as well as the propagation of our salt water fish. W. M. H.

SOUTH PORTSMOUTH, R. I., Jan. 31, 1884.

STOCKING STREAMS WITH TROUT.

THE following on this subject is taken from the last report of the Fish Commission of Connecticut, and shows the working of stocking private waters by the State:

Very great interest has been manifested in the efforts of your Commissioners to stock the depleted brooks and streams of the State with trout. Though the supply was greater than in any preceding year, the demand last year was so great, that only 3,000 could be allotted to each applicant. All those who applied previous to March 1 received their quota. It is very gratifying to receive such favorable reports from the streams stocked during the two previous years. The young trout are thriving, and in many cases reports come to your Commissioners of their reappearance in streams where none had been seen for several years. The prospect seems good for a return of their former abundance, especially as the farmers are making efforts to protect them during their infancy. Occasionally some one complains that he is not allowed to capture the fingerlings as usual. As a specimen, a clipping from a Hartford letter to the Springfield *Republican* is here given:

"They go out for trout, and the number of large catches of trout reported this year is well above the average. The explanation is simple. Many people have taken advantage of the offer of recent years of the Fish Commissioners to give 5,000 young trout to whoever would come and get them. With these they have stocked wild brooks and then they have hired from the land-owning farmers the sole right to fish in the streams. In other words, we are developing a lot of preserves. It is impossible to see the harm of it. Fish are bigger and plentier, farmers get a little something for what they used to get nothing for; their fences are safer and crops less disturbed. And yet it is said that the effect of these preserves, with the warning notice against fishing, has been to create a hostile feeling against the Fish Commissioners. People will go to fish in a brook and find it preserved, say it is all due to the Fish Commissioners, and get mad accordingly. But these same people do not think of going to the farmer's barn-yard for chickens and then condemning the Legislature at the thought that they can't carry off the broilers without being punished."

The facts, so far as reported, are that the farmers, finding that certain persons were in the habit of visiting the recently stocked brooks, and catching the young trout deposited only the previous year, have posted their lands for the purpose of giving the young trout a chance to grow to a sufficient size to propagate their species. In this way alone can the experiment receive a fair trial, for there is in every State a class of persons, generally known as poachers or pot-hunters, whose only idea is to capture the last bird or the last fish possible, provided only it serves to supply by its sale, their craving for whiskey. The March woodcock, the July partridge, and the yearling trout are all equally welcome, if they can be sold, and it is well known that even in Hartford woodcock have been served at dinner parties in May and partridges in August, and trout can be bought at any season. The young trout for the year's distribution were provided by Mr. Henry J. Fenton of Poquonock, at a cost to the State of three dollars per thousand. Mr. Fenton's system of delivery has been so perfect that no complaints have yet reached your Commissioners from any quarter.

In their report of last year your Commissioners recommended that an Act should be passed forbidding the exposure for sale of any trout less than six inches in length. A bill for the purpose was presented to the General Assembly, referred to the Committee on Fisheries, acted upon without the knowledge of the Commissioners, reported adversely, and promptly defeated. As complaints are frequently made to your Commissioners about the sale of fingerling trout in the markets, the subject is suggested for a reconsideration.

THE MASSACHUSETTS COMMISSION.—Mr. Edward H. Lathrop has been appointed a Commissioner of Fisheries in the place of Mr. Asa French, resigned. Mr. Lathrop has been long and favorably known as a sportsman, and one interested in fishculture. His address is 419 Main street, Springfield. The appointment by the Governor was confirmed by the Council on Wednesday, Jan. 30, and is for the term of five years from February 1.

There died recently at Fort William, Invernessshire, William Mackenzie, one of the most noted deerstalkers of his day. Mackenzie, or as he was more commonly called in his latter days "Old Gaick," was born in the Braes of Lochaber in 1800, and he was thus in his eighty-fourth year. When quite a young man he entered the service of the Ballindalloch family, and soon became their head man in the forest of Gaick, in Badenoch. This situation he occupied for about thirty years. Whoever might be tenant to the forest, William Mackenzie was always head-keeper; and there he became widely known in the sporting world as one of the best deerstalkers of his day. His powers for running and walking were marvellous, and even when in his eighty-third or fourth year he thought nothing of walking twenty or thirty miles in a day. Among the sportsmen who were tenants of Gaick in his time were Sir Joseph Radcliffe, and the Earl of Selkirk. After being thirty years in Gaick he quitted the service of the Ballindalloch family; and at that time Sir Joseph Radcliffe, in recognition of his excellent services while he was tenant of Gaick, conferred on the deerstalker-bard a pension for life. Sir Joseph is long since dead, but Mackenzie's annuity continued to be paid from the estate. During the last twenty-five years he lived here and there among members of his family in different parts of the country. He was literally a mine of Highland tradition and Gaelic song.

LANDOR, the poet, says in one of his sweet little sonnets: "We are what suns, and winds, and waters make us;" but unfortunately suns will scorch, winds will roughen, and waters will not remove the injurious effects of the other two upon the lovely complexion of the fairer sex. For ages chemists have tried to distil from herbs and minerals an elixir of beauty, but they have failed, and it was left to modern times to find a cosmetic which should remove every speck and blemish, and leave a soft and peerless loveliness upon the roughest skin. Gouraud's Oriental Cream does this, and while so perfectly harmless that spring water is not more so, it has a magic influence upon the complexion which cannot be over estimated or believed until realized. To our lady readers we simply say, would you be as lovely as kindly Nature intended? Then use the Oriental Cream. Also from the noted star actress: "Philadelphia, Nov. 22, 1883. I cordially recommend Dr. T. Felix Gouraud's 'Oriental Cream Magical Beautifier,' as it is perfectly harmless. Sincerely, LILLIE HINTON."—*Adv.*

The Kennel.

FIXTURES.

BENCH SHOWS.

March 4, 5, 6 and 7.—Cincinnati Bench Show, Melodian Hall. Entries close Feb. 25. Charles Lincoln, Superintendent, care of B. Kittredge & Co., Cincinnati, Ohio.

March 12, 13 and 14.—New Haven Kennel Club's First Annual Bench Show, Second Regiment Armory. Edward S. Porter, Secretary, Box 657 New Haven, Conn. Entries close March 1.

March 26, 27 and 28.—The Dominion Kennel Club's Second Annual Bench Show, Horticultural Gardens. C. Greville Harston, Secretary, Toronto, Canada.

April 3, 4 and 5.—The Cleveland Bench Show Association's Second Bench Show. Charles Lincoln, Superintendent. C. M. Munhall, Secretary, Cleveland, Ohio.

May 6, 7, 8 and 9.—The Westminster Kennel Club's Eighth Annual Bench Show, Madison Square Garden. Entries close April 21. Chas. Lincoln, Superintendent. R. C. Cornell, Secretary, 54 William street, New York.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **869**. Volume I., bound in cloth, sent postpaid, $1.50.

THE BEAGLE CLUB.

AT the request of the committee of the American-English Beagle Club, we have taken charge of the ballot for officers of the club, who have been chosen as follows:

For President,
MR. W. H. ASHBURNER, Philadelphia, Pa.
For Secretary and Treasurer,
MR. A. C. KRUEGER, Wrightsville, Pa.
For Executive Committee,
GEN. F. A. BOND, Jessup, Md.
MR. J. N. DODGE, Detroit, Mich.
DR. J. W. DOWNEY, New Market, Md.

CLEVELAND DOG SHOW.

Editor Forest and Stream:

If the number of letters that I am receiving every day from all parts of the country, asking for premium lists, is indicative of the number of entries we will have, our second bench show will be one of the largest exhibitions ever held west of New York. The premium list is now in the hands of the printer; soon as issued they will be well distributed among sportsmen. We shall hold our show Thursday, Friday and Saturday, April 3, 4 and 5, at Roller Rink, Euclid avenue, same building that we had for our first exhibition. It is well suited for the purpose. We decided to try the three-days plan at the request of many exhibitors, who claim that four days is too long to confine the dogs. The Malcolm standard will be used for judging the black and tan setter. C. M. MUNHALL, Sec'y.

CLEVELAND, Ohio, Feb. 3, 1884.

ON THE SCENT.

SATURDAY morning, the 26th of January, dawned clear and cold, and there being a good tracking snow, it gave me the fever for a fox hunt. Having no hound of my own, I hied me to a neighbor's and borrowed his dog, and off I started. Climbing a hill off to the southwest of my home I work along on its top for quite a distance without finding a sign of a track. I saw quite a large flock of crows, though, that had evidently been fooled by the weather "prognosticators" prophesying an open winter, and had stayed around, and are seemingly having a pretty hard time to get a living. Going to the trees where they had been, I found the snow plentifully besprinkled with beechnut burrs, which they had shook off in some way, and then had thoroughly examined, to get what few nuts remained in them.

I finally gave up trying to find a fox on that hill, and struck across on to a hill in the direction of home. Here Range soon found a track, but it was pretty cold, and he would not "open" on it. He followed it, however, across on to another hill, around its various crooks and turns, most of the time in sight, till he worked it up to a rocky point when I lost sight of him for a moment, but the next instant my blood was sent dancing through my veins by his giving tongue in such a stream of joyous yelps that told me at once he had bounced Mr. Fox. And then out in sight they came, the fox only a short distance ahead. He knew his fleetness of foot, however, and only ran as fast as it was necessary. He ran on the walls most of the time, once going entirely around a lot of about four acres on the wall, with the exception of cutting off the corners a short distance, as he evidently knew the dog would cut across and gain considerably on him if he followed the fence clear around. As he had no trouble to keep out of the way, I soon saw that he would not cross to the hill where I was, so concluded that I better get over there as soon as possible and have a hand in the fun myself. So away I went, going into the snow up to my knees occasionally, but with that "music" lending its impulse to "get there."

I soon reached a wall where I could command a view of the situation. Soon the music began to come nearer, and then I saw that the fox was going to run on a wall to the right of me; so, bending over so as not to be seen, I gain the stand, and with gun at "ready," wait till he gets as near as I care anything about having him, and at once open fire. At the first discharge he goes off from the wall out of sight; but I don't know as he is "done for," so run down close to the wall, and there he was going like a red streak, but I at once give him the other barrel, which sent him headlong into the snow, where he scrabbled around for a moment and then jumped up and away he went up the hill. I promptly tucked a shell into one barrel and spoke to him again; but he didn't mind it, and no wonder, for when I went to see where the shot struck I could not find any marks in the snow. Now, either that shell didn't have any shot in it, or else I tried to be sure and head him off, and so sent them clear to the top of the hill. My second shot made him bleed pretty freely, though, for a while. He had fooled around there as long as he proposed to, however, and so led way on to "hills and valleys new"—to me. I followed on after, hoping that he would turn and come back, but as there seemed to be no prospect of it, I finally started for home to load up some more shells—and my stomach. The dog did not come home till the next afternoon. The snow was nineteen inches deep that day in the woods, where it had not drifted any. O. FAY.

FRANKLIN, N. Y., Jan. 30, 1884.

PHOTOGRAPHS.—We have received from Mr. G. Mills, of Hudson, N. Y., two photographs of the red Irish setter dogs, Guess and Snap (litter brothers), bred by him, and the winners of nine prizes before they were two years old in New York, Washington and Cleveland. The pictures are excellent photographs, and do credit to both dogs and artist.



MR. THOS. G. DAVEY'S BLACK AND WHITE ENGLISH SETTER DOG "PRINCE PHŒBUS."
Winner of very high com. reserve, London, Ont., 1883.

PRINCE PHŒBUS.

WE give this week a cut of the black and white English setter dog Prince Phœbus, owned by Mr. T. G. Davey, London, Ont. Prince Phœbus was whelped April 2, 1880. He is by Tam o' Shanter (E.K.C.S.B. 6,118) and out of Pruo (E.K.C.S.B. 5,774). He was imported by Mr. Davey last September from the kennel of Mr. T. R. H. Dalrymple, Stranraer, Eng. He was exhibited a month later at the London show, where he won very highly commended reserve, in the open class for English setter dogs, and the special for the best English setter dog owned in London. He is quite a good looking dog with an evenly marked head, good chest, body, loin and quarters. His stifles are well bent and he has the appearance of being a speedy, useful animal.

THE CLUMBER SPANIEL.

But if the shady woods my cares employ,
In quest of feathered game my spaniels beat,
Puzzling the entangled copse, and from the brake
Push forth the whirring pheasant.

THE Clumber spaniel is a thorough gentleman's dog, a regular aristocrat, and ought, to be seen in perfection, to be worked in a large team, and such as only a rich man can afford to keep; and well bred and broken, and shot to in covert suitable to such dogs, it is certainly a great treat to a sportsman.

A Clumber or two, from their slow gait and large size, are of little use in an ordinary way, and for general work are not much to be recommended. At the same time, there is no doubt it is the scarcest, the choicest, and the most valuable breed of spaniels we have.

The first mention I can find of them by the name of Clumber is in an article in the old *Sporting Magazine*, which also gives an engraving by a well-known man of his day, Bartolozzi, of a team of dogs belonging to his Grace, the Duke of Newcastle, and their keeper, Mansell, with a woodcock in his hands. They were said to have been imported from France, and were given to the Duke by the Duke de Noailles (it does not appear at all clear when these dogs were imported from France, but if, as is supposed, this breed of dogs all sprung from the Duke's kennel, they must have been there for a number of years, as it will appear presently that Lord Westmoreland had them a century and a half ago); and it is from their having been, as is believed, first bred at Clumber Park, the Duke of Newcastle's seat in Nottinghamshire, and have ever since been largely bred until the last few years, and carefully treasured and preserved there, that they take their name. For a great many years the Duke of Newcastle was very chary of the breed, and consequently they got into very few hands; but I believe at a sale some years ago they were nearly all sold. The family of Mansell have been keepers to the successive dukes for a great many years, and paid great attention to this breed of spaniels.

Although I cannot prove it, I have a very great idea that this, after all, is an original English breed, and that they were exported from England, it may be centuries ago. In one of the very earliest books written on this dog I find it stated in these words: "The French dogs are derived or propagated of the dogs of Great Britain." And in another place, "The Spanish dogs whom the French call Espagneuls have long ears, but not like branches (meaning hounds), and by their noses hunt both hares and conies. They are not rough, but smooth-coated." I take it that by smooth coats the author did not mean to imply that they were smoooth-coated like a pointer, or, as is now the fashion with our beautiful but useless black spaniels, but flat-coated like a well bred setter.

In another old book the author says: "You must be provided with a good spaniel that will range about well, and when he hath perched the pheasant, to bay soundly, which will cause them to keep the perch the better; then, hearing whereabouts he is, make up to him as privately as possible, and having espied him (being at a reasonable distance), make your shot; and for your dog's encouragemend, let him bring him to you and make much of him." This I should think, did not mean the Clumber spaniel; for one great characteristic of that breed is that it is perfectly mute when on game. One can hardly help smiling at the author's quaint way of writing, it puts one in mind of an American dog "treeing a 'coon."

The following is an extract from an article in the old *Sporting Magazine;* although the writer does not say so, I have no doubt whatever that the spaniels he refers to were Clumbers: "Lord Westmorland used to have a first-rate breed of spaniels fifty years ago, and they had been in the family for upwards of a century, and they were extremely choice of the blood and each under-keeper had six or seven brace under his particular care, as well as some particular wood or portion of the forest, which contained 20,000 acres, of which 8,000 were wood. A gentleman who shot over them in 1835, says: 'Renshaw's are allowed to be the crack spaniels of the establishment, and fine fellows they looked as they met my eye that morning. I fancy myself to be a judge of a spaniel, and these appeared what spaniels should be: all of a color, lemon and white, short-legged, thick-backed, and ears not too long or curly, which may suit the parlor, but agrees very ill with briars or burrs. I never saw dogs in better working condition, nor spaniels under finer command when we went to work with them. Practice had indeed made them perfect; they had just enough chase about them to drive a hare or rabbit across the line of guns; but, at the same time, they kept so well within range, and packed so admirably, that I scarcely saw a pheasant spring out of shot during the day.' This is one of the charms of shooting to Clumbers; when once well broken they are perfectly steady and give no trouble. Although a busy and a steady worker, he seems to consider that when he has put up the game his duty is accomplished, and he has no wish to run open-mouthed after his game like we see in all old paintings and engravings of spaniels at work: they are all represented in close proximity to the game, apparently all anxiety to catch it."

The late Lord Middleton, of Wollaton Hall, Notts, had at one time a first-rate breed of spaniels, which he brought to the highest perfection. "Nimrod," in an article on pheasant shooting, mentions these, and also some belonging to Mr. Giffard, of Chillington Hall, Staffordshire, which he says were the only ones he ever saw fit to be taken out with highly broken pointers; when in cover the spaniels found the game and the pointers came to heel, in the open the pointers ranged and the spaniels came to heel with one crack of the whip; one of the spaniels would back the pointers if allowed to do so, which must be considered a very rare accomplishment indeed, and one not very easily acquired. These spaniels I believe to have been Clumbers; I don't know whether "Nimrod" knew as much about shooting as he did of hunting, but he was a thorough sportsman, and no doubt understood what he was writing about.

Morland, the celebrated animal painter, has many paintings and sketches of spaniels, always in a quiet, steady attitude, and nearly all of them are, if not really Clumbers, at all events very much of that character, and I do not think that for many years the breed was so exclusively confined to the Duke of Newcastle's kennels as many people suppose; the Duke, no doubt, jealously kept his own strain from getting common, but I have strong grounds for believing the Clumber to have been originally sent from this country to France and re-imported there. The Duke's strain, which was given to him by the Duke de Noailles, was in all probability derived from English stock.

I firmly believe the Clumber spaniel to be one of our early and original breeds of dogs, frequent mention being made by old writers of orange or lemon and white spaniels.

Lord Westmorland's dogs, therefore, as well as several others, may not have been related to the Duke of Newcastle's strain at all, and will account for the great difference in head and other points in the several breeds at this time, notably in the late Prince Consort's and the Earl of Arundel's kennels at Wardour Castle.

In the early days of dog shows Mr. R. Boaler showed some very fine dogs; but to my thinking they were hardly heavy enough, had a little too much daylight under them, and, though not wanting in true Clumber character, were not equal to the Duke of Newcastle or Mr. Holford's strains.

Nevertheless, as I have said, they were very fine dogs; he had bred them carefully for many years, and I know them to have been good dogs in the field. Mr. Boaler was, I believe, keeper to the Duke of Portland, and if so, probably they were really his dogs. The next to show Clumbers was Mr. R. Stayner Holford, M. P., of Westor Birt, who carried all before him when he consented to exhibit them. A team of his spaniels was exhibited on one occasion at Islington, and created a great sensation. They were justly and greatly admired, and were at one time, if not so now, the largest and best kennel of Clumber spaniels in the kingdom. Mr. Holford won all six prizes at Birmingham in 1862, with, as "Stonehenge" says, "such a team as in all probability were never put together before." I have never seen better Clumbers anywhere than Mr. Holford's, and his dogs, Kimbush, Rover and Brush, and bitches, Truce, Venus and Silk, have never been, in my opinion, equalled, not to say excelled, as a team.

I have seen as many as fifty couples in his kennel at one time, every one worth a Jew's eye. Mr. Holford spared no expense or trouble in obtaining the best blood, and he was ably seconded by Garland, his head keeper, than whom no man in England understood better what a Clumber spaniel really is. Garland went every year on a visit to the best kennels, to see if he could pick up anything to improve his own; and if he found it, no price stood in the way. I have shot to over twenty couples at once on several occasions, and their work was certainly as near perfection as regards covert-shooting to spaniels as it is possible to attain. They were usually hunted by the head keeper with a queer-looking fellow called

'George," who, however, knew his duties as whipper-in Every dog worked within about twenty-five to thirty yards of the gun, every one dropped to shot, was free from chase and quite mute; a "whimper" would have been followed by the immediate order for execution. It certainly was a treat to a sportsman, not to be met with every day. The way they spread out like a fan, with their noses on the ground, and the busy, merry working of their sterns, their fine brilliant coats flashing among the bushes, working to the keeper's hand, being certainly very beautiful. Nothing could escape them; every bush that could hold anything as big as a linnet was searched, and every dock leaf or bunch of nettles closely examined by their noses; nothing could be better than the whole turn-out—it was perfectly unique.

Garland particularly fancied the strains of Mr. Foljambe, Lord Spencer, and the Duke of Newcastle. It is some years since I saw this kennel, and I do not know whether or not it is now kept up to its old strength and form; but I fancy, since the death of old Garland, Mr. Holford has lost the hand and head most effective in keeping the team up to its proper standard.

The Duke of Portland has a grand team of Clumbers, and has won many prizes with them, and I believe they are quite A 1 in the field, and at this time probably the finest kennel in the kingdom. They are not often exhibited, but when they are they are tolerably sure to be at the top of the list.

The Duke of Hamilton has also a very beautiful strain of Clumbers, which are held in deservedly high estimation and which are pretty sure to be in the prize list whenever shown.

His Royal Highness the late Prince Consort had a team of Clumbers, but from what I have seen of his blood, though I never saw them in kennel, I don't think he had quite the right sort, that is to say, of the type I have been discussing, but that they were of pure blood, I do not doubt; they were too pointed and long in the head, and not heavy enough in bone; beautifully feathered and with good coats, but in some specimens which I have met with there was decidedly something which wasnot, according to general notions, quite correct.

The Maharajah Dhuleep Singh had also a breed of Clumbers, and a story is told that after Prince Albert's death a present of a brace of puppies which the Prince had promised him from a very beautiful litter were forwarded to him by command of Her Majesty the Queen, as appears by a paragraph in memoriam of the Prince which appeared in the *Sporting Magazine* of that date:

"The Prince participated in our gracious sovereign's fondness for dogs, and the following anecdote of a circumstance which has only within the last few days occurred will, we are sure, be most acceptable and pleasing to our readers. Shortly since Prince Albert promised the Maharajah Dhuleep Singh that he would present him with a couple of puppies from the litter of a beautiful Clumber spaniel. The Prince's lamented death briefly followed. To the surprise and great gratification of the Maharajah, he has received a letter, written to him by command of Her Majesty, informing him that the Prince's gift awaits his Highness—the puppies promised by the Consort are ready for him. Can any comment from our pen requisite on such an incident! Plans, promises and wishes—even to the very thoughts of the departed—all, aye, every one stored and ready for application."

[TO BE CONCLUDED.]

NEW HAVEN DOG SHOW.—The entries for the New Haven bench show close March 1. As the winners will be eligible to compete in the champion classes at the show of the Westminster Kennel Club in May, there will undoubtedly be many fine dogs present.

THE CRYSTAL PALACE DOG SHOW.—The report of the Crystal Palace show from our regular correspondent arrived too late for this issue. It will appear next week.

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, of breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Lady Leicester. By Mr. John A. Doolittle, New Haven, Ct., for orange and white English setter bitch, whelped Nov. 8, 1883, by Blue Blood (Leicester—Doll), out of Coin (France—Fanny).

Rye. By Mr. Geo. Laick, North Tarrytown, N. Y., for white, black and tan mottled beagle bitch, whelped Sept. 17, 1883, by Ringwood out of Roxy.

Meggie. By Mr. John W. Trautum, Middletown, Ct., for red Irish setter bitch, whelped July 21, 1883, by champion Elcho out of Meg (Elcho—Rose).

Miss Ranger. By Mr. W. F. Gould, Menomonee, Wis., for liver and white pointer bitch, whelped Nov. 3, 1883 (Dilley's Ranger—White Lilly).

Bracc Ranger, Dine Ranger and Lass o' Ranger. By Mr. S. B. Dilley, Rosendale, Wis., for pointers, two dogs and one bitch, whelped Nov. 3, 1883, by his Ranger out of his White Lilly.

Mona. By Mr. F. Pendergast, Boston, Mass., for red Irish setter bitch, by Dr. Wm. Jarvis's champion Elcho out of Meg.

Essex and Bernardo. By the Essex Kennel, Andover, Mass., for tawny, brindle and white smooth-coated St. Bernard dogs, whelped Jan. 30, 1884, by Alp II. (A.K.R. 705) out of Daphne II. (A.K.R. 489).

Avis, Alpina, Lotta and Quenn. By the Essex Kennel, Andover, Mass., for white, with orange tawny markings, smooth-coated St. Bernard bitches, whelped Jan. 30, 1884, by Alp II. (A.K.R. 705) out of Daphne II. (A.K.R. 489).

Rose Marie and Red Kate. By Capt. F. G. Bixby, Boston, Mass., for red Irish setter bitches, whelped June 17, 1883, by his Ruby (Elcho—Rose) out of Red Maggie (Chief—Gussie).

Dash Boy and Duck. By Capt. F.G. Bixby, Boston, Mass., for black, white and ticked English setters, dog and bitch, whelped Oct. 19, 1883, by Dash III. out of Rhœbe (Rook—Dora).

Black Bess II. By Mr. Louis Melchor, Battle Creek, Mich., for black coeker spaniel bitch, whelped Aug. 28, 1883, by imported Tippo out of Woodstock Queen (Beau—Black Bess).

Blue Belle. By Mr. Louis Melchor, Battle Creek, Mich., for blue belton English setter bitch, whelped Aug. 28, 1883, by Count Noble out of Rosalind (Leicester—Sanborn's Nellie).

Jolly Nell. By Mr. H. W. Durgin, Bangor, Me., for white, black and tan English setter bitch, by Mr. J. H. Goodsell's Prince out of Jolly May.

Jolly June. By Mr. H. W. Durgin, Bangor, Me., for black and white English setter bitch, by Mr. Jas. H. Goodsell's Prince out of Jolly May.

Marvel. By Mr. J. W. Munson, St. Louis, Mo., for liver and white pointer bitch, whelped Feb. 22, 1882, by Croxteth out of Trinket (Tory—Jaunty).

Master M. By Mr. J.W. Munson, St. Louis, Mo., for liver and white pointer dog, whelped June, 1883, by Croxteth out of Spinaway (Garnet—Keswick).

Mack M. and Majesty. By Mr. J. W. Munson, St. Louis, Mo., for liver and white and lemon and white pointer dogs, whelped October, 1883, by Faust out of Musette.

Bessie Case. By Mr. J. W. Munson, St. Louis, Mo., for black, white and tan English setter bitch, whelped December, 1881, by Fritz (Roderick—Norna) out of Duff (Carlowitz—Rose).

Dimple Baker. By Mr. J. W. Munson, St. Louis, Mo., for black, white and tan English setter bitch, whelped April, 1880, by Sanborn's Dan out of Sanborn's Roxey.

Jule. By Mr. James L. Semon, New York, for lemon and white English setter bitch, whelped April 10, 1883, by Dr. S. Fleet Speir's St. Elmo IV. (champion St. Elmo—Clio) out of Diamond Duchess (Bailey's Victor—Blue Nellie).

Beaumont. By Mr. W. W. Nixon, Leesburg, Va., for liver and white ticked pointer dog, whelped June 19, 1883, by Beaufort (A.K.R. 694) out of Fannie Turner (Sensation—Queen II.).

NAMES CHANGED.

☞ *See instructions at head of this column.*

Black Silk to Hornell Silk. Black cocker spaniel dog, whelped Aug. 7, 1882 (Obo—Chloe II.), owned by the Hornell Spaniel Club, Hornellsville, N. Y.

BRED.

☞ *See instructions at head of this column.*

Bess—Glencho. Mr. F. Waterman's (Hudson, N. Y.) red Irish setter bitch Bess (Chief—Tilly) to Mr. W. H. Pierce's Glencho, Nov. 22.

Faust Fan—Ranger Croxteth. Mr. S. B. Dilley's (Rosendale, Wis.) pointer bitch Faust Fan (Faust—Minnetonka) to his Ranger Croxteth (Croxteth—Royal Fan), Jan. 27.

Critic—Obo II. Mr. Winchester Johnson's (Boston, Mass.) black cocker spaniel bitch Critic (A.K.R. 303) to Mr. J. P. Willey's Obo II. (A.K.R. 432), Jan. 1.

Nellie—Dash III. Mr. Taylor's (Woburn, Mass.) English setter bitch Nellie to Mr. A. M. Tucker's Dash III., Dec. 7.

Matchless—Dash III. Mr. F. Tburi's (Newburyport, Mass.) English setter bitch Matchless to Dash III., Dec. 12.

Model Blue—Dash III. Mr. A. S. Garland's English setter bitch Model Blue (Druid—Gussie) to Dash III., Dec. 29.

Maida—Dash III. Messrs. Mason & Monse's (Providence, R. I.) English setter bitch Maida (Blue Dan—Clip) to Dash III., Jan. 24.

———*—Dash III.* Mr. Elmer A. Hight's (Lynn, Mass.) English setter bitch ——— to Mr. A. M. Tucker's Dash III., Jan. 31.

Nellie—Count Best. Mr. J. F. Lawrence's (Ann Arbor, Mich.) English setter bitch Nellie to the Detroit Kennel Club's Count Best (Dick Laverack—Kelp), Jan. 21.

Hornell Ruby—Obo II. The Hornell Spaniel Club's (Hornellsville, N. Y.) cocker spaniel bitch Hornell Ruby (A.K.R. 67) to Mr. J. P. Willey's Obo II. (A.K.R. 432), Dec. 4.

Skip—Belton III. Mr. J. R. Henricks's (Pittsburgh, Pa.) English setter bitch Skip (Dog Whip—Daisy Dean) to Belton III.

Early Dawn—Count Best. The Detroit Kennel Club's English setter bitch Early Dawn (Nixey—Princess) to their Count Best (Dick Laverack—Kelp).

Reign—Lexington. The Detroit Kennel Club's English setter bitch Reign (A.K.R. 178) to their Lexington (Nixey—Princess Louise), Dec. 25.

Phœbe—Bow. Mr. C. A. Johnston's pointer bitch Phœbe to Mr. Edward Odell's Bow.

Clio—Lord Sefton. Mr. J. S. Brown's (Montclair, N. J.) pointer bitch Clio (Sensation— ———) to Mr. A. E. Godeffroy's Lord Sefton (Croxteth—Vinnie), Dec. 18.

Countess—Belton III. Mr. J. R. Henricks's (Pittsburgh, Pa.) English setter bitch Countess (Leicester—Pocahontas) to Belton III.

Molly Druid—Royal Gladstone. Mr. J. R. Henricks's (Pittsburgh, Pa.) English setter bitch Molly Druid (Druid—Jolly May) to Royal Gladstone (Gladstone—Mersey).

Crook—Emperor Fred. Dr. H. F. Aten's (Brooklyn, N. Y.) English setter bitch Crook (A.K.R. 281) to Mr. E. A. Herzberg's Emperor Fred (A.K.R. 33), Jan. 31.

Daisy Starlight—Dashing Dan. Mr. H. W. Durgin's (Bangor, Me.) English setter bitch Daisy Starlight (Lelaps—Starlight) to Mr. F. T. Hall's Dashing Dan (Lotty—Maud Muller), Oct. 29.

Spinaway—Bang. Mr. J. W. Munson's (St. Louis, Mo.) liver and white pointer bitch Spinaway (Garnet—Keswick) to Poyneer's Bang (Bang—Luna), Nov. 9.

WHELPS.

☞ *See instructions at head of this column.*

Belgrave Bess. Mr. H. P. McKean, Jr.'s (Philadelphia, Pa.) imported fox-terrier bitch Belgrave Bess (Akely Joe—Hebe), Jan. 8, three dogs.

Rita Croxteth. Mr. Geo. S. Tucker's (Peterborough, N. H.) pointer bitch Rita Croxteth (A.K.R. 168), Dec. 22, six (three dogs), by his Baronet (A.K.R. 264).

Bess. Mr. F. Waterman's (Hudson, N. Y.) red Irish setter bitch Bess (Chief—Hill's Tilley), Jan. 21, ten, all bitches, by Mr. Wm. H. Pierce's Glencho (Elcho—Noreen).

Nina. Mr. Arthur Brookhouse's (Wellington, Mass.) English setter bitch Nina (Lelaps—Belle), Nov. 8, nine (seven dogs), by Mr. A. M. Tucker's Dash III.

Kelp. The Detroit Kennel Club's (Detroit, Mich.) English setter bitch Kelp (A.K.R. 110), Dec. 29, eleven (seven dogs), by their Nixey (A.K.R. 177).

Chess. The Detroit Kennel Club's pointer bitch Chess (A.K.R. 77), Dec. 25, twelve (six dogs), by their King Bow (A.K.R. 83). Seven since dead.

Ruby. Dr. S. H. Green's (Newmarket, N. H.) liver spaniel bitch Ruby, Dec. 19, ten (six dogs), by Mr. J. P. Willey's Obo II. (A.K.R. 432). Eight black and two liver.

Betty. Mr. Wm. B. Mersnon's (East Saginaw, Mich.) Gordon setter bitch Betty, Dec. 17, seventeen (eleven dogs) by Dick (Rupert———). Betty threw thirteen last spring and her owner was very much elated thereat.

Madge. Capt. F. G. Bixby's (Boston, Mass.) red Irish setter bitch Madge (Berkley—Ruby), Jan. 21, eight (four dogs), by his Ruby (Elcho—Rose).

Trix. Glencho Kennel's (Peekskill, N.Y.) red Irish setter bitch Trix (A.K.R. 187), Jan. 27, eleven (six dogs), by their Glencho (Elcho—Noreen). None for sale.

Ace of Spades. Mr. George H. Gilbert's (Boston, Mass.) black spaniel bitch Ace of Spades, Jan. 28, eight (five dogs), by Obo II. (A.K.R. 432).

SALES.

☞ *See instructions at head of this column.*

Miter. English terrier dog, whelped Sept. 7, 1883 (Dandy—Fanny), by Miss Ida F. Warren, Leicester, Mass., to Dr. Geo. O. Warner, same place.

Wycliffe. Red Irish setter dog, whelped Aug. 25, 1883 (Ruby—Lyda Belle), by Dr. J. Frank Perry, Boston, Mass., to Miss Ida F. Warren, Leicester, Mass.

Lucretia. Liver, with white on breast, cocker spaniel bitch, whelped May 1, 1883, by Snipe (Captain—Nellie) out of Cute (Sam—Flora), by Mr. Forest W. Forbes, Westboro, Mass., to Mr. Geo. M. Hour, same place.

Primer. Black and white English setter dog, age not given (Dashing Dan—Daisy Starlight), by Mr. C. N. Wade, Hackettstown, N. J., to Mr. Geo. Shaw, Minshell, N. J.

Lady Leicester. Orange and white English setter bitch, whelped Nov. 10, 1883, by Blue Blood (Leicester—Doll) out of Coin (France—Fanny), by Mr. W. E. Miller, Meriden, Ct., to Mr. John A. Doolittle, New Haven, Ct.

Chief—Biddy whelp. Red Irish setter dog, whelped Feb. 2, 1883, by Mr. Geo. Laick, North Tarrytown, N. Y., to Mr. Chas. P. Williams, New York.

Donna. Red Irish setter bitch, whelped Feb. 2, 1883 (Chief—Biddy), by Mr. George Laick, North Tarrytown, N. Y., to Mr. Frederick Comfort, Catskill, N. Y.

Flora. Liver, with white on breast and feet, cocker spaniel bitch, whelped Oct. 20, 1882 (Joe—Beauty), by Mr. Jas. W. Rushforth, Yonkers, N. Y., to Mr. A. D. Wilbur, Catskill, N. Y.

Spry. Lemon and white pointer dog, whelped July 16, 1882, by Quest (Sensation—May) out of Topsy (Ned—Flora), by Mr. J. H. McCann, Colebrook River, Ct., to Mr. J. W. Trantum, Middletown, Ct.

Miss Ranger. Liver and white pointer bitch, whelped Nov. 3, 1883 (Ranger—White Lilly), by Mr. S. B. Dilley, Rosendale, Wis., to Mr. W. F. Gould, Menomonee, Wis.

Black Pearl. Black cocker spaniel bitch (A.K.R. 647), by Mr. Geo. S. Tucker, Peterborough, N. H., to Mr. J. P. Willey, Salmon Falls, N. H.

King Bow—Bow Queen whelp. Pointer bitch, whelped Nov. 14, 1883, by the Detroit Kennel Club, Detroit, Mich., to Mr. Geo. Hoover, Canal Fulton, O.

Crook. Blue belton English setter bitch (A.K.R. 271), by Major G. R. Watkins, Brooklyn, N. Y., to Dr. H. F. Aten, same place.

Flash. Black and white cocker spaniel dog (A.K.R. 652), by Mr. Forest W. Forbes, Westboro, Mass., to Mr. George M. Hour, same place.

Port Wine. Pointer dog, 3 years old (Shot—Taylor), by Mr. J. S. Brown, Montclair, N. J., to Mr. Isaac Eckert, Reading, Pa.

Beaut—Bell Mahone whelps. Black, white and tan English setters, whelped November, 1883, by Mr. J. O. Watts, Lineville, Ia., one to Mr. J. S. Brown, Montclair, N. J., and one to Mr. J. R. Beny, Jr., same place.

Flora. Fawn, with white toes and tip of tail, rough-coated St. Bernard bitch, whelped Oct. 18, 1883 (Carlisie—Moya), by Mr. James McNamee, Stapleton, S. I., N. Y., to Mr. Henry Muller, Clifton, S. I., N. Y.

Jolly Nell and Jolly June. Blue belton English setter bitches, whelped June 25, 1883 (Goodsell's Prince—Jolly May) by Mr. H. G. McMillan, Rock Rapids, Ia., to Mr. H. W. Durgin, Bangor, Me.

Jolly June. Blue belton English setter bitch, whelped June 25, 1883 (Goodsell's Prince—Jolly May), by Mr. H. W. Durgin, Bangor, Me., to Mr. C. F. Danforth, same place.

PRESENTATIONS.

☞ *See instructions at head of this column.*

Ponto. Lemon and white pointer dog, whelped Dec. 25, 1882 (Bow—Julia), by Mr. Edward Odell, New Orleans, La., to Mr. P. Muspero, same city.

Sir Kay. Orange and white English setter dog (A.K.R. 288) by Major G. R. Watkins, Brooklyn, N. Y., to Commander James E. Jewett.

Friar Tuck. Orange and white English setter dog (A.K.R. 223), by Major G. R. Watkins, Brooklyn, N. Y., to Mr. F. D. Watkins.

Ruby S. Red Irish setter bitch (A.K.R. 514), by Dr. C. E. Nichols, Troy, N. Y., to Mr. Chas. R. Squire, same place.

Elcho—Ruby S. whelp. Red Irish setter bitch, whelped Dec. 2, 1883, by Dr. C. E. Nichols, Troy, N.Y., to Mr. Charles R. Squire, same place.

DEATHS.

☞ *See instructions at head of this column.*

Belle. Black and tan Gordon setter Belle, 10 years old (Ruby—Juno), owned by Mr. Wm. H. Moller, New York, from paralysis.

Kate. Black and tan terrier bitch (A.K.R. 193), owned by Mr. Henry Muss, Champaign, Ill.

Rifle and Trap Shooting.

FIXTURES.

First International Clay-Pigeon Tournament, at Chicago, Ill., May 26 to 31. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

RIFLES IN THE FIELD.

THE English rifle makers and shooters are indulgiug in flooding the newspapers with letters upon the re-arming of the infantry of the regular forces. One of the more recent and interesting of the series of letters is from J. D. Dougall, the well-known gunmaker, of Bennett street, London, who in the *Times* says:

"For many years references have been made in the public press to the inaccurate shooting of our soldiers on the battlefield. In former times this was attributed to the smoothbore musket, the familiar 'Brown Bess' of our forefathers, and it was a favorite estimate that at the battle of Waterloo there was only one casualty for every hundredweight or so of lead expended in bullets. The rifle system was to remedy all this; but the question now is, has there been such improvement as expected? and I believe that it is a very common opinion that there has not. This disbelief has been greatly strengthened by the result of the affair of some of our best infantry with the Boers in South Africa some year or two ago, when our highly trained and disciplined men had no chance, although armed with the most scientific weapons, against those rough Africanders, all sportsmen from boyhood. In short, our men were picked off one by one, and could deliver no effective fire in return. Why was this? Let me give an answer to this question, not dogmatically, but for the due consideration of all concerned. If my words may appear somewhat dogmatic, it is because they are founded on knowledge and experience.

"It may appear a bold assertion, but I hold all high 'vernier' sights on military rifles, for use in actual battle, to be a mistake. Let them be applid to long-range and target rifles if you will; but target practice will never make a man a good shot in the field, whether he be a soldier or a sportsman—nay, I go further, and say, with all the confidence that is founded on experience, that it will make a bad shot of either. To explain. All good shooting is founded on keeping both eyes open in the act of aiming and firing. It is by this that, unconsciously, we have a sense of distance, and that we also command the ability to aim correctly at objects parly concealed (as the Boers were) or in motion. Soldiers are not taught this, and I have read somewhere that they are even enforced, under strict orders, to close the left eye and take aim. To use one eye only, however effective it may appear at target shooting, is to throw away our natural endowment of binocular vision, and all the fine 'rifle sights' in the world will not restore the loss. This is now being recognized by sportsmen, and hardly a man among them is now to be found who closes his left eye in game shooting. Yet when I first began to ventilate the subject (but by no means claiming that I had invented the 'two-eye' system) in the London press, about the years 1855-56, I was received with a shout of derision. But the derision has passed away, and all the best shots whom I have had the opportunity of consulting tell me that they now never think of closing one eye. This is not done in driving a nail, in playing at cricket or billiards, and why is it done in rifle shooting? Because we have got into a wrong groove and think it is the proper thing to do, not knowing that, as the cookery books say, there is 'another way,' and a better one.

"The subject is too serious to be briefly discussed, and I fear to intrude unduly upon your space. To enter upon the whole question is not beyond my ability; but I should prefer, before doing so, that some experienced military men would give this short letter their consideration. In the first place, I would suggest that military rifles be fitted with plain folding 'leaf sights,' say, for 100, 200, 300 and 400 yards, and without complications. Beyond 400yds. I fearlessly assert that much more deadly fire would be delivered upon a moving or shifting enemy by the judgment and common sense of the soldier, trained to keep both his eyes open and to exercise his faculties, than by the use of fine mechanical adjustments, which (be being taught to depend on them) can only puzzle and bewilder him when there comes the real tug of war. Our grandsires drew a good bow at Hastings,' but I never heard of any bowman, from Robin Hood down to the still existing and highly expert Royal Scots Archers, voluntarily depriving themselves of one-half of the ocular powers granted them by nature."

RANGE AND GALLERY.

BOSTON, Feb. 2.—The regular matches were continued at the range at Walnut Hill to-day. The attendance was large, including several visitors, among whom were Mr. W. D. Palmer of the Merrimac Club, and members of the Press Association. During the morning the weather conditions were excellent, a light south wind prevailing; in the afternoon it increased, but not enough to make good shooting difficult. The results of the different matches are appended:

Combination Match.—Decimal Target.

A C Adams	7	8	9	10	8	6	10	10	10	9—87
B A Amsdem	9	10	7	8	8	4	10	10	8	8—81
C B Edwards	10	6	10	6	5	5	5	9	7	9—72
C A Hunt	4	6	4	9	3	7	7	9	6	8—68
B A Lappen	7	7	7	5	4	9	9	4	5	2—59

Combination Match—Creedmoor Target.

R Davis	5	5	5	4	4	5	4	5	4	5—46
B A Amsden	4	5	4	5	4	5	5	5	5	4—46
B A Lappen	4	4	5	4	4	5	5	4	4	4—44

Victory Match.

J B Fellows	7	5	7	10	6	7	10	7	10	9—80
B F Jones	9	8	6	8	7	9	7	9	8	5—76
C A Gordon	9	4	7	10	6	9	8	6	5	5—69

Creedmoor Practice Match.

C E Berry	5445545544—45	H A Lewis (mil)	3543545454—41
E B Edwards	4545554454—45	J R Carmichael	3135554443—40
W D Palmer	5454455544—45	G Welsh	4344445443—39
H D Hubbard	4544455544—44	S S Burns (mil)	4444444443—39
B C Carr	5445455444—44	J Payson (mil)	4444542333—36
F Chauncy (mil)	4444445444—41	J E Kemp	5542424334—36
A Keach	5445443444—41		

Creedmoor Prize Match.

H Cushing	4544455545—45	J B Thomas (mil)	4454445445—43
H Withington	5444455445—45	C J A Cobb	4555435444—43
J P Bates	4455544545—45	J A Look	4552424444—42
A C Cash	4554445545—44	A Darling (mil)	4444454444—41
B A Lappen	5444545445—44	C H Best	4435544543—41
F Chauncy (mil)	4444545554—44	L A Barr	3444445544—40

Capt. John C. Mallory, of the Civil Engineer Corps, United States Army, now stationed in Boston, has been elected to membership in the Massachusetts Rifle Association. He was a member of the Amateur Club of New York.

At a meeting of the directors of the Massachusetts Rifle Association, held at the office of the secretary, the following committees were chosen for the ensuing year: Executive committee, Messrs. Rockwell, Baker, Fellows, J. A. Frye, Gerrish; membership, Leach, Rockwell, Russell; range, Fellows, Bullard and Hinman; glass ball, Sawyer, Frye, Leach; team, Rabbeth, Russell, Perkins; long range, Hinman, Gerrish, Washburn.

SWISS GUN TRIALS.—The *St. James Gazette* reports progress on the series of trials now going on in Switzerland between the new and old systems of military arms. The trials are not yet concluded. But enough has been done in 1883 to demonstrate pretty clearly the superiority of the Rubin system over that now employed for arming the troops. A report by Colonel Feiss, presented to a military society at Berne, declares that the new arm is superior both in accuracy of aim, power of penetration, and flatness of trajectory to the older weapon patented by Vetterli. Mr. Rubin, who is director of the Federal Laboratory at Thun, reduces the caliber of the barrel by one-tenth of an inch, or even more; that is to say, from 10.4 millimetres to 8.0 and 7.5. The cartridge he uses has a metallic case, and contains a little bullet nearly 1¼ inches in length, inclosed in a covering of galvanized copper, requiring no grease. In order to keep the length of the whole cartridge within reasonable bounds, compressed powder is used, and it is exploded by central-fire action. The initial velocity of the ball is found to be 540 metres for the rifle of 8.0 bore, and 565 for that of 7.5 bore, whereas the Vetterli system gives a velocity of only 403. The penetrative force of the projectile carries it at 10

metres through a plate of zinc more than ¼ inch thick; and at 300 metres it has still a velocity of 305 against 292 of the old bullet. Its accuracy of aim is said to be 33 per cent. greater than the Vetterli, and it makes a pattern on the target up to 2,000 metres, whereas the other cannot be depended upon to do so over 1,600 metres. In the matter of trajectory the Rubin weapon is equally superior. With the Vetterli rifle the ground covered by its range, and called the "dangerous space," is about 360 yards; with the Rubin 8.0 bore it is increased to 460 yards, and with the 7.5 bore to nearly 500 yards. The new rifle has four shallow grooves, equal in width to the space separating them, and these have a twist more than twice as rapid as that of the Vetterli grooves. The next experiments are to be conducted with a view to establishing the relative merits of the Rubin system and that of M. Heller, a professor of Zurich, who has also invented a new small-bore rifle.

JAMESTOWN, N. Y., Feb. 4, 1884.—Club medal shoot of yesterday afternoon, 200yds., Creedmoor target, 10 rounds; wind at 8 o'clock, medium, light, bright.

S N Ayres, Stevens .38-cal	45	Geo Shattuck, muzzleloader	42
O H Lilly " "	44	R H Burns, Bal. .38-cal	42
A F Warner, " "	44	F R Dowler, muzzleloader	41
H V Perry, muzzleloader	44	E Perry, Bal. .38-cal	39
N J Fenner, "	44	W N Goky, Win. .44-cal	38
J R Moore, Bal. .44-cal	43	A F Ward, muzzleloader	38
W H Sprague, Rem. .38-cal	43		

R. H. B.

BULLSHEAD RIFLE CLUB.—Thursday, Jan. 31.—Twelve-ring target; possible 120.

G Zimmermann	118	S F C Weber	105
M Dorrler	117	D Holland	103
C Rein	117	S Mehrbach	103
H Holzmann	117	G D Johnson	100
A Lober	115	J F Campbell	96
H Hackmann	113	G Wendelken	96
V Steinbach	108	H A Wasmuth	95
G F Schroeder	106		

H. LOBER, Secretary.

SARATOGA SPRINGS, Feb. 2, 1884.—The following are the highest scores shot by each member during the week:

A G Hull	10	12	10	12	10	12	12	12	10	12	—112
I Davis	10	12	11	11	10	12	12	11	11	11	—111
S P Wells	12	11	11	12	10	9	10	11	10	11	—107
W Gage	10	10	10	11	11	12	10	10	12	0	—105
W H Gibbs	11	11	9	11	11	10	11	9	9	8	—100
F A White	10	8	8	12	10	10	12	9	11	9	— 99
Howard	9	8	8	12	10	8	10	11	8	11	— 93
O J Wing	9	10	9	10	10	8	10	6	8	9	— 89

A. G. HULL, Adjutant, Saratoga Rifle Club.

NATIONAL GUARDSMEN.—A meeting of the National Guard Association of the United States will be held at Cincinnati, O., on Wednesday and Thursday, March 26 and 27. The association held its first meeting in New York, its second in St. Louis, and the last in Philadelphia. The association aims to promote military efficiency throughout the active militia of the United States, and to secure united representation before Congress for such legislation as it may deem necessary for this purpose. The Secretary of War will be requested to honor the proposed meeting at Cincinnati with such a representation from the United States Army as he maydeem expedient. Information as to all subjects which it is proposed to bring before this meeting should be sent to the secretary of the association. —W. L. ALEXANDER, Des Moines, Iowa.

NEWARK, N. J., Jan. 30.—The annual meeting of the Newark Rifle Association was held this evening, at the Frelinghuysen range, 189 Market street. The Secretary's report shows an increase in membership over last year. The Treasurer's report showed a balance on hand of $25.12. The following officers were elected for the ensuing year: President, Alfred Hunt; Vice President, J. K. Walsh; Secretary, A. C. Neumann; Treasurer, C. F. Jackson; Association Scorer, J. E. Pollard; Financial Committee, President, Secretary, Treasurer, J. Huegel and J. Velsor.

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

FALL RIVER, Mass.—The Fall River Gun Club held an all day tournament Jan. 11, which was well attended by shooters from Providence, East Providence, Pawtucket, Brockton and other places. It was expected that Mr. W. S. Perry, of Worcester, would shoot a match with Mr. J. A. Negus, of Fall River, for the Massachusetts champion clay-pigeon badge, but owing to sickness Mr. Perry did not appear and the match was postponed. The day was spent in sweepstake shooting with the following results:

First match, 7 glass balls—Wilbur of Brockton and Valentine of Providence divided first, Negus of Fall River and Palmer of Providence second, Braley and Hall of Fall River third.

Second match, 7 clay-pigeons—Sheldon and Bourne of Providence divided first, Luther and Paine of East Providence divided second, Wilbur and Braley third.

Third match, 7 glass balls—Hall first, Wilbur and Valentine second. Palmer third.

Fourth match, 7 clay-pigeons—Paine first, Bradley second, Tinker third.

Fifth match, 7 glass balls—Braley and Palmer first, Wilbur and Luther second, Tinker third.

Sixth match, 7 clay-pigeons—Wilbur first, Luther and Tinker second, Sheldon third.

Seventh match, 5 clay-pigeons—Wilbur and Valentine first, Sheldon and Luther second, Braley third.

Eighth match, 5 clay-pigeons—Sheldon and Luther first, Braley second.

Ninth match, 5 clay-pigeons—Braley first, Sheldon second.

The Fall River Gun Club held a shoot on the 30th, Mr. W. S. Perry, of Worcester, and Mr. J. A. Negus, of Fall River, contesting for the Massachusetts Champion Clay-Pigeon Badge at 50 clay-pigeons each, Mr. Perry winning by a score of 42 against Mr. Negus's 36. A number of sweepstakes were then shot, with the following results:

Badge Match—50 Clay-Pigeons Each.

W S Perry	11110011011111101111111111 / 11111111111111011111101110—43
J A Negus	11101111011011010111011110 / 01011100110110111111111101—36

First match, 7 glass balls—Wilbur and Negus first, Hall and Palmer scond, White third.

Second match, 7 clay-pigeons—Wilbur and White first, Hall second, R. Perry third.

Third match, 7 glass balls—Hall and Wood first, R. Perry second, White third.

Fourth match, 7 clay-pigeons—W. S. Perry and Shepard first, R. Perry and White second, Palmer third.

Fifth match, 7 glass balls—W. S. Perry first, Wilbur and White second, Palmer third.

Sixth match, 7 clay-pigeons—W. S. Perry and G. Barney first, Wilbur and White second, Palmer third.

Seventh match, 7 glass balls—H. C. Braley first, Hall second, White third.

Eighth match, 7 clay-pigeons—Hall first, H. C. Braley second, Wilbur third.

Ninth match, 7 glass balls—Wilbur first, Palmer second, Rounsevelle third.

Tenth match, 7 clay-pigeons—Wilbur first, H. C. Braley second.—T. S. H.

BOSTON GUN CLUB.—Jan. 30.—A large number of trap-shooters occupied the range at Walnut Hill to-day to enjoy their favorite sport. Fourteen events were shot, with the following result:

First event, 5 clay birds.—Severence first, Curtis and Barnard second, De Rochemont third, Eddy fourth.

Second event, 5 glass balls.—Lewis and Sawyer first, De Rochemont, Law and Curtis second, Eddy and Nichols third, Saunders and Field fourth.

Third event, 5 clay birds.—De Rochemont and Field first, Curtis and Dickey second, Law third, Adams fourth.

Fourth event, 3 pairs glass balls.—Tinker and Law first, Nichols second, Curtis third, Lewis and Eddy fourth.

Fifth event, 5 clay birds.—Tinker first, De Rochemont, Draper and Law second, Curtis and Adams third, Shumway fourth.

Sixth event, 5 glass balls.—Decker first, De Rochmont second, Tinker third, Eddy fourth.

Seventh event, 3 pairs clay birds.—Law first, Barnard and Sawyer second, Draper and Decker third, Eddy fourth.

Eighth event, 5 glass balls.—Lewis and De Rochemont first, Nichols and Sawyer second, Sampson third, Short fourth.

Ninth event, 5 clay birds.—De Rochemont, Curtis, Short and Eddy first, Sawyer and Barnard second, Decker and Field third, Saunders and Gove fourth.

Tenth event, 3 pairs glass balls.—Decker first, Law second, Tinker and Curtis third, De Rochemont fourth.

Eleventh event, 5 glass balls.—De Rochemont first, Decker second, Barnard third.

Twelfth event, 7 clay birds.—Field, Sawyer and Sampson first, Decker and Draper second, Barnard third, Law and Eddy fourth.

Thirteenth event, 5 clay birds.—Law, Field and Decker first, Gove and Draper second, De Rochemont third, Eddy fourth.

Fourteenth event, 5 clay birds.—Law and Sampson first, De Rochemont and Decker second, Gove third, Sawyer fourth.

TORONTO, Ontario, Jan. 31.—To-day C. Cockburn, of this city, and George Grant, of Woodstock, shot a match of 25 birds each, 21yds. rise, for $300 a side, at Oulcott's Hotel, Yonge street. There was a large delegation from the city, as the match had excited considerable interest. There was not much betting, and no odds, but at even the Woodstock man had the call, as his townsmen were inclined to support him liberally. Cockburn missed his first bird through neglecting to have his gun cocked, but ultimately won by two birds. The following is the score:

C Cockburn.....0 1 1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 0 1 1—19
George Grant.....1 0 1 1 1 0 1 1 1 1 1 1 0 0 1 0 0 1 1 1 1 1 1 1 1 0—17

A second match will be shot at Woodstock during the coming week, also under the Dominion rules.

Subsequently, James Douglas, of this city, and John Forbes, of Woodstock, shot five birds each at $1 a bird. The result was as follows:

James Douglas.....1 1 1 1 1—5
John Forbes.....1 1 1 1 0—4

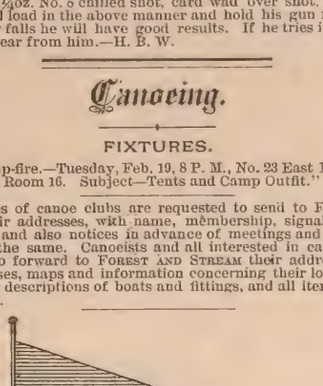
LOADING FOR CLAY-PIGEONS—Phelps, New York, Feb. 4.—*Editor Forest and Stream:* I use a Lefever hammerless gun, 10-bore, full choked, weight 9½lbs. I always use paper shells. For glass balls I use 4¾dr. of FF Hazard or No. 3 ducking powder, two No. 9 pink edge wads over powder, 1¼oz. No. 9 chilled shot, card wad over shot. For clay-pigeons I use 5dr. No. 3 ducking powder, two pink wads, 1¼oz. No. 5 chilled shot, card wad over shot. If "Clay-Pigeon" will load in the above manner and hold his gun right when the hammer falls he will have good results. If he tries it would be pleased to hear from him.—H. B. W.

Canoeing.

FIXTURES.

Winter Camp-fire.—Tuesday, Feb. 19, 8 P. M., No. 23 East Fourteenth street, Room 16. Subject—Tents and Camp Outfit."

Secretaries of canoe clubs are requested to send to FOREST AND STREAM their addresses, with name, membership, signals, etc., of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to FOREST AND STREAM their addresses, with logs of cruises, maps and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.



IRRAWADDI CANOE CLUB.

DAVENPORT, Iowa.—Organized April 27, 1883. M. C. Smith, Commodore; St. Clair Putnam, Secretary. Eight active members. Signal, blue gronnd with white letters.

NEW YORK C. C.

SEVERAL of the members have been afloat this week. On Wednesday last one of the members in company with a friend visited the club house, and on entering discovered two young men packing up the clothing of the canoeists in rubber bags. Each seized a man, but after a struggle one escaped. The other was taken before Justice Carey and committed for examination. The second man was afterward arrested by officer Hall and identified. The house had been entered through a rear window which was broken open.

Mr. Coudert is having a 14x80 cruising canoe built by Stephens of West Brighton. She will be lug rigged, with light iron board. The Red Rover has been sold to Mr. Wm. Childs, who will fit her with his new centerboard and make a practical test of it on a canoe. It has already been tried successfully on an oyster skiff. The board has been much improved during this winter.

Marmalade Lodge, Staten Island.—On Feb. 3, wind southwest, light, sun shining brightly, McMurray and Cooke, of N. Y. C. C., launched Jersey Blue, and started for a tandem paddle. The heavy ice had gone out with the ebb tide, and the paddlers encountered nothing worse than an occasional floating cake and a thin coating, newly formed, which was easily broken. The trip, though uneventful, proved eminently satisfactory to the participants, judging at least from their later actions.

LARGE vs. SMALL CANOES.

I HAVE just seen for the first time *Outing*, for last October. From the article on the canoe meet at Stony Lake, written by Kirk Munroe, I extract the following:

"In striking contrast to these airy skiffs, floating like egg shells on the very surface of the water, were the big Pearl canoes, exhibited by the members of another Canadian club, the Toronto. They are the largest and heaviest canoes built, and are best fitted for use in the rough waters of the British Isles, where they originated. They carry an immense spread of canvas, have iron centerboards, are heavily ballasted, and partake more of the nature of small yachts than canoes."

The "airy skiffs" he refers to are the open Peterboro canoes. Mr. Munroe then goes on to state that the American crusing canoes offer a happy mean between these two extremes.

From the foregoing, canoeists may infer that Canadian sailing canoes are all Pearls, or small yachts, and that the canoeists in the States would not use such heavy craft. In a late number of your paper a canoeist signing himself "Widgeon" also makes an attack on large canoes. I desire to reply to Mr. Munroe and "Widgeon."

Mr. Munroe has been a member of the New York Canoe Club for some years. Is he aware that the first Pearl built in North America was for Dr. Bronson of the same club? Mr. Oudin, owner of the Pearl Tramp, and Mr. Whitlock, of the No. 3 Pearl Ripple (since destroyed) are also members of that club. The latter craft carried more ballast and had a larger mast and sail area than was ever used on either of the Toronto Pearls. As a striking commentary on Mr. Munroe's remarks, I give a report of a race of the N. Y. C. C. on Sept. 29, just about the time Mr. Munroe must have written his article for *Outing*.

Canoe.	Sail area, feet.	Ballast carried including board, pounds.
Dot	95	75
Freak	105	110
Surge	73	125
Tramp	135	150
Esmeralda	85	60

Won by the Dot.

The Tramp is a Pearl, and the Freak as large as any Pearl. At least she is in class B, as a 16x30 should.

The Pearl and Nautilus models are English, but there are other models used in that country. I do not think I am mistaken in asserting that seventy-five per cent. of the thousands of canoes in use in Great Britain are Rob Roys and similar craft, while Pearls and other heavy ballasted canoes are not five per cent. of the whole.

I do not believe that Mr. Munroe meant to say anything against the Toronto Club, but I suppose he thought that in writing an article for the general public it was not necessary to be very particular. I feel all the more inclined to pardon him, for apparently he has seen the error of his ways and is going in for something larger than Pearls, and which is even outside of the liberal A. C. A. definition of a canoe. I suppose his Alligator will weigh more than a Pearl, heavy board included.

The Cincinnati club use large craft. Dr. Heighway and I think also Commodore Longworth use the Princess model, 15x31 at bottom of top streak. Rushton advertises three sizes of that model—14x31, 15x31 and 15x36; Stephens advertises, and has built, more Pearls than any other builder in America; the Racine Co. advertise double canoes 16x38 and 18x40, weighing 150 and 170 pounds respectively; Joyner, of Glens Falls, 16x36, and so on. And yet with all this I do not think that all future canoes will be large and heavy with iron boards.

"Widgeon" need not fear that all canoeists will wish to be racers, they will never number more than a small percentage of the whole. In all regattas there are always more races for the medium than for the extremes in either paddling or sailing. At Stony Lake a medium canoe, the Snake, entered for five races, and won four. In my Boreas I could only enter in one sailing race. In paddling canoes it is the same; the 28 or 30in. craft has a far better chance for prizes than the 24in. The A. C. A. regatta rules will—no doubt justly—always favor the all-round canoe.

"Widgeon" mentions the Stella Maris as a compromise type. Surely the Jersey Blue, the Ellard or the Lansingburgh models like Mr. W. Wackerhagen's Henrietta, are much more of a compromise than the Stella Maris. The Stella Maris is a Rob Roy with a little sheer, and is nearer the extreme in the way of small size than a compromise.

At the risk of being considered egotistical I give some particulars about my Pearl Boreas as a cruising craft. She is 14×32; board weighs 45lbs.; only one carried; carry no ballast; sails balance lug, mainsail less than 60ft.; dandy, a Racine lateen of 10ft; lines on deck one halliard, one reef line and the two sheets; can reef mainsail to 35ft. in any wind or in any position, running, reaching or closehauled, in five seconds; can shake reef out in one second; the hull weighs 190lbs; centerboard is removable at pleasure. I only weigh 130lbs. and am not as strong as a team of horses, yet I can take the Boreas out and in boathouse without assistance even when board is in.

Let "Widgeon" once use a balance lug simply rigged and I think he will admit it is the safest sail he ever tried. I have used all kinds—leg of mutton, standing lugs, lateens and balance lugs—and I swear by the latter.

"Widgeon" is unfortunate in his reference to the cruise of the Maria Theresa. Mr. Bishop used oars on the greater portion of that trip, and when he afterwards made the journey in comparatively smooth water down the Mississippi he used a sneakbox with oars. Let "Widgeon" read Mr. Bishop's reasons for making the change before he condemns all large canoes.

And now to close, will "Widgeon" come to Grindstone Island next August, and some day when a strong southwester is blowing and a good sea is being kicked up, I shall be happy to try a race with him, three or four miles dead to windward and return, he to paddle and I to sail.

HUGH NEILSON (Canoe Boreas).

CANOE OR SNEAKBOX.

Editor Forest and Stream:

I met a drummer on the Lake Shore train a day or two ago who was loudly arguing with his neighbor in the next seat on the question of the sailing qualities and general cruising efficiency of a sneakbox as compared to the modern canoe. The drummer maintained that upon large rivers and open waters, where portages are unnecessary, the canoe has no right to exist; that the sneakbox, when fitted with centerboard and balance lug sail, is a perfect little yacht, possessing ample cabin accommodations for crew, large stowage space and ballast enough to go to windward in a stiff breeze and sea.

Being interested in boats in general and canoes in particular, I took a seat nearer the pair, and under cover of a newspaper took it all in. The longer the cruise, continued the commercial man, the more marked the superiority of the sneakbox; take your proposed Florida trip via Ohio and Mississippi rivers, for instance. No canoe can be slept in many nights in succession without becoming strained, and consequently leaky, and before you reach Cairo you and the bailing can will be well acquainted. "Dunkirk," yelled the brakeman, and as I made my way to the door I caught the words, "Heavy, clumsy canal boat"—"Oars, too"—evidently from the other fellow.

Now, Mr. Editor, up to last Saturday I had intended to buy a canoe and cruise up the lake to Long Point this coming summer, but at present writing am somewhat undecided as to the proper craft, and would like to ask you in all confidence your opinion on the two questions following: First. Will a canoe compare favorably in sailing qualities with a sneakbox, each having centerboard and balance lug sail? Second. Is a canoe liable to become leaky after a fortnight's cruise, the crew (150 lbs.) sleeping on board every night?

Mr. Bishop, in his "Four Months in a Sneakbox," seems to agree with the drummer when he says: "Light indeed must be the weight and slender and elastic the form of the man who can sleep many nights comfortably in a 70-lb. canoe without injuring it. Cedar canoes, after being subjected to such use for some time, generally become leaky; so to avoid this disaster the canoeist, when threatened with wet weather, is forced to the disagreeable task of troubling some private householder for a shelter, or run the risk of injuring his boat by packing himself away in its narrow, coffin-like quarters and dreaming that he is a sardine, while his restless weight is every moment straining his delicate canoe and visions of future leaks arise to disturb his tranquillity."

My ideal canoe is a Racine Shadow, 23in. beam instead of 28in., built with more crown to deck and a trifle less freeboard, and provided with the pointed cockpit combing now in fashion.

By answering the above questions you will greatly oblige a "prospective canoeist." A. H. A.

[The canoe is superior to the sneakbox for general cruising on open waters, as it is fully equal to the latter in sailing and sea-going qualities; it is much more comfortably propelled, weighs much less, and can be much more easily handled on shore by one man and transported, as is necessary on almost all waters at times. It can be slept in comfortably and without any more danger of leakage than with the sneakbox, if reasonable care is used in placing the boat on a smooth surface and blocking the bilges. Mr. Bishop's remarks, written some years since, certainly do not apply to the canoes in use now, as many of them have records of thousands of miles as cruisers and are still dry. We would advise A. H. A. to try a canoe of 14x30 or 15x31½in., and shall shortly publish the designs of such a cruiser.]

THE LOG BOOK.

V.—DOWN THE MISSISSIPPI.

[*Continued from Oct.* 25, 1883.]

Editor Forest and Stream:

I believe that I promised you from Vicksburg a complete narrative of our trip down the Mississippi to New Orleans when it should be accomplished. I gave the account of the trip from Chicago to St. Louis, so the present one will consist entirely of our experiences canoeing on the Mississippi. We left St. Louis Wednesday, Oct. 17, with a strong head wind, and enjoyed(?) our first attempt at beating to windward.

It was, to say the least, not pleasant, for the wind blowing directly against the strong current, raised waves which for ugliness are unsurpassed. They are short, high rollers, just like the stern wash of a "stern-wheeler," and a boat has no time to recover after diving into one before the following one has washed the deck. Added to this, the river is filled with "eddies" which sometimes fairly threw the boat at right angles to our course; and to have one of these catch us and "head us off," when a strong puff necessitated "heading up," we found not conducive to any very great confidence in our own ability to remain "right side up." We had no mishap, however, although a capsize was narrowly escaped in several instances, and camped opposite Kimswick, where we remained over the next day, and gave the boat a much needed coat of paint. We found that, notwithstanding her hard treatment on the Illinois, her injuries were confined to a few scratches and "digs," none of which amounted to anything. She also was perfectly dry, in fact, she didn't leak a drop all the way down the river.

Friday morning we continued our journey, making about twenty miles, a very good run, considering that we didn't get away from camp until about noon. Being novices in Mississippi traveling, we were for a long time under the impression that our camping places must be situated upon the banks, although their steepness made them far from pleasant. They average about thirty feet high, and have become terraced from the different stages of water, so that carrying our "camp truck" up these rude steps was quite a tiresome occupation. Even after reaching the top the ground was not as inviting as it seemed from the river, being usually "hardened muck," so that one night, being forced to take to a sand bar on account of the inaccessibility of the banks, we found it so handy, clean and comfortable that we resolved to make the bars our camping places in the future, and with but one or two exceptions we did.

Of course every bar would not serve as a fit camping ground, some of them being entirely destitute of fire wood, but as there is a bar for every bend, and also for every island, not counting the ones that are "just bars" on their own hook, there are plenty of chances to pick out one with a drift pile on it. To the man who has done his canoeing on open water or small streams these drift piles are indeed a revelation. The river banks from St. Louis to Vicksburg we found to be fairly covered with logs, fence rails, slabs, tree trunks and general debris, in some places piled so high as to render futile any attempt to get back into the woods; and as most of the stuff was thoroughly seasoned, it was like having a woodpile in your back yard. After passing Vicksburg we found the wood not so plentiful, as the banks were more thickly populated and the "niggers" burnt it up, but enough can always be found to make a fire for a regiment.

But to return to our subject. We had fair winds the next few days, with the exception of one or two when it was dead calm, and reached Cairo Oct. 26. The distance from St. Louis to Cairo is 215 miles, and was made in ten days; but our record will show up better when allowance is made for three full days used up in painting and trying to keep out of the rain. An evil spirit seemed to pursue us in this form, for we were treated to rain storms about three times a week, and finally "knocked out" entirely by it. The night before reaching Cairo we camped about nine miles above it, and the next morning

started out about 10:30 with the expectation of reaching the city by 12 o'clock at the furthest.

However, as we approached the city, it seemed to recede, and instead of finding it on the Mississippi as we supposed, we were surprised to find on arriving at the mouth of the Ohio that a two-mile pull against the current of that stream was necessary before reaching the town. The Mississippi was rising and set back into the Ohio, so our row was not as hard as it might have been. About 4 o'clock, just as we had finished stocking up with provisions, we were favored with our customary rain storm, and things soon began to assume a decidedly moist appearance.

For some time we were undecided whether to "sit it out" all night on the wharf boat under a sort of projecting roof, or make for a camp. We finally determined to row down to the mouth of the Ohio, where we had seen a stranded barge, and see if we could find shelter in her. On reaching the bar, we commenced to unload our truck after having pitched the tent, and were soon visited by a man who told us he lived in the shanty on the barge, and invited us to come up and get dry by his stove. We accepted the invitation, and proposed that he join us in our repast which I proceeded to prepare. He joined us, or perhaps I should say we joined him, for the way he did stow grub was a caution. Meat, potatoes, bread, coffee, all disappeared with lightning rapidity.

After eating until the visible supply was exhausted, he informed us that it was the best supper he had eaten for months, and it was almost inclined to think the only one. He then went on to tell us about his affairs—how he had been laid up with fever and ague all the summer, and was just beginning to be around—and got us so much interested that we resolved to fill him up tight in the morning, and I guess we did, but there was a very perceptible hole made in our supplies. We left him and his barge that morning about 11 o'clock with a stiff northwest wind, and had good sailing all day. We passed a place in the river near Wolf Island, below Columbus, Ky., where the river runs like a mill race.

It was by all odds the wildest water in the whole length of the river. The eddies became veritable whirlpools, strong enough to have rendered sailing in a head wind quite dangerous. We now began to meet any quantity of ducks and geese, and spent a good part of the time anathematizing the hard luck that caused up to neglect to bring guns. We thought we had seen some game on the Illinois, but we quickly came to the conclusion that we had been mistaken. For every duck on the Illinois we saw fifty on the Mississippi, and the geese were extra. Ducks were as plentiful as blackbirds, and the geese were in flocks of from ten to one hundred. On one occasion I saw a bar fairly covered with them, and think that there must have been fully one thousand. This may seem an exaggeration, but when the fact is considered that the bar was about two miles long, and that the geese were stretched out in line over its full length like a regiment in review, I don't think my figures will look so large. The birds were very wary, however, and could be bagged with nothing but a rifle.

We got in revolver range several times, but the unsteadiness of the boat destroyed our chances. A man with a good rifle going down the river as we did could not only have lots of sport but could also pay his expenses, as each wild goose brought to a landing is worth from $1 to $1.50, and I think we could have got ten a day at least. The landing stores are filled with canned goods of all sorts, so that the geese would act the part of a well-filled purse. This would not be pot-hunting, I think, and so could not be objected to as being unsportsmanlike.

We reached Memphis Nov. 3, the distance from Cairo being 250 miles in round numbers. We were laid up about three days by rain and head winds on the way, but made a fair average notwithstanding. The river between Cairo and Memphis has a great many "chutes," which may be described as one of the passages around an island, and so called to distinguish it from the other passage called the channel. I believe that by taking the chutes between Cairo and Memphis we saved about twenty-five miles, and even more between Memphis and Arkansas City.

Below Arkansas City, which is about 130 miles above Vicksburg, there are few short cuts, although the river is full of bends. It is very encouraging, I assure you, to come upon a stretch of ten or fifteen miles and then see away off to the right, abreast of you, the smoke of some steamer and realize the painful fact that you will have to go twenty or twenty-five miles by river when a straight line would probably bring you to the same point in about eight.

The current, however, is always on hand, and one is not very long making twenty-five miles. I think the average current was about four miles an hour, and this, together with a pair of oars, would send us along about seven or eight miles an hour steadily. At first we were disposed to take short cuts, hugging the points, skirting the bars, etc., instead of taking the full curve; but we soon learned that the longest way round was in fact the shorest; for the swiftest current takes the longest sweep, and more than makes up for the distance gained in the "cut." The "chutes" for this reason are to be avoided below Arkansas City, but above the current is about as strong in the "chute" as in the channel. In going around Island 35, which is just below Randolph, Tenn., we had a smashing breeze over the starboard quarter and took the "chute," which saved four miles. The current ran like a mill-race full six miles an hour, and this together with the wind, sent us along faster than I had ever gone before in a small boat. We just "buzzed" by the snags, and I estimate our speed to have been not less than twelve miles an hour.

J. W. Keogh.

THE WINTER CAMP-FIRE.

FOURTH MEETING.

Among the inventions that have been perfected to a point of practical utility within the last ten years, three stand out prominently from all the others, namely, the telephone, the electric light and dry-plate photography. The last of these, while perhaps the least valuable to mankind in general, is of the greatest importance to the traveler, the explorer, and, above all, to the canoeist, as while in his case it may be carried without the least extra trouble, it is a companion for his leisure moments, it records faithfully his cruises, and enriches and verifies his log book.

The last "Winter Camp-Fire," held on Jan. 29, at 23 East Fourteenth street, was devoted entirely to this subject, and proved by far the most interesting meeting yet held. The Kit Kat club room was ornamented with canoe pictures of all kinds. On the walls were a large number of very fine photographs by Mr. L. W. Seavey, mostly taken in canoe cruises, while on the easels were several fine oil and water-color pictures of Scotch canoes and scenery, as well as large photos of the Mersey and Clyde canoe clubs, loaned by Mr. King.

Among the pictures sent in were two very fine ones, a trophy of fish, rods, etc., and a snow scene, bringing home a deer, by Mr. J. G. Walton, of Sherbrooke, Can.; some small views taken on cruises, by Mr. Van Deusen, of Rondout, and two pictures sent by Mr. Shedd, of the Springfield C. C. The latter, taken by Mr. Lazelle, a photographer of Springfield, are very fine pictures, and were greatly admired.

Mr. L. W. Seavey, an artist who uses both the canoe and camera to assist him in his work, the painting of photographic backgrounds, introduced the subject, comparing the work of the painter when out-doors, as in summer, requiring time and more or less bulky materials, besides much skill, with that of the photographer, with a compact camera and packages of plates, requiring but little time, and giving very valuable results. Touching on the discoveries of Daguerre and Talbot, Mr. Seavey described briefly the old process, and then passed to the modern one. First comes the question, "What to photograph on a cruise." The speaker suggested first a view of the canoe, its sails, gear, etc., and also the crew, then when once started, the camp each day, natural scenery, characters, and on the return, crew and boat again, making, with brief notes, a full and accurate record of the cruise.

As an example of the value of photography, Mr. Seavey exhibited a sketch and photograph of the same object, one the work of an hour or so, the other, more accurate in every way, the work of a moment. After describing in detail the pictures of his cruises, Mr. Seavey exhibited and explained the necessary apparatus, first showing several holders for containing the prepared plate, and keeping it perfectly dark, also the manner of keeping a record of exposures on each holder.

An 8x10 camera was then shown, and the various parts explained. This camera was arranged with one large lense and two small ones for stereoscopic work, on one front, either the single one or the pair sliding into position at will. The drop shutter was also shown and explained. Another camera, a Pearsall, 6½x8½, was arranged very compactly, dispensing with an outside carrying box. Two novelties in this apparatus were a small roller curtain of tracing cloth to receive the image in focusing, instead of the ground glass commonly used, and a second bellows hinged to the back, also used in focusing in place of the focusing cloth.

One of the latest novelties in cameras is the gun camera, a box for 4x5 plates, fitted with an instantaneous shutter, worked by a trigger, the whole being carried on a common gun stock. A sight is used on top of the box. Still another similar instrument is known as the "Detective Camera," an oblong box about 4x6x8in., the lense and shutter being in one end. On top is a brass handle, and on one side is a small lense and a focusing glass about 1in. square, on which is shown, to a reduced scale, the image on the plate. The box is held in one hand, the position of the image on the plate adjusted by observing the image thrown by the supplementary lense, and the drop operated by the other hand. A number of very fine pictures taken with this camera by an amateur were shown with it.

Mr. Barnard exhibited a small but very compact camera mounted on a tripod called the "Reporter's Camera," as well as some views taken with it, after which Mr. Seavey explained the process of developing the plate, illustrating his remarks by developing two 5x8 plates exposed during the day. The subject for the next meeting, on Feb. 19, at the same place, is "Tents and Camp Outfits." The meeting adjourned at 10:30 P. M.

PITTSBURGH CANOE CLUB.

Editor Forest and Stream:

The first social meeting of the P. C. C. for 1884—a dinner given by our newly married Lieutenant on the 8th—was promptly followed up, and eight members—all who are now in the city—gathered around the festive board of the commander of the Lotos Flower at an early hour on the evening of the 25th. The good things thereon were only equaled by the feast of reason and flow, etc., and, starting with many a reminiscence of the ever memorable progress down the Allegheny last season of "eight canoes and a grub boat," the conversation quickly pread to all things pertaining to our noble pastime.

At length, the table being cleared, and eight pairs of legs extended thereunder with great sense of personal comfort to their owners, amid the fast thickening but wholly peaceful smoke, the idea was advanced that our "camp-fire" must surely be as pleasant as any held this winter in your city of New York. "'camp-fire,' quotha! as well call it an oil stove." The suggestion was received with the approval it so well merited, and for all time to come the archives of the P. C. C. bear record that at the second Oil Stove of January, 1884, such and such important business was transacted.

Among the questions discussed was that of the proposed change in our burgee, already noted in Forest and Stream, and a committee was intrusted with the task of ascertaining whether a device sufficiently like an oak leaf to be recognizable can be produced in gold upon a blue field. The proposed A. C. A. badge was heartily approved, and most present seemed to prefer the A. C. A. burgee, the colors of which can doubtless be sufficiently represented by ye cunninge artificer in ye preciouse metalls.

After this the conflict raged between the advocates of veneer and clinker build, all manners of steering gear held up for admiration and ruthlessly torn to pieces; and the fact developed that our small assembly embraced all classes; from the admirer of "simplicity" as exemplified by the lateen to one who, not satisfied with jib, fore and mainsails on a St. Paul, is now designing a topsail.

The oil stove burned brightly until the small hours, and then we wended our way homeward through an atmosphere thick with hoar frost. As we crossed the suspension bridge over the Allegheny we looked down shudderingly at the icy waters beneath, and, when the end was reached, cleared the chunks of ice from our moustache to hail the toll collector as to the state of his thermometer. The laconic answer came back "Two below."

Katrina.

THE GALLEY FIRE.

AN IRISH STEW.

Put a few splinters of wood in bottom of pot, on them place about one-quarter pound pork, sliced, and about one quart of water; let it boil ten minutes, and add two parsnips, pared and sliced, boil ten minutes longer, skim if necessary and season with pepper and salt; then place in half a dozen potatoes and boil twenty minutes longer or until the potatoes are done. This makes a hearty and savory mess.

Q.

CANOE PHOTOGRAPHS.—We have received from Mr. C. M. Shedd of Springfield, two very handsome photographs of the S. C. C. and their fleet of canoes, the work of Mr. E. J. Lazelle. The picture is taken with a "revolving camera," the only one used in the United States. The camera is first pointed directly across the river, and then revolved toward the north, giving the appearance of great width to the river. The results are very fine, especially when it is considered that the boats were in a swift current, and the house, as well as the raft on which the camera was placed, were both in motion.

HARTFORD C. C.—The H. C. C. have adopted as a sailing signal a red crescent one inch in length for each foot of length of canoe, with a red five-pointed star next the upper corner.

AMATEUR CANOE BUILDING.—This subject will be continued next week.

Yachting.

THE BOOM IN CUTTERS.

NEVER before were so many cutters on the stocks at such an early date as this season. We have already given particulars of four new cutters building by Lawley & Son, of South Boston; one by Williams & Stevens, of Lowell, Mass.; two on the stocks in Driscoll's yard at Greenpoint, and one in the shop of Stephens, on Staten Island, which, with the Daisy to be imported, makes a total of nine. We now add number ten, the keel for which is to be laid by Poillon, of Brooklyn. She is 51ft. loadline, from designs by her owner, a member of the Seawanhaka Corinthian Yacht Club, and will be similar to the Oriva. Number eleven is to be the biggest yet attempted in this country, for the owner of a well-known schooner. The design is now being struck in by A. Cary Smith. She is to measure 75ft. loadline, with four and three-quarters to five beams. We also know of many other cutters contemplated, and count on twenty or more of the kind for next season. The readiness with which we are taking to the cutter is the best proof of the growing fondness for real yachting in contradistinction to insipid dawdling.

COST OF YACHTS.

MR. HARVEY states that to build a large schooner he has designed in America will cost fully one-third more than in England. The prospective owner has determined to build in England. As the yacht will cost about $60,000, it was thought a little too high to pay $20,000 for the privilege of an American register. As the move for free trade in ships is now gathering force, the new schooner may after all be entitled to the flag of the country by the time she appears in an American port. It is even now found cheaper to buy yachts as good as new abroad and pay duty than to build in our yards. This can only be done with yachts under twenty tons which can be imported upon a nominal valuation as "wood manufactures." The Madge was assessed at $1,500 and the duty paid was $500. Her original cost with outfit was under $4,500. She could not be duplicated here for less than $6,000. It is likely more yachts will be imported as the number of good vessels at reasonable figures to be had abroad is legion, with the advantage of all sizes, kinds and rigs to pick from. The ten-ton cutter Florence, for example, with a record as a racer, can be had for $2,500, or less than half the money a new yacht of the kind could be built for here. She is about of the Madge's proportions. The importation of foreign yachts is something which has only just begun and is likely to assume great proportions before long. It is well to warn builders in time of what the near future will disclose, so they can shape their policy accordingly.

Greater business tact and more enterprise are needed if the competition from abroad is to be staved off. An English yacht, three to five years old, from the hands of a crack builder, which has been well taken care of all the year around, is not only cheaper, but a stronger, better and more stylish job than a brand new yacht from any of our yards, as she is built to much more thorough specifications in the first place, and will outlive home-built craft two years to one, to say nothing of the outfit which comes along. There are those silly enough to confound throwing dust in people's eyes with "patriotism." They are the worst enemies of all yachting interests in America. Unless our builders wake up on all tacks, they will find their avocation slipping from under, free ships or no free ships. We know, as an illustration, that the cutter Daisy, only two years old, fully as good as new, and of vast deal better build and fittings than boats of her size of American origin, can be imported, duty paid, for little more than half the cost of a new yacht, inferior in all points, built in New York or Boston. We know that she will cost afloat in these waters less than the figures at which four-year old sloops were offered, with their poverty-stricken rigs and forlorn equipment. Seven years hence those sloops will be worthless for aught but firewood. Seven years hence the Daisy, fairly well looked after, will still fetch half the money laid out. Can any one blame her owner for his good sense in looking after his interests and buying abroad when such advantages are held forth? And is it not likely a great many will follow his example?

Will our builders take warning while there is still time, or will they wait till crippled or swept away altogether by the coming deluge of importations? This is certain, "patriotism" must be hove overboard at once. Instead of blowing upon achievements in the past, the stern present must be looked in the face. Our yachts are woefully wanting in equipment, style and finish, whatever may be thought about model and method of build. People who travel are learning to appreciate the truth of all this. Once let importation obtain full sway and neither progress nor real merit of our home productions can stay the influx for a long while to come. There is no desire on our part to cry "wolf." We are posted on the drift of public opinion, and know that many have in mind purchasing abroad, because they get more and better for their money. Pot bellies and stub-tail sterns, cheap and homely rigs, paint bedaubed decks and graceless superstructures, clumsy scantling and stingy fastening, crude taste, offending want of symmetry and corelation in all parts and belongings, gawkiness aloft, uncouth pose, and the provincial vapidity all over, one and all, and a great many other technical laches must give way to a more discriminating and exacting taste, a higher degree of intrinsic worth and superior mechanical completeness.

SOME REMINISCENECES.

A GENTLEMAN of life-long experience in yachting writes us that he takes great interest in the development of seaworthy boats, and that his own observations lead up to conclusions identical with our own. As far back as 1836, when the Northern Light was built by the late Col. Winchester, he made several runs in her from Boston to Newport and the westward. She drew 10ft. of water with ballast moulded as low as it could be got. She was a keel boat, and nobody ever asked how the weather was going to be, for she was always got underway at the hour determined and took it fair or foul and rough or smooth, as it happened to come. In 1840 he built the Gypsy, 39ft. loadline, 12ft. beam and 5ft.6in. hold, with 7ft. draft and a keel, as all good boats were built in times gone by. She was run four years about the coast, gunning and fishing. When it blew she was reefed down, and when it came out too heavy to look to windward, she was allowed to lie to. In 1845 he built the Pet, 32ft. loadline, 10ft. beam, 6ft. hold and 5½ft. draft, with 25 tons moulded to the floors. She, too, was a keel, and no one objected on the score of her draft. Yachtsmen were sailors then and knew how to appreciate a good boat. She was sold to Savannah pilots after a successful career as a racer in all kinds of weather. She left Boston in company with a ship bound the same way, and a purse was made up for a match into port. Pet captured the money, half the voyage under two reefs in a gale of wind.

In 1846 he constructed and fitted the Coquette for Jas. D. Perkins. She was 66ft. long, 19ft. beam, and 10ft. 6in. draft with keel. This was the memorable boat which took the starch out of Stephen's big smooth-water machine Maria, in a match twenty-five miles to leeward and return off Sandy Hook, Oct. 21, 1846, in blowy weather and a jump. Time, six hours and fifty-six seconds. Maria was much the larger of the two, but depth and draft were then as now, more than a match for board and flat bottom. The same gentleman now has a deep catrig yacht 23½ft. long, which lords it over Buzzard's Bay in a reefing breeze. Two things, he writes, his experience has demonstrated necessary in a good boat. You must have depth with draft and weight for the most satisfactory performance. Beam may be left an open question, as it will adapt itself to the rest, or else the boat will be indifferent under sail when beam is carried to excess. He sailed the sloop Una, a deep boat with four beams to length. She was a trump in a breeze and sea. In the good old days yachtsmen were on the right track. All the more strange we should ever have swerved so far from the lessons of experience, and all the more reason why we should sheer broad off from the flat bottom river traps, and once more return to honest construction with the depth, draft and weight a good boat ought to have.

HOW NOW?

IN the report of the British Y. R. A. committee on measurement for small yachts occurs the following passage:

"The fact cannot be overlooked that a rating by length would *fail entirely* to class boats unless they were all of one particular type. For instance, during the past two seasons the Chittywee and Mascotte, two yachts of three tons, built to compete under the tonnage rule, sailed against the most recent specimens of 30-footers with the result that they (Chittywee and Mascotte) were beaten over a seventeen mile course by about 13min. This result was due mainly to the fact that the broad 30-ft boats are able to carry a much larger sail spread than the narrow 3-tonners, in consequence of their *greater weight* and beam."

That is to say, the experience gained by sailing small, narrow cutters against larger, heavier, bulkier boats in Southampton waters has plainly demonstrated that *bulk* on a given length, when properly shaped, is an element of speed! That it cannot be fair to sail small and large boats of like length without an allowance to the smaller one for the greater possibilities for speed possessed by the larger boat.

The committee therefore proposed to roughly measure such differences in size by taking the larger sail area of the larger boat. Bulk or bigness which finds its expression in sail area in yachts of normal shape and like construction is then, according to the Y. R. A. committee's conclusion, really the just basis for allowance between boats of like length. A stronger and more obvious indorsement of the equity of bulk measurement from better authority could not be forthcoming. The recommendation amounts to this: You are to be limited for classification purposes to a certain length and pay for differences of bulk on that length as expressed in the sail area. As there is no especial reason whatever for limiting a designer in the choice of one dimension more than in the remaining two, the next step in common logic will be to permit the free selection of length just as well as beam or depth, with a penalty attached only to "bigness" regardless of the form it assumes. Then, and not until then, will the measurement question come to a rest.

The committee likewise indorse the position of Forest and Stream concerning the extravagant forms and great expense to which the length rule leads directly. The biggest boat, biggest displacement and rig. The greatest outlay of money and the exclusion of all moderate forms and rigs of the same length. In place of a long boat of economical proportions, the length rule induces a shrinkage of useful length and eschews economy, prohibiting in its taxation of length, all boats which are not the clumsiest, most expensive and unhandy in connection with the least practically available accommodations.

The committee's decision is a death stroke to length measurement abroad and will not be without its influence in bringing about a clearer understanding on this side of the Atlantic of the prejudice and evil tendencies of measuring by "simple length."

GIVE IT SUPPORT.

WE publish herewith an appeal to all hands of more than ordinary importance, and hope that at least the proposal to build up general yachting headquarters will at once receive enough support to justify taking further steps. Whatever may be thought about the practicability of forming a racing association for the government of clubs, the scheme to institute a great central rendezvous with accommodations and facilities of use and benefit to every owner and friend in sympathy with yachting ought not to be allowed to fall through for lack of encouragement to the committee having the matter in charge. In unity there is strength, and should the New England organizations all contribute to the establishment of a congress having tangible existence, the move would be a step ahead of anything yet undertaken, and would redound to the credit of the prime movers and the whole of New England, as it would likewise be of inestimable benefit to the progress and popularization of the sport. Centralization and action as a united body would quickly supplant influences only spasmodic and local with wide-reaching sway and prestige instead. It is above all else the one thing most needed for the growth and prosperity of yachting. There are a hundred persons who might and ought to own yachts to every one actually flying his burgee aloft, and nothing would contribute so much to fresh accessions to the fleet as a common heart to reflect the pulsations of yachting life. It is to the activity of New England and the ripe development of its yachting we look for the birth of ideas and practices in time to become the standard along the whole coast, and we hope the expectations raised in the subjoined proposition will not be doomed to disappointment through individual lethargy or fatal delay. All hands should clap on without any hesitation. Aid and abet the scheme now while aid from every man is needed:

NEW ENGLAND YACHTING ASSOCIATION.

YACHTING CONGRESS.

Among the yachtsmen of New England, especially those residing near Boston and belonging to many of the clubs, there has long been felt a desire for a greater uniformity in measurement, time allowance, and all the details of yacht racing rules and regulations.

In order to effect this, and establish a permanent congress for the consideration of these points, and also the best method of promoting their adoption, it is proposed that, annually, each club appoint one or more delegates, who shall meet as often as may be necessary.

It is also suggested that such a congress would afford a proper authority for the settlement of any important questions arising during the racing season.

YACHTING HEADQUARTERS.

As important and desirable as the foregoing, is the establishment of headquarters for all yachtsmen belonging to any recognized yacht club, to be supported by its individual members.

The advantage of such a headquarters is manifest to all yachtsmen. It would afford a rendezvous for the meeting of those heartily interested in yachting, there to discuss the events of interest in seasons gone by, and to arrange and plan for the future. The best types of hull, and the best rigs, spars, and sails could be thoroughly discussed.

All yachting magazines, both foreign and American, and such yachting publications as may be desirable, could there be found.

A bulletin for news, exchanges, sales of yachts, etc., could be established. It would afford a repository for all new inventions connected with yacht building and fitting, and numerous other advantages would inevitably arise from the establishment of such an organization, which, it is believed, could be started and maintained at a moderate yearly due.

It should be distinctly understood that while the yachting congress before mentioned, though being under the same head of the New England Yachting Association, is entirely separate and distinct in its workings. It would be entitled, of course, to the free enjoyment of all the privileges of the headquarters.

In order to approximate the support this enterprise will receive at its inauguration, the committee appointed to select rooms for the headquarters and to ascertain the probable expense of the project have concluded to send with this circular to each member of the different yacht clubs of New England a postal, with a request that all who will aid in the start and support of the association will return the same with favorable answer. The next general meeting of delegates, committee and club members interested in this enterprise will be held at the Parker House, Boston, Thursday, Feb. 7, at 7:30 P. M.

Committee.—C. A. Perkins, Chairman; Fred. Pope, W. L. Jeffries, L. M. Clark, Henry Bryant.

SMALL BOATS.

THE cause of small cruising yachts is looking up. Inquiries for models, cost of building, etc., pour in upon us, and builders, notably from towns along the Chesapeake Bay and on the lakes, and many exhibit a preference for the yawl rig. One inquirer wishes to know how to steer with a tiller in a square stern yawl, the mizzen-mast interfering. The tiller should be made of iron, with an elbow or bend in wake of the mizzen, so that it can be put hard over without striking the mast. Or the tiller may be split open, the mast passing down through the hole, which should be elliptical with the major axis athwartships, and long enough to permit the required play to the tiller from side to side. Such a tiller could not be unshipped. Application of a little mechanical genius could easily overcome this drawback. A number of single-hand yachts are already under way for owners in this city and in Boston, of which particulars have been given. No form of yachting becomes more intensely absorbing than single-hand sailing when rightly pursued. The fact of being captain, crew and cook, with no divided responsibility, completely unfettered, at liberty to commit all the blunders you like, unanswerable to anyone but yourself for the consequences, with the sense of perfect freedom, and the consciousness that all depends upon action and judgment of your own, contribute to surround single-hand sailing with an amount of irresistible fascination and a fullness of realization which never pall upon the taste but incite the appetite for more, which no end of cruising nor advancing age can appease. To the youngster, to the man, and to the veteran at the helm, sailing single-handed is sport unequaled. And this is within the reach of the millions, as soon as they learn of what a good boat consists. The San Francisco *Breeder and Sportsman* has the following on the subject:

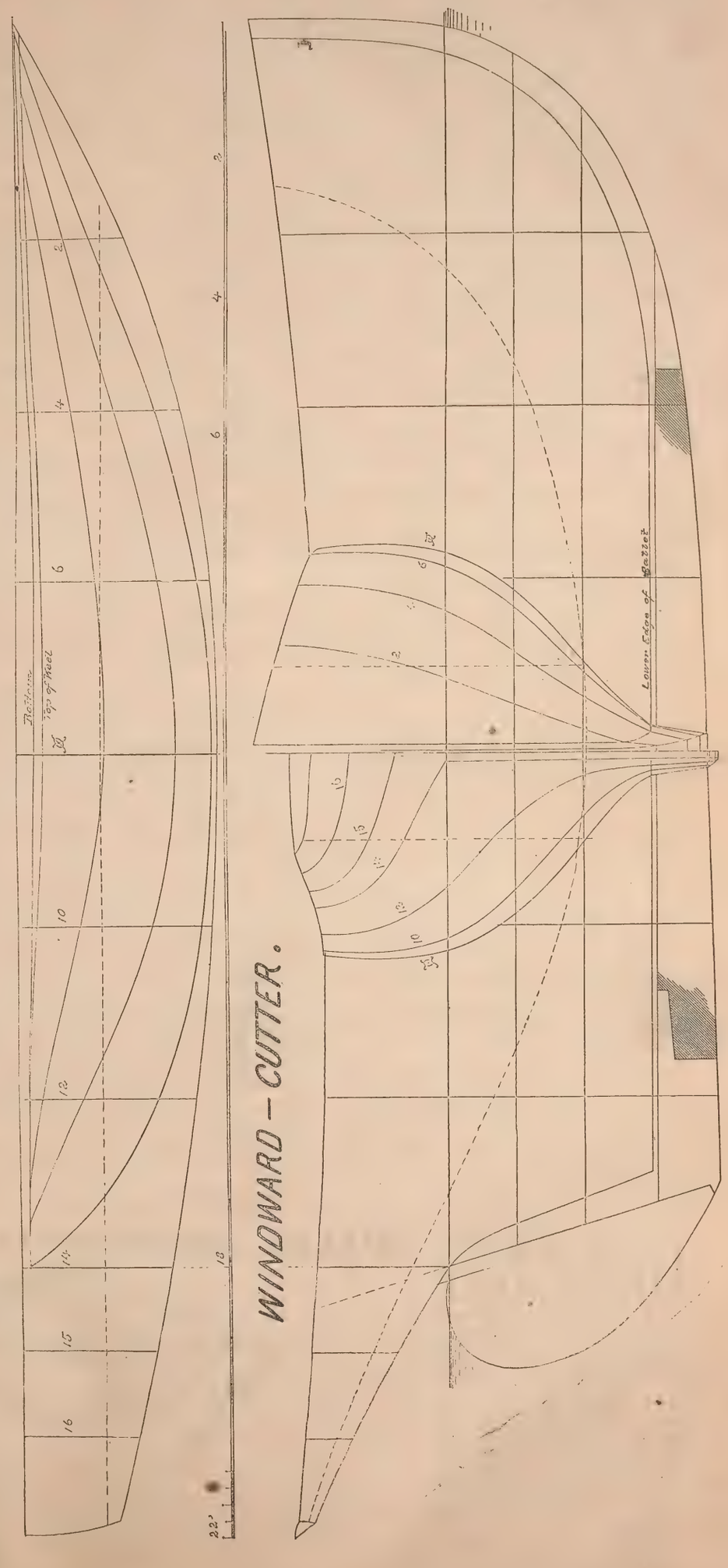
"Learning to sail in small vessels makes a sailor of a man, for the reason that everything that is necessary to be done must be done by himself or one of his companions, not by paid seamen. When a gentleman without any previous experience builds a large yacht and attempts to sail her himself, it is about a parallel case of teaching an apprentice of any trade by putting him at once on the most difficult work to be found. After a long time he may succeed in doing the difficult work, after a fashion; but how much better does the apprentice who has worked his way up to this same work. Again, when the gentleman finds that sailing a yacht is not such a simple thing as he fondly imagines, he becomes disgusted and also sells out, almost always at a terrible sacrifice, and not only retires himself, but deters others from his experience from interesting themselves in yachting. We can recollect when the Lively, yawl Ariel, and other boats of that build and size, had special prizes offered for their build and class, and they used to go over the course in the heaviest kind of weather, and have as much interest taken in their movements as in those of the large yachts. This was as it should be, and this built up a hardy race of yachtsmen, many of whom are still with us. Encourage the small yacht owners, give them place in your discussions, endeavor to get more people to build small yachts, and then, after a season or two of such a system, you will see and admit the truth of the foregoing remarks."

Additions have lately been made to the fleet of small yachts in considerable number. There was not long ago an impression that small but deep keel boats could not be made to sail or show speed and that in spite of their solid advantages in respect to room, safety, and general cruising adaptability, they would not become popular because lacking in speed. This was the theory of the old skimming dish school, and was clung to tenaciously by many who have since learnt otherwise. For example, sundry members of the Larchmont Y. C., had been indulging in the usual idle gossip and fantastical exaggerations about the speed of the centerboard sloop Gleam, belonging to Mr. Lawton, the little unpretending keel cruiser Aneto being at the same time cited as a style of boat unable "to get out of her own way," etc., etc. This kind of silly gossip reached its height on a certain day last fall. Next morning there was a nice sailing breeze blowing, which brought the extravagantly sparred machine Gleam down to a couple of reefs. The Aneto, with a snug yawl rig, which every one knows to be less effective than sloop or cutter, happened to get under way at the same time, and an impromptu match was arranged with the result that the despised "old hulk" gave the Gleam such an out and out tanning on all points, that the day has since become memorable for the conversions effected.

The conclusion fell like a bombshell in the camp and blew to atoms many cherished theories and groundless prejudices. Needless to say, that Aneto and her class are spoken of since then with profound respect instead of derision. It is not always safe to judge of a yacht by ruling customs or standards of beauty. A high side and short counter may not be attributes of beauty in the eyes of those educated to a sandbagger's proportions, but freeboard and low weight with good lines below in the Aneto were discovered to clothe qualities of greater intrinsic value than the assumed beauty of outline with which Gleam's friends invested the sloop, and upon which they too hastily decided beforehand the relative speed of the two yachts. We believe Aneto is to have her overhang spun out this spring, and that she will also receive a racing rig. In that event, she may surprise her detractors in light weather as completely as she already has done in a blow. Meanwhile, the building of small cutters has taken a fresh start, and accessions to the fleet of small yachts are promised for the coming season. The time is not far distant when a club will be formed in New York especially devoted to the interests of yachts under 30ft. loadline. If this move be started by the proper persons animated with the right spirit, a future is certain which will eclipse in point of membership and activity any organization in these waters. There is field enough to draw upon for a thousand members and five hundred yachts, with club house and anchorage second to none of the existing institutions.

We publish herewith the lines of a new cutter, now planked up in the shops of W. P. Stephens, of Staten Island. She is a very taking boat, out of which the maximum of service can be got at merely nominal expenditure for keep. For cruising and fishing and for general yachting life afloat, as well as for racing, boats of this class appeal to the masses who wish to indulge in rational sport upon a small outlay of money. Such boats are not mere outlines of regular yachts like the sandbaggers and open boats, nor mere harbor-drifters, like other makeshifts, but fit for all the work and service to which a large and costly vessel can be put, differing from their big sisters only in tonnage and the distances they can cover in a given period of time. This new boat is building for Mr. Willoughby, who has "tired of keeping sailors' boarding-houses," and now proposes to do some sailing himself. The rig will be either yawl or cutter. Small cockpit and sail hatch aft and hatch over cabin.

Length over all	22ft.
Length on loadline	18ft.
Beam extreme	6ft.
Depth of hold	4ft. 9in.
Draft extreme	4ft.
Draft mean	3ft. 4in.
Least freeboard	1ft. 9in.
Displacement	116.6cu.ft.
Displacement in tons, 2,000lbs	3.75 tons.
Coefficient of fineness	0.224
Iron on keel	1,500lbs.
Iron inside	2,060lbs.
Ratio of ballast to displacement	0.5
Area loadline plane	69 sq. ft.
Area midship section	11.2sq. ft.
Area longitudinal section, no rudder	65.6sq. ft.
Area wet surface, no rudder	173 sq. ft.
Area of rudder, both sides	11.6sq. ft.
M. S. abaft center of L.W.L	1.5ft.
Center of buoyancy ditto	0.72ft.
Center of lateral resistance ditto, with rudder	1.43ft.
Center of buoyancy below L.W.L	1.16ft.
Meta center above center buoyancy	1.32ft.
Center buoyancy forward of M.S	0.78ft.
Center lateral resistance ditto	0.07ft.
Area lower cruising sails	450.00sq. ft.
Sail per square foot wet surface	2.06sq. ft.
Total wet surface per ton displacement	49.2 sq. ft.



THE LIFE-SAVING SERVICE.

THE service embraced at the close of the last fiscal year 194 stations, 149 being on the Atlantic, 37 on the lakes, 7 on the Pacific, and 1 at the Falls of the Ohio, Louisville, Ky.

The number of disasters to documented vessels within the field of station operations during the year was 300. There were 3,792 persons on board these vessels, of whom 3,777 were saved and only 15 lost. The number of the shipwrecked who received succor at the stations was 651, and to these 1,879 days' relief were afforded. The estimated value of the vessels involved in these disasters was $5,100,925, and that of their cargoes $2,075,615, making the total value of property imperilled $7,176,540. Of this amount $5,611,800 was saved, and $1,564,740 lost. The number of vessels totally lost was 68. In addition to the foregoing there have been 116 disasters to smaller craft, such as sailboats, rowboats, etc., on which were 244 persons, 240 of whom were saved and 4 lost. The property involved in the latter disasters was $66,180, of which $59,900 was saved and $6,280 lost.

In addition to those saved from vessels there were twenty-two persons rescued who had fallen from wharves, piers, etc. Of nineteen persons lost nine were drowned by the sudden capsizing of vessels before assistance could reach them; seven were lost in endeavoring to get ashore by their own efforts, one perished from being thrown overboard and one died as soon as landed.

The number of disasters last year exceeds by seventy-one the number of disasters of the year preceding, which was considerably larger than that of any previous year in the history of the service. The amount of property involved was $2,476,493 greater than in the preceding year, but the amount lost $88,750 less than that of the preceding year.

The assistance rendered during last year in saving vessels and cargoes has been much larger than in any previous year, 337 vessels having been worked off when stranded, repaired when damaged, piloted out of dangerous places, or assisted by the station crews. There were besides 125 instances where vessels running into danger of stranding were warned off by the night signals of the patrols.

Since the last report seven additional stations have been completed—one at Hunnivell's Beach, Me.; one at Muskeget island and one at Coskata, Nantucket, Mass.; one at Brigantine Beach, N. J.; one at New Inlet, one at Cape Hatteras, and one at Ocracoke, coast of North Carolina. Four other stations are in process of construction and approaching completion—one at Lewes, Del.; one at North Beach, Md.; one at Wallop's Beach, and one at Parramore's Beach, Va.

There have been nine sites selected for new stations which it is proposed to erect soon—one at Brenton's Point, L. I.; one at Grand Marais, Lake Superior; one at Frankfort, one at Pentwater, one at White River, one at Holland, and one at South Haven, Mich.; one at Michigan City, Ind., and one at Sturgeon Bay Canal, Wis.

AMATEUR LOGIC.

NOT long ago Mr. N. D. Lawton undertook to enlighten the public in the matter of measurement through the columns of the *Herald*. Mr. Lawton averred that experience had shown the narrow five and three ton cutters unable to compete with the beamier Itchen boats of same length.

If a broad boat is faster than a narrow one of same length, it must be evident that a length rule places a premium upon the construction of beamy boats, and exhibits in its workings a prejudice in favor of one style at the expense of another, which no equitable rule ought to do.

Again, if the broader boat is the faster of the two, by virtue of her enjoyment of beam, then how can a comparison by length alone be logical or fair with another which does not enjoy like possibilities for the production of speed?

By Mr. Lawton's own argument the fallacy and deleterious working of "simple length" are shown up in all their nakedness.

Length rules are well enough as long as boats are all of one type. But in that case the diameter of the galley stove pipe will serve just as well. It is in the competition between different types that the prejudices of "simple length" are quickly discerned. As deep boats of great beam are the most expensive to build and sail and dip to the greatest draft of water without returning in proportion anything worth having, unless it be accommodation for a party of picknickers in a cockpit, the simple length rule will never receive the indorsement of persons who appreciate the economics of design and cruising. Moreover, any rule which frowns down free choice of forms but artificially stereotypes particular proportions, brings progress to a standstill. If Mr. Lawton is correct in his statement that the greater beam of the Itchen boats has been shown to give them greater possibilities for speed, it follows that beam should pay upon exactly the same ground which is advanced for the taxation of length. This is in the main accomplished by the sail area and length rule, as, broadly considered, every addition to beam as well as to depth increases stability and the canvas carried in consequence. While we are unable to concede any sound theoretic basis or accurate application to that rule, inasmuch as it supplies in most cases a crude comparison of the actual sizes of boats, it is certainly far preferable to that simple length, the equity of which Mr. Lawton has so effectively if unwittingly impeached in citing the supposed performance of narrow cutters in comparison with beamier boats. But Mr. Lawton owns a nice little round bowl as broad as she is long, and being no great sailer except in light weather through the aid of an extravagant area of sail, the key to prejudice is easy to find. Every man for his own boat and to the devil with equity.

CONCLUSIONS OF Y. R. A. ON MEASUREMENT.

THE committee appointed by the Council of the British Y. R. A. to report on the lengths which should be recommended for adoption in the length classes met on Monday last. The members of the committee were Mr. Frank Willan (chairman), Col. Dugmore, Mr. W. Baden-Powell, Mr. Henry Crawford, and Mr. G. B. Thompson.

The committee having heard various letters read from different clubs which had been asked to express their views, unanimously decided to recommend that the classes should be 21ft., 25ft., and 30ft., and that boats exceeding a class length must go into the class next above if raced.

The committee also decided to recommend that for time allowance in the different classes the sail area rule of the Y. R. A. should be used with the Y. R. A. time scale by tons. The rule is as follows:

$$\text{Tons} = \frac{\text{sail area} \times \text{length}}{6000}$$

The committee came to this decision because the types of boats around the coast vary to a large extent, and, even in any particular locality, there is considerable variation of type. A simple length rule would not therefore enable these boats to compete together in a satisfactory manner, and, moreover, the old boats which have been outclassed owing to the greater weight of lead keels and larger sail areas of the newer boats required to be considered, and it is hoped that they will be able to compete with some chance of success under the sail area rule. Beyond this the cost of producing boats in the length classes year by year increases just as it has in the tonnage classes, and the committee thought that this growth of the expense should be controlled if possible, as it tended to limit the sport to a few.—*London Field.*

We may add that experience on this side of the Atlantic bears out in full the conclusion of the British Y. R. A. committee that boats of varying type cannot fairly be classed by simple length, and that such a system of comparison leads to the largest and most expensive boats on the length, driving all moderate sizes with moderate rigs out of existence through the failure to measure size sufficiently near the truth. While the sail area and length rule does not accomplish this in all cases, it comes so much nearer to a relative estimate of size in the majority of instances and extends proper consideration to reasonable forms and rigs that it is to be preferred to simple length. After a reasonable size has been reached on a given length, a further increase, whether in the depth and displacement of cutters or in the beam and above water bulk of a sloop, adds nothing in the economics of a yacht worth having, but increases the expense of build and commission. The additional size, however, supplies further power and ability to the boat and, escaping taxation under a length rule, compels building up to an undesirable extreme in cutter as well as in sloop whether you like it or not. When taxed through the sail rule, the compensation granted to smaller boats permits the choice of a moderate form and equity in racing against larger and more powerful yachts of the same length, which is as it should be in justice to all and with regard to latitude of model, allowing every one to settle upon size and rig he prefers without prejudice to any style. The logical derivation of sail area and length is open to question, but in its practical workings it is much more rational and less proscriptive than comparison by simple length.

THE NEWPORT MATCH LAST YEAR.

Editor Forest and Stream:

I am not surprised that Fortuna should be the favorite of FOREST AND STREAM over schooners of the American idea. Sound Fortuna's trumpet all you please, but don't make assertions about other boats that you cannot prove. You state that in the Newport race last summer Montauk, "on edge and battened down," barely beat Fortuna five minutes, when the fact is, there was not a hatch or skylight closed on Montauk in the race, and so far from being "on edge," there was no time during the race when she was down to her scuppers. At the finish Fortuna just weathered the lower end of line, while Montauk had to bear away to cross. Fortuna could not have reached the windward position in which Montauk crossed in fifteen minutes. The apparent better time of Fortuna down the wind was simply the result of advantages and by Fortuna holding on to her kites longer than Montauk. The fact that Montauk beat Fortuna easily down the wind when the squadron left Newport proves the boasted superiority of Fortuna down the wind is pure fiction. Montauk stands upon her merits, and, though losing two drift races, she has never yet been fairly beaten. GUEST.

[Concerning hatches being battened down and sailing on edge, our information was derived from several sources. As but little of the match could be seen, we, of course, accept the correction made by a "Guest" on board the Montauk during the race. We have likewise reports from different sources that Fortuna was found the better of the two whenever sheets were lifted. As to Montauk's finishing higher up than Fortuna, it was due to making a hitch to sea after the turn and the subsequent veering of the wind favoring the weathermost yachts and forcing the others to pinch. This also accounts for the difference at the finish. We do not "favor" Fortuna in particular, but simply desire to see a just record to both sides. As the "patriotic" division of critics took care of Montauk's case, we sought to arrive at conclusions upon the technical issues of the day, and they are not weakened by our correspondent's letter. That it is not a difficult thing to press Montauk to a capsizing point was made very clear early last spring.]

NUMBER TWELVE.

THE twelfth cutter underway for next season is a very handsome boat building by Lennox, of South Brooklyn, for Mr. Ripley. She will be 30ft. over all, 25ft. water line, 8ft. beam, and 5½ft. draft, with two tons lead on the keel. The wood keel is 8x5 inches. Single steam-bent frames all through, flush deck, and full cutter rig. This new yacht will make a splendid match for the Daisy, to be imported. The backbone and frame is all out, and the work is now being put together. This cutter is from designs by her owner.

PRESENTATION.—"Old Wul Fife," the famous builder of a long string of crack vessels hailing from Fairlie, Scotland, was recently presented with a lifelike portrait of himself by a host of admirers. Mr. Fife is not only one of the most successful builders of modern times, but also a highly respected citizen of the town of Fairlie, in which he holds many responsible positions. Among his famous racers with their biggest winnings we may name: Fiona, 78 tons, Mr. Boutcher, who won $3,800 in 1870. Neva, 60 tons, Mr. R. K. Holms Kerr, $6,700 in 1877. Annasona, 40 tons, Mr. Hedderwick, $7,800 in 1882. Ulidia, the smartest 10-tonner afloat, Mr. Corry, $1,100 in 1883, and Camilla, 5 tons, Mr. Lawson, who won $1,000 in 1877, or nearly half her first cost. Mr. Fife has a promising son, who designed Annasona, Ulidia and others and upon whom the talent of the father has descended. "Young Fife" is now superintendent of the Culzean Launch and Yacht Works, of which the Marquis of Ailsa is owner. He has now in hand some new racers for this season which will no doubt show a long string of flags at the close of the match sailing next fall.

NEW SCHOONER.—The Palmers of Noank are putting up a large schooner of their customary style and build for Mr. H. D. Burnham of Boston. Length over all, 115ft.; beam, 23ft.; hold, 10ft. A keel boat with a back bone 36x12in.; stem and post, 10x14in.; frame of oak; locust stanchions; 3-in. oak plank; pine ceiling; 2¾in. square white pine decks; rail cap of oak 9x3in.; copper and galvanized fastenings; mainmast, 87ft.; foremast, 85ft. 8in.; mainboom, 70ft.; gaff, 33ft.; foreboom, 30ft.; gaff, 29ft.; topmast, 41 and 40ft.; bowsprit knightheads to cap, 24ft.; jibboom, 25ft. beyond cap; spinnaker boom, 73ft.; sails by Sawyer.

COMPROMISE SLOOP.—The little sloop, already mentioned in our issue for Jan. 10, building for Mr. Forbes' sons, is of the compromise type, having good depth of body and a small board, which could be done away with by the addition of 8in. keel. She will have 4,000lbs. lead outside and 744sq.ft. of sail with housing topmast, mast deck to hounds 30ft. with 3½ft. masthead. Topmast, 15ft.; boom, 26ft.; long gaff of 17ft. and bowsprit 12ft. outboard. She is 28ft. loadline, with 5ft. cutter overhang, and 3ft. 9in. draft without board.

BUNKER HILL Y. C.—Membership is now 51, owning 4 schooners, 13 sloops and 6 cats. Present rooms of the club are on Wellington's Wharf, East Boston. Officers elected for the year: Commodore, P. M. Bond; Vice-Commodore, D. C. Musgrave; Fleet Captain, W. H. Hodgkinson; Secretary and Treasurer, B. F. Underhill, Jr.; Financial Secretary, George W. Abbott; Trustees, William H. Tolman, George T. D. Williams, T. B. Rich; Measurer, Harry L. Johnson.

NEW SCHOONER.—Mr. A. Cary Smith is at work on a new four-beam keel schooner of 65ft. loadline and 9ft. water, for San Francisco owners. Moderate beam and good draft is carrying the day all the country over.

ABANDONED.—The collapse of length measurement in England is noticed on the editorial page.

A COMPLIMENT DESERVED.—Marine Engineer Saefkow, of the Imperial German Navy, has been elected an honorary member of the Rhe Y.C. of Stettin, in consideration of the valuable aid and impulse he has given to yachting on the Baltic. This election has been conveyed through an elegantly illuminated diploma composed of yachting and nautical subjects grouped in a water-color painting with appropriate resolutions attached.

THETIS.—According to the Boston *Herald*, April 28 has been selected for the launching of Mr. Henry Bryant's new yacht from W. B. Smith's yard at South Boston. She is now about planked up and laying the decks has commenced. Her tender will be of the whaleboat pattern, 18ft. by 4½ft., built of cedar and mahogany.

CORRESPONDENCE.—We answer nearly all inquiries by letter. It is necessary that proper address should be given in all cases. Specific data where alterations are contemplated are required to form an opinion.

GOOD-BYE STUB-TAIL STERNS.—The sloop Thistle, originally of Boston, now the property of Mr. Wm. Ziegler, is to be spun out aft by the addition of a cutter's fantail.

ANSWERS TO CORRESPONDENTS.

E. C. F., Cornwall, Pa.—The owner of Dash III. is Mr. A. M. Tucker, 85 Main street, Charlestown, Mass.

H. D., Baltimore, Md.—The dam of Snap is Hill's Tillery. She was by Scout (Plunket—Carrie) and out of Beauty (Plunket—Nell).

AMATEUR, Augusta, Ga.—The rules of the Eastern Field Trials Club require that the sire and dam of entries be given. The National rules do not.

RAMBLER, Waynesburg, Pa.—Rose and Noreen are owned by Dr. Wm. Jarvis, Clairmont, N. H.; Lady Clare by Mr. J. S. McIntosh, Pittsburgh, Pa., and Trix by the Glencho Kennels, Peekskill, N. Y. All are first-class animals.

A FEROCIOUS BUCK.—An Adirondack guide, when arrested and brought to trial for killing a deer out of season, pleaded not guilty, and explained that he was afraid the deer was going to bite him. If that man reads the New York *Sun*, he has doubtless seen this bit of correspondence from Rollandsville, Pa., Jan. 29: The game law of Pennsylvania prohibits the killing of deer after Jan. 1, and consequently something of a sensation was created in this village when Jordan Mapes and Frank Grover, two well-known citizens, drove in on Saturday with the body of a large buck in their sleigh. They drew up in front of Crane's store, and the entire village soon surrounded the sleigh, and questions poured in thick and fast on Mapes and Grover. Such a bold and open violation of the law had not been known in years. John Rollands, a well-to-do citizen, took the men to task, and declared he would have them arrested. They told him that he had better not have them arrested until he had heard how they came by the deer, and Grover made the following statement, which Mapes corroborated: "We were driving through the piece of woods beyond Fairland's mill," said he, "when suddenly the buck jumped out into the road and attacked our horse. It tried to strike the horse with its fore feet. We whipped up and yelled at the deer to frighten it away, but it then turned on us and tried to jump into the sleigh. Frank fought it with an axe helve we happened to have with us, while I plied the whip on the horse. But the more Frank battered it over the head the madder it got, and it finally ran off to the edge of the woods, and, giving one leap, landed plump in the sleigh right across our feet. We both jumped out and made for the woods. The horse went on, with the buck lying clear across the sleigh, its hind legs hanging over on one side and its fore legs on the other. It took the deer quite a while to get out of the sleigh, and then it came tearing back after us. We were scared half to death. Frank succeeded in getting up a tree out of reach, but I couldn't climb, and, seeing I was in for a fight, I grabbed a rail from a lot that happened to be cut and piled there, and when the buck came rushing at me I let him have it square in the forehead, and downed him. Before he could get up I hammered the life out of him. Frank then got down out of the tree and ran down the road after the horse. He found it by the side of the road all right, a mile away. He brought the sleigh back, and we loaded the buck in and brought it home. We couldn't see any particular point in leaving it in the woods for wildcats to feed on. The deer must have been driven by dogs until it was crazy, and didn't know what it was doing. If you take us up, Mr. Rollands, I don't believe you will be able to make us out guilty." Justice Wilson, who was present, was positive that there was nothing in the law forbidding peaceful citizens to defend themselves against the attacks of wild beasts known to be so fierce and bloodthirsty as deer. Mr. Rollands concluded, under the circumstances, not to make an arrest. Mapes and Grover offered to raffle the deer off for $25, and to give $10 of the proceeds to the poor fund. The offer was accepted, and twenty-five chances, at $1 a chance, were soon disposed of. Justice Wilson took two chances, John Rollands took two chances. Justice Wilson won the deer. It was lifted out of the sleigh and placed on the stone stoop. In the afternoon the 'Squire drove down and loaded it in his sleigh. On his way home he was stopped by Constable Winans. "'Squire," said the constable, "I've got a leetle war'nt fur ye!" "A warrant!" exclaimed Justice Wilson. "What for." "To 'rest ye fur havin' ven'son in yer p'session 'ginst the law." The constable served his warrant. It had been sworn out by John Rollands before Justice Clark. 'Squire Wilson was taken before Justice Clark, where he waived examination and gave $100 bail to appear and answer the charge at the next term of court.

Three boys in Moultonborough, N. H., have this season shot 285 partridges, for which they obtained forty cents each, ten foxes, besides several mink and other game.

A GERMAN writer says one should every day read a fine poem, look upon an excellent picture, hear a little good music and speak a few sensible words. Esterbrook adds use his steel pens.—*Adv.*

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This is a new bait, having many advantages over the other styles of spinning baits. It is much stronger on account of the spoon being struck out of one piece of metal. It revolves very easily, and the red ball in the center reflecting on the spoon makes it very attractive to the fish. Its extreme lightness prevents its sinking and catching in the weeds; in short, it is the lightest, strongest, handsomest spinner in the market.

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FOREST AND STREAM.

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CORRESPONDENCE.

THE FOREST AND STREAM is the recognized medium of entertainment, instruction and information between American sportsmen. Communications upon the subjects to which its pages are devoted are respectfully invited. Anonymous communications will not be regarded. No name will be published except with writer's consent. The Editors are not responsible for the views of correspondents.

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NOS. 39 AND 40 PARK ROW. NEW YORK CITY.

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With its compact type and in its permanently enlarged form of twenty-eight pages this journal furnishes each week a larger amount of first-class matter relating to angling, shooting, the kennel, and kindred subjects, than is contained in all other American publications put together.

LOADING AT THE SCORE.

AT several recent shooting contests we have noticed a careless disregard of the rule which requires that guns should be loaded only after the shooter has stepped to the score and is ready to take his chances at the trap. The marksmen instead put in the cartridge and then stand about with their weapons over the shoulders, or tucked away under their arms, or perhaps standing butt on the ground as the contestant sits waiting for his turn at the trap.

No habit can be more reprehensible than this. There is absolutely no excuse for it. The saving in time is insignificant, if there is any at all, while the chance of a mishap is so great that no one but the most reckless marksman would take it. There is some reason for carrying a loaded gun in the field where a snap shot may be called for at any moment, but even then the charge should always be withdrawn when there is a long tramp to be taken, a boat ride, or a wagon trip. The man who is careless of these minor points of safety on the trap grounds is generally a tyro. He is the greenhorn who thinks it clever to take risks, imagines it is a mark of experience when he puts himself above the rules of safety, and resents as an imputation on his ability to take care of himself any warning which may be offered

In rifle shooting the same difficulty presents itself—marksmen will parade about under arms. They seem to imagine themselves on the picket line in active warfare, or on the skirmish line with the enemy in view, and really careful shooters are put to no small nervous strain in watching the comings and goings of these dangerous fools. Often in shifting from range to range and from one firing point to another, the nonsensical freak of keeping a ball cartridge in the weapon is indulged in and frequently passes unrebuked.

There is but one way to meet this difficulty. It deserves a severe penalty and should receive it. It will not do to have a rule on the printed card and expect careless fellows to take the hint. They won't do it. They need instructions by object lessons, and the most effective one is to have a heavy fine imposed, or better still to have a clear and marked case of this fault drummed off the range for his act. The rule should carry with it its own warning. There should be no second or third trials for such an offense. The first act of omission should bring an emphatic rebuke from which there should be no appeal.

THE OHIO FLOODS.

EVERY winter and spring we hear the same news from the Western rivers. The Ohio and the Mississippi, with their tributaries, are swollen by the melting snow within their watersheds, overflow their banks and cause the destruction of millions of property and scores of lives. The floods come with regularity, and appear to be each year a little more destructive than they were the year before. The people who live upon the river banks, undergo their usual drowning, or washing out, as the case may be, and then after the floods have subsided, go about their vocations as usual. Subscriptions are taken up for the relief of the sufferers, the general government makes appropriations for their relief and spends money in building dams and dykes, which shall restrain the mighty streams and keep them within their banks. The annual lesson seems to teach nothing, however, to the people of the United States. These people are not usually regarded as fools, but how slow they are in appreciating the palpable facts that these damaging floods are a direct result of their destruction of our forest lands.

The snow falls now upon the land as of old, and the hills and fields lie beneath the pure white mantle for months. Then comes a warm rain. All at once the snow melts. Each trickling spring becomes a roaring brook, each brook a torrent, and the entire precipitation of a month or two is thrown, almost in a day, into the stream. This is large enough to carry off the water had it been gradually supplied, but when it comes all at once, the task is beyond its capacity, and the choked up waters rise, carrrying devastation and death to the surrounding country.

When the forests covered our land, it was different. The snow came then and lay among the great forest trees, beneath the spreading pine and hemlock, and the naked branches of oak and hickory. When the warm rain came the snow melted, but much more gradually. The freed drops did not then as now hurry down the hillside as if they hoped by a single impetuous bound to reach the sea. They trickled here and there by devious ways, and stopped among the mosses, and dived down into the crevices of the rock, loitered among the grass roots and soaked into the ground, for there were not then a million of their fellows behind them pushing them on with an impatience that knows no curbing. Then they could take their time, and they did so.

This week it is stated that Congress has reported a bill providing the appropriation of $300,000 for the aid of the sufferers by the Ohio floods. This is well. It is right to pay for damage done. But Congress ought not to stop here. Annual appropriations of hundreds of thousands of dollars for cure, and not a penny for prevention, is the height of improvident folly. How much wiser and more economical it would be to enact some intelligent legislation to provide the United States with a competent forestry commission, and then to give it money enough to carry on its work intelligently, wisely and liberally. Should we alone of civilized nations be behind hand in a matter which so deeply concerns the material prosperity of our country?

The fact that our country is a comparatively new one, and that until recently its forests have appeared to the short-sighted and superficial eyes of our lumbermen inexhaustible, seems to be the only excuse for the criminal laxity of legislators, State and Federal, in this important matter. It is time this supineness ceased. It is time that measures be taken to protect our citizens against losses such as are now occurring in Ohio, Indiana and Kentucky, and such as will a little later take place in those States which lie along the Mississippi River. The press and the people should take the matter in hand, and urge upon their representatives the needs of the country in this respect. We have preached the sermon so often and from so many points of view that it seems needless to urge it further.

Just at this time, however, we should think that the need of forest preservation would have presented itself very forcibly to those who have suffered in Pennsylvania, West Virginia, Ohio and Kentucky. Surely there ought to be some converts made from those States. Surely the representatives at Washington of these unfortunate people ought to be able to tell a moving tale, and to urge, from their own experience, the needs for forest preservation of at least one section of our country.

More important than the hardship which will result from the absence of timber for commercial purposes, and prior to it in time, comes the danger from floods. We are just beginning to experience this danger, and before the need for action is fully appreciated, no doubt we shall have to pass through a severe school of suffering. The dwellers in the fertile Ohio and Mississippi valleys will be the first to sustain loss, they should be the first to cry for forest preservation everywhere throughout the land.

A BILL INTRODUCED into the New York Legislature this week, and passed by the Senate, deserves the support of all sportsmen. Its provisions forbid the use of batteries in the pursuit of wildfowl on any waters within the State. Heretofore it has been lawful, in certain Long Island waters, to shoot from batteries, a practice which we now hope to see stopped. Really, it seems at last a if the legislators in certain States were beginning to have some appreciation of the necessity for game protection. The passage by the Pennsylvania Legislature of a law forbidding fowl shooting after Jan. 1, is certainly a movement which is as encouraging as it was unexpected. And, now that Pennsylvania has set the example, we may hope that New Jersey, New York, Delaware and the New England States will sooner or later, for very shame, follow the good example set them. The abolition of spring shooting is the first step toward the preservation of our wildfowl and shore birds, and when the importance of this change in the law has made itself felt, a long step will have been taken in the right direction. Let every sportsman do what he can to agitate this subject, and impress its importance upon his neighbors.

SKATES AND RIFLES.—The latest thing in target shooting is the skating rifle match. A target is set up on the edge of the pond or stream. Two lines are drawn on the ice, one ten yards above the target, the other ten yards below. The contestants, at given distances, skate across the ice, and when between the two lines, while skating at full speed, aim and fire at the target. This novelty has excited great interest in certain ice-bound districts. It is hardly necessary to call attention to the extreme caution which should be exercised in setting up a target of this kind. Firing is apt to be wild, and when a bullet has once left the muzzle there is no device yet discovered by which it may be recalled, even though speeding straight for a farm-house.

THE AVERAGE MAN takes the average dog into the field, talks to it in a way which presupposes on the canine's part a perfect comprehension of the English language. As a matter of fact, the dog knows very little English. Then when the average man discovers that the average dog does not understand all that is said, he straightway looks about for a club with which to beat his commands into the canine's noddle. The average man may with profit to himself and his dog read a communication on this subject in our Kennel columns.

THE "OFF-SEASON" may be very profitably employed. If an angler, one may practice fly-casting. The ice is a capital place for this. That is where some of the most successful tournament fly-casters found their training. If a gunner, this is a good time to experiment for determining the best way of loading, etc. Trap-shooters in many sections of the country have had ample opportunity for keeping their hands in.

DEATH OF D. C. SANBORN.—Just as we go to press we receive intelligence of the death of Mr. D. C. Sanborn, of Dowling, Mich. He died last week at Alamo, Tenn. This announcement will be received with sorrow by the very many friends of Mr. Sanborn. Few men were so widely known among sportsmen; no one was more highly respected.

NEW GAME LAWS.—We again repeat the request that our readers in different States send in the new game laws that are enacted this year.

A PIG IN A POKE.

ELSEWHERE appears a letter relating to remarks offered in these columns anent the anxiety of a certain Captain Lundborg to sell out a revolution in naval architecture to the United States, exact price not mentioned. We cannot understand why such a letter should have been addressed to us for publication. It contains nothing at all bearing upon the matter, and is weak in argument and logic. As a certificate of Captain Lundborg's good character it is superfluous, and as a technical indorsement of the proposed revolution, it is without weight because of its non-professional origin. If merely an attempt to advertise a customer, it calls for no further attention than to justify its appearance in these columns, lest the charge be laid at our door of refusing others access to the public. The communication in no way vitiates what we have said. Accompanying the same is the address of the "inventor" to Congress. This memorial is an unfortunate affair, being composed of loose generalities and stump oratory, appealing desperately to the "patriotism" of Congress to give the revolution a lift, and set it agoing with might and main. A discussion of the merits or demerits of Captain Lundborg's scheme is not pertinent at present. It would lead away from the principal question, nor can we concede to the scheme sufficient importance or prospect of success to call for further consideration. The point we make is a simple one. This is not a paternal government, engaged in helping along needy inventors upon the strength of a circular in which Washington, Jefferson, Madison and other eminent persons are made to figure as canvassers for a dubious revolution existing so far only on paper. There is ample opening for the use of all the capital of the country and more besides in the development of the Great West at more remunerative rates than can be expected from its investment in floating property in competition with the cheaper carriers of older nations.

There is, therefore, no reason whatever why Congress should hear the appeal of a vendor of nautical revolutions on "patriotic" grounds any more than similar appeals from the inventors of reapers, sewing machines or quartz crushers, any one of which has far greater and more immediate and tangible application to the country's needs, than theoretical improvement in the models of ships. If the memorial of Captain Lundborg should influence a grant of money direct or through the medium of experiments carried out by the Navy Department, an onslaught upon the Treasury might be expected from the lightning rod man engaged in the laudable and patriotic profession of protecting the valuable lives of American citizens in their homes; and the sewing machine agent would not be slow in setting forth his claims in behalf of the oppressed class of poor girls, whose capital in needles and thread would buy up our nautical interests several times over. The memorial of Captain Lundborg to Congress is nothing less than the entering wedge of a vicious system seeking the advancement of personal interests at the risk and expense of the community. The commercial marine of a nation is not to be restored by listening to the clamor of a few subsidy beggers nor by the purchase of a pig in a poke. When Captain Lundborg hints in his address that prosperity awaits our nautical interests in proportion to the action Congress takes upon his "invention," his address descends to positive burlesque. As we said before, this appeal to Congress is preposterous and should be promptly resented by a large negative vote should the supplication ever reach the dignity of a proposition before that body.

Let Captain Lundborg and his revolution float or sink in the world according to their worth. If his plans have half the merits claimed, private enterprise is quite equal to the task of testing and launching the innovation and is ready to eagerly grab an invention promising a monopoly to a great extent.

THE FLICKERINGS BALLOTS.

THE numbers are disproportionate. Twenty-one hundred and twelve ballots, and only seven prizes. The prize winners are to the others as 1 to 300. We can, however, hardly suspect of sordid motives every one of those who have thus cordially co-operated to make the Flickerings discussion so successful; nor do we believe that each of the 2,105 who receive no prize can be classed among those familiar and disagreeable personages we all know so well, the "disappointed exhibitors." There is one consolation—every vote helped to make the result what it was. And if any carper be found who neither voted nor acquiesces in the result, he has no one but himself to thank.

From numerous expressions, we have reason to think that the voting competition has afforded pleasure to our readers. Indeed, the "scheme" has been so much more cordially received and acted upon than we had anticipated, that we have almost determined to repeat it another year. If that be done, there will be certain modifications of the plan. These will be stated hereafter; perhaps next week.

Herewith is presented the final report on the vote. Last week we announced the winning stories. To-day we give the names of the winning voters and their ballots.

It was explained in our original announcement of the conditions of the competition that the winning ballots would be those which showed the highest aggregate of story credits. This is only another way of saying that those ballots would win which should come nearest to the choice of all the voters.

The relative merits of the ballots have been determined by an addition of the credit units belonging to the several stories on each list. The highest possible total of credits would be reached by a card containing (without regard to order) the ten stories which received the highest scores of credits; that is, Nos. 36, 53, 31, 45, 93, 37, 42, 10, 33 and 20. (See table of first fifteen in last issue.) This highest possible is found to be 39,272. The winning ballot, as will be seen below, has all of the winning seven stories, and sums up the remarkably high score of 37,814.

We give the detailed scores of the first ten ballots. Of these the first seven are the prize winners.

	List.	Credits.	Total.
First—Mr. J. A. Crisp,	93	4,017	
(Address, Jefferson, Ohio. Card mailed Jan. 19. Mr. Crisp writes: "Here goes for first prize.")	36	5,423	
	33	2,928	
	31	4,480	
	37	4,105	
	42	3,301	
	45	4,346	
	53	4,735	
	14	2,067	
	17	2,412	37,814
Second—Mr. H. W. Gilbert,	37	4,105	
(Address, Produce Exchange, New York city. Card mailed Jan. 5.)	93	4,017	
	31	4,480	
	43	2,601	
	20	2,908	
	33	2,928	
	53	4,735	
	36	5,423	
	45	4,346	
	76	1,927	37,470
Third—Mr. William J. Smith,	37	4,105	
(Address, No. 118 Dartmouth street, Boston, Mass. Card mailed Jan. 3.)	48	1,886	
	17	2,412	
	31	4,480	
	7	2,821	
	42	3,301	
	45	4,346	
	36	5,423	
	53	4,735	
	20	2,908	36,417
Fourth—Mr. Josiah T. Middleton,	93	4,017	
(Address, 121 East Fifty-first street, New York. Card mailed Jan. 10.)	31	4,480	
	36	5,423	
	37	4,105	
	38	2,558	
	42	3,301	
	45	4,346	
	44	404	
	43	2,601	
	53	4,735	35,970
Fifth—Lieut. W. E. Hofman,	17	2,412	
(Address, Fort D. A. Russell, Wyoming Territory. Card mailed Jan 8.)	31	4,480	
	36	5,423	
	53	4,735	
	20	2,908	
	38	2,558	
	42	3,301	
	93	4,017	
	76	1,927	
	37	4,105	35,866
Sixth—Mr. C. E. Seger,	94	2,151	
(Address, No. 16 North Fourth street, Quincy, Ill. Card mailed Jan. 3.)	38	2,558	
	93	4,017	
	53	4,735	
	45	4,346	
	43	2,601	
	42	3,301	
	36	5,423	
	31	4,480	
	23	2,157	35,769
Seventh—Mr. E. S. Cranston,	31	4,480	
(Address, Willimantic, Conn. Card mailed Jan. 8.)	92	1,152	
	53	4,735	
	45	4,346	
	37	4,105	
	36	5,423	
	20	2,908	
	33	2,928	
	10	3,029	
	38	2,558	35,664
Eighth—Mr. E. D. McConnell,	20	2,908	
(Address, P. O. Box 180, Madison, N. J. Card mailed Jan. 30.)	42	3,301	
	33	2,928	
	45	4,346	
	53	4,735	
	93	4,017	
	23	2,157	
	27	1,362	
	31	4,480	
	36	5,423	35,657
Ninth—Mr. M. Britton,	93	4,017	
(Address, Wauseon, Ohio. Card mailed Jan. 25,)	62	2,764	
	53	4,735	
	45	4,346	
	36	5,423	
	37	4,105	
	29	2,485	
	31	4,480	
	17	2,412	
	25	844	35,611
Tenth—Mr. M. P. McKoon,	36	5,423	
(Address, Franklin, N. Y. Card mailed Dec. 27.)	33	2,928	
	31	4,480	
	62	2,764	
	91	2,529	
	29	2,485	
	53	4,735	
	37	4,105	
	18	1,824	
	93	4,017	35,290

By reference to the list of winning stories in our last number, it will be seen that the writer of the first prize ballot named all of the seven prize stories; the second writer named six; the third, six; the fourth, seven; the fifth, six; the sixth, six, and the seventh, five.

That each voter may count his or her own ballot, we subjoin a complete list of the credits given to each story of the ninety-six:

COMPLETE TABLE OF STORY CREDITS.

1	1494	17	2412	33	2928	49	175	65	686	81	480
2	888	18	1824	34	1272	50	25	66	213	82	614
3	1317	19	477	35	1659	51	259	67	232	83	317
4	230	20	2908	36	5423†	52	290	68	74	84	711
5	660	21	79	37	4105	53	4735	69	335	85	184
6	236	22	1533	38	2558	54	150	70	173	86	1816
7	3821*	23	2157	39	291	55	57	71	25	87	406
8	1257	24	893	40	483	56	1581	72	1433	88	1089
9	1401	25	844	41	761	57	197	73	142	89	757
10	3029	26	350	42	3301	58	194	74	83	90	264
11	244	27	1362	43	2601	59	667	75	538	91	2529
12	164	28	88	44	404	60	681	76	1927	92	1152
13	1626	29	2185	45	4346	61	988	77	550	93	4017
14	2067	30	121	46	893	62	2764	78	844	94	2151
15	1278	31	4480	47	1099	63	2350	79	437	95	116
16	1183	32	832	48	1886	64	472	80	198	96	195

*No. 7. By transposition of the 6 credits and the 7 credits in the table last week there was an apparent increase in the score of No. 7. The total is 2,821.

†No. 36. By the omission of a 10 credit in our table last week, No. 36 was credited in the first line with 1,300, when it shoud have been 1,310. The total 5,423 was correct.

The Writer of No. 36.—By mistake in our address book, we assigned the authorship of the story No. 36, to the wrong man. Last week we asked the writer to send us his name and address. We now repeat the request. The writer of story No. 36 will please make himself known, that he may receive the prize book now awaiting his order.

The Sportsman Tourist.

BETWEEN THE LAKES.

Fourth Paper.

HUNTING AND FISHING.

HE who sits down to write a history of events engaging his fancy, is apt to find himself lingering in the by-ways of his story longer than was his original purpose. He is like one meeting for an evening, after years of separation, an old and dear friend of his youth. There is so much to talk about, so much to tell and hear, and so short a time for it all. Here am I, charged with the task of recording the history of the summer rambling of the Judge, the Greek Professor and myself, and there is so much that I could write and so little room for it all that I hardly know where to begin or where to leave off. Why, a good-sized book would not suffice for it. This is the fourth paper of the series, and yet I have scarcely begun the story of the pleasant camp life we led on the Ahmeek-we-se-pe.

Ah! how sweet the recollection of these forest and stream experiences are! Here I sit by my fire with my feet on the fender and the wintry winds without moan at the gables and roar in the chimney throats, and the snow whirls around the corners and drifts into heaps, while I, scarcely conscious of it all, dream of soughing winds in pine trees, of blazing camp-fires, of leafy woods, of wimpling streams, of leaping trout. Howl, ye boreal winds, and pile up, ye drifting snows, I go a-fishing this very night.

Where am I? Yes, the Judge killed a deer and he came into camp with it on his back, looking for all the world like the pictures of the hunters familiar in my boyhood days, only the Judge did not wear a 'coon skin cap and his gun did look as long as did the old hunters' guns in the pictures. This exploit of the Judge occurred some days after our trip to the Seven Mile Creek, and as our venison had been out a good while, and trout were not so easily taken as at the first, it came when most needed. Our two hunters had been hunting industriously for several days. The Greek Professor had made a salt lick on the plan suggested to him by Captain Jim, and while he watched his lick, the Judge took to the small lakes, and finally success rewarded his efforts. His deer was a small one, and for a near-sighted man, the shot was a good one. He put the ball through its heart, but we never could quite make out the distance he was from it. The Greek Professor quizzed him as closely as he would a conceited boy with a bad lesson, but about all he could learn was, that the Judge had abandoned his boat and was in ambush on the shore. He was very particular in his description of its manner of running after it was shot, and the exact spot where he found the first blood, but as to his distance from it when he fired, not a hint would he give. The Greek Professor pointed out to me a blemish in the color of the hair surrounding the bullet hole and suggested that it might be powder burnt, but we finally decided that the blemish arose from some other cause and gave up further inquiry.

Soon after establishing our camp, tracks had been discovered in the vicinity which occasioned some controversy. I think it was the Judge who saw them first, and he reported them as being a dog's tracks, but the Greek Professor scouted the idea and said they must be wolf's tracks. Not long afterward the Greek Professor himself saw them, and in turn he reported that they were dog's tracks, and it was now the Judge's turn to scout the idea, and he was not slow in doing it either. "Why, it is preposterous," said the Judge, "to suppose them to be a dog's tracks. We are nineteen miles from civilization and no dog would ever wander this far. No, they are wolf tracks!"

Not long after the question was settled by seeing the animal that made the tracks. We were returning from Beaver Lake, and as we emerged from the thicket into the belt of Norway pines that crowned the bluff on which was our encampment, the Judge exclaimed, "We have visitors! See that dog!" Sure enough, there was a white and brindle spotted, medium-sized dog, busy picking up such scraps as he could find around the camp. Before we had gone many steps nearer he heard us, and giving us one quick, surprised look, he ran swiftly to cover under some brush, and we never saw him more, nor were dog tracks seen any more.

No visitors had come, and it was quite evident that the dog was out on his own account. The number of times we had seen his tracks indicated that what he considered his home was in that neighborhood, and as four dogs were reported to be running wild in the Jeromeville region, twenty-one miles straight across the country, we came to the conclusion that probably our dog belonged to that pack.

The Indians told us that south of Beaver Lake a couple of miles, trout of large size and in great abundance could be taken, and to verify their statement we made an exploration of that region. Part of the way we traveled over picturesque hills and hollows covered with a magnificent growth of hardwood timber. Then we came to a cedar swamp through which ran a spring brook, in which were a few small and exceedingly dark-colored brook trout. After crossing the swamp a level region bearing mostly pine timber ensued, and then we came to the stream which in a former paper I have ventured to christen the Pau-Puk-Keewis, for reasons there set forth. We did not find the large trout the Indians said were there, but we did find small ones, and they were quite plentiful. I am inclined to think, however, that we omitted in our explorations the most important part of the stream. Had we followed it down to a point nearer the lake we might have found the Indians' big trout. Be that as it may, the Judge and the Greek Professor set out for a visit to the Pau-Puk-Keewis one day, and there occurred an event of such importance as to require a careful narration. While I was not with the two men on that occasion, yet I heard the story from the lips of each of them so often, and told with such a degree of minuteness, that I think I can enter more into the spirit of the affair than if I had been an eye-witness to it myself.

At rather an early hour the two set forth on their journey. Their purpose was to cross Beaver Lake and tie up their boat on the south shore, and cross over to the headwaters of the Pau-Puk-Keewis and fish down that stream. For some reason, however, they did not row straight across, but turned up the lake toward the southeast, and when they reached the shallow water they went to fishing. Not meeting with any success, they set their prow westward and moved slowly down the south shore. The Judge is quite skillful in the use of the steering pole, having learned that art in river navigation. He was standing in the stern of the

boat pushing lazily along while the Greek Professor, seated in the bow, was casting ahead, zealous to catch something, he cared not what. Finding himself unable to throw out as far as he wished, while seated in the boat, he rose to his feet and began casting. This rendered the boat difficult to manage, and the Judge thereupon said as much to the Greek Professor, who kept on his casting but taking nothing. Two or three times the Judge hinted the difficulty, but the Greek Professor gave no attention to the hint. Then the Judge's ire arose, and he resolved to throw the Greek Professor overboard. He had given two or three little side movements in order to test the force required to make successful the experiment, and had planted his pole and braced himself for the final quick and strong side push, when his right eye caught a glimpse of a deer stepping down into the water. I say right eye, because he is so very near-sighted in his left eye, that he does not pretend to see with it any such distance. At once the Judge resolved not to throw the Greek Professor into the lake just then. "I see a deer ahead, and if you will sit down amidship, I'll push this boat within gunshot of it." It required nothing more to get the Greek Professor down as indicated, and with the shotgun across his knees. And then the Judge bent to the pushing pole, and the Wawa shot through the water as straight and as noiseless as a pike.

"Where is it?" asked the Greek Professor. "I can't see it."

"No," said the Judge. "Some people never can see game. It has moved behind some brush, but will come out in a moment."

And the Wawa fairly leaped along in silence, leaving a long and widening trail behind her.

"There, now!" said the Judge in a low tone. "It has stepped out, as I said it would. See, it looks all around—don't move a finger." And he stood as motionless as a stump, and the Greek Professor sat likewise. And then the deer lowered its head and again the Wawa shot forward, and by this time the Greek Professor had his gun to his shoulder.

"Don't shoot yet," said the Judge, "you are too far!"

"No, I'll not!"

And nearer and nearer the little boat drew.

"Must I shoot?" whispered the Greek Professor.

"No, not till it looks up again," was whispered back to him.

And the setting pole was lifted from the water without noise and a new foothold taken and the Wawa sent still nearer the unsuspecting victim. It turns its side to them and lifts its head.

"Now!" is whispered.

Bang!

And the deer drops in its tracks.

"A center shot! Where did you aim?" asks the Judge.

"Right at the fore shoulder," answers the Greek Professor proudly.

"My conscience!" exclaims the Judge in well simulated surprise.

"What is it?" asks the Greek Professor in evident concern as the Wawa moves up to the prostrate deer.

"Think of the consequence had you aimed at its hind shoulder!"

"Oh, fudge!"

The deer was lying in shallow water, holding its nose out. Both the men leaped out, and, giving the boat a push, it was run ashore.

"Lay hold of it," said the Judge, "and cut its throat."

"I can't do it," said the Greek Professor, whose savageism had gone out with the shot he had fired and whose tender-heartedness had returned. "No, I can't do it; you must do it."

"Well, then you must stop shooting at deer."

And the Judge laid hold of it, and, dragging it to the white sand, he thrust a knife into its throat, and as the warm blood spurted from the gaping wound and a film came over its eyes, and its under jaw relaxed and it gave a dying struggle, the Greek Professor said, "Poor thing! Poor thing! I wish I had missed!"

"I can believe you," replied the Judge, "I don't think I ever killed one in my life that I saw die but I was real sorry that I had hit it. I remember that I once shot at a deer and broke its back while it was standing on the river bank, and it fell in and swam around, using its forelegs. A friend was with me—a capital good fellow he was, and as tender-hearted as a woman, and he cried like one, too, while I was killing that wounded deer; and I am not right sure but I cried myself. And I felt real mean and sneaking all day after. The truth is, I couldn't eat the venison and we gave it away."

"Well, then, what makes you kill them?" asked the Greek Professor.

"What made you kill this one?" replied the Judge. "You have been crazy to kill one ever since you have been in the woods. You feel just now as if you would never kill another, and I don't think you would go very far out of your way to kill another one to-day. But to-morrow, or the day after, you will have forgotten all about this poor, pitiable thing lying dead here, and will be more anxious than ever before to kill another. Why do we kill them? Well, a very few hundred years ago our ancestors got their living mainly by hunting, and I guess we have inherited a good deal from them. There is where I fancy I got my love of deer shooting. But let us see where your shot struck."

And they turned the carcass over expecting to find the region of the heart riddled with shot, but not a wound could they find there. Then they examined other parts of the body and finally they found that one shot had struck it plump in the top of the head.

The deer was a small one—a yearling doe, but its flesh was all the sweeter and tenderer, and although the Greek Professor was heard to say, "If it only had been a big buck!" in a lamenting tone, yet after he had slept over it he was as proud of his achievement as if it had been the biggest buck in all the woods.

Notwithstanding the luck of the morning the Wawa was hauled ashore and the trip continued to the Pau-Puk-Keewis, and the remainder of the day spent wandering up and down that stream, the seat of an ancient beaver empire made famous by "The Song of Hiawatha."

On their return to camp, tired and hungry, but in high spirits, toward night, they were unexpectedly met by Ed. Cox and Ira Weller, who had come to the Ahmeek-we-se-pe for a two days' fishing, and who had brought letters from home—the first we had—and also a further supply of sugar, flour and baking powder. Their experience as woodsmen and campers-out led them to conclude that "about this time we were beginning to run short of these substantials," and their conclusion was correct. D. D. BANTA.

REMINISCENCES OF THE NORTHWEST.

MY FIRST BEAR.

HAVING decided upon a few years of border life, the time of departure drew near, and many bright anticipations of hunting and fishing exploits ran riot in my brain during my contemplation of the coming change. I remember during a short stay in New York, just before taking the express for the West, how many well-wishers there were who joined me in painting the bright hope-picture of the mighty West—what lots of hunting, and what countless numbers of trout of any imaginable size were destined to become my prey.

Had I a good gun? Was it a Greener? Or what had I considered best for such a hunting prospect? Whatever make, it could hardly be good enough. But a light gun would hardly do; I must certainly have a rifle, for it seemed the slaying of buffalo, deer and grizzlies would unquestionably form a large part of my future occupation; and among the many brilliant suggestions advanced with a view to meeting this emergency, that of an "express rifle" calculated to express something like a quarter of a pound of lead was not wanting. All this resulted in the purchase of a Ballard rifle before leaving, with the ostensible object of slaying the antelope and buffalo of the plains, as the trains of the Union Pacific flew past their numerous herds. With notions like these I started for the frontier, and it is barely necessary to add that the Ballard was disposed of to the first purchaser after reaching my destination, with, of course, the unfailing recommendation that it was really a new gun and had never been fired.

I think it was something over a year after my arrival in the West that I had occasion to use a rifle, and by that time I had learned that one of Uncle Samuel's Springfield carbines was about the best thing for all uses there was to be had in that line. After a great deal of wing-shooting and deer hunting of various sorts, a trip into the mountains was under contemplation which gave unusual promise of bringing some of us at least within range of a genuine live Rocky Mountain grizzly; the climax of the hunter's joy.

But, alas! for the vanity of human hope, day after day, and week after week took its place in the ranks of the past and the bruin of our dreams still remained a "vapory conjecture," a "mere figment of the intellect."

At first I always carried a rifle when going far from camp alone, until day after day proclaimed in stronger terms the unwelcome truth that there was really no immediate danger of being devoured, and this weighty consideration added to the fact that all kinds of small game were plenty—particularly grouse and birds of every sort as well as small deer that could be killed with buckshot from a shotgun—resulted after a short time in my going abroad customarily armed with a very ordinary eight-pound fowling piece, the shells charged with sixes and eights; two or three reserve cartridges being loaded with buckshot for an occasional deer. So passed the days with birds and venison in profusion for the entire command.

A short march, making camp by three in the afternoon, was generally the order of the day, and this left several hours for hunting before dark, while an early rise in the morning gave ample time for a few casts in the brook before breakfast and boots and saddles. After weeks like this, anything more than a small black bear was reckoned among the possibilities but hardly among the probabilities of the future of our trip. Bear tracks were not uncommon on the trail, but they seemed to be out of the way in the day time, though now and then a small black bear would be seen early in the morning, which at sight of us would take to the hills or the timber, avoiding our approach.

The object of our trip had been accomplished, we had joined another command scouting in the same section, and we had already turned our course homeward. Great had been my eagerness to ascertain on joining the new command if Lieutenant P. while separated from us had succeeded in getting a bear, and equally great was my gratification in learning that my luck was not exceptional, and that he had been no more fortunate than I.

We were within a few days of our return, when a pleasant afternoon found us encamped on the banks of a mountain stream at a point where, leaving the hilly cañon it found its way through a pleasant meadow. We had had about hunting enough; Lieutenant P. was still sanguine, but in our conversation on the subject while sitting about camp awaiting the call to supper, I remember having strongly deprecated the hunting resources of the Territory. I did not believe there were any more bear in the Rocky Mountains than there were in the Adirondacks, while the former range covered vastly more ground, as a result of which I contended in the strongest terms that there were more bear to the square foot of land in the East than there were in the West, and that there was much nonsense, if not actual fraud, in the reputation the West enjoyed for hunting facilities. I did not expect to meet any bear at all events, and if I did, I had that confidence in my shotgun that I should simply shoot him with one barrel in one eye and then with the other barrel in the other eye, after which I should proceed to fall upon him and whittle him up with my jack-knife while indulging in a wrestling match just as I had frequently seen it done upon the stage. This sort of talk was interrupted by Johnny the scout, who had just reached camp, and came to inform the Loot'nant that he had discovered a deer lick a short distance from camp with fresh signs about it, and that a deer could probably be taken with little trouble by going to the spot about sunset, as they customarily came down to the licks at that time for water.

After supper we lit our pipes and at the suggestion of Col. B., who said our larder was getting low, I expressed my willingness to take the deer whose visit at the salt spring was contemplated. Lieutenant P., from disinclination or other cause, did not care to go along, but in his habitually gentle manner ventured a few predictions adverse to the results. I had somehow acquired, with him at least, the reputation of being a rather desultory hunter. I didn't propose to get more than one deer anyhow, so I picked up the first carbine that came to hand, and taking three cartridges from the nearest belt of the many that lay scattered about the ground, I shoved them somewhat carelessly into one of the pockets of my hunting coat and left the camp, pipe in mouth and gun in hand, thinking my smoke might as well be finished at the deer lick as about the camp-fire, with the additional prospect of a fresh steak for breakfast.

It was only a few hundred yards to the lick, a beautiful spot to while away an hour and watch the setting sun. A half hour soon passed, my pipe was out, and with it my reflections took a turn. Lieutenant P. might yet be right, the prospect that I should return empty-handed was certainly better than it had been and was visibly improving every minute.

No rustling in the leaves, no sign of game beyond the cañon, whose dark gorge was fast fading into the gloom of twilight. Certainly this would not do, if the deer was coming down I might hasten matters somewhat by meeting him half way; besides I would feel better for the walk and might possibly save my reputation as a hunter.

There was little of interest on the cañon trail. I drifted along over one little rise after another, and now and then climbing over some large pine trees that had fallen across the trail. I had gone some little distance without interruption, the trail became narrow, winding along the side hill some fifty or sixty feet above the white waters of the mountain stream; to the right and left the steep declivity of slide rock precluded the possibility of climbing. As I sauntered along gun in hand my gaze had been directed to the ground for some minutes, when suddenly without apparent cause, I looked up along the trail. Heavens! Could it be true, or did I dream? The largest, fiercest, ugliest creature I had ever seen, stood—no, I wish he had—was leisurely walking straight down the trail toward where I stood leaning against a tree trying to collect myself and realize the immediate and terrible necessities of the situation. His ponderous paws came down with monotonous pat, pat, pat, that seemed to fairly shake the ground, for he wasn't more than forty yards away.

I shall never live to forget the sick feeling that first glimpse produced. His heavy plodding carriage seemed to say with the swiftness of thought: "If you are standing there when I arrive I shall walk right through you. I'll eat you up, and I'll use your miserable old pop gun for a toothpick, and it wont bother me any more than breathing so much air." This was about all I felt in addition to the sense of ultra fierceness that grizzly's whole appearance seemed to wear, his little small eyes, scarcely visible, his ponderous feet and a sense of massive weight as he came plunging down the hill, all combined to produce that sense of utter goneness which is only known to those who have been once thoroughly and awfully scared. Here, then, was what I had been looking after for weeks. This was what I thought the country needed in order to meet the expectations of its friends; here was the grizzly bear that I wanted to shoot, blind with pepper shot and cut up with a penknife.

While all this was passing through my mind I was fumbling about in my pocket for one of those miserable three cartridges I had so carelessly tucked away, and I hadn't much heart in what I was doing, either. I didn't know for certain whether or not 'twas best to ruffle his temper with foolish and trifling demonstrations of courage. I would have liked to swap my carbine for a Gatling gun or a mitrailleuse, in fact anything seemed preferable to the situation I was in. All this time the bear was coming right along; it seemed as though I was unconsciously counting his steps while fumbling about for that cartridge and getting it into the carbine. At last it was there, the hammer cocked, and, with steady rest against that little pine tree, I pulled the trigger on grizzly bruin. The smoke passed away, and "oh, horror!" he wasn't dead at all! He was coming at a run, and only had thirty yards to run if I stood where I was. It was too much for human fortitude. If there had been anybody round to laugh at you it would have been different, but there wasn't. What I thought I don't quite know. The next recollection I have I was running down that hill about as fast as my legs had ever carried me, and calling loudly for "Johnny," the scout, who I suddenly recollected had told me on leaving camp that he should come up to the spring after finishing his supper.

As will appear later I had unfortunately made myself heard before I could collect my senses sufficiently to realize that I was actually running from a challenged enemy, and what might Col. B. and Lieut. P. say could they see me in this predicament. I think it was this sense of humiliation that overcame the effects of the fright with which that bear's sudden appearance had inspired me; at all events I managed to get one of my two remaining cartridges into the gun, stubbornly faced about and not caring a cent whether bruin made a square meal off me or not, I coolly drew another bead on that bear and fired. It was evidently the work of despair; the smoke cleared away again and it would be hard to describe my gratification at seeing my grizzly rolling heavily down the hill like a barrel of pork, bounding from one stone to another until he took a final plunge into the mountain stream that rushed along the gorge below.

Another shout to "Johnny," this time a call of triumph, and the next instant I was scrambling over the slide rock down to where bruin lay. The complete reversion of feeling produced by seeing my formidable victim rolling apparently inanimate down the hill was too much for my sanguine nature; it never occurred to me that he might not be dead, and that the gorge was not a very nice place after dark even when no bears were about. My eagerness knew no bounds; one careless step after another, and half way down the hill, I found my motion uncontrollable; the slide rock had got started and it would not stop. I must go with it. Another second and splash! up to my waist in a cold mountain stream full of rocks and boulders; but what was infinitely worse, a glance up the stream brought back all the horror of my first sight of bruin. There, not more than ten feet up the stream from where I stood, was bruin, wounded and plunging about in the rocks and water, whose swift current continually disturbed his footing and urged him a few feet nearer me. Though wounded he was apparently as well as ever, and evidently intent on reaching me, in which he was greatly favored by circumstances.

I think the cold water of the mountain stream brought me to my senses somewhat. At all events it didn't take me long to find my third and last cartridge, my forlorn and only hope; should it fail, there remained nothing to do but to take to the stream and chance it with the rocks to the mouth of the cañon. By the time I had got it into the gun bruin was about two yards off. In the coolness of despair I pointed the muzzle to his breast and pulled the trigger. Bruin fell from his erect position against the bank into the water and floated to my feet. His head was under the water, and by the time he reached me he had breathed his last.

Johnny had heard my call, and the discharge of my last shot had indicated my whereabouts to the amazed bystanders on the hills above. "Hooray! Hooray! Bully for the loot'nant! Golly, it's a big one!" "Sling him a rope!" and many similar expressions, told how lustily I had hollered some minutes before.

Ropes were procured, and Mr. Grizzly, the first and only bear of the season, a fine five-hundred-pounder, was floated down the stream and hauled into camp with the honors of war.

We had another supper that night and after it a long talk, in which the bear was killed a half dozen times over, and after it all Lieutenant P. was hearty in his sincere, though somewhat unanticipated, congratulations.

WINTER FIRESIDE THOUGHTS.

FROM boyhood I have always loved to sit before the fire and let my thoughts stray at will, and the habit has so strengthened with years, that to-night finds me in the old place, indulging in fireside fancies with as much enjoyment as ever. It has been a very dull day; there was something in the air that seemed to depress one, the still atmosphere indicating snow. Even my little friends the snowbirds were not in their usual good spirits, but twittered in a chill, comfortless tone, as they rummaged about among the spruce and arbor vitæ, and the scrunch, scrunch, of the gravel under their feet seemed to voice the general depression reigning in the outside world. But here we are at last before the grate, the lights turned out, doors shut, curtains drawn, and only the dull red glare of the coals to keep company with our thoughts. How complete is the satisfaction to sit here in the silence thi stormy night, and listen to the swirling gusts outside as they dash the little snow fairies in a mad race through the air. One can imagine he hears the beat of their tiny feet against the window panes, and their complaint as they drive off again in the darkness.

The heavy curtains seem instinct with life, and now and again sway forward, as some furious blast forces a little of its wild nature between the sashes. The wind rose gradually; a long drawn sigh which swept up the chimney gave the first intimation that the wild uproar now raging without was about to begin. The fire is burning slowly down, and now and then settles with a husky little murmur, while little spurts of pale blue flame run about over it in response to the intermittent draughts as the gale roars around the house. The lights and shadows play through the room, and touch here and there upon the forms of many of my specimens, each one bringing to mind the scene and incidents of its capture.

There on the bookcase sits an immense snowy owl, the pride of my collection. His wings are extended, and his great yellow eyes gleam in the fire light as he bends slightly forward as though about to dash at me. He met his death one bright October afternoon in this wise: It had been too warm and calm for shooting, and about two o'clock I voted to take up the decoys and return to the shanty. While quietly poling along in my punty, I espied his lordship on the marsh some distance ahead, and made up my mind to stalk him if possible, so carefully shoving into the sedge, I crawled ashore. Finding concealment was out of the question, the meadow grass being too short, I rose and walked slowly toward him. He was sitting with his back to me, but with that quick twist which only an owl can give and not dislocate its neck, he turned his head and looked back at me directly over his shoulders, those fierce eyes of his glaring at me (I must confess with more expression than now), from out their circle of snow white feathers. His bill was snapping like a pair of castanets as I approached until nearly within gun shot, when he spread his great white wings and with his head still turned toward me, seemed to be awaiting my next move. Pausing a moment I enjoyed the picture, only for a moment, however, for with a bound he started at once into the air. I turned loose both barrels almost on the instant, although with but slight hopes of grassing him at such a distance. As luck would have it, a single pellet cut the tendons of his right wing close in to the body, causing it to double back, and down he came with a rush. Without stopping to reload my gun I ran toward him, but to my surprise (I cannot say delight), he advanced to meet me with a series of gigantic flops which soon closed the little space between us, and before I could strike him he had me, driving his long black talons through my overalls and deep into the heavy wading boots underneath. After a short but careful skirmish I managed to get hold of the tips of his wings, and soon secured the old fellow under the hatch of the punty, where he vented his rage in shredding the strip of oiled canvas rent from my overalls in his first onslaught, and wickedly clutched in the struggle that followed.

But are those eyes bent on me? As I follow the direction of their glances, I see the form of a green-winged teal cowering close in the dancing shadows. Pretty little fellow, he was stopped on his way south one autumn, he was such a little jewel of a duck, and those sturdy little wings of his slipped him along so fast that he had nearly escaped me.

The dusky form of a coot (crow duck, blue peter or whatever you will, gentlemen) stalks close beside the big owl. Not because I especially admire this specimen did I preserve him, but his form reminds me of how often I have lost patience with these same blue peters, as they rafted by thousands just out of shot, luring the fowl from my decoys.

Across the room, almost indistinguishably in the gloom which surrounds him, stands a huge black-backed gull. I killed him in a driving snowstorm, and well I remember what a prize he was. He undertook a short cut across the point on his way down one evening, and the rest of his story was told by the happy lad who with numbed fingers gathered him in. Other feathered beauties there are around me, some of them bringing up thoughts of the fragrant woods, and again in imagination sweet notes ring out from their graceful throats.

But time has flown with our reverie, and the little people who live in the soot on the back of the fireplace have lighted their lanterns as the fire dies, and we see them traveling back and fourth in the dark, and now, the last one having put out his light, let us take the hint so prettily given and ourselves retire. WILMOT.

MAJOR JOSEPH VERITY.

SOME OF HIS SPORTING ADVENTURES, AS MODESTLY SET FORTH BY HIS OWN HAND.

Chapter VI.

IF any who has been interested in the plain unvarnished accounts of my experience has wondered that I have not continued them, I can only say that I have suffered the common lot of all earthly things; in short, have grown old. I find it difficult to remember with sufficient distinctness the events of my past life to record them with that accuracy of detail and strict adherence to truth which above all things I prize. Particularly in this respect do I find myself embarrassed concerning those things which have occurred since I have approached and passed the period where it was ordained that the days of man should end. Of them I write with hesitation, though what I saw and was a part of in my prime is as vividly impressed upon my mind as these words upon the page before me; and furthermore, concerning such matters of the long past, I feel that I have not fallen into the common error of age, which is to exaggerate the exploits of youth, and magnify the wonders of bygone times. If of late affairs I seem to the readers at times to verge on the improbable, though never I trust on the impossible, I can only beg of him to remember and bear with the infirmities of an old man's mind. That better part of us must fail with its fleshy tenement till it shall leave that poor abode and enter a new one, not of flesh or earth. When I look upon the hand which pens these lines, a withered member over whose bones and nerveless sinews the dull blood runs in its ridged purple course, I can hardly believe it the same that forty years ago could crush the sap from a maple limb, till I see the scars that a panther throttled by it made in his death struggles.

Speaking of panthers reminds me of a singular incident of which I was a witness. It was on the borders of a wild lake in Adironda, where, with a companion, I was hunting and trapping one fall. I had left our camp early one morning to go down to the lake to hear the fishes sing, as in that water a certain kind that I have never seen elsewhere are wont to do. At daybreak or thereabout they would thrust their noses above the surface and begin in concert to trill forth the most melodious song that I ever heard, and continue it for half an hour, and sometimes longer. The sweet strains seemed to attract insects from all the surrounding forest, and as they hovered close to the surface, apparently entranced, the fish would devour them in incredible numbers, some of the fish all the time keeping up the spellbinding melody. Such singing of fishes I have read of as occurring in the depths of the sea, as might naturally enough be where mermaids inhabit, but I never heard of nor heard them in fresh water except in this one lake. My companion held that these were frogs, which, as all know, do sing after their fashion, but when I caught one of the singers with a fly, and a song in his throat, some of which leaked out after its landing, he was convinced. As I neared the shore on this particular morning I heard an unusual rustling of the fallen leaves close by me, and stopping behind a great tree, I presently saw a young panther busily chasing its own tail, just as we see our domestic kittens often doing. I was much interested in the pranks of this little pup of the woods, and kept quietly out of sight, watching him pursue the appendage which seems to have been given to the cat kind merely for ornament and the plaything of their youth. I questioned myself, What do little lynxes and wildcats do, who have no tails worth following? Surely nature has not been so kind to them as to their larger cousins. But presently I was inclined to think differently, for my little performer being somewhat rough in the handling of his toy, gave it a prick with his claws, which enraged him, and getting the tip of his tail between his jaws, he gave it a savage bite, and then his fury increasing he bit and swallowed the whole of it quite to its roots and even inflicted some ugly wounds upon his hams, and he continued his attempts to swallow himself till he was actually strangled by his own tail. Feeling assured that his mother was not far off, I quietly withdrew to camp and got my rifle. Returning to the spot I found her trying to unravel her unfortunate offspring. A well directed shot put an end to her grief and her life, and I dragged the two panthers to camp, the hooped kitten just as he had died, to show my companion and convince him that it had come to its end on both its ends in the manner related. For my friend was a doubting Thomas, and sometimes inclined to question the accuracy of my statements, and yet he told tales of his own adventures, which were borrowed. One I remember, of his hunting on this same lake, when he lost his powder horn overboard, and his comrade, who was an expert diver, offered to go down and get it, and after some remonstrance did so. He was gone so long that my friend became alarmed and went down in quest of him, when what was his disgust to find his unfaithful companion sitting upon a rock on the bottom, pouring the powder from the lost horn into his own. Now this is an ungestionable fact, but it happened to another man than this companion of mine, namely, to my friend John Burt of Essex, of the county of that ilk in the State of New York, and not in this little lake, but off Split Rock in Lake Champlain. I have lately seen this story going the rounds of the papers as having happened somewhere out West, which appears to be the home of big stories as well as of other big things.

Our trapping in this little lake of the singing fish was very successful, especially in the taking of otters, animals which greatly abounded there at that time. Our method of capturing them was devised by us, and it was done by setting a very sharp one-tined spear in the deep water at the foot of their slides exactly in a line with their course down them. Speeding down the slide one after another with prodigious velocity, it was not uncommon for as many as four otters to be impaled upon a spear, one on top of another. I never knew the name of this lake, but it lies not very far from the fountain of condensed water of which I have told, and which I trust the thorough survey of the region now being prosecuted may bring to light, as well as the tunnel through the world up which the monkeys come. I have written to Mr. Colvin, giving him all the information I can which may guide him in his search for them, and hope it may be his fortune and that of many another to see what I have seen.

ADIRONDA, January, 1884.

MR. NICHOSON'S BUCK RIDE.—A recent account, in the reckless style of the newspapers of the "Rockies" whose yarns are usually in accord with the size of their mountains, relates how an old hunter was involuntarily treated to an elk ride, "forty miles, if it was one," which forsooth was a most invigorating shake up for the old chap—if true. However that may be, the incident of Nichoson's buck ride, a strictly true occurrence, is herewith presented. Mr. Nichoson was residing in Naples, Ontario county, N. Y., some forty odd years ago—a period in which there was yet existing in Western New York a large extent of forest and a corresponding fair share of wild game. One winter day while engaged in drawing wood a large buck, pursued by hounds over hard crusted snow, was run down by them in the road only a short distance from Nichoson, who hastened to secure the creature, and straddled its neck with intent to cut his throat. While reaching down to get out his knife the buck suddenly arose, leaving Nichoson's legs firmly secured under his antlers—then with his hoofs he clawed into shreds the back part of his rider's pants and split down his boot legs. The buck, finding he could not get rid of his rider, then treated him to a vigorous good-sized buck trot of nearly a quarter of a mile, and, perhaps like the famous cork leg of Mynheer Von Waldegg, would be running yet, had not Rob managed to stop the wild career of the antlered steed by cutting his jugular with a knife. The effects of the "hoof raking" and this rough ride was a lameness unfitting him for work for several days. Mr. Nichoson has long been famed throughout this region as the veteran fox hunter, and, although a cosmopolite of leisure and well along in years, is yet an inveterate sportsman, pursuing the glorious pastime with rifle and hound at frequently occurring intervals.—PIPER.

Natural History.

THE EGRET.

WHILE inditing my note of last week about the bittern my mind reverted to an acquaintance I once formed with a distant relative of that family. I was spending the summer as usual on the banks of the Manasquan (New Jersey) and one day found myself lying on the beach sand watching the natives who were engaged in the sport of "squidding" for bluefish. I had pulled one or two across the sands, but found the exercise too violent for my feelings. Happening to cast my eye inland I saw across the meadows, a mile away, a flock of some white birds circling in the air. I called the attention of some of the fishermen to the matter and was told that it was a flock of white tame geese owned by one of the cottagers. The explanation did not satisfy me, and in a few minutes I had the sail of my batteau up and was wending my way through the creeks to the spot where I had seen the birds go down. Taking a circuit I reached a clump of woods that at that point skirts the edge of the meadow, and crawling through the brambles and Indian grass I found myself in easy range of a flock of the most beautiful and graceful game that I had ever seen. There stood, feeding in the meadow grass from which the tide was just falling, sixteen small white herons, grouped and posed in a way that would excite envy in the breast of a decorator of Japanese screens. I say "small" but I must confess that from my point of view and in the excited state of my imagination, they looked to be as large as cranes. One with each barrel was the result.

Oh, if I had only then known what a Parker was, but noticing that the flock did not seem inclined to leave the vicinity I hurriedly propped the dead birds on the stalks of a hollyhock and, retiring to my blind, soon had them again in range with a similar result. Another wait gave me another pair, and then I was content to see the balance of the flock sail away. The birds were the egret, I think the *Ardea garzetta*, and while I am about it I may as well say that their flesh was nearly as white as their feathers, and was pronounced by all who had the privilege of tasting it to be tender, juicy and finely flavored. Their plumage was as near pure white as could be, excepting a dove-colored tint beneath the tip of the longest wing feathers. I need not say that these wings were eagerly sought for and appreciated by the ladies at the hotel, and their gratitude for the additions to their millinery possibilities probably increased my ardor in the further pursuit of the game.

I am no pot-hunter nor bonnet-shooter, and I was then younger than I am now, but I have no apology to make for the statement that for two weeks that constantly diminishing bunch of birds gave me daily sport. The range of their flight was for miles, and, like the famous Kidd, "I sailed, and I sailed, and I sailed." Sometimes a long pull against the tide proved that I had been duped by bunches of seafoam or a stake on the meadow; but I always found them again. In fact I secured the last bird of the sixteen four miles from the inlet, after pushing my boat nearly a mile up Sawmill Creek.

This was probably ten years ago, and I do not remember that I have ever seen a live specimen of the egret in Jersey since, unless I was right in believing that a group of them were on the Barnegat meadows one day when I was fishing there. At least they were too far off to be identified, and I never expect to have another fortnight with the "white geese." T. B. A.

NEW JERSEY.

THE CORN CRAKE IN NEW YORK.

ON Nov. 6, 1883, a corn crake (*Crex pratensis*) was brought to me by Mr. William Dommer, who stated that he found it the day before running about rapidly in a cabbage field on Green Island, opposite Troy, N. Y., and shot it as it flew when flushed by his dog. The bird was in nice plumage and good fleshy condition, weighed six and one-fourth ounces, and had in its stomach remains of a very large grasshopper and a seed of great bitter weed (*Ambrosia trifida*). It was an adult female, and I have it mounted in my collection.

I am not aware that the corn crake has ever been brought alive from Europe and set free in this country. Some books on North American birds state that it appears to be a common summer visitor to Greenland, from whence stragglers probably reach the eastern coast of the United States, where it has been found on several occasions. The only specific record known to me of the capture of the bird in this country is that of one shot near Salem, N. J., as noted in "Proceedings of the Academy of Natural Sciences," Philadelphio, 1855, Vol. VII., page 265. Probably some readers of FOREST AND STREAM can give further information of the corn crake in America. AUSTIN. F PARK.

TROY, N. Y.

THE ROUGH-LEGGED HAWK.—The note on the rough-legged hawk in FOREST AND STREAM of Jan. 31, does not allude to the position which this species should occupy in the minds of sportsmen and farmers. I have set up these birds till weary of so doing. I have three in my cabinet, black enough for all practical purposes, and have had them of every shade from that of the redtail hawk to the crow. On the broad meadows of the Connecticut in migrations they outnumber all other hawks together. They are hardly driven south by snow in November and December, and return with the first bare ground in March. My friend Damon, of Northampton, an ardent ornithologist, has shot them from his buggy well up among the hundreds, taking advantage of their clumsy and sluggish habits to drive within easy gunshot "most every time." But that is not all. To the owners of the meadows they are of great benefit. Of all the hawks the most harmless, never to my knowledge taking a chicken or bird, but harvesting mice by the thousands, and saving tons of grass and grain by so doing. I have counted a dozen in sight at once, sitting stupidly on trees in a morning, and not a mouse could eat his breakfast above ground, without at the same time making one. The unparalleled change of color has caused some amusement to mature heads. The Smithsonian, when young and ambitious, made three hawks out of the one, but hastily withdrew two varieties when confronted by Dr. Wood's platoon of specimens. I shall, as I have done for years, plead with sportsmen to spare these birds. They have no feet for holding large game like other hawks, and their being always loaded with fat, shows their success and usefulness as mousers and consequent friends to the agriculturist.—B. HORSFORD.



Male Woodland Caribou.



Female Woodland Caribou.

"ANTELOPE AND DEER OF AMERICA."

NO study is more delightful than that of the habits of our large game, and yet the lack of knowledge about these animals, even among the most intelligent of sportsmen, is remarkable. Although the sources of information at their hands are considerable, there are but few men who are at all well acquainted with the habits of these large species. This is the more deplorable because this large game is so rapidly passing out of existence, that it will soon be only a memory, except to the most ardent of hunters, and because, owing to the rapid settling up of the country, the conditions of the life, and so the habits of these animals are continually changing. It is true that in many sections of the United States the Virginia deer clings to its haunts with surprising tenacity, but it is equally true that most of our other large game animals are becoming extinct with a rapidity that is most saddening to those who for years have taken pleasure in living with them in regions where they were at home, and in observing their habits. How swiftly and surely this extermination is taking place is realized by but few people.

To many men the memories of the days, weeks and months spent in the forests, on the prairies, or among the mountains, in the companionship of God's wild creatures, are the most satisfying and pleasing of their lives, and these recollections come back more vividly in the after years and give rise to more delight than do the thoughts of their triumphs of pen, of oratory, or of statesmanship. And yet there are hundreds of men who, in one way or another, have hunted large game, have spent months in its pursuit in a



Male Columbian Blacktail Deer.

country where it was perhaps abundant, and who know but little about it. They have had guides who were hunters, and they have depended wholly on them. These guides have taken them about over the country, have found the game, have brought them up within shooting distance, and have told them when and where to shoot. The employers—the "gentlemen," as they are called in some regions—simply held the gun and pulled the trigger.

Men who thus depend entirely on others, travel with their eyes shut. They have no idea of finding their way about without a guide. Take them over the first hills behind camp, and turn them around once or twice, and they are lost. They take no note of the habits of game, and even after a long experience in hunting, do not know where to look for it. They cannot tell a deer's track from an antelope's or a sheep's. Their powers of observation have not been trained; they do not see what goes on about them.

Happily all men are not so. There are others who, from a week's hunt, will bring back a note book full of interesting facts and incidents concerning the game which they have been in search of. Within a day or two they will have learned so much of the country that they can hunt through it alone. They observe the salient features of the landscape, and mountains, streams and trees become to them so many plainly marked guide boards, by which their steps are directed through a country hitherto perfectly unknown. With men such as these, it is a pleasure to converse after their return from a hunt, for their conversation fairly bristles with facts. On the other hand, one hears constantly from people of the former class, who have had abundant opportunities for observation, statements which are so wide of the truth, and which betray such groping ignorance of the commonest facts in the natural history of all wild animals, that we are constantly surprised at the want of information concerning them. And yet there is no hunter—no one, we should perhaps say, who imagines himself a hunter—who would not be glad to know all about this game if he knew how and where such knowledge was to be obtained. Although it is very true that about some species of our large game the literature is scanty, fragmentary and widely dispersed, there are others about which a great deal has been written, and the most familiar



Young Woodland Caribou.

group, that which includes our deer, has been quite fully treated by a most competent authority.

When Judge J. D. Caton's valuable work on "The Antelope and Deer of America" first appeared, we called attention to it as the most important work on the subject which had yet appeared, and this pre-eminent position it still occupies. The wide dissemination of this most excellent volume would do much to diminish the prevailing ignorance on this subject. The opportunities which Judge Caton has enjoyed for observing the habits of the antelope and most of the species of North American deer, have been remarkably good, and to this study he has devoted years. His work is not the unconsidered production of an individual seeking fame, but the careful and painstaking work of a conscientious naturalist. And yet it is written with the enthusiasm of a man who is devoted to his subject, and who has omitted no detail, however slight, which might throw light upon the habits of physical characteristics of the animals which he was studying.

On all points which concern the mode of life of our more familiar species of deer, Judge Caton is the highest living authority. For many years he has kept in confinement large numbers of elk and deer of various species, and has thus been able to observe them closely at all seasons of the year, while they were to all intents and purposes in a state of nature. Having them thus constantly before his eyes, being keenly alive to the importance of observing them, and of recording his observations, he has accumulated, and given to the world in a very attractive form, a vast mass of facts of the very highest value.

In all, Judge Caton has had over one hundred elk in confinement in his park at Ottawa, Illinois, and he has had no less than fifty-four living individuals there at one time. Of other temperate zone species he has had the Virginia, Acapulco, mule, and Columbian blacktail deer, and the pronghorn antelope.

Nine species are treated of in his work: The antelope, moose, barren ground and woodland caribou, elk, mule, Columbian, Virginia and Acapulco deer. To each of these separately considerable space is devoted. The synonomy, description, geographical range and habits are treated of in the articles devoted to each species, and after all have been thus discussed, we come to chapters on the *Cervidæ* taken together. The titles of these chapters are Comparisons, Groupings, Habit and Domestication, Hybridity, Aliment, Congeners, Diseases of the Deer, The Chase, The Skins, with an Appendix treating of the glands and the tubes in the feet of the *Cervidæ*. Perhaps there is no better way of illustrating the breadth of the field which the book covers, than by showing, as above, what it contains. Its 425 pages are full of information of just the kind that is desired by the hunter who is something more than a mere killer of meat.

One of the most interesting subjects connected with the group, and one to which the author has given great attention, is the antlers of the deer, a topic about which few men have any intelligent knowledge. To this subject over sixty pages are devoted.

A very interesting point relative to these osseous outgrowths is the curious relation which exists between them and the reproductive organs of the deer. On this point Judge Caton has made many interesting observations, the great number of individuals at his command enabling him to experiment very fully, and he has thoroughly established the fact of an intimate connection between these organs and the antlers.

Judge Caton's work is profusely illustrated, figures of all the species described, and of several exotic forms, being given. Besides these there are a vast number of illustrations of antlers, feet, glands, etc., from each of which something may be learned. One of the most instructive of all the figures is that of the tails of the different species, and it would be well worth the while of the very large number of individuals, who, from the confusion arising from the misleading name of one of the commonest species of our western *Cervidæ*, are in doubt as to what the true blacktail deer is, to study this very interesting woodcut.

There are some points on which we do not altogether agree with Judge Caton. Thus we cannot subscribe to his system of nomenclature, nor do we regard the woodland as a species distinct from the barren ground caribou, nor, as we have elsewhere written, do we believe that the vision



Mule Deer.

of several species of our deer is "defective." But on all that is essential—on all matters of fact—we may unhesitatingly accept Judge Caton's views as sound and wholly free from prejudice.

SQUIRRELS IN CONFINEMENT.—Lockport, N. Y., Jan. 30.—Probably the largest private collection of squirrels in confinement in the State is kept by Mr. Charles Shaler, of this city. I had the pleasure of paying them a visit to day, and was surprised at the number. To the question put to Mr. S., "How many are there of them?" he answered, "I will give you $50 to count them correctly." I did not undertake the task. Mr. S. finally said there were about forty of all kinds—black, red and fox squirrels. I think there were four of the latter. He has nine of the gray at present. Mr. S. said he commenced keeping them about fifteen years ago, and that they breed every year, commencing in February. To the question, "Do they ever breed in the fall?" he said that they had done so in one or two instances. Mr. S. claims that the young do not see until they are forty days old. He keeps them in a room built out on the east side of his house, inclosed with coarse wire netting. Here there is a labyrinth of dead trees and branches for them to run among; also wheels for them to turn. Attached to one of the latter he has a miniature train of cars, which is kept in motion a good share of the time; and I noticed that the festive little red did a good share of the work, although this species is in the minority in number as well as in size. Mr. S. promised to let me know when there were some young squirrels, and to convince me that they do not see until they are forty days old.—J. L. D.

Bird Migration.—In the number of Forest and Stream for Jan. 24 was printed the general circular on migration of the committee of the American Ornithological Union. As superintendent of the "Mississippi Valley District" I wish to supplement it by a special appeal to the sportsmen of that portion of the United States. Exact reports on the migrations of the water birds in the Mississippi Valley are yet to be written. We have plenty of notes on "Ducks and Geese," "Snipe and Plover," but for the accurate study of migration, such notes are, to say the least, unsatisfactory, because the several species are not separated. The observers are not to blame for this; they have done the best they could. Like the most of mankind, they cannot distinguish the different kinds at a distance. What we want, in addition to the general reports on all birds, which we are glad to get from anybody, is special reports from those who from profession or by practice have learned to recognize the various species of water and shore birds, both in the hand and on the wing. The Mississippi Valley contains many who are eminently fitted to aid in this work. There is hardly a lake in that broad territory where some one is not now anxiously awaiting the disappearance of its ice and the appearance of the water fowl; hardly a marsh that some one will not later be watching for the first signs of the birds that are to give him such glorious sport. These are the persons whose help we want. But the professional hunter is the man par excellence whom we are after. He is the one who is at home with the birds, whose business it is to watch and note accurately their comings and goings, and if he will contribute his observations, the spring of 1884 will see for the first time an extended series of exact observations on the migration of our water birds. Let all, then, who are willing to give us the benefit of their notes send in their names and I will furnish a fuller statement of plans and wishes.—W. W. Cooke (Caddo, Ind. Ter.)

Screech Owls in a Chimney.—Lockport, N. Y., Jan. 29.—The inclosed was taken from the Lockport *Journal* of yesterday: "About two weeks ago a stove was put up in a room in the residence of J. H. H. Clark, on Chestnut street, which had not been occupied for some time, and every night a rattling and scratching noise would be heard in the previously unused chimney. Occupants of the room endeavored to get the uneasy visitors out of their quarters, but without success until last night, when the fire became too hot and two full fledged screech owls, who had lodged in the chimney, came tumbling down into the fire place, overcome by heat. It is very seldom that screech owls make their homes in chimneys." The birds were brought to my son to be stuffed and mounted, and were male and female, and I think last season's birds; they were in good shape, but very poor, and I think they could have had but little to eat during the two nights they have occupied the chimney. My son has stuffed a number within the past month, and with this exception they have all been very fat.—J. L. D.

Tame Quail.—Monroe, La.—A lady friend of mine, Miss Slaughter, has a tame quail of our small variety, which domesticated itself. Miss S. lives on the bank of the Quachita, near Monroe, the premises being surrounded by corn and cotton fields. The bird, a female, came voluntarily into the yard and associated itself with the domestic fowls. It has been in the poultry yard about a year, and rarely leaves its domestic companions. It takes an active interest in matters at feeding time, and by its extraordinary pugnacity secures for itself a fair share of the food thrown to the chickens. Miss Lou says it will ruffle up its feathers and boldly attack a hen of ordinary size. A very curious feature about this case is that the bird built a nest in the garden last spring and laid some dozen of eggs, having no contact with any other member of its tribe. Part of the eggs were placed under a setting hen, and I believe the bird itself sat on the others, but none of them were hatched, owing, I suppose to want of impregnation.—Ouachita.

Another Tame Crow.—Referring to Mr. Sprague's tame crow, I am reminded of one formerly owned by a family in a village one and a half miles from my residence. This family ran a hack several times a day to the railroad station, one mile distant. For several weeks this young crow attempted to accompany the hack to the station but was invariably attacked at the outskirts of the village by some kingbirds who quickly drove him back to the house in which he at once took refuge. This crow became such an inveterate thief that the family gave him away to a young lawyer in the neighborhood. He kept him confined in his office till he became attached to his new home, when he allowed him to fly about the neighborhood. Although this young lawyer was fairly itching for business he soon had more "petty larceny" cases than he could attend to and was compelled to dispose of his crow, which soon went where all bad crows go.—M. P. P.

Early Migration of Woodcock.—On Thursday morning, Feb. 7, while out with my beagles, I flushed a woodcock. The bird was evidently a fresh arrival, as he seemed tired and loath to rise, being sprung several times, and always taking short flights. The weather had been mild for several days, and the morning in question was murky with drizzling rain. He was found in a low piece of woodland on the very verge of West Philadelphia, a spot that thirty years ago was a favorite haunt of these birds, but the steady growth of the city westward has trenched on this territory until now the houses are built up in solid blocks to within one hundred yards of where this bird was found. In a long experience I never remember to have seen woodcock so early in the season, and the case is especially remarkable, as up to within a week the weather has been very cold and the ground covered with snow and sleet.—Rusticus (Philadelphia, Pa.).

Recent Arrivals at the Philadelphia Zoological Garden.—One grizzly bear (*Ursus horribilis*), two raccoons (*Procyon lotor*), two gray squirrels (*Sciurus carolinensis*), one opossum (*Didelphys virginiana*), one great horned owl (*Bubo virginianus*), one herring gull (*Larus argentatus*), one broad-winged hawk (*Buteo pennsylvanicum*), two yellow-shafted woodpeckers (*Colaptes auratus*), one Amherst's pheasant (*Thaumalea amherstiæ*), two muscovy ducks, one diamond rattlesnake (*Crotalus adamanteus*), five alligators (*Alligator mississippiensis.*)

N. B.—In our notice of pictures received from Mr. G. Hill, Hudson, N. Y. (page 33), that gentleman's name was inadvertently printed Mills. Find in answer to "N. D." (same issue), dam of Snop should read Hill's Tilley.

Game Bag and Gun.

THE CHOICE OF HUNTING RIFLES.

[*Continued from page 30.*]

Editor Forest and Stream:

The man who asserts that he can remedy the defect of too much curve in the trajectory, either by high sighting, by taking "coarse lead" on the front sight, by holding over or high upon the game, or by elevating sights, or by any other plan, simply asserts that he is a quick and accurate judge of distance under the ever-changing conditions of ground and light; and that, too, in the very face of game that is generally ready to leave on the instant, and is often in motion. Every method of remedying this defect in the field involves the calculation of distance. There is positively no escape from it. With any man who makes such an assertion I have nothing to argue. Our experience is antipodal; there is no common ground upon which we can meet; no premises that we can use as a common starting point.

The man who asserts that a .40-caliber solid ball is large enough for deer, antelope, etc., simply asserts one of these three propositions:

First—That he can hit his game just where he chooses; or,

Second—That a ball is just as effective in one part of an animal as in any other part; or,

Third—That the crippling and torturing of game is a matter of no consequence.

I challenge the world to point out any way of escape from impalement upon the point of one or the other of these propositions.

With such a man also I have nothing to argue. There is no common ground between us. He is a being from a loftier sphere from that in which I live and for which I write. For years I have known that genius of the field who is never troubled with the eccentricities of lead. I have seen him perform. For a mere "duffer," a blockhead who has not sense enough to place every ball in the heart of a bounding deer to offer advice to such a demigod, requires more courage than this "duffer" happens to possess just at present.

There are, however, many clods of common clay who, like myself, feel compelled to bow to the vagaries of lead. Especially so when it is traveling upon a high curve, and the game is traveling upon a still higher curve. And we are weak enough to prefer a bullet that may take effect when accidently planted at .87.906 of an inch from the precise point where our aforesaid friend would plant it. And so weak are we in this respect, that we are hopelessly blind to the loss of an extra square inch of "pelt," and can even endure with composure the loss of fifteen and a half ounces of meat irretrievably "mussed" and ruined by an expansive bullet.

Such persons now prefer a bullet made expansive, and some prefer it even larger than .40. By some it is objected that expansive bullets are not sufficiently killing for want of penetration.

The effect of expansive balls has been immensely overrated. A large amount of twaddle has been written about "express shock," etc, tigers wilting like wet rags under a single bullet, and grizzlies' heads pulverized like puff balls, etc., etc. One who has never tried one of these balls but had only read of them, could conceive nothing less than a bottled up thunderbolt suddenly let loose in an animal's body. There is nothing to be done but to make the contact. The instantaneous paralyzation of every nerve and muscle in the victim results as a matter of course. Stop now, my friend, you need not give me a record of so many tigers or bears killed with a single shot each. I can find you a single muzzleloader of .45-caliber in this county that has killed fifteen grizzlies in just fifteen shots, all solid balls. I know, too, how it was done. By following the bear hunter's rule, viz., "let a bear alone unless you can get a dead sure shot." Any good hunter with any kind of a rifle that is accurate, will make runs of six, or seven, or eight deer killed in succession with the single ball, and all falling within sight. And it is probable that more deer have been killed at a single shot from small-bored muzzleloaders with round ball than have ever been killed or ever will be killed with all other rifles put together.

All such things prove exactly nothing except that the animal happened to be hit in the right place. Give me the formula for reaching the right spot and I want nothing better than a .38 or .40 solid ball. On what are known as the vital points of deer and antelope the difference between the most destructive express balls and the small solid ball amounts to little. For dangerous game it may be different, and even very little of course amounts to something. But I believe that even there the effect is immensely exaggerated. I have often seen deer, struck at the point of the shoulder, run fifty or sixty yards with 400 grains of leaden "splash" driven almost to the skin on the opposite side and tearing lungs and heart completely into shreds. The majority so struck will run some distance precisely as when struck with a solid ball; and the latter will bring many down in their tracks as quickly as the expansive one will. Nor can I discover any material advantage (in this respect) from increase of powder. And the principles of so much "force expended in an animal's body," "express shock," etc., I can find little or nothing in—so far as the vital spots are concerned. And I doubt if any one living shoots as large a powder proportion as I do, or has cut the hole of expansion bullets into more varied sizes.

But when we come to shots not on the vitals, the difference between the solid and the expansive ball becomes immense. And the place where common mortality is liable to plant a bullet in an animal running, or one a little too far off, or in bad light, or in brush, etc., etc., and which are not immediately vital, comprise almost two-thirds of the body.

While few or none will dispute this last statement, there are still many who claim that the solid ball, defective as it is, is still better than the expansive one, because of its better penetration.

There is some truth in this. Seven years ago I said in these columns that in the long run penetration was about as essential as expansion. Ever since then I have been using expansive balls of various sizes and shapes, and am fully satisfied that for 100 shots taken as they generally run a solid ball is better than an expansive ball that opens too quickly or that goes into splash upon flesh. I said then that the expansive hole in the bullet should be small and tapering to a point at the bottom. The more I use them the smaller I make the hole, and the more I am convinced of the necessity of making it small.

If the ball opens too quickly no amount of powder will give it sufficient penetration for those shots in which penetration is needed. It simply makes a wider flesh wound but without sufficient increase of depth to be of practical use. For such shots as a little too far back of the shoulder, or in the brisket, it will still be far better than the solid ball, but it will be inferior for nearly all the raking or quartering shots, where a ham must be shot through before the ball can enter the body. The expansive ball must in any event have a very heavy powder charge behind it, as even slight expansion checks it immensely, and no amount of powder will suffice for good penetration unless the ball is made to open slowly.

I think all the objections to the efficiency of expansive balls are caused either—

First—By too much expansion; or,

Second—By too little powder.

Both of these are combined in the Winchester express. The ball goes to pieces on flesh alone without touching bone; and though far superior for shots on the stomach, too high or too low in the shoulder, etc., of a deer, it is not equal in efficiency on some raking shots from behind to the .45-60 of the same company. The copper tube adds little or no strength to the ball; it is needless for accuracy or any other purpose whatever, except to catch gulls who think it has some marvelous virtue. If the hole were made narrower, shallower and tapering to the bottom, it would be far more effective, in the long run, though for some shots it would be less quickly fatal than as at present made. It also needs more powder, fully fifteen grains being needed to balance the increase caliber over the .44, the larger tube requiring always a little more powder for the same weight of lead. The ball is heavy enough, and if made to simply expand to about four-fifths of an inch, and backed by 120 or 130 grains of the very best powder, the gun ought to be the most effective of all rifles that can be held to the shoulder, its repeating power overbalancing all else.

The expansion of a ball can be tested only upon flesh. Soft clay may possibly do, but tests made upon wood, etc., are worthless. I have seen bullets with copper tubes hold together on wood and make good penetration, while the same bullet would invariably go to flinders upon flesh. If the makers of repeaters or rather express rifles will listen a moment I can give them some good advice that will tend to reconcile and unite all the conflicting opinions upon this point.

First—Make the ball light enough and the rifle heavy enough to prevent much recoil, so that a difference of twenty-five grains in the weight of the ball will not require any change of sights at ordinary range.

Second—In every box of cartridges let one-half the balls be solid ones, so that those who do not like expansive balls or want some solid ones can be accommodated.

Third—Make in the point of the rest a hole only half the length of the ball, tapering to the bottom and not over one-tenth of an inch wide at the top, and leave it open.

Fourth—Upon the box cover inform the purchaser that the latter balls can in a moment be made expansive to any extent desired with a gimlet, reamer or point of a penknife. Also that if he thinks the hole will affect the ball's accuracy that he may close it with wax or tallow, but that there is no need of anything.

Fifth—The last and best. Throw the copper tube to the dogs, stiffen the ball with tin and put behind it the last grain of powder that the repeater action will bear.

Quite an effective rifle may be made of a .40-caliber, with 100 grains of powder and 200 of lead. And I see no reason why such a rifle could not be made to take a cartridge of 120 of powder and 250 of lead. If the latter could not be worked through the magazine, it might be inserted in the barrel by hand when the carrier block is down and there is no haste in loading.

I think, however, if any one can only overcome the unmanly fears of a little recoil—entirely unfounded—and endure the sacrifice of a few ounces of meat, he will find no trouble with the .50-caliber of the Winchester, remedied as above suggested. For all-around work, for penetration, expansion and retention of velocity, a ball must have actual weight. Without weight, momentum or force is impossible, and without solid walls around the hole in a bullet slow expansion is impossible. Make the hole too small in a narrow ball and it does not expand enough. Make it large enough and it may go to pieces too quickly. Put weight enough in a .40-caliber ball to force its expanding front very far through flesh and you must make it too long to have good initial velocity.

How, then, shall we strike a compromise between the three conflicting elements of high velocity, weight, and sufficient striking surface? There is but one possible way to give a ball weight without cutting down its velocity. And that is by widening it. Of course it will need more powder, but give it that and you may get as high a velocity from the larger caliber as from anything. The late rifle trials in England show 1,946 feet a second velocity for a .50-caliber; powder 138, lead 342; while the .40, with the same proportion, 82-209, gave 1,873, and the .45, with 110-322, gave 1,776 feet. From the smaller caliber you may get the higher velocity from the same amount of powder, the tube being smaller. But it is only in the larger bore that you can unite comparative lightness of the bullet with sufficient actual weight for good penetration and crushing power.

S. T. Van Dyke.

California.

Editor Forest and Stream:

So long as there are different patterned rifles and men of different patterned ideas to handle them, and each handling attended by different circumstances, into which the merits of the handler enter as largely as the merits of the weapon handled, so long will different ideas be entertained relative to the efficiency of the various makes, each advocate invariably standing by the bridge that carried him safely over.

In the discussion now carried on in the Forest and Stream on the "choice in hunting rifles," I join in favor of Sharps army carbine, for frontier use, against all comers. I, for reasons strong as life, believe them unexcelled and far superior to any magazine rifle that has yet come into notice. For close and rapid shooting the magazine rifle may be without a peer, but such a happening comes but once in a hundred times, and when it does come the man that handles it must be its master, or nine shots out of ten go wide of the mark. Few men there are that can hold such a rifle to their shoulders and manipulate it effectually on objects distant fifty to one hundred yards.

Looking back over a long and varied experience in the use of rifles against both man and beast, I have yet to see it done. At long or short range, the carbine referred to is a

hard and deadly hitter. Its simple mechanism is always in order and they are as readily loaded as any rifle not a magazine-made, nor will I except the magazine variety if the user must needs take it from his shoulder to cast and replace the empty shell, for in that case a practiced hand will, with a Sharps fully hold his own. The latter, moreover, is exceedingly short and light, a matter of no small consideration, where constant use is required. The short, light barrel will, I know, be pooh-poohed by target ring hunters, but to the man that can hold them down they are kings.

Some time during the early part of the seventies I, with several others, was prospecting for placer ground on the headwaters of the Santa Domingo River, in Sonora. At that time the Apache Indians left the San Carlos Reservation, in Arizona, and raided as far south as Ures. The main body of them passed us on the west, as we afterward learned, but a party of probably a dozen happened our way, and the trouble began by the Indians ambushing myself and a companion as we were riding through one of the most beautiful oak parks it has ever been my good fortune to see. At the first fire they put us both on foot, but fortunately without bodily injury to outselves. My animal, a full-blooded bronco mare, was also uninjured, but the surprise was so sudden to both that she had me off in a jiffy. Although somewhat dazed, we up and treed instanter, and then the fun commenced. My mare, for a minute or so, galloped wildly about her struggling companion, and then made a bee line back the way we had come. The Indians in the meantime yelling their best, but not till we broke cover did they dare attempt to close in, and only then by individual spurts from tree to tree, as we made like moves, each one covering the other's retreat in turn. Finally, by a hard run we reached a deep arroya that cut across the bottom at right angles and made us masters of the situation, and gave us comparatively smooth sailing into camp, which we found thoroughly alarmed by the mare which had preceded us, and prepared for the worst.

We were at this time five strong—three Americans and two Mexicans (an old man and a boy). Our arms consisted of one Winchester rifle, two Sharps carbines and two old army muskets, with the barrels sawed short. The old man gave good counsel, and under his directions we hastily prepared for the attack that we knew was sure to come. Although the site of our camp was well chosen and watch constantly kept, those off guard slept but little that night.

Shortly after sun-up next morning, when we were congratulating ourselves on our security, a rifle cracked as a bullet pinged across our camp and broke ground a short distance beyond. To our surprise it came from a direction unexpected, but hugging the ground closely we rolled our blankets into temporary breastworks, and with ready rifles waited the issue, which we purposed should not be one-sided. Not knowing from which way the next shot would come we faced in the most probable direction. Presently a second shot, followed closely by a third from the same direction as the first, told us that our foe was reaching for us from one side only. We therefore gave it our united attention. A wreath of smoke hanging to the top of the grass localized our man. The only Winchester in camp was fired at him repeatedly without effect, other than to bring back answering bullets, one of which took the side out of a canteen that was standing by a stone previously used as a seat.

With us bullets were bullets, as none could be bought nearer than Tucson, distant nearly three hundred miles, and as each cartridge fired by the Winchester was one more wasted, it was decided to try him with a Sharps, and the duty assigned to the writer of this, who, hastily rising to a half kneeling position, fired two shots in rapid succession. A convulsive jump told us that something had gone wrong in the Apache camp. Fearing a ruse, we awaited further developments, but as none came, we investigated, and found the gentleman doubled up with a bullet hole through him from his left shoulder inside of right hip.

He had gained his vantage point by climbing up the side of an almost perpendicular box canyon, and then crawled fully three hundred yards on his belly before firing a shot. He was armed with a needle gun, old army pattern. They undoubtedly shoot as hard and carry as far as a Sharps, but because of their weight and length, are too cumbersome for a prospector to carry. We had, previous to this little incident, an exalted opinion of the magazine rifle, but after that we stood by the Sharps, and subsequent events justified our faith. I could give many illustrations in point, and may, perhaps, later on, if this is found worthy of publication. Now, however, I give but one which came under my notice when prospecting in the San Simon range with W. E. Cook of, I believe, Rochester, New York.

We were following up a dry path leading our horses, when we struck a bear trail that crossed the path we were in, to the opposite bank. As near as we could determine it had been made by not less than five animals. We mounted and followed the trail till it broke up, and was lost on the hard mesa, but off in the distance we noticed what appeared to be a cow and calf. Surprised that they should have strayed so far from any settlement, we rode carelessly toward them with a view of examining the brand if any they had. Greater, however, was our astonishment, when up with a snort raised an enormous she grizzly and a good sized cub. We had with us a crop-eared Mexican cur dog that stood probably about eighteen inches high at the shoulders. We had always regarded him as a good watch dog and a keen fighter, but at the sight of the bear he developed qualities that made him dear to us afterward, for with a vicious bound he sprang at bruin's throat, but being instantly knocked down we thought him killed. The next moment, however, he had her by the hams, and so quick was he that she could neither bite nor strike him. Several times she essayed a dash at us, who, on foot, were vainly endeavoring to lead our terrified horses closer up, but each time she gave us her attentions the dog gave her his.

As our horses refused to approach, it was decided that I hold them while Cook advanced with his Winchester to shoot her. He at a distance of not more than twenty steps fired at her four or five times. As each bullet struck her she would lie down, roll over and cry, then jump up and rush toward him, but as she did so the dog invariably bit her on the hams, and that annoyed her worse than the Winchester. In Cook's haste to cast an empty shell it fouled in the extractor, and he could neither get his lever up nor down. Throwing down his gun he ran to get my Sharps; but as I had too long stood a quiet spectator to one of the most exciting scenes I had ever witnessed, I left the horses with him, ran up, shot her through the brains, and the battle was over. She was thin in flesh, but her hide was equal in size to that of a large ox. The cub was very fat, and when dressed weighed about thirty or forty pounds. Before killing it we fought it with the dog, but as the latter was jaded in his fight with the old one, the cub on a square tussle was more than his match; but every time it got loose from the dog it would climb on the dead body of its mother and cry piteously.

The fouling of the shell, as stated, created with me a distrust in all magazine rifles of like make. Although I must confess that I afterward sent to San Francisco for one, and, through the excellent judgment of a friend, secured a very good one, but the caliber being too small for my use, I traded it off and fell back on my true but time-worn carbine. Later on it was stolen from me by a Mexican, and as he hied himself to the land of tortillas and beans, I never saw it afterward. A friend, knowing my admiration for the gun, presented me with a new one of the same make. It shoots as wicked as its predecessor.

In conclusion, I can safely assert that, if properly handled, there is no animal in the Southwest that can stand against them. I once shot a cinnamon bear that was walking on the side of a hill above and from me. The bullet struck and shattered the left ham bone, passed through the ham and ran under the skin along the entire length of the animal and effected a lodgment at the base of the upper jaw. Again, I shot at a bear that stood quartering to me. I saw the bullet strike the ground beyond him, and as he turned and headed down the canyon I believed that I had overshot him. Suddenly he stopped as if considering what was best to do, then staggered forward and fell dead. The bullet had gone entirely through him. In one winter alone, in the Santa Ritas, I killed fifty-four deer, and with but one exception, I never found a bullet in any of their carcasses.

ADIOS.

TUCSON, A. T., Jan. 28.

THE BIRDS IN WEST VIRGINIA.

SITTING by a large open fire, with my two dogs on the floor near me, for I have not as yet a better half, and having just finished overlooking gun and fishing tackle, I have picked up several of your last issues, and the first thing I see is your call to "feed the birds." Thinking you would like to hear from this part of the country, I send you this.

We had better partridge shooting in this county last fall than we have had for years, though the best that was done was thirty-eight to two guns. Our birds are wild, very strong, and feed close to woods and thickets, into which they go when first gotten up. We think thirty-eight good, very good, the rough country and all things considered. The gentleman shooting with me, Mr. S. W. M. P., of Philadelphia, is a much better shot than I am, and should this meet the eye of any of his Philadelphia Gun Club friends they will know what he killed and what fell to my share. Take him all in all, I think him the best all-around field shot I know.

I am taking care of and feeding at my own place about fifty birds, and have induced some six or eight of my farmer friends to feed any birds that may come about their barns and outbuildings. I furnish the feed; they do the feeding, and I have just returned from a "round trip." I find they have upward of 200 partridges feeding, and hope to get them safely over this hard, cold winter. I hear of others taking care of a covey or so, and knowing the country here as I do, I feel assured many birds will take care of themselves. The farmers last fall left much corn outstanding, and it has proved of great advantage to our game.

In the proper season, when our black bass fishing begins, I shall be glad to give any information I can to any of your many readers who may wish it. I use the fly entirely and know the Potomac and Cacapon rivers for miles as thoroughly as I do the road over which I drive to get to them.

N. S. D. P.

BERKELEY SPRINGS, W. Va., Feb. 1, 1884.

ANOTHER CAT TALE.

"REIGNOLDS'S" cat reminds me of a tough specimen that I had some experience with some thirty-five or more years ago. I was boarding at a large farmhouse, where they kept a fine flock of poultry. Late in the spring the egg-gathering members of the family found fresh-laid shells emptied of their contents. The mischief was charged upon skunks, but one day a large semi-wild, yellow and white cat of the Thomas persuasion was caught in the act. This cat had recently taken up his abode at the large barns upon the place and was remarked a fine specimen, but this egg-sucking development caused an immediate proclamation of outlawry from the household department. At that time I kept an excellent hunting rifle and practiced with it almost daily.

One afternoon a little girl of the household who had been out gathering eggs, came running in flushed with excitement, holding a broken egg, saying she had just driven the old yellow cat from the nest and he was then out back of the further barn. Hastily loading my rifle, I ran across the road where I could look down back of the long line of barns. Just as I reached the corner of the nearest barn, I met the cat, which instantly beat a rapid retreat and the intervening fence prevented a snap shot on the run. The cat passed the barns and turned under the long shed beyond, stepping behind a large, flat stone, upon which one of the shed posts rested, and looked back. I could just see his left eye by the edge of the post and over the stone. The distance was about thirty-five yards, and in those days I rarely missed the size of a dime at that distance when firing at a rest, as I deliberately did in this instance, of course drawing a fine bead upon the cat's eye. The first thought was to set the rifle in the barn and get a shovel to bury the cat, but these animals perform ground and lofty tumbling when shot through the head with a bullet, and as I could see no demonstrations of the kind, I omitted the shovel. Repairing to the shed-post, I found no cat, but did find a surprising quantity of yellow hair and some clots of gore, showing that the bullet done some execution. Nothing more was heard from the cat and no more empty egg shells were found. The family were certain they smelled the dead cat under the barn.

About the middle of the following January we had a fall of some twelve or fifteen inches of snow in one night, which had not yet drifted. The next morning was all that could be desired for fox hunting, the locality being in the Green Mountains. I had an excellent old foxhound, and started early for a large pasture about a mile away, between two large swamps, a famous crossway for foxes. As I was getting well between the swamps the sagacious old hound was ranging well ahead, when he suddenly turned from his course and the wag of his tail showed that he was on a track which, of course, must be fresh. It lead in the direction of the nearest swamp, and a few yards further on the hound disappeared down in a gulley and commenced his peculiar standing bark, showing that he had game at bay. I knew there was no hiding place in the vicinity, and as the hound never hesitated clinching any game found in that region, I was puzzled and hastened forward. Coming suddenly upon the hound not fifteen feet distant, I found him confronted by an enormous yellow and white cat. I had never known him to take the least notice of a cat before, and the peculiar alternation of glances first to me and then to the cat, was clearly an inquiry for orders. I gave the word, "Take him," and in about three seconds the air for some feet around was filled with a mixture of snow and hair, and the hound was uttering muffled yells of pain, which, however, soon ceased, to be supplanted by a long-drawn "yaul" from the cat, who a few seconds later lay limp and dead on the hair-carpeted snow. As he lay with his left side up, I discovered that his left eye was gone. An examination disclosed an unhealed wound nearly in the center of the back of the head. It was the old egg-sucker that I had omitted to bury eight months before. Moral: Always plant cats as soon as you shoot them.

Right here I wish to add that this particular style of cats destroy more small game and insectivorous birds than all the gunners in the land, including pot-hunters. M. P. P.

MUCILAGE-EDGE WADS.

Editor Forest and Stream:

It is to your columns that sportsmen must look for information concerning anything new which pertains to sporting matters, and for that reason I beg a short space to herald a new and, I think, important device for loading shells. All the present methods of securing wads over the shot are unsatisfactory. Crimping is not only a great nuisance, but fails to meet the desired end. On a recent shooting trip I was shown something new in this line, the invention of Mr. M. S. Alexander, of Moorefield, W. Va. The powder and shot are put in the shell in the ordinary way. After the shot are put in, a loader, into which a narrow circle of sponge projects from the outside, is set over the shell. A wad having small strips of muslin, covered with mucilage, is now dropped into the loader and pushed home in the usual way. As it passes through the sponge the mucilage is moistened, and the wad held securely in place by the strips sticking fast to the sides of the shell. Crimping is entirely done away with, and the shells remain almost perfect after being fired. Shells can be loaded more rapidly than by the ordinary method. These wads work splendidly in brass shells, and are far ahead of the patent mucilage-edge wads. I have carried shells loaded in this way for days without the wads starting. This new device, if ever brought on the market, will prove a boon to upland sportsmen. SYCAMORE.

BALTIMORE.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

I see many things from the fertile imaginations of sportsmen on practical matters that are not governed by human agency. Marvelously long shots, clean kills at unreasonable distances, and wonderful scores, in one instance forty-eight out of fifty grouse (perhaps it was only thirty-eight out of forty). Now, the natural and uncontrollable inclination of shot is to scatter. This deflection commences the moment the charge leaves the gun. At a certain distance the spaces between pellets are larger than the object aimed at. This marks the killing range of any gun. Forty yards is taken as a standard limit, and most guns are targeted at this distance. Where one gun shows a killing circle at this range, twenty will fail to make a pattern that would be sure to stop the bird if held "straight on." Sometimes a very long hit is made, as occasionally the foolish bird, instead of keeping straight for the woods, tries some fancy flying and comes to grief. Often I have made what I thought a splendid long shot, fifty yards at least.

"I say, Bill, where did you stand?"

"Right there by that patch of briers."

"Where did the bird fall?"

"O, way down the fence, fifty or sixty yards."

"I don't see it nor any feathers near here."

"Well, he fell right about where you stand. Look a little further down."

"Can't find him.

"Well, come this way a little. I know I killed him dead."

"How are you 'fifty yards!' Here's the bird, not over twenty-five."

"Well, I killed him anyhow, and he looked as if he were a hundred yards."

This little scene is quite familiar to us all. I am in favor of some margin. But when we get out of bounds, it don't count. "Dead out of bounds," you see.

MARION, Ind. THIRTY-EIGHT LONG.

A NEW STYLE OF "TURKEY SHOOT."—Marcellus, N. Y., Jan. 30.—*Editor Forest and Stream:* In your last issue you refer to the decadence of the old-fashioned "turkey shoot." We have had several matches in this vicinity this winter, conducted on principles in harmony with those of the S. F. P. C. A. Ten or twelve shooters paid for a turkey and decided who should have it by shooting at a small paper target, the shooter winning who drove a pellet nearest the center. While there was much chance in the game, yet a good shooting gun would win in the majority of cases. The distance was 35 yards, 1¼ ounce, No. 8; target, 5½x6 inches. One gun was fired five times, with an average of fifteen pellets in the paper. Three other guns fired four shots in all and made an average of seventeen. At another match, same conditions, distance 35 yards, target 5½x6 inches, four guns were fired twenty-four times with an average of 30⅝ pellets in the target. One gun an equal number of times, averaged 26½. All conditions were as favorable as could be made; rest, cleaning between shots.—MARCELLUS.

SOUTHWEST FLORIDA.—Myakka River, Fla., Jan. 25.—Thinking that some of the readers of your valuable journal would like to know of some locality on the southwest coast of Florida where good hunting could be found, I can safely say this is the best game country I have seen along this coast as yet. The country I speak of is along the banks of this river, which extends from Charlotte Harbor into the mainland about thirty or forty miles. Along this river deer are very abundant, also turkeys and wild hogs. Although I have seen but one covey of quail, I think they are more plentiful up the river. Wildcats and panthers are quite common around here, and if one has dogs a bear can be found in a short time. One party of eight men, that went up the river a short time ago, killed in a day and a half eight deer and seven turkeys, using dogs. This river could be reached by taking passage on a schooner at Cedar Keys that runs to Hickory Bluff. At the last-named place a sail-

boat could be purchased at the store there, also provisions, etc. The river is only ten miles from the Bluff, and with fair wind a person could run up the river for ten or fifteen miles, or, if desired, a man could be engaged at the store for pilot.—Chester.

Indiana Quail.—Fairland, Ind., Jan. 18.—Reports so far, notwithstanding the heavy fall of snow, are favorable for quail and "ground game" in this part of the State. An unusual number of large bevies are reported left over, and are now in good condition.—C. H. W.

Paper Shells.—The problem of making a paper shell which should possess in many respects the staple qualities of a metal shell, has engaged much of the attention of the cartridge companies, and the claim has frequently been made that success was achieved; but experience developed objections to the new patents. The U. S. Cartridge Company has put out a shell which, it is claimed, is superior to anything of former make. The paper is subjected to a process that renders it water-proof, reliable, and capable of withstanding large charges of powder and repeated reloading. Its smooth, stiff shape—inside and out—is retained after recrimping and firing, and it is not easily bent out of shape by rough usage. They are primed with the new No. 2 Lowell primer, and with a good lock are not liable to miss.

Camp Fire Flickerings.

"That reminds me."

The writer of story No. 36 will please send name and address to this office.

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THE "Spoon Hill" gang were sleepily lolling about the waning camp-fire. Talk had run low for some time when all of a sudden some one asked, "Dad, did you ever shoot a deer by the light of a jack lamp?" ("Dad" is the dyspeptic, asthmatic member, and when the fit is on is as gloomy and cross as two sticks.) "Never but once; and I have always regretted it." "Why so?" yelled several at once. "Because it was the means of prolonging this miserable existence." "Out with it, old man, tell us all about it," screamed the entire crowd, as yawns gave way to glaring eyes and anxious faces.

"It happened several years ago. A small party were camped on the bank of Crooked Lake, away up in Clare county, more for fishing and idleness than anything else. This was previous to the building of the F. & P. M. road and deer were quite plenty at that time. The question whether a deer could be captured by jacking or not had been hotly discussed, so it was decided to try the experiment, and I was successful in shooting the finest buck that ever fell to my gun. It was something irregular in regard to season; but the meat was very acceptable in camp, as we were getting tired of fish and salt pork."

"Oh yes, that may all be, but how in the name of all the saints did the shooting of that deer, 'prolong that miserable existence' you just mentioned?"

"Steady now, youngster; don't pull in your fish until you have him hooked. The day before, I had accidentally discovered a small stream in one of my rambles, which I was anxious to fish alone and unbeknown to any one in camp. The day after shooting the deer, while the rest were enjoying their after dinner nap, I sneaked up alone, and whipped the stream with tolerable success, when a gathering of the clouds warned me to either go quickly to camp or to take a thorough wetting. You all know that water agrees with me inwardly, but when applied outwardly it is a promoter of colds, asthma and rheumatism; therefore, I reluctantly started for camp, but the shower was too quick for me, and the pattering rain drops plainly indicated that unless I soon found shelter, a downright drenching was in store for me. On looking about I found a fallen tree, the butt of which was hollow; into this I crawled as quickly as possible. The rain came down in torrents, the lightning flashed, the thunder rattled, the wind howled and tore around fearfully, but there I lay dry and comfortable, as snug as a bug in a rug. Blow, blow, ye winds; rain rivers, cataracts, aye, whole lakes if it pleases you; what care I in this dry, cozy shelter? I kicked up my heels, whistled with the wind, laughed at the rain and bellowed with the thunder. I even began to sing—

"'When the humid shadows hover
Over all the starry spheres,
And the melancholy darkness
Gently weeps in rainy tears.'

when there came a furious blast of wind tearing through the forest, uprooting and dashing to the ground nearly every tree in its pathway. One fell directly across the end of my cosy retreat, smashing and closing up my entrance in the most effectual manner. Vainly I kicked against this summary proceeding. Yelling was useless, as I soon concluded. I saw that the only way out was to cut for it, and at it I went. I had a good knife; the upper part of the log was badly damaged; and I soon had daylight shining through. 'Bah!' said I, 'sicker children have been cured;' and I worked away with a will; and presently had a hole large enough to thrust my arm through, and I was glad to straighten it out, as working in such narrow and restricted quarters had benumbed and almost paralized it. In drawing back my arm my hand was badly scratched on the ragged edge of the log, my fingers loosened their hold on the knife; it fell and slid down on the outside!

"No, it could not be reached. I tried until nearly exhausted. My clothing was as wet from perspiration as though I had stayed out in the shower. A storm of kicking, twisting and screaming followed. All vain and useless. Then a calm; and I arrived at the conclusion that my earthly troubles were nearly over, and that my relatives would be denied the privilege of paying the undertaker for an extravagant and useless show. I began to look away back to my earliest recollection and thought over my entire past life; and as each sin of omission and commission passed before my eyes I humbly begged for mercy and asked forgiveness from that Supreme Being into whose august presence I soon expected to be ushered. Tranquilly, thoughtfully and hopefully I traveled over my entire existence down to the hour I shot that deer, when presto! change. I collapsed, dwindled and shrunk into such utter littleness as without any difficulty to crawl through the small hole I had made in the log; and securing my knife I made my way to camp, arriving in time to gorge myself at the evening meal with the broiled flesh of the deer, which had been the means of prolonging this miserable existence." W.

Grand Rapids, Mich.

Sea and River Fishing.

TROUTING ON THE BIGOSH.

SCALY SUBJECTS.

IN the morning Jack brought the fish, over which the Colonel and the Doctor had disputed as to their identity, into camp with the remark, "Here they are; father says they are all suckers, while the Doctor claims that only one is a sucker and the other two are some kind of perch."

"There is more than one kind of sucker," said the Colonel, "and when I called them suckers I did not mean that they were all of one kind; any one can see that they are different. This one I call a black sucker, while the others are silver suckers. There is another kind, I believe, isn't there?"

"Forty, at least," I answered, "not counting many closely related forms as the buffalo fish of Western waters, and others. This fish, which the Colonel calls the 'black sucker,' is the only one of the three which belongs to the family of suckers; and it is a common species. I will tell you something of it after we get through with the fish which the Doctor thinks are 'some kind of perch.'"

"Give us some double-jointed, nickle-plated, waterproof, cable-laid and hard-twisted Greek and Latin names," suggested Jack, "it makes the fish taste better when it is cooked, to know that it has two names with seven syllables in each, and, as the showman says of the zebra's stripes, 'nary two alike.'"

"Jack's theory that scientific names are used merely to amuse or confound those who may not be familiar with them," I replied, "is not confined to him alone, but is one that I have often heard in different ways before. As a rule, Jack, the names are not hard when you know them, and many fishes have no other names. For instance, take the name 'pickerel;' out of a family of fishes which has five sharply defined and plainly marked species in America, one of the five is called by anglers 'mascalonge,' and the other four are all called pickerel in some parts, and pike in others. As two of these four grow to a size to be angled for, it is a matter of wonder that our anglers, who are observant and more inclined to make distinctions where no structural differences exist than to overlook them, should confound the large lake pike, *Esox lucius*, with the smaller species, *E. reticulatus*. The fishes not only differ in structure, but in color as well, and the angler takes more note of color and attaches more importance to it than the naturalist does. The first of these fishes is marked by oval white spots on a dark ground, and the latter by a black network more or less plain on a ground varying from green to greenish-yellow. There is actually no other way to make it plain which fish is meant than by using the scientific name. There are a few anglers who, while knowing the scientific names of the fishes they take, hesitate to use them for fear of being thought pedantic. They never hesitate to speak of a rhinoceros or a hippopotamus, both of which are the Greek names of animals as used in zoölogy, nor in speaking of plants do they fear to mention the heliotrope, chrysanthemum, coleus, ailanthus, verbena and other systematic names, for the reason that they are more commonly used, and because the names were introduced with the things to which they belonged, and they have become familiar."

"Jack," said the Doctor, "while I know nothing of ichthyology, I recognize the fact that the language of all sciences must be in what are called the dead languages, because they never change, and are therefore employed as a common nomenclature for all scientific purposes by all civilized nations, or rather by all those which have derived portions of their languages from these older ones, for I deny that the Japanese and Chinese are not to be classed as 'civilized.' In anatomy and medicine we have the dead languages as a common medium in both structure, diseases and remedies. Jack only needs to be reminded that when he speaks of an asphalt road, cellar, or other surface, he is using one of those horrid latin words which, when he goes to college, as his father intends he shall in a couple of years, he will learn is the *pons asinorum* of the angler."

"I'll tell you how Jack is," said his father, "he thinks that what he understands everybody else should know. A few days before we left home he was trying to explain to a maiden aunt of his, who never went further in mathematics than the multiplication table, how, by triangulation, the distance to the sun was made out. He stated it at ninety-two million miles, but as he knew that the astronomers differed to the extent of two millions of miles more, he did not care to go into astronomical science further, and yet this is one of the most exact of sciences. Certainly, ichthyology cannot claim to be an exact science, for it is well known that it is not as far advanced toward a solid foundation as some other departments in zoölogy."

"No," answered I, for the Colonel looked toward my side of the shanty for a reply, "there are several authorities at present and they do not agree in all things, but while they differ, their works usually give as synonyms the nomenclature of other writers. It is only within a few years that anglers have taken much notice of classification, because the means of information were not at their hands and the older angling writers made a muddle of describing fishes. My first attempt to determine fishes by aid of a book was made with a pike and Frank Forester's "Fish and Fishing." I looked at his plates of that fish and mascalonge and thought the fault was mine in failing to determine which fish was before me. It never occurred to me that the author did not know the difference, as I believe now. These two fishes now before us, which the Doctor calls 'some kind of perch,' are very far from that family. All fish which may properly be called perch or bass have hard rays in the dorsal fin and one or more in the anal, and they are stiff and sharp and will wound the hand. These, on the contrary, have no spinous rays anywhere, the first ray of the dorsal being hard but not sharp, and having a single dorsal fin and no teeth on the jaws, are members of the great family of *Cyprinoids*, to which belong most of our so-called 'minnows'. This family in Europe contains many species large enough to attract the angler, while in America only two or its members grow to any size, and these are before us. The smaller of the two, with the black spot at the base of the dorsal fin and the horny tubercles on its head, which are shed in summer, is variously called chub and horned dace, and is the *Semotilus corporalis*. It is, as you see, nearly a foot long, and is a greedy fish and fair fighter. In many countries it would be esteemed as an angler's fish, but in America only three or four fishes are deemed worthy of our steel, and the rest are left to the boys. This is a splendid specimen, and about as large as it ever grows. The larger one is also called chub and also fallfish (*Semotilus bullaris*). It lacks the dorsal spot, and has larger scales than the other. This fish is fully thirteen inches long, and I think it grows to be sixteen. I have taken it with the fly in Virginia and found it fine sport. There are other differences than those mentioned, but it is not necessary to go into them here. This last fish carries stones to make its nest, and piles up quite a mound of them."*

"Well, how about the sucker?" asked Jack, "give us a lecture on him."

"This sucker is the most common of all its family, and there is not much to say of it. It is called 'common sucker,' 'white sucker,' etc., and is *Catostomus teres*. How did you take these fish?"

"The chubs were taken on one of the Doctor's small hooks," said the Colonel, "baited with a small minnow, while the sucker took in the tail of one of those crawfish which you brought in yesterday. There must be other fish in this lake, and some day I intend to try that bunch of lily-pads, near the north shore, for perch or pickerel. So far we have only fished in deep water for lake trout."

"Did you find your place by the ranges given?"

"Yes; no trouble about it. I wonder now how I was so stupid as to doubt it; but it was a new thing that never occurred to me before."

"Tell us about the stream," said the Doctor; "I want to learn if there is a chance to wade and fish, for I am tired of boat fishing."

"Doctor," said I, "the stream is wadeable, as far as we saw it, and I may try it with you some day just for a change, but when you get to be as old and as lazy as I you may think as I do, that boat fishing is the best of all fishing. I can sit in a boat and cast my fly, and when tired can stand up and cast, but while always ready to work with my arms I can say that I hate walking of any kind, in water or out. This may be owing to my build, which is better adapted to sitting down than to foot-racing, but I can truly say that it never hurts my feet to sit down."

"And I," said the Doctor, "can as truly say that I would rather walk twenty miles than to row five, as I have seen you do. It is my legs that are industrious, but my arms too lazy for all exercise except fly-casting, and when I begin it in the spring my biceps gets dreadfully sore. However, we will try it some day."

"All right, gentlemen," chirped the Colonel; "you may wade if you like, but none of it for me. I am quite an enthusiast on the subject of fishing, but to enjoy anything, whether it be fishing, the opera, or a dinner, I must be comfortable both in mind and body; and to have my feet in icy water and the sun broiling down on my head at the same time would be like listening to a prima donna when, like *Iago*, I had a 'raging tooth.'"

"I agree with you, Colonel," said I, "and the only alternative is to use wading boots, which may be the lesser of two evils if one only thinks so. Whether it is best to cut slits in the toes of our shoes to let the water out, or to wear rubber boots which come to the hip and retain the perspiration, is a question. In one case it means rheumatism and in the other a train of minor ills that, like Byron's shaving, balances the account." Fred Mather.

*See Forest and Stream, Vol. XVI., p. 410; XVII., p. 412.

GAFFING A STURGEON.

"Acti labores jucundi."—*Latin proverb.*

"Labor done is pleasure won."—*New Translation.*

OUR two small yachts, out for a couple of weeks' cruise, were stormbound, having found a lee in one of the many bays of Long Point which are sheltered from the lake (Erie) by either a bar or marsh. Going on shore for a constitutional in the evening, we happened to find a fishing shanty during our walk. We found that its occupant intended going out to his sturgeon lines as soon as the sea went down. The gale had blown for twenty hours right on shore, and raised a nasty sea, which prevented any one visiting the lines during that period. We at once volunteered to man his yawlboat and take the fisherman out, but, although very desirous of going, he declared it almost impossible to gaff any large fish with so much sea on. I, half jokingly, yet half in earnest, volunteered to gaff all the sturgeon on his line if he would take my oar. I fancy the man anticipated some fun, and thus acquiesced.

After a thorough drenching in the surf, which, however, had gone down considerably by this, we launched the boat, took our places in her, got clear of the breakers, were into the swell and riding easy. I felt quite important as I stood in the bow, knowing that so much depended upon my skill, nerve, and strength (although I did not realize the quantity of each required), in capturing something I had never attempted or seen done before. I believe I quailed a little, just when a larger wave than usual threw our bark almost out of the water and myself almost into it, because I thought with philosophic truth that if such a thing should happen while I was leaning over the side with about a hundred pounds of extra inducement beckoning me to come out, I should have to obey. However, while I was grazing my shins against the forethwart, in my descent to the bottom of the slippery boat, I noticed a few smiles from as many half-turned faces, and from that moment determined to make a fool of myself no more.

The leemost fishline buoy is reached. I grabbed it and followed the line hand over hand. Very soon it began to come heavy and rise perpendicular. I thought at first I had got hold of the anchor end, but was assured by our "wiser head" that 'twas a fish. Pulling very slowly and cautiously, as if afraid of frightening the poor thing, but not so much so as not to disturb him, for he commenced to act like a small Georgia mule, which started me thinking and wondering, "If this is what he can do in twenty feet of water what will he accomplish when I get him at arm's length." I allowed no intimation of my thoughts to escape me, so none knew how taken aback I was on seeing this whale hove to right under my nose. When within easy reach I seized the gaff hook and began picking at it, without any effect, for the hook just slid over him. "Hit him hard," sung out the fisherman. I did so, but at that moment my antagonist had placed two or three feet of water between us, and so my endeavor was merely sufficient to prick him, as a spur would a mustang, and cause him to move round rather lively for a while. Chagrin is a powerful incentive, and caused my ire and muscle to rise, so that when my friend showed his face again on the surface, I let drive. It would have been all right that time, only the hook was the wrong way, and I fear the poor fish had a terrible sore eye and nose after it. This was sufficient to stun most things, but not him; it was merely the signature to a new lease of life, and he made the most of it.

The next time I was successful, and buried the hook well into his waist, just a little abaft of midships, and held on. I pulled and so did he, and I found we were well matched. I did not know how this novel "tug of war" was going to end, nor when exactly. In about ten minutes I felt sure he would turn the scales at a ton, and I was about to ask the crew to clap on a watch tackle, or make some other absurd request, when I came to my senses. My position is worthy of notice. My knees were braced against the planking till I thought I should start them. My back got such a kink in it as to be a fit subject for carrying in a sling; my arms were fearfully strained by reason of pulling with that outward tendency so much harder to endure than a straight up and down haul. My eyes, being so intent on watching my captive, had necessarily at the same time to watch the coming and going, the rising and lowering of every wave, which began to act like a pump in my nausea box, and would forever lower me in the estimation of the crew.

I am proud to say I neither gave in nor let on. I just let the perspiration run, the fingers cramp, the back gripe, the knees grind, and attended to the solid avoirdupois outside. I succeeded at last; he came in, although he had his revenge in doing so, for as he slid into the bottom of the boat he made a skating rink of it, with material more slippery than greased ice, down which I went as if determined to follow him to the bitter end.

This was my first as well as my worst. I gaffed ten more that evening, but I hooked the others nearer the bows of the fish than the stern; and if ever you have occasion to educate greenhorns who wish to go sturgeon fishing in a heavy sea, lay down, as a first principle, the rule "gaff as previous as you can behind the head."

I think I was deserving of the congratulations I received, for I did not make a miss with eleven fish, which totaled more than as many hundred pounds in weight. VERAX.

PORT ROWAN, Ont., Feb. 5.

LAND-LOCKED SALMON.

[*From Report of the Maine Fish Commission.*]

WE have expended more of our slender means for the last two or three years, in trying to protect this magnificent fish of Sebago Lake from the organized gang of poachers that destroy them on their spawning beds on Crooked River and other tributaries, than we could well afford. Were these fish better known, this lake would be more visited than even Dominion waters, and with the same outlay of time and less money, with as great success. Sebago Lake is worthy a special appropriation from the city of Portland or the railroads running into it for its protection from the vandals that line its shores, as an investment that would repay a hundred fold in attracting travel. The habits of the fish have not been carefully studied by the local anglers. We do not deem them more shy than are salmon always in dead waters, even on the best salmon river. We do not believe they have been fairly and persistently tried with the fly. We ourselves have never had time to devote to it of more than one individual day. On the best salmon rivers we have known of successive blank days, without a rise to the most tempting flies the angler's book would afford. Experienced anglers would attribute the inertness of the fish to climatic causes, the premonition of approaching storm and in most cases with correctness. Sebago Lake is worthy the persevering study of any good angler, and we think with surety of reward. Trolling, always in a light wind to ripple the water; trolling by night should also be tried; casting the fly by night; deep fishing with fine tackle and live bait. It is worthy of a season's study and trial. Beautiful as Lake Como for a cottage home.

Some very large land-locked salmon have been taken in the spring at the mouth of Songo River. A poacher was last year arrested and convicted for spearing a salmon of twenty-four pounds weight on Crooked River. An account comes to us to-day of a salmon found stranded on the banks of Roger's Brook, which measures thirty-seven inches in length and weighed twenty-two and one-half pounds; as it was somewhat shrunken from long exposure, it was estimated that when first out of water it would have weighed thirty pounds. The Grand Lake or Schoodic salmon is very much smaller than that of Sebago Lake, four and one-half pounds being deemed a monster fish, while the average would not exceed one and one-half pounds. Both the Schoodic salmon and the Sebago salmon have free access to the ocean, and in both lakes have *Salmo salar*, or sea salmon fry been freely introduced for some six years past. In this connection we here publish a copy of an old document for which we are indebted to J. F. Pratt, M.D., of Chelsea.

To Honorable the Senate and House of Representatives of the Commonwealth of Massachusetts, in General Court assembled:

The petition of the subscribers inhabiting near Crooked River humbly showeth that in said river is a kind of trouts of an uncommon size, weighing from three to fourteen pounds. Some have been caught which weighed seventeen pounds. These fish run up the river in the months of September and October, but are scarce at all other times of the year. They have been, and might continue to be, very beneficial to all who inhabit near said river, which runs from a pond in Oxford, near Bethel southerly line; from thence it runs through said Oxford and through Waterford, a part of Norway and of Philip's Gore, Otisfield, and a part of Raymondtown into a gore between Raymondtown and Flintston, where it falls into Songo River, and with it into the Great Sebago pond. These fish have for several years been prevented from passing up said river by wares built wholly across the water by the inhabitants near the mouth thereof, and as there is no law to prevent them, they not only boast of having availed themselves of all the benefit of the fish in years past, but declare they are determined to do it in future, to the great injury of the other inhabitants above them, who have (or ought to have) equal right to the benefit of the fish. We therefore humbly request your honors to take the case into your consideration, and to make a law for preventing the obstruction of these fish in said river and its connections in the months of September and October, and as in duty bound will ever pray. (1800).

Both at Grand Lake stream and Sebago these fish have been always called trout, indeed at the latter are known by no other name, black spot and red spot indicating land-locked salmon and brook trout. These fish have proved a great success in Moosehead Lake and in Rangeley waters. In the former they are taken more or less every season; one of four and one-half pounds and some of smaller size have been taken the present year. As in Moosehead none but Schoodic fish have been planted, four and one-half pounds, if correctly reported, would indicate increase of size from the present stock. In Rangeley, salmon of four and one-half pounds have been taken, and on the spawning grounds in 1882 a number of very large fish were observed that were estimated at much greater weight. Here we are in doubt as to the increase of weight from present stock, as some fry from Sebago were planted in Rangeley waters several years since.

How to class these fish, amid all this conflicting matter, we are still in doubt, but as none but Schoodic fry have been introduced into Moosehead Lake, we must look there for evidence as to increase of weight in new waters. We shall continue to introduce these fish into both Moosehead and Rangeley in as large numbers as our restricted means will allow, until we have established a sufficiently strong breeding stock to afford the yearly supply of young fish to constitute their future breeding home. The rule then should be rigid enforcement of the laws, for the most skillful and persistent angling with baited hook or flies, will never exhaust the fish of any waters. Rigid laws enforced, will always preserve a sufficient stock. The cunning of fishes is coeval with the angler, and the education of experience will preserve its ratio with each. A strict observance of close time, and fair honest angling, is only requisite. We planted this year 225,000 fry in the following waters: At Moosehead Lake, 100,000, hatched at the excellent hatchery of O. A. Dennen, near the Kineo House, in charge of Capt. Brown. At Rangeley, 100,000 at the Oquossac hatchery, in charge of T. C. Hewey. At Enfield, 25,000, in charge of A. J. Darling. These last were divided between Island Pond, Molunkus Pond and Cold Stream Pond. It is a subject of common observation, that these beautiful fish do not now frequent in accustomed numbers certain favorite localities on Grand Lake stream, where they formerly abounded. This has led to the hasty conclusion that they are lessening in numbers, and the cause attributed to artificial spawn taking. The region of Grand Lake, so near the boundary of two distinct governments, would naturally make its wild recesses of forest the favorite resort of questionable, or rather unquestionable, characters from all sources. The poachers of every possible grade exist in numbers only equaled by black flies, and as deserving of extermination. Again, angling is now a mania, a fashion, and five hundred fish where formerly but one cast his fly. Fish have their pastures, their feeding grounds, the same as our domestic stock. Destroy the feed of a pasture and its stock will abandon it and go elsewhere or starve. Certain flies are bred on the bottoms of rivers amid the gravel and earth. Cover this bottom with tan-bark or shingle waste or sawdust and the bottom of the river no longer produces food for fishes; the fly bred from the egg or worm that the bottom of the river supplied with the congenial element no longer rises there; the fly that hovered over its surface to deposit its eggs that begat the worm and in turn the fly, no longer tempts the fish. Streams that formerly bred shad by millions, cannot now feed one, even if millions were there planted, for the river, now bottomed by poisonous sawdust, produces no food for the baby shad to support it on its way down to the ocean. A factory on the river's source may make a fortune for its owner, even if not allowed to destroy all the fish in the water that runs below his mill. He may not make it at so little trouble, but has he a right to do it if he deprive a family even of one meal of food a week?

In response to many letters from Aroostook and other sources, asking relief and redress, which we are unable to afford, we will propound to our legislators the question, "If a stream running through a section of country supplies both food and recreation to the inhabitants, has any one a right, by establishing a factory upon its sources or its shores, to so poison its waters as to destroy the fish and thus deprive others of the value of the food destroyed?" Is not even the beauty of a stream running through one's land a consideration of price and value? Has as any one a right, by establishing a factory above one's property, to destroy its beauty by throwing waste into it, or its fish by emptying the washings of a starch or other factory into it? Industry and ingenuity have a right to their reward, but not at the price of the food, or the value of the beauty of the humblest homestead.

THE BEST COLOR FOR LEADERS.

Editor Forest and Stream:

I have been greatly interested in Mr. Wells's able article on the color of leaders. His suggestions appeal to all anglers, and I feel confident that there are very many among your readers who could, "an' if they would," give other bits of experience, which would be extremely useful to them.

I notice that in your Game Bag and Gun and your Canoeing columns, especially, your correspondents are constantly volunteering hints and advice to others, while in the angling column I see nothing of the kind. Can it be that anglers are less generous than other sportsmen, and are unwilling to aid their brethren by their own experience and experiments? It looks a little like this, and I cannot believe that this is true. Yet, my purpose in sending you this note is to inquire of Mr. Wells, whether his experiments were conducted quite in the way to acquire the best knowledge as to how differently colored leaders appear to the trout in the water. What I mean is this. The fish and the leader are both in the water, and only this medium intervenes between them. The former sees the gut through only the water. In Mr. Wells's experiments, however, he saw the leaders in the first case through air, glass and water, and in the other through air and water. Might not these different media through which the visual rays passed, make a difference in the color appearance of the gut? I put forward this opinion rather timidly, for I feel that I do not know enough about the subject to discuss it intelligently, but I have vague recollections of college text books, which spoke about these matters. The rays from the eye would pass directly toward the object through the air, but when they impinged upon the water, would be deflected so that the object would appear to occupy a position which it did not have. Whether or no the fact that the eye looked into the water from the outside air would make any difference in the apparent color of the gut, I do not know, but would it not be worth while to look at it merely through the water, that is with the eye immersed?

In order to acquire the best possible notion of how the leader looks to the trout or salmon, we should, it appears to me, try to make all the conditions under which we look at it, as nearly as possible, like those to which the fish is subjected.

I should be glad to see this subject further discussed by Mr. Wells, and others as able as he. If this be done, anglers everywhere will be benefited.

The points I have mentioned are no more than suggestions, and as such, I submit them to those who are wiser than I.

NEW YORK, Feb. 7. COUPLES.

1. ONE IN SEVEN of those insured under the Accident Policies of The Travelers, of Hartford, Conn., in 1883, was killed or injured by accident, and received cash benefits.—*Adv.*

THE SAGACIOUS CATFISH OF WASHOE.—The catfish of Washoe Lake having all buried themselves in the mud at the bottom, therein holding themselves in a semi-dormant state, refusing to heed the beguilements of the angler, some miners the other day concluded to play them a trick. The men, at the suggestion of one of their number, who said that in winter catfish always remained buried in the mud until they heard the first thunder in the spring, exploded a giant-powder cartridge on the shore. Sure enough, the fish thought they had heard it thunder, and swarmed to the surface. The men were delighted with the success of their experiment, and were about preparing their hooks and lines when a new movement among the fish attracted their attention. As though some signal had been given or word passed, every catfish, great and small, turned toward the Sierras, stuck his head out of the water an inch or two, took a long look, then disappeared beneath the waters of the lake—went down into the mud again. The miners now fired half a dozen cartridges—all they had with them—at various points around the lake, but not a fish showed itself. They had all taken a good square look at the Sierra Nevada range, and had seen that it was still white with snow.—*Virginia (Nev.) Enterprise.*

FISH AND GAME IN VIRGINIA.—Norfolk, Feb. 5.—During the last week of spring-like weather, the rockfish (*Roccus lineatus* and not *chrysops*) have begun to run up the Elizabeth River, and a few are caught daily in purse nets, all in excellent condition, hard and fat. The run is of much larger fish than those of last fall and early winter, when they were abundant, but seldom heavier than two pounds, the great majority falling far short of one pound. We are getting them now up to nine pounds weight, a female of seven and a half pounds having roe developed about as large as a man's finger. No salt-water fish in the market; of fresh-water kinds none but inferior sorts, viz., perch, brown, speckled and yellow, black bass, called chub here, and small pond pickerel. These fish are all caught in ponds, and are very inferior to the same fish of the North. Of game, the market is well supplied during this warm weather with canvas-backs, mallard, widgeon and black ducks, none, however, in very good condition. With thermometer down to freezing, all of the best ducks go to New York. A few rabbits and squirrels make up the list.—PISCO.

BASS INJURED BY FRESHETS.—Mechanicsburg, Pa., Feb. 9.—Owing to the high water in the Connoduguinet Creek, and the consequent breaking of the ice, quite a number of large bass have been washed ashore, the majority of them being more or less injured. Some of our fishermen have taken advantage of this opportunity to secure said injured fish, and it is a question with our game protection sportsmen whether the gentlemen are legally allowed, under existing Pennsylvania State laws, so to do. I await your answer.—R. S. [As the laws of Pennsylvania forbid the taking of bass at this season and only allows them to be taken with hook and line at any time, we think their capture in the manner stated is illegal. At the same time, it seems to mitigate the offense if the fish are injured so badly as to be strewn on the shore.

A FISHING DOG.—Oxford, Feb. 2.—*Editor Forest and Stream:* This is too good a story to keep. While Fish Warden Pettingill was at Oxford, investigating the recent violation of the fish laws, he wished to buy a foxhound of Louis Edwards, a well-known fox hunter of this place. The hound was let loose from his kennel for inspection. He immediately got over the fence and returned with a good-sized trout, which he laid at the fish warden's feet. You can imagine the feelings of his owner, especially as he is not a fisherman, nor has he been fishing this winter. The fox hunter has not been near the village since.—JOSH JEEMS.

FLY-RODS LONG VS. SHORT.—In ten years' bass fishing I have found that a rod of 16 feet would catch more fish than one of 11 or 12 feet; it has proved so with both rods in the same boat, the long rod in stern, casting on same side of the boat, and consequently fishing over water partly worked, also in following boats using short rods. Therefore I am in favor of long rods, and would be pleased if your readers having two-handed rods would give weight, dimensions and timber, dimensions at ferules and also between joints.—R. H. DIXON.

GRAYLING AND TROUT EGGS.—At a recent meeting of the London Piscatorial Society, Dr. Brunton read a paper, which tended to prove that if the grayling fed on the eggs of the trout at all, it was to a very small extent. He had on the previous Saturday taken several grayling from immediately below the scours on which trout were spawning, and had carefully dissected them immediately after capture, without finding any trout eggs.

SALMON FISHING WANTED.—"West Chester" asks: Can any of your readers inform me where a novice can find good salmon fishing for ten days or two weeks at not too great cost, and what will be the license fee, the route, approximate expense of the trip and the time necessary, allowing two weeks on the stream?

PENNSYLVANIA ANGLERS' ASSOCIATION.

[An address read before the Anglers' Association of Eastern Pennsylvania at its annual meeting by A. M. Spangler, President.]

IN accordance with the request of the Association at its last meeting, I have prepared some remarks in regard to the operations and obligations of the Anglers' Association during its single year's existence, though I have not attempted anything like a detailed statement. That duty properly belongs to the Executive Committee, whose first annual report will be submitted to-night, and which will contain full information on those points.

My special object in the preparation of this paper has been to present for your consideration a few plain suggestions in regard to the course, which, in my judgment, the Association should pursue in order to more effectually secure its primary purposes, namely, "The preservation, protection and increase of edible fish, and the enforcement of the laws concerning the same."

If these suggestions, or others of equal or greater value, are adopted, salutary results must inevitably follow, and a great public good be achieved.

It is only a few years since the importance of fishculture and fish protection first began to be thoroughly impressed upon the public mind of this country. European nations had long before recognized and appreciated their true value, and with commendable prudence made adequate wholesome provision for checking the improvidence that had so nearly depleted their waters. This was accomplished by the only two seemingly possible methods—the enactment and enforcement of stringent protective laws and liberal appropriations for propagating purposes. I need not state that those nations are to-day reaping a rich return for their investments.

It was not until the veteran Seth Green and a few others,

by vigorous writing and repeated successful practical experiments, satisfactorily demonstrated the entire feasibility of artificial fish propagation, the restocking of exhausted streams, and the imperative necessity for such legislation as had been found needful and wholesome in Europe, that the generally prevalent apathy on these important subjects gave way to a marked feeling of interest. Up to that period the whole country appeared to have imbibed the idea that either our edible fish supply was inexhaustible or that fish propagation and fish protection were matters too trivial in importance to merit public attention—subjects fitted only to interest and amuse the few earnest and sanguine men who had been giving them so large a share of their time and attention.

But such indifference could not last forever. In the very nature of things, it was certain, sooner or later to find its limit, unless the people and their legislative representatives were willfully determined to bind themselves to the cogent facts which were so persistently forcing themselves into conspicuous notice, and the logic of which was almost irresistible. Gradually, but surely, the conviction that something must be done and that speedily, asserted itself. It needed no argument to convince those disposed to give the subject thoughtful consideration, that almost without exception, the waters within the limits of the then settled portions of the country, had been improvidently drained of their finny inhabitants, and that unless prompt and decisive measures were adopted, the day was not distant when our indigenous edible fishes, once so abundant and so nutritious, would, from their scarcity, become veritable curiosities.

Eminently successful experiments in artificial propagation and the clearly demonstrated fact that the streams exhausted of their fish could readily be re-stocked, and at a comparatively trifling outlay of money, gave additional healthful impetus to this conviction. Social economists became earnest advocates, and the need for prompt action almost imperative. Demands for the appointment of fish commissions, the artificial propagation of edible fish, and the stocking of streams with such as would afford, in proper season, remunerative employment to the professional fisherman, sport to the angler and wholesome food for the table, came up from every section. These were supplemented by others for the enactment of laws that would give protection to the great interests which were about to be re-established.

The responses to these demands were in the highest degree encouraging. Beginning in 1866 with Massachusetts and Connecticut, closely followed by Vermont, New Hampshire and Maine; these in turn by Rhode Island, California, New Jersey and Pennsylvania, and finally by all the States except Alabama, Tennessee and Oregon, with nearly the whole of the Territories, fishculture appeared to enjoy almost universal popular favor.

Pennsylvania's first commissioners were appointed April 15, 1866, and the first appropriation for general purposes amounting to $18,080, made in 1873. Appropriations in varying amounts, were continued from that time up to 1882, when the sum of only $7,500 was granted. The aggregate was $114,000; but in addition, several special appropriations for fishways, amounting to $30,000, were granted; but only $20,000 was expended, as some of the later appropriations depended upon the unqualified success of the fishways that had been previously constructed. The belief in the entire success of these passageways for shad, is not entirely unanimous, though those erected under the direction of our State Fish Commissioners, have as nearly met expectation as any constructed elsewhere, either in this country or abroad. Adding these fishway expenditures to those for general purposes, and we have an aggregate of about $134,000, placing the Keystone second on the list of States, in the matter of encouragement to fish propagation and protection, New York being entitled to the first, her appropriations for like purposes amounting to $240,000. The sum total of the various State and Territorial appropriations from 1866 to 1882, inclusive, was $1,110,096.

In 1873 the United States Fishery Commission was established by Congress. The sum set apart for its use in the beginning was ridiculously small, amounting to only $8,500, but it was annually increased thereafter, until in 1882-83. it amounted to $229,000; the aggregate for the ten years being $1,190,955.45. This sum represents investments in the form of hatching houses, apparatus, ponds, salaries, etc., together with the purchase of three steamers for the special use of the Commission, and preparations for the national exhibit at the London Exhibition in 1883.

The sum total appropriated by the National, State and Territorial governments, during the period named, was $2,292,051.45. When this large amount—an exceedingly small portion of which was expended in salaries—is considered, and in connection with it the restrictive and protective enactments of Congress and the several States and Territories, a natural inference would be, that the country was in a fair way to have its streams and lakes literally teeming with the choicest of food fishes. It needs not the telling that such is not the case, or, that with a few exceptions, the United States are not greatly better off, as far as the supply of food fishes is concerned, than in 1866.

These facts, thus concisely presented, bring us fairly face to face with the question: With such ample facilities, why have we such meager results? As has been shown, millions have been appropriated and expended for fish propagation within the past ten years, and we should have valuable results, in some unmistakably tangible form. We have results, but they are not commensurate with these large outlays of money and labor.

Fish have been artificially propagated by hundreds of millions, and protective laws of the most stringent character enacted, but the waters yield no adequate return. Why not? Simply because the protective laws have not been enforced. There are several reasons for this non-enforcement. Officials sworn to support those statutes, have not only foresworn themselves by neglecting that duty, but worse, in many well-attested instances, have been proven comparceners with those engaged in open violation of them. The fishery laws, save in some exceptional cases, have therefore been mere nullities. They are practically so to-day.

Private citizens are not willing to play the ungracious and unpopular part of informers upon their lawless neighbors, and many county officials wink at proceedings which may appropriately be designated as great public wrongs. The fault is not in the laws, but with the people and the officials.

The aversion to becoming informers appears to be insuperable. Men who have volunteered to give evidence in cases of poaching, have been boycotted or threatened with personal injury, and in consequence, few are found willing to incur such penalties for the mere sake of having laws in which they are no more interested than their neighbors, respected. How then are these difficulties to be surmounted? If officials are faithless to duty, and private citizens refuse to interfere, then organized associations must assume the task, or the admission be made that fish protection, through the intervention of law, is an impossibility.

It was in view of such a conclusion that "The Anglers' Association of Eastern Pennsylvania" was formed. A dozen gentlemen met a twelve-month ago, organized, and adopted a constitution and by-laws. The purpose of the association is clearly defined in the first article of the constitution, which declares that "the primary object shall be the protection and increase of edible fish in the waters of Pennsylvania, and the enforcement of the laws concerning the same."

Necessarily, the operations of the association have been limited. Starting with a mere handful of members, and with a treasury as empty of money as the streams of fish, it was not to be expected that much would be accomplished until the organization had "lengthened its cords and strengthened its stakes." But notwithstanding this primitive weakness, the members have pressed the good work with untiring zeal and energy, and it affords me great pleasure to state, with prospects of eminent success.

The membership during the year has increased to more than two hundred, and is still growing, comfortable headquarters have been secured and nicely furnished, and as the report of the Executive Committee shows, a number of streams in the vicinity of the city, and in some of the northern counties, have been stocked with trout; detectives have been employed to secure the capture and conviction of persons engaged in illegal fishing, and rewards offered for such information as will lead to the exposure and arrest of offenders of all kinds against the fishing laws. Although none of the lawless parties have yet been brought to justice, the effect of these measures has been very salutary. In a number of sections of the State, where fishing with seines, fyke-nets, fish baskets, weirs and other unlawful devices, as well as with hook and line during the close season, was openly practiced; the posting of the Association's placard, and the suspected presence of detectives, have had the effect of intimidating the wrong doers, and greatly lessening the amount of illicit fishing. This is encouraging.

But much yet remains to be done. We have only made a fair beginning, but with reasonable prospects of ultimate success, if we diligently persevere. If violators of the fishing laws are taught to understand, by practical demonstration, that the association is in live earnest, and that it means to press the good work in which it is engaged until the authority of the State laws is fully acknowledged by a respectful observance of them, the men who have hitherto been setting them at defiance will pause and reflect upon the possible consequences before indulging in further infractions. That will be a great point gained, for the association, through its correspondents, has reliable information to the effect that in the upper waters of the Delaware, throughout the almost entire length of the Susquehanna, in the Schuylkill, Perkiomen, Lehigh, Brandywine, Juniata, and in fact in nearly all the bass and trout streams of the State, the fishing laws are defiantly violated. It has directed official and general public attention to such pregnant truths, and has energetically labored, with the limited means at its command, to counteract these most reprehensible practices.

"Rome was not built in a day," nor can we reasonably hope to accomplish the reforms at which we are aiming in a twelvemonth. They amount almost to a revolution, for attempt to disguise it as we may, there is no such thing as getting away from the fact that public opinion in the rural districts has undergone a marked change for the worse, in regard to the fishing interests of the State.

When the subject of fish propagation was first introduced, it was received with general favor. The successful practical experiments of Seth Green and his coadjutors, had satisfied even those who had been most incredulous, that the artificial breeding of food fishes was feasible. Public expectation was therefore largely excited. When hundreds of thousands of small fry were placed in the streams of the State, the confident expectation and belief was, that in the course of four or five years, the re-stocked waters would teem with edible fish, and that all who so desired, could have them in abundance, at the mere cost of catching. So they would, had the wise provisions of the fishery laws been observed. But they were not, and are not. In most instances, they are as completely disregarded as though they had never been enacted. Worse than that, as already stated, in a number of well authenticated cases, county officers who attempted the destruction of dams and other illegal devices for capturing and killing fish, were openly resisted and their lives threatened. This warfare upon, and overturning of the work done by the Fish Commissioners, began as soon as the young fish had attained fingerling size, and this discreditable spirit is asserting itself as boldly to-day as at any former period since the re-stocking of the streams of the State was begun.

Is it surprising, then, that there should be a revolution in public sentiment, that tax payers disheartened by this decade of virtually fruitless experiment and waiting, have become weary and disgusted, and that there is sturdy opposition to further appropriations? And yet there is no real cause for despondency. True, the anticipations of the great mass of the people have been disappointed; but the fact remains, that although the increase of edible fish has not met expectation, there has been a practical re-stocking of all the waters of the State, and, that if it be possible, either by enforcing existing protective laws, or by procuring such additional legislation as will make fish-poaching a misdemeanor, punishable with imprisonment as well as fine, the desired result will ultimately be attained. Ten years of freedom to the fish now in the streams of the State to multiply without let or hindrance, is all that is needed to fill those waters with the finest edible fish in the world. If all the fish dams or baskets now in the headwaters of the Delaware were destroyed, and unrestricted freedom given to the shad to spawn, and to the young shad to migrate to the south in their season, the supply would be equal to almost any conceivable demand that would be made upon it. Instead of being compelled to pay, as the people of Philadelphia have been doing for many years, from forty to sixty cents for a fair-sized shad, it is hazarding nothing to assert, that fish of equal size and quality would be profitably sold for less than half the price named.

The question for the thoughtful consideration of the Association, is, what remedy, if any, have we at command? A specific is provided in existing laws, could they be rendered practically operative. When it was proposed to the rats in council assembled, to put a bell on their mortal enemy, the cat, the proposition was received with tumultuous joy, but the old dread revived when a venerable member of the assembly gravely inquired, "Pray, who is to bell the cat?" That is the problem, we, in common with all the friends of the fishing interests of the State, are now called upon to solve. If, as past experience has so clearly demonstrated, private citizens will not become informers, and officials will not perform their sworn duties in regard to violations of the law, we must seek for other aid.

The education of public sentiment is one of the remedies I would suggest. Not many years ago, insectivorous birds were generally regarded, either as nuisances, or at best, worthless, except for food. Instead of protecting them, farmers, in many cases, encouraged their destruction—frequently by lending a helping hand. But when their grain crops were devastated by vermin, their fruits destroyed, and their incomes, in consequence, seriously lessened, they began to look around for the cause and its remedy. Science assisted in the search, and very soon demonstrated that the immense multiplication of crop-enemies was due to the wanton destruction of the birds. What was the result? Laws for the protection of the badly used little friends were enacted, and as farmers had learned, by costly experience, that they had a direct pecuniary interest in having those laws observed, their own guns were laid aside; the pot-hunters who traversed the country, invading private property and slaughtering birds of every description, were driven away; respect for the close seasons was everywhere manifested, and they are receiving their reward in the form of improved crops and the presence and songs of the unselfish feathered friends, who, only a little while before, they were endeavoring to destroy. It was the *argumentum ad crumenam*, the potency of the mighty dollar, that wrought the change.

Now, to my mind, the money value of the fish interests of the State is as readily susceptible of convincing demonstration. Fish food, instead of being a staple article of daily consumption, is little less than a luxury to those of humble means. The workingman cannot afford to place it on his table except at occasional intervals. It is more costly than beef, and in addition, were the demand very materially increased, the supply would be inadequate, for it is a rare thing that fresh fish are so abundant in the Philadelphia market or elsewhere, as to cause a glut, or even any marked decline in prices.

Though without positive data, I do not hesitate to assert as my confident belief, that if the edible fish now in the waters of the State, were allowed to propagate unmolested for ten years, or even five, and that, if thereafter, the protective laws were enforced as they should be, the annual gain in the form of wholesome and nutritious food would exceed a million of dollars. If my conjecture is even approximately correct, has not every citizen a direct pecuniary interest in the matter of fish protection? and if this were clearly demonstrated, as it so readily can be; would not each one instinctively feel that he had an indisputable right to a share in the products of the State's waters, and that those who infringed the protective laws were defrauding him of a portion or perhaps the whole of his rightful dividend? Therefore, one of the first and most important steps to be taken is the education of public sentiment in the direction indicated. Let it be shown that this immense annual addition to our animal food supply, can be had almost without cost. The investment has already been made. The stream are sufficiently stocked now. Give the fish fair play. Let them alone for a few years, and the increase will come as certainly as that day follows night. Impress upon the popular mind another simple truth, namely, that in order to maintain this abundance, the only requisite will be the adoption of the course so successfully and profitably practiced towards the birds—protect them.

But where shall this educational process begin? With the printing press of course—with the newspaper, the magazine, and statistical facts in form of printed documents liberally distributed. The people must be taught that the "the gods help those who strive to help themselves," that if they would have fresh fish in abundance they must unitedly assist in protecting them against both open and secret enemies. They must be taught to regard every man who kills edible fish out of season, or by illicit means at any time, as a public enemy. They must be confronted with such startling truths, as that a single fish-basket in the spawning waters of the Upper Delaware, causes the destruction of a great number of young shad than are taken full grown in an entire season, by one-half of all the fishermen on the Delaware River. It may sound improbable, but I give it on no less authority than that of one of the State Fishery Commissioners, that drowned shad, of a finger's length, have been hauled away from such traps by the wagon load, to be converted into manure by farmers in the vicinity.

I have personal knowledge of the fact that nearly every paper, daily or weekly, published in Philadelphia, has pledged the full weight of its influence in behalf of this valuable interest. I doubt whether there is a single one that is not ready and willing to co-operate heartily in the work proposed to be done by the Anglers' Association. With such powerful auxiliaries, the educational process will be begun under the most favorable auspices. What has been said of the readiness of the city press to assist, will as fully and properly apply to the newspapers of the State. Let us begin with them all and begin now.

Again, public sentiment must be educated up to the point of believing that our association was not organized for mere sporting purposes. Sport is one of its cardinal features, but it has others of still higher importance; for, if we would have angling sport, we must have fish, and can have fish only by protecting them, as the law provides. It should therefore be our earnest endeavor to convince every one, that while we are striving to enlarge the means of fishing recreation, we are at the same time laboring to build up a most valuable State interest. There are few men in Philadelphia or the State, who, if made thoroughly acquainted with the character and object of the association, will not cheerfully become members, even though they never caught a fish or expect to do so. They will recognize and appreciate the fact that the organization is purely unselfish, and that if successful, a great boon will be conferred upon the whole people. Some of these will be influenced by the voicings of the press, but the most effectual method is the personal presentation of the association's claims, by the members themselves. All business men know that such an organization cannot be effective in its operations without funds, and all who are possessed of the right kind of public spirit, will regard it as a privilege, or at least a duty, to join our ranks. If they find that there are those ready and willing to give time and effort to the good work indicated, and without other remuneration, either present or prospective, than the consciousness of being in the discharge of a public duty, I shall be greatly disappointed if hundreds who now stand aloof because they have had no proper conception of the real objects of the Anglers' Association, do not rally to its support.

As already stated, the membership has increased greatly in numbers and influence. It is composed of gentlemen of wealth and respectability, and I am pleased to note the watchful care exercised in regard to the admission of members, in order to prevent the introduction of any mischievous element. We want more of this influential material, and we shall fail in duty if we neglect to make the effort necessary to secure it.

There are special reasons why the organization should number its membership by thousands instead of hundreds. First, the funds that would accrue from such accessions are needed; second, necessary and important legislation will have to be applied for. If such application is backed up by a thousand or two of the best names in Philadelphia and vicinity, the granting of it will be at once almost assured. For these and other reasons that could readily be advanced, we need a great many more members; we should and can have them, if those now connected with the Association will act promptly and energetically.

It is an axiom as old as humanity that if we would have others respect us we must respect ourselves. If we preach fish protection and practice fish destruction, our false pretensions will naturally and rightfully earn for us distrust and contempt. It therefore behooves every angler to frown upon practices of every kind that tend to the wanton killing of fish. To some who wield the rod and reel it may seem something noteworthy to be able to boast the taking of a hundred trout, but how contemptible the boast, when, if the entire catch were put in the scales, it would not draw five pounds. There are such pot-hunters—unfortunately, too many of them—who would have the world believe them sportsmen. They have not a vestige of claim to the title. No true angler can possibly entertain for them any other than a feeling of profound contempt, and I am gratified in being able to say that the Anglers' Association of Pennsylvania is free from all such travesties upon sportsmanship.

The Governor must be urged to make pointed allusion to the importance of the subject in his next message, and it is not hazarding anything to say that the request will be cheerfully complied with.

The formation of auxiliary societies throughout the State, or at least in the vicinity of large streams, should be encouraged.

The names of sheriffs and other public officers, who either neglect or refuse to perform their sworn duty in regard to the Fishing laws, should be reported to the proper authorities.

Regular correspondence should be kept up with kindred associations in other States.

There should be a library composed of all procurable publications bearing upon the commercial and sporting fishery of our country and of the world. Measures looking to such a result have already been taken, and can hardly fail of success.

But our efforts at fish protection must not be confined to the waters of our own State. Those of New Jersey, especially the sea coast, have strong claims upon the attention of the Association. The Legislature of that State being foiled in its well-meant endeavors to abolish illicit fishing along its coast, because of lack of jurisdiction, the important subject was im-

mediately and energetically taken up by the State's representatives in Congress, and Senator Sewell has been untiring in his endeavors to have this alarming evil corrected, and with every reasonable prospect of success. The hands of these advocates of fish protection should be held up and strengthened by whatever influence the Anglers' Association of Eastern Pennsylvania can bring to bear upon the subject.

It is not necessary to recite the reasons that should prompt to such action. They are patent to all who have given the subject even casual consideration. To permit the further wholesale destruction of the menhaden fish on the coast, is simply an invitation to those engaged in such wrong to completely destroy the supply of salt water food fishes which has hitherto found its way to our markets. How seriously that supply has been diminished since menhaden fishing has been tolerated, need not be told. What will be its ultimate effect, unless it is speedily abolished by law, may readily be inferred from what has already been realized. I feel that I cannot too strongly impress this matter upon the attention of the Association. Action should be prompt, energetic and decisive. Our protest should be made now, and in language that will admit of no misconstruction.

If it be urged that we are transcending our sphere of duty, the answer is that the wrong is not limited by State law or State boundaries. It is national in character, and hence protests by this Association are not only admissible but should be made by citizens of every State.

Having thus, in a desultory way, complied with the request of the Association, allow me in my conclusion to tender my congratulations to the members for the encouragement they have thus far received. That the most sanguine anticipations of the founders of the Association have been more than realized, need not be said. The future holds out still stronger inducements than the past, for the reason that we are gradually becoming more familiar with the proper methods of dealing with those who have hitherto displayed such total want of respect for statute law. Perseverance works wonders, and if the energy and determination that have thus far characterized the proceedings of the Association are maintained, there are some of us at least, who may live to see the day when the streams, not only of our State, but of the whole country, will yield their harvests of food fishes as abundantly as they did years ago, before the spirit of extermination, now so rife, had attained formidable proportions. This hope is strengthened, as far as Pennsylvania is concerned, by the fact that we are assured that in the future, as in the past, we shall have the hearty co-operation of our own Fish Commissioners, to whom we have been indebted for many courtesies and whose labors in behalf of fishculture and protection have been so damagingly interfered with by the parties to whom frequent and special allusion has been made in these pages. A communication from their Secretary, Mr. McCullough, informs me that they are constantly in receipt of encouraging communications from every part of the State, and that notwithstanding the marked disregard of the fishing laws there is a steady and sure increase.

Fishculture.

PROPOSED ADIRONDACK HATCHERY.

THE following bill has been drafted, and will soon be introduced into the Legislature of New York, by Mr. O'Neil, of Franklin Co. There are many good sites for a hatchery in the Adirondacks, and the eggs of native fishes could there be hatched and distributed without much trouble or expense. The following is the proposed bill:

An Act to establish a fish hatchery in the Adirondack forest:

Section 1. The Treasurer shall pay upon the warrant of the Comptroller to the Commissioners of Fisheries out of any money not otherwise appropriated, the sum of five thousand dollars for the purpose of establishing a fish hatchery at some convenient point in the Adirondack forest, for the purpose of restocking the lakes and streams of said forest with trout and other fish natural to that locality.

Sec. 2. This act shall take effect immediately.

THE EDIBLE QUALITIES OF CARP.

IN his forthcoming book entitled "Carp in American Waters" the treatment of the above mooted question is probably foreshadowed by Capt. Peirce, in the following communication to this paper:

The question is indeed a much mooted one. I have given it all practicable investigation. However divergent the views of fishculturists upon other points, all agree to the unequalled edible qualities of the brook trout when taken from its native habitat. Most fishculturists now also agree to its marked deterioration in flavor when artificially cultivated and fed (as is practically compulsory) on slaughter house refuse.

I was in Boston a few days before last Thanksgiving, which is the "national New England holiday," and was noticing the accumulations of poultry. Of course, the national bird of New England is the turkey, and, it will be remembered by the way, that Franklin maintained it should have been the national bird of the country; however, a more gamy one was selected. Well, as I said, I was noticing the poultry. The turkey had all the "posts" of honor, though a large number "were put to the rack," but the Jersey chicken was next. I was repeatedly informed that New Jersey poultry commanded from three to five cents per pound more than any other in Boston markets. Now, Mr. Editor, I have been spending a large portion of the time since the war, in the leading poultry-raising section of New Jersey. Although the matchless climate of that region may have some effect upon the poultry, its chief superiority is attained by the intelligent culture which obtains there (I do not refer to "culchah" but to the treatment of poultry). The Jersey women have entire charge of the poultry, and "what they don't know about the business, is not worth knowing." The secret of the superior flavor is no secret there. It simply consists in confining the poultry in coops, with slatted floors, raised a foot or two above the earth so that no filth can accumulate. This is done two or three weeks before marketing, and in the meantime they are given only pure, clean food and drink. This changes the entire flavor of the fowl. Of course the dressing of the fowl has also some effect upon the flavor, but the principal factor is its treatment a few weeks previous to marketing.

Now as to carp. Some of my editorial friends seem to think me an enthusiastic old crank, because I maintain that good, edible fish can be raised in warm and even filthy waters. I have told you how poultry, raised even in the filthiest barn yards, is, in a comparatively short time, transformed into healthy and exquisitly flavored food. The same poultry fattened in barn yards and at once killed is not only ill-flavored but positively unhealthy, sometimes fatally so, the same as the ruffed grouse is known to be when it has been feeding upon poisonous birds or berries in winter. Now I propose to apply the same system to carp that the Jersey women do to poultry, even to their slaughter. The Jersey women would not have their poultry slaughtered by drowning or otherwise smothering them, nor would I take fish from the water and allow them to smother and die as is generally done with the fish we eat in this country. But, for obvious reasons I must tell part of the story in my forthcoming book.

MILTON P. PEIRCE.

PHILADELPHIA, PA.

THE AMERICAN CARPCULTURAL ASSOCIATION.—An organization with the above title was formed in Philadelphia, on Feb. 8. The following officers were elected: President, William Parry, Parry P. O., Burlington, N. J.; Vice-President, Henry P. DeGraaf, Bowery National Bank, New York city; Treasurer, Samuel Wilkins, 329 Market street, Philadelphia, Pa.; Secretary, Milton P. Peirce, 323 Walnut street, Philadelphia, Pa. Directors—Dr. S. T. Davis, Lancaster county, Pa.; Joseph Pyle, West Grove, Chester county, Pa.; George Hamel, Sr., Weldon, Montgomery county, Pa.; Jeremiah Comfort, Wm. Penn, Montgomery county, Pa.; Edwin Tomlinson, Byberry, Philadelphia, Pa.; William A. Wood, Pittsgrove, Salem county, N. J.; Amos Ebert, Kirkwood, Camden county, N. J.; Rev. J. H. Brakeley, Bordentown, Burlington county, N. J.; E. G. Shortlidge, M. D., Wilmington, Del.; George W. Hill, Clayton, Del. The office of the Association is 323 Walnut street. It aims to embrace directly and indirectly within its organization every carpculturist in the country, and desires States and local branches organized throughout the country. Its principal object is the dissemination of useful and reliable information among its members. It will cheerfully co-operate with fish commissions, boards of agriculture, agricultural societies, granges, etc. Wishing to respond, as far as is practicable, to the wants or desires of all engaging in carpculture, it invites all interested to correspond freely.

TIME OF HATCHING CARP EGGS.—In the Bulletin of the United States Fish Commission the following extract from a letter written by Dr. H. H. Cary, Superintendent of Fisheries of Georgia, to Professor Baird, appears: "I have been taking some pains for the past two years to ascertain the period of incubation of the eggs of German carp. A statement in your report for 1875-'76 that they hatched in from twelve to sixteen days was doubtless based on a lower temperature of water than prevails in this latitude during the hatching season. Last year, with the temperature of the water at about 69 deg., the eggs hatched in about five to six days. The present year, with a higher temperature of water, a more carefully conducted experiment has demonstrated that the eggs will hatch in from forty-eight to seventy-two hours. The eggs hatch finely in water at a temperature of 90 deg."

IN THE ADIRONDACKS.—The hatchery of the Bisby Club is in complete running order. It has troughs for land-locked salmon, lake trout and brook trout, and has the McDonald jars for the frostfish. The eggs have done remarkably well so far, and notwithstanding the severe cold in that region the spring water has not frozen up, although the air has been 30 deg. below zero on two or more occasions, and the water in the troughs has been steadily at 33 deg. above. The hatching has progressed slowly, with little or no loss after the early pickings, and the fry are expected to be unusually healthy and vigorous.

The Kennel.

FIXTURES.

BENCH SHOWS.

March 4, 5, 6 and 7.—Cincinnati Bench Show, Melodian Hall. Entries close Feb. 25. Charles Lincoln, Superintendent, care of B. Kittredge & Co., Cincinnati, Ohio.

March 12, 13 and 14.—New Haven Kennel Club's First Annual Bench Show, Second Regiment Armory. Edward S. Porter, Secretary, Box 657 New Haven, Conn. Entries close March 1.

March 26, 27 and 28.—The Dominion Kennel Club's Second Annual Bench Show, Horticultural Gardens. Charles Lincoln, Superintendent. C. Greville Harston, Secretary, Toronto, Canada.

April 3, 4 and 5.—The Cleveland Bench Show Association's Second Bench Show. Charles Lincoln, Superintendent. C. M. Munhall, Secretary, Cleveland, Ohio.

May 6, 7, 8 and 9.—The Westminster Kennel Club's Eighth Annual Bench Show, Madison Square Garden. Entries close April 21. Chas. Lincoln, Superintendent. R. C. Cornell, Secretary, 54 William street, New York.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **869.** Volume I., bound in cloth, sent postpaid, $1.50.

EXPERIENCE WITH DOGS.

THE intelligence of a dog is identical in quality with that of a human being. Were the quantity of intelligence present in the heads of our canine friends, and vocal organs supplied to assist intelligence, we could take our pets into the field and discuss the events of the chase with the same satisfaction we can now with our human brother.

I have made a companion of a dog for the past twelve years, and my experience teaches me that the same influences which make a child good or bad, dull or bright, also control a dog. My first dog was an English setter, the scrub of a litter, and he turned out to be the handsomest and most intelligent of the lot. My next was a pointer, selected for his color from a litter of twelve, and he proved to be the prize dog of the family. My next friend was an Irish setter, Gyp, the last choice of a litter of eight, and she grew up the brightest of the octet. My next was a spaniel of uncertain parentage, selected from a litter because he had a distinguishing mark which would plainly describe him in case he strayed away, and he took advantage of his bringing up and grew to be a beauty and the envy of my fellow-sportsmen. My next is my present companion, a cross between a spaniel from Burgess's stock and a half-bred Irish setter bitch, and he, now two years old, surpasses all of his brothers and sisters in beauty and courage. Such a uniform experience compels me to conclude that my dogs have been developed, and that my experience will be the experience of others, using the same or similar methods in raising and educating them.

All the dogs I have owned I secured when they were very young. While they were growing I gave them all they could eat, offering them food several times a day. Milk, vegetables, meat, bread, oat and corn bread, and porridge. I never kept them on the chain, but let them romp to their hearts' content. Plenty of food and plenty of exercise gave them form and strength, good constitutions and brave hearts. Their education commenced when they were two or three months old and continued until they came to dog's estate. First they were taught to charge. Next to retrieve (under the whip), then to find. Next to toho, etc.

The great avenue to success in teaching a dog well, is to teach one thing at a time. And as soon as the dog is known to understand an order, to always insist upon obedience at whatever cost of time and patience to the teacher. When my dogs have comprehended the idea I have intended to convey to them, I have accustomed them to listen for my commands by giving them in an ordinary tone of voice, until at length I could carry on quite an extended conversation with them, I giving the signs, vocal or otherwise, and they interpreting by obeying me. Constant intercourse of this nature with one who is kind to his pupil, who encourages prompt obedience and chides delay or carelessness, will change a cur to a humanized companion, a dolt to a being of intelligence.

To raise a fine dog, then—feed him often and abundantly. Never put him on the chain, but allow him to romp at will. Teach him early and often, and make a Jesuit of him to the extent that he may know that his first duty under all circumstances is obedience. The result will be beauty, courage, intelligence, affection and a perfect dog.

I am aware that very few have the time or inclination to raise their dogs in this way, and the result is long pedigrees, and a disappointment for every degree the dog has departed from the routine I have described.

Three years ago I took a mangy looking pup—a blue-blooded but insignificant looking scion of Bolus's Belton—with me into the country to train for a friend. He had been reared on a chain and fed by servants, until he was a coward in spirit and appearance. I kept him with me for two months, permitting him to run wild until he had acquired some courage, and then commenced his education. When he was ten months old his master hunted over him and pronounced him a wonder; and he was. He outran four old dogs, and the third day out was the only dog out of the six we had on the first day that would hunt at all. He worked like a major but was slow, because foot-sore. The year following he was as worthless a dog as ever hustled about among a covey of birds, and on several occasions his outraged owner was tempted to bestow upon him the epitaph, "No earthly good." He had hung upon a chain since his experience of the year before. He had forgotten the lesson of all good dogs, obedience, and he was out for a frolic.

Last fall I again took him into the country as an experiment. I wanted to explode the idea, if I could, that a dog once spoiled was afterward forever worthless. I knew I had good material to work on. I took my pupil back to first principles, and taught him to charge when I gave the word under any and all circumstances. I then took him into the field and made him drop when any bird rose so near that I judged he saw it rise. When he dropped to wing nicely I started him in on birds, keeping him close. When he showed he had the faintest trace of birds I made him stop, and held him there for a few minutes to impress upon him that he was hunting for me, and then I would walk up with him until the birds were flushed, dropping him invariably to wing. Two weeks of this work without the gun and he was as steady as a clock. When I turned him over to his owner he was as hard as a nut and as staunch as an oak. He would instantly turn to the whistle an eighth of a mile away; in fact, he was a good dog again, and like good Indians, good dogs are very infrequent.

To the sportsman who loves a good dog but only has the time to use one a few days in the year, I say secure a pointer; they are slower and steadier than setters and will stand the chain, and yet do fair hunting. To such a man setters are of no earthly account. They may be perfect when purchased, but one year upon the chain will ruin them. When taken into the field for the first few hours they will chase the wind and such birds as they may flush in their mad race and then become exhausted, and their hunting fever gone. A setter needs lots of work and constant experience in the field to keep them steady. When hard worked and handled by an experienced sportsman, they are far superior to pointers in endurance, style, and speed, and it is the very qualities which makes them so valuable when properly handled that makes them worthless when out of form. HUNT.

ST. PAUL, MINN.

["Experience with dogs" is just what we want to hear about, and we hope that those who have read "Hunt's" instructive communication, and have anything of their own to offer on this topic will favor us with it. Experience need not have been successful to make its relation useful. The mistakes made in dog training may be quite as instructive as the more successful efforts. Whoever has had an experience with dogs, which may be of service as a guide or warning to other amateur trainers, may benefit his fellow men by relating it.]

THE ROYAL SPORT OF COURSING.

A GREYHOUND, as he appears in the crowded streets of a city, is by no means, to the average observer, a thing of beauty or grace. There is a lack of animation in his eyes; his drooping ears impart to his long, slender head an inane expression; while his canter, or lope, conveys to one who has never seen him in the field the idea that his speed is legendary or mythical. In fact, his whole make up and appearance, as he perhaps quietly trots along the paved street, with head on a line with his body and ears folded close, is extremely disappointing to one who has heard of, but never has seen, his animated appearance when in quest of "puss." Come with me, my disgusted friend; let us see this stupid creature in another light.

Picture, if possible, that same slender greyhound, with head tossed high, delicate ears erected, muscles and cords distended, eyes flashing fire, and you will then appreciate the wonderful beauty, grace and strength of the greyhound in the field. When I first saw the sight, I at once likened his expression to that of a noble eagle or hawk on the lookout for prey.

If the reader be a sportsman, a single day with greyhounds, in a country where large California hare are to be found, will fill him with enthusiasm and love for the beautiful, remorseless flyers.

I hardly know a sport that so quickly entrances a susceptible person as does the exciting sport of coursing. No wonder that in ages past it was, with falconry, the chosen sport of kings and princes and ladies of high degree.

Suppose we follow an old custom of mine years agone in California, and two or three of us spend a few hours upon the plains with our six or seven dogs. By the way, let me state that the California hare differs from the jack rabbits of Texas and countries east of the Sierra Nevadas, the California hare being both larger and faster.

Well, we make our arrangements for to-morrow's "battle royal," and, having fed our hounds, turn in early to bed, for legs will be weary indeed ere this time twenty-four hours. In the morning you can do as you prefer, eat a hearty breakfast or not; as for myself, a cracker or two is enough, for I found by experience some time since that I could walk further and better and with less fatigue by not overloading beforehand. At length we are off, with the greyhounds running around us. A brisk walk of a mile or two along the level California roads brings us to some fields or country where puss is to be found, so we separate some fifty paces apart, and walk ahead, with eyes on the lookout for the first start. Our dogs are all fine fellows—well experienced; see them as they, with eager, cruel eyes, impatiently await the sight of their devoted prey. We have taken but a few steps when we simultaneously whoop with excitement, for up jumps a brown, long-eared creature that leaps away with bewildering speed. Look! the black and the blue dogs have seen it; the others, jumping at our cries, also catch the sight and away they go—the hare with a start of full one hundred and fifty yards. Ah, that's the sight you never had before! Look at the race between the black and the blue. How they pound the earth with their flying feet! Ha! ha! see the brindle come up with the leaders; and the others are also putting in some fast work. The chase is now a mile away, perhaps further, when we shout with glee as we see the black dog crowding puss so hard that she suddenly darts off at a right angle to her previous course, and we give the credit for the first "turn" to the noble black, whose momentum carries him fifty feet beyond the sharp corner made by puss. Now the blue takes up the work. Another turn, and the brindle does his share; and whoop! old black again is leading. Poor puss, your time is short; those cruel hounds keep coming, coming, coming; you turn and turn again, and now, perhaps, have doubled back, and are not forty rods from us. The eager hounds are crowding the quarry hard; the turns are quicker and quicker, one after an-

other—a mix of dogs and hare, and hare and dogs, when, see! the white hound darts in, after the latest double, sinks its fangs into exhausted puss, and the course is finished.

Calling off the dogs, we reckon up the amount of work each one has done; the greater number of points proves to be in favor of the old black. It is no new thing to give him credit for a well-run course.

And now, my friend, who "always wondered what there was in greyhounds to admire," what think you? One look at your excited, glowing face is enough. Henceforth you are a devotee to the kingly sport of coursing.

Again, after a few moments' rest, we push ahead. Again we yell as puss jumps up and scurries off. Again the hounds catch sight of their prey, and on wings of the wind fly after. Ditches and sloughs, if in the course, are gaily taken with amazing ease. Some of the dogs perhaps will not leap the fences, but crawl through them where the others sail over. At each leap of the "fencers" in their mad course our voices ring out with exultant approbation. "Well done, Spring!" "Good boy, Poor Pat, that was a corking jump," as the latter clears a five-foot fence with no apparent exertion. Soon the chase is lost to sight, hidden, perhaps, by intervening brush or rolling ground. We wait a while, then walk in the direction taken by our dogs. Anon we see them coming slowly back, and when they reach us an examination shows a few hairs clinging to the corners of their mouths; these tell the fate of puss. But one of the hounds, Poor Pat, is missing. Look! half a mile away comes the game old boy, carrying in his mouth the heavy hare, killed perhaps a mile and a half further on. We never saw his equal for "packing in" his hare; and when the old hero reaches us and is relieved of his heavy burden, we caress him lovingly. "Good boy, Pat, the old countryman of yours who gave you to us shall have this hare upon his board to-night."

And so it goes; perhaps the next hare we start takes to the earth after a sharp run; and although we could easily reach to lift her out, we do not. She has earned her life this time; let her have it.

After two or three more runs we look at our watches, which tell us 3 P. M. Our appetites corroborate the watches, so we turn homeward, carrying five or six hares, the results of our sport. These we leave with certain Hibernian and English friends, who like the flesh, which we do not. Upon reaching home, having fed our footsore, tired hounds, we eat our "breakfast" with keenest relish, meanwhile recounting the various exciting incidents of the day. And we enjoy a quiet laugh or two at our enthusiastic convert, who extravagantly plans for future sport, and who, I fear, will fall a ready victim to the wily dog seller for some time to come. He also now decries the man who "murderously" shoots poor puss, forgetting that less than a day ago to him a hare was but a hare, and if any one preferred shooting it to coursing it, why, what difference?

Such quiet modes of coursing I personally prefer to regular meetings, in which the cracks are matched against one another, and are loosed from the slips, to insure an even start. Not but that such matches are intensely exciting, for indeed they are; in fact, therein lies my objection to them, for, no matter how correctly a judge renders his decision in a closely contested course, dissatisfaction at the defeat of a beloved dog is very apt to arise. The position of judge in a coursing match is as truly a thankless one as it is in a bench show or field trial. So, all in all, give me the "battle royal," or, for a change, a bit of quiet sport among a few friends where the dogs are slipped in couples, no prizes nor money being dependent upon the results.

Greyhounds are wonderful leapers. Were it not that I fear being discredited, I would state the distance leaped by Mr. Wright's Quicksilver, at Modesto, in 1872 or '73. Should this meet the eye of some Californian, who remembers that marvelous jump, will he not state the distance in FOREST AND STREAM? I refer to the time when the hare swam a slough, and Quicksilver, who, by the way, was a grandson of the English winner, Master McGrath, coming up with a grand rush, cleared the slough, to the amazement of the spectators. He was a noble greyhound.

I love the graceful, quiet creatures. Often have I sat reading for hours at a time, with three or four of the silken-coated blue bloods standing or sitting around me, their slender heads lying on my knees or in my lap, while their great lustrous eyes looked calmly into mine. They would remain there like statues until I moved.

And how game they are! I think it is Charles Lever who records it as a fact that two greyhounds were slipped after a hare, and the three went out of sight. They did not return, and the next day, some twenty miles away, the hare was found, dead, twenty yards ahead of the lifeless body of one hound, while the other hound lay dead, fifty yards in the rear. All three had run to the death.

I am sorry for sportsmen who have never enjoyed the excitement of coursing. You cannot appreciate the glorious sport as yet unknown to you. The only trouble is that it is apt to prove too fascinating, too exciting. Great is the man who, being an owner of greyhounds, can attend the meet, wherein they contest, without losing his self-possession and good nature. I have seen two such men. Some time since I read that several Eastern gentlemen would introduce coursing into the Atlantic States. I trust they will succeed in their attempt. While the country is not so well adapted to the sport as California (where the chase can be seen on the level plains for miles), still, once started in the East, its future there would be assured.

I should like to visit the Pacific slope next month and do a bit of coursing on the old grounds. And to find that same nervous horse, who oft enjoyed the sport as much as his rider, to carry me through a glorious "battle royal." Imagine, if you can, the thrilling contests between the flying hounds, witnessed from the back of a noble horse, and you will agree with me that coursing is royal sport indeed. DELTA.

DETROIT, Mich.

COCKER SPANIEL PRODUCE STAKES.

Editor Forest and Stream:

The progeny of the following bitches have been entered for the American Cocker Spaniel Club Produce Stakes to be decided at Westminster Kennel Club show, New York, May 5, 6, 7 and 8, 1884:

Toronto Jet (Nigger—Belle), J. F. Kirk, Toronto, Can.

Queen Vic (Witch—Madge), J. S. Cattanach, V. S., New York.

Princess Royal (Dandy—Queen Vic), J. S. Cattanach, V. S., New York.

Hornell Dinah (Prince—Sister to Beau), Hornell Spaniel Club, Hornellsville, N. Y.

Hornell Ruby (Bob III.—Lady Bath), Hornell Spaniel Club, Hornellsville, N. Y.

Hornell Baroness (Baron—Queen), Hornell Spaniel Club, Hornellsville, N. Y.

Blackie (Rolf—Belle), F. F. Pitcher, Claremont, N. H.

Gracie (Snip—Juliette), F. F. Pitcher, Claremont, N. H.

Topsy (Drake—Victoria), Hornell Spaniel Club, Hornellsville, N. Y.

Prin (Witch—Princess), Hornell Spaniel Club, Hornellsville, N. Y.

Nellie (formerly Lawson's), Dr. J. S. Niven, London, Ont.

Dolly (Jack—Bobtail), Dr. J. S. Niven, London, Ont.

Luna (Jack—Jessie), Geo. Schofield, Toronto, Can.

Bonny Kate (Don—Lady), J. F. Kirk, Toronto, Can.

Hornell Ruby (Bob III.—Lady Bath), Hornell Spaniel Club, Hornellsville, N. Y. J. F. KIRK,

Hon. Sec, American Cocker Spaniel Club.

TORONTO, Feb. 6, 1884.

CRYSTAL PALACE DOG SHOW.

[From our Regular Correspondent.]

THE Kennel Club's twenty-second exhibition of sporting and other dogs was held in the gallery of the Crystal Palace on the 15th, 16th, 17th and 18th of January, the total entries amounting to 1,507, 29 of which were double entries and 353 puppies. But in acknowledging the Kennel Club exhibition of January, 1884, as the most successful and grandest exhibition ever held, it ought to be remembered that it really represented a number of special clubs; such as the Mastiff, St. Bernard, Great Dane, Collie, Dachshund, Bulldog, Fox-terrier, Bedlington, Dandie Dinmont, Irish Terrier, and other clubs, who offered numerous valuable prizes for private competition among their members. The benching and feeding of the exhibits, as usual, was intrusted to Spratt's Patent, which, under the able management of Mr. Charles Croft, was a guarantee that all possible care was taken of them.

In bloodhounds Nestor had an easy win in the champion class; in the open dog class, Mr. Nichols's Triumph, who was placed first, is a young dog, rather dark in color, but sure to improve in that respect as he gets older. Otherwise he is about the grandest young dog we ever saw; he is very good in ear. The second prize winner, Maltravers, also bred by Mr. Nichols, is another good specimen. The bitches were a very good class and the winners well placed.

In mastiffs, Crown Prince came once more to the front in the champion class, the brindled Cardinal not being entered for competition. In champion bitches, Rosalind won quite easy. She is a grand bitch, but would be improved with having more wrinkle. In the open dog class, Orlando, who won first, is a remarkably massive-made dog of good type; nevertheless, he is so much out at elbows and low at shoulder, that we think he was very lucky to win. Boatswain, who won second, is another good-headed dog, but is not straight on his legs. Prince, who was placed third, has much better legs and feet than those placed over him, and has a really good head. Moses, who won fourth, is a fairly good young dog, but seems a nasty-tempered animal. The bitches were the best class we have ever seen, first and second being really grand animals; the third was also good. Bal Gal, vhc. reserve, we consider very fortunate, as there were several much better behind her. The dog puppies were only moderate. The bitch puppies were a good class, the three best being full sisters, and we considered the winner rather the worst of the three, being large of ear and smaller of skull.

There were four entries in the St. Bernard champion class, one, Save, not for competion. Pedro was absent, so the fight was between Bayard and Cadwallader, the former taking the honors this time, though not quite up to his best form. In the bitch class, Madam had an easy win over Amy, the only other entry. In the open dog class thirty-one faced the judge, and it was one of the best classes we have seen. Leonard won first. He is improved since we saw him last. He was closely followed by S. W. Smith's new dog, Duke of Leeds, who has a grand skull, good, straight coat, and is a beautiful color, with white markings. Third went to Glacier, a good, big dog, with a fair head. He has a rich orange color, with nice black face markings. He is rather proud of his tail. Next came Boniface for fourth, but we prefer the vhc. Faust. Sailor, a dog we always liked, was rightly placed reserve number. Sultan III. is a very large dog. He is too sharp in muzzle and small in skull. Storm King is too small. Courage II. is plain in face. The bitches were a good class of twenty-three, including several of the best on the bench. Elfreda followed up her Bristol form by taking first, Cloister, in nice condition, coming second. Third went to a fair bitch named Bernardine. She is light of bone, but is nicely marked. Bertha came in fourth, but had Theis been better shown she would have beaten Bertha.

It was a walk-over for Beauchief in the smooth dog class. Don II. is light in bone for so large a dog, although he has a good head and ears, and deserved the second. Bera, late Copenhagen, is now showing age. In the bitch class, Leila, the Hundred Guinea Cup winner at the St. Bernard Club show, had it all her own way for first, second going to Chinaleta. Ida II., looking her best, came in for reserve. There were several very good young ones in the puppy classes. In smooth-coated puppies, Mr. Thornton won with a most promising youngster.

The black Newfoundlands, as usual, were small classes, Nelson I. winning in the champion class. Gunville, first in dogs, is a very good specimen. The bitches were, as a rule, small in size, and the winner was out of coat. Newfoundlands other than black were well represented, and the decisions seemed to give general satisfaction.

Great Danes came out in good force, and the quality was better than we have ever seen in England before.

In deerhounds Chieftain won in the champion class. We consider his light color his worst fault. First and second in the open dog class were good specimens, one of which changed hands, we understand.

The greyhound classes were small, but the quality was very good, Messrs. H. P. and J. P. Charles winning all before them. We fancied the black and white Bonnie Lass to be the winner in the bitch class.

In pointers Mr. Norrish once more won in the champion class with his liver and white Graphic. In large-sized dogs the winner is rather fat and appears throaty. The second prize, Duke IV., is a little faulty in muzzle and refused to show well in the ring. The large-sized bitches were a good class, and any of those noticed are fit to win, and the same remarks apply to the small-sized dogs and bitches.

In the English setter champion class there were no entries for competition. In the open class first went to a lemon and white dog, Sting, who was first at Bristol two weeks ago, he has a good head and good coat. Tycoon, the second prize, is a blue belton, rather shorter in head than the winner, but a very good dog. First in bitches went to Wild Rose, rather out of coat, with more bone than the second prize, Pearl, who is a very nice bitch with a good shaped head. Flimsy, the third prize, is a strong, well-made bitch but not possessing the qualities of the winner. In puppies, Ramble, a liver ticked dog, was placed equal first with Mr. Cockerton's Bella, of Ravensbarrow, a blue belton. Mr. Lowe being vhc. with a very nice young dog, Blue Rocket.

In black and tan setters, Dan II. won first, being closely pressed by Heather Ranger, who was very good in tan, but being only ten months old, was not so well furnished as the winner. Wild Grouse, hc., is a very good coated dog, rather deficient in color. Norwich Bloom, first in bitches, was in good form and an easy winner over Alice, who is not so good in feet. Kate XI. was a very fair specimen. Kate IV. rather out of coat. The winning puppy, Heather Gem, was rather more forward than the second prize, Fan VII.

In the Irish setter champion class Geraldine won first, beating Nellie, who is a trifle fine in muzzle. Roy, first in open dog class, is a handsome little dog rather fine of muzzle and out of condition at present. Tyrone is a very good dog but is a little strong in head. King Billie is another good one and the vhc., Chief, is another typical dog but small. The bitches were a very good class. We thought Lady Palmerston II. ought to have been further up.

In sheep dogs Rutland, who was first in the champion class, is a very handsome black and tan; he was looking better than we ever saw him before. Peggy, winning first in the bitch class, was closely pressed by Lorna Doon. The open class for rough sheep dogs was a very large one and contained a great many very fine specimens. First went to Young Cockie, a very good black and white, who seemed to carry his tail rather high. Tramp II. was looking very well. Romulus, who won third, is a sable; he is rather short of coat and frill and large of ear. We fancied the sable dog Highland Chief equally as good as any in the class; Loafer, vhc., is another nice dark sable dog. The fourth prize went to a coarse black and white. In bitches first went to a very fine dark sable bitch a little short of frill. The puppy classes contained some very promising young ones. In the bitch puppies we fancied the third prize one very much, being more heavily coated than the winner, with a smaller ear. She was quickly claimed at £50.

The basset hounds were a very good collection, Mr. C. R. Krehl having a very large entry and winning most of the prizes.

In Dalmatians, the winner, Treasure, was a long way ahead of the rest.

In Pomeranians the first is a very handsome little black. The second is Mr. Fawdry's well-known white dog Charlie.

In poodles the prizes all went to well-known winners.

Monarch, who won in the champion bulldog class, also won the challenge cup, Britomartis scoring the same in the bitch class. In the open class for dogs over 60lbs. and bitches over 50lbs., first went to President Garfield, a brindle, with a very good skull. In the next class, first went to Black Prince, a dark brindle, with a good skull. He is a trifle long in back. In the corresponding bitch class, first went to a very showy red and white bitch, with a small nose and round skull. The winners in the other classes were fair specimens, but nothing above the average.

Irish water spaniels were a failure; only two were in the show—Lady and Young Hilda—the former winning, being best in coat, but in every other respect we prefer the latter.

In the Clumber spaniel champion class John o' Gaunt won easily, his kennel companion, Tower, winning in the open class.

The Sussex spaniels were a small class.

In champion field spaniels, first went to Solus, who was looking his best and was really a show of himself. There was nothing against him but Miss Oho. We consider her a much overrated cocker, being too flat in skull to suit our ideas. Roysterer is a very good, long, low and well-bodied dog, just a little plain in head. We think the second and third prize dogs ought to have exchanged places. In cocker bitches, the first prize, Little Smutty, is a very handsome little cocker and of the correct type, but would be improved if a little stronger before the eyes.

In fox-terriers, Spice won in champion dogs and Bedlamite in the bitch class. We thought Diana ought to have won, but at present she is rather out of condition, and being a small bitch she looked more of a toy than usual. In the open dog class, first went to a lemon marked dog, not as good in his quarters as he might be. The second is rather large in ear and coarse in head. He was claimed at £50. In bitches, the first is rather light in bone. The second is a very good one, she has a good head, good feet and legs, with plenty of terrier expression.

There was only one entry in champion bull-terriers. In large sized bull-terriers the competition was good, and the awards were pretty generally indorsed. In small sized bull-terriers there were very few good specimens, we might say very few moderately good specimens.

The Airedale terriers were a fairly good class, and Bedlingtons were also good. Many of the hc. and c. dogs are fit to win at any ordinary show.

Irish terriers were very good in quality, with a very fair entry of thirty-six.

Champion pugs had only one entry in the dog and two in the bitch class, Jenny having an easy win from Buttercup. The first in the open class for dogs is of good size and style, but is very smutty in color. The second and third are better in color but rather larger.

In Yorkshires, Bradford Hero scored another win for Mr. Foster.

Lady Gifford had the whole maltese class to herself, and certainly her exhibits are really worth going a good distance to see.

The Blenheim spaniels seemed more numerous than we have seen them for some time, and the quality throughout was very fair.

In King Charles, the first prize dog, Bend-Or, is the best we have seen for a long while, we think he will make a better dog than his companion, Alexander the Great.

Italian greyhounds and toy terriers were as usual, good but nothing to call for special comment. Following is a list of the

AWARDS.

BLOODHOUNDS.—CHAMPIONS: Prize, M. Beaufoy (Nestor).—OPEN—*Dogs:* 1st, E. Nichols (Triumph); 2d, L. G. Morrell (Maltravers); 3d, E. R. Ray (Nobleman) *Bitches:* 1st, L. G. Morrell (Malvina); 2d and 3d, E. Nichols (Patti and Phryne).

MASTIFFS.—CHAMPIONS—*Dogs:* Prize and cup, Dr L. Forbes-Winslow (Crown Prince). *Bitches:* Prize and cup, Dr. L. Forbes-Winslow (Rosalind).—OPEN—*Dogs:* 1st, J. S. Turner (Orlando); 2d, M. Beaufoy (Boatswain); 3d, J. Royle (The Prince); 4th, J. Evans (Moses). *Bitches:* 1st, H. G. Woolmore (Cambrian Princess); 2d, H. Oldham (The Lady Ella); 3d, F. J. Campell (Lily II.).—PUPPIES—*Dogs:* 1st, R. Cook (Ilford Caution); 2d, G. Renton (Guelph II.). *Bitches:* 1st, J. S. Turner (Guinevere); 2d, J. Evans (Vivian).

ST. BERNARDS.—CHAMPIONS—*Dogs:* 1st, J. C. Macdona (Bayard). *Bitches:* Prize, H. I. Betterton (champion Madam).—OPEN, ROUGH-COATED—*Dogs:* 1st and cup, J. F. Smith (Leonard); 2d, S. W. Smith (Duke of Leeds. late Good Bayard); 3d, E. Hodgson (Glacier); 4th, J. C. Macdona (Boniface). *Bitches:* 1st, H. C. Joplin (Elfrida); 2d, W. G. Marshall (Cloister); 3d, G. S. Ball (Bernardine); 4th, W. Wells (Bertha).—SMOOTH-COATED—*Dogs:* 1st, W. Wells (Beauchief); 2d, J. C. Davies Don II.). *Bitches:* 1st and cup, R. Thornton (Leila); 2d, H. C. Joplin (Chinalette).—ROUGH PUPPIES—*Dogs:* 1st, R. Thornton (Amelot); 2d, H. I. Betterton (Correze); 3d, J. H. Ellis (Valentine). *Bitches:* 1st, H. G. Sweet (Romola); 2d, Rev. W. S. Barthropp (Meta); 3d, E. Snelling (Rhona).—SMOOTH—*Puppies:* Prize, R. Thornton (Evio).

NEWFOUNDLANDS.—CHAMPIONS: Prize and cup, E. Nichols (champion Nelson I.). BLACK—*Dogs:* Prize, H. R. Farquharson (Gunville and Courtier). *Bitches:* 1st, E. Nichols (Sybil); 2d, A. C. McMinn (Dagmar).—OTHER THAN BLACK—1st and 2d, H. R. Farquharson (Trojan and Seaman).

BOARHOUNDS.—CHAMPIONS: Prize, C. Petrzywalski (Sultan II.). OPEN—*Dogs:* 1st, R. Bryan (Samson); 2d, Mrs. M. Hazlerigg (Prince Charlie); 3d, S. E. Shirley (Thunder). *Bitches:* 1st and extra cup, C. Petrzywalski (Mirza); 2d, S. E. Shirley (Nox); 3d, J. Angell (Diana). *Puppies:* 1st, G. Bolton (Luther); 2d, A. A. Grosvenor (Mark Antony); 3d, A. Moore (Athlete).

DEERHOUNDS.—CHAMPIONS: Prize, H. C. Joplin (champion Chieftain). OPEN—*Dogs:* 1st, G. W. Hickman (Lord of the Isles); 2d, Miss E. de la Pole (Glengariff); 3d, Misses A. Maxwell and E. Cassel (Victor) *Bitches:* 1st, Miss de la Pole (Belle); 2d, A. Maxwell and E. Casse (Minna); 3d, G. W. Share (Storna).

GREYHOUNDS.—*Dogs:* 1st and 2d, H. P. and P. J. Charles (champion Mennon and Whiskedale II.); 3d, H. C. Hodson (Emperor). *Bitches:* Prize, G. S. Ball (Lancashire Witch).

POINTERS.—CHAMPIONS: Prize, E. C. Norrish (champion Graphic).—OPEN—55LBS. AND UPWARD—*Dogs:* 1st, G. Pilkington (Lake); 2d, F. A. Manning (Duke IV.); 3d, B. Field (Young Dick).—50LBS. AND UPWARD—*Bitches:* 1st, S. Price (Bell of Bow); 2d, C. H. Beck (Nan); 3d, W. Arkwright (Lady Olive).—UNDER 55LBS.—*Dogs:* 1st, Sir T. B. Lennard, Bart. (Belhus Hector); 2d, Prince Albert Solms (Naso Kipping); 3d, H. Burra (Duke of Glenmarkie).—UNDER 50LBS.—*Bitches:* 1st, S. Price (Mealy); 2d, R. J. L. Price (Bellona); 3d, J. L. Bulled (Bell of the Ball).—SINGLE ENTRIES, NOT LITTERS—*Puppies:* 1st, E. Palmer (Devon Duke); 2d, J. Whitley (Sir Garnet).

ENGLISH SETTERS.—*Dogs:* 1st and 2d, H. Platt (Sting and Tycoon); 3d, Mr. H. F. Grant (Junior Carlton). *Bitches:* 1st, H. Platt (Wild Rose); 2d, B. Field (Pearl); 3d, J. H. Platt (Flimsy). *Puppies:* Equal 1st and 2d, Major H. Platt (Ramble) and J. B. Cockerton (Bella of Ravensbarrow).—BLACK AND TAN.—*Dogs:* 1st, J. Williams (Dan II.); 2d, R. Chapman (Heather Ranger); 3d, C. T. Fauntleroy (Dasher). *Bitches:* 1st, W. Long (Norwich Bloom); 2d and 3d, F. A. Manning (Alice and Juno V.). *Puppies:* 1st, R. Chapman (Heather Jem); 2d, W. Eglinton (Fan VII.).

IRISH SETTERS.—CHAMPIONS: Prize, Rev. R. O'Callaghan (champion Geraldine).—OPEN—*Dogs:* 1st, B. R. Woodd (Roy); 2d, Rev. R. O'Callaghan (Tyrone); 3d, E. F. Welch (King Billy). *Bitches:* 1st, E. F. Nuttall (Leo VII.); 2d, L. F. Perrin (Wee Kate); 3d, Rev. R.



THE WESTMINSTER KENNEL CLUB'S ORANGE AND WHITE POINTER DOG "BANG BANG."

O'Callaghan (Vintry). *Puppies:* 1st, Rev. R. O'Callaghan (Iona); d, H. F. Smith (Lanwath Pat).

RETRIEVERS.—WAVY: Prize, S. E. Shirley (Moonstone).—CURLY-COATED: Equal 1st, G. Culley (Jet II.) and the Duke of Hamilton (champion Baron).—OPEN, WAVY—*Dogs:* 1st, S. E. Shirley (Tractor); 2d, Col. H. Ewart (Wing); 3d, G. Foster (Foppery). *Bitches:* 1st, S. E. Shirley (Tacit); equal 2d, S. E. Shirley (Tact) and Lieut.-Col. H. C. Legh (Breeze). *Puppies:* 1st, S. E. Shirley (Tacit); 2d, Lieut.-Col. H. C. Legh (Bob II.)—CURLY COATED—*Dogs:* 1st, R. Chapman (King of the Koffees); 2d, G. Culley (Crown Prince); 3d, H. Lingwood (Sammy). *Bitches:* 1st, Duke of Hamilton (Lady Neil); 2d, Dr. W. A. G. James (Luna), 3d; Mr. C. Taylor (Miss Gyp).—OTHER THAN BLACK: 1st, H. Skipworth (Venture); 2d, R. Chapman (Mistake).

SHEEPDOGS.—CHAMPIONS, ROUGH-COATED—*Dogs:* 1st, S. Boddington (Rutland); 2d, M. C. Ashwin (Donald). *Bitches:* Prize, Rev. H. F. Hamilton (Peggie II.)—CHAMPION, SMOOTH-COATED: Prize, D. P. Thomas (Beryl).—OPEN—*Dogs:* 1st, J. J. Steward (Young Cockie); 2d, R. Chapman (Tramp II.); 3d, J. Osborne (Romulus); 4th, Dr. G. C. Edwardes Ker (Augustus Cray). *Bitches:* 1st, W. Buckley (Morwyn); 2d, J. J. Stewart (Patience); 3d, Rev. H. F. Hamilton (Sooty); 4th, D. P. Thomas (Welsh Lass). SMOOTH COATED: 1st, W. A. G. James (Lady Help); 2d, M. C. Ashwin (Lady Elcho); 3d, A. Hastie (Dark Jennie).—PUPPIES—*Dogs:* 1st, J. J. Stewart (Young Cockie); 2d, T. Easton (Red Gauntlet); 3d, W. A. G. James (Clover). *Bitches:* 1st, E. Collings (Amy Robsart); 2d, S. Boddington (Miss Charlemagne); 3d, J. Beach (Myra III.).—BOB TAILS: 1st, D. P. Thomas (Sir Guy); 2d, R. J. Lloyd Price (Belle of Ranelagh).—COLLIE CLUB DERBY: 1st, J. J. Steward (Young Cockie); 2d, Dr. W. A. G. James (Clover); 3d, H. Ralph (The Bedouin).

BASSET HOUNDS.—CHAMPIONS.—Prize, G. R. Krehl (Jupiter).—OPEN—*Dogs:* 1st, G. R. Krehl (Fino); 2d, R. Temperley (Roufiot). *Puppies:* 1st, H. V. Gibson-Craig (Carillon); 2d, G. R. Krehl (Oriflamme).

BULLDOGS.—CHAMPIONS—*Dogs:* Prize and challenge cup, H. Layton (Monarch). *Bitches:* Prize and challenge cup, A. Benjamin champion Britomartis).—OVER 60LBS., *Dogs:* OVER 50LBS., *Bitches:* 1st, J. W. Gurney (President Garfield); 2d, A. T. Foreman (Big Ben).—OVER 45LBS. AND NOT EXCEEDING 60LBS.—*Dogs:* 1st, C. R. C. King (The Black Prince); 2d, S. E. Shirley (Cervantes); 3d, J. W. Gurney (Royal George).—OVER 35LB. AND NOT EXCEEDING 50LBS.—*Bitches:* 1st, J. W. Gurney (Wheel of Fortune); 2d, J. S. P. Sellon (Dona Sol); 3d, T. A. Skeate (Chandos Demon).—NOT EXCEEDING 45LBS.—*Dogs:* 1st, W. Donkin (Castor); 2d, A. K. Smith (Bacchus II.); 3d, A. Benjamin (Kimmel Billy).—NOT EXCEEDING 35LBS.—*Bitches:* 1st, A. J. L. Price (Empress V.); 2d, H. Layton (Jenny Howlett II.); 3d, J. S. P. Sellon (Belladonna). *Puppies:* Prize, A. Benjamin (Kimmel Billy).

IRISH WATER SPANIELS.—*Dogs:* Prize withheld. *Bitches:* 1st, G. S. Hockey (Lady).

SPANIELS.—CLUMBERS—CHAMPIONS: Prize, H. H. Holmes (champion John o' Gaunt).—OPEN—*Dogs:* 1st, H. H. Holmes (Tower); 2d, G. B. Clark (Ramble); 3d, E. Malling (Duke O.). *Bitches:* 1st, E. Bishop (Foxley Beauty); 2d, R. W. S. Lowndes, Jr. (Lulu).—SUSSEX AND LIVER-COLORED, OVER 25LBS.—*Dogs:* 1st and 2d, Hooley Brothers (Horatio and Baryta). *Bitches:* 1st, J. Partridge (Brida II.); 2d, J. R. Whittle (Voisine).

FIELD SPANIELS.—CHAMPIONS: Prize, J. Royle (Solus).—BLACK, OVER 25LBS.—*Dogs:* 1st, H. B. Spurgin (Roysterer); 2d, W. Riddlesdell (Bramble); 3d, A. H. Easten (Easten's Bracken). *Bitches:* 1st, J. Royle (Salus II.); 2d, J. C. Phillips (Beatrice); 3d, A. Easten (Easten's Busy).—COCKERS, ANY COLOR, NOT EXCEEDING 25LBS.—*Dogs:* Prize, G. W. Carter (Jingo). *Bitches:* 1st, A. H. Hussey (Little Smutty); 2d, A. F. Nash (Lilac).—OTHER THAN LIVER OR BLACK, EXCEEDING 25LBS.—*Dogs:* 1st, H. B. Spurgin (Counsellor); 2d, A. H. Easten (Easten's Bruce). *Bitches:* 1st, H. B. Spurgin (Fanciful); 2d, J. Royle (Zuess).

FOX-TERRIERS.—SMOOTH HAIRED.—CHAMPION—*Dogs:* 1st, L. Turner (Spice; 2d and 3d, Rev. C. T. Fisher (Richmond Jack and Darkie). *Bitches:* 1st, Rev. C. T. Fisher (Bediamite, late Joyous); 2d, L. & W. Rutherfurd (Diana); 3d, F. Redmond (Diadem).—OPEN—*Dogs:* 1st, Rev. C. T. Fisher (The Belgravian); 2d, J. J. Pim (Brokenhurst Jim) 3d. A. R. Wood (Splinter); 4th, F. Redmond (Dandy Dick, late Silver Dick); 5th, A. and C. Fraser (Rookwood). *Bitches:* 1st, J. J. Pim (Just); 2d, Hill and Ashton (Meersbrook Model); 3d, R. H. Barlow (Nadine); 4th. C. E. Longmore (Dulcie); 5th, A. and C. Fraser (Joyful).—PUPPIES—*Dogs:* 1st, A. Hargreaves (Hogmaston Rebel); 2d, Hill and Ashton (Meersbrook Ross); 3d, A. E. Knight (Citron). *Bitches:* 1st, Hill and Ashton (Meersbrook Model); 2d, H. S. Whipp (Douglas Nettie); 3d, T. Errington (Eaton Trip).—WIRE-HAIRED—CHAMPION—*Dogs:* 1st and 2d, Earl of Lonsdale (Briggs and Sam Weller). *Bitches:* 1st and 2d, Earl of Lonsdale (Miss Miggs and Vora). OPEN—*Dogs:* 1st and 2d, W. Carrick, jun. (Master Tiger and Turk II.); 3d, H. G. Bennett (Derwent); 4th, M. Hazlerigg (Trophy). *Bitches:* 1st, W. Carrick, jun. (Carlisle Venom); 2d, W. W. Beckh (Black Watch); 3d, M. Hazlerigg (Tinder); 4th, Earl of Lonsdale (Grace Broom). —PUPPIES—*Dogs:* 1st, A. Maxwell and E. Cassel (Jack Frost); 2d, W. Carrick, jun. (Tinder); 3d, R. Bird (St. Swithin). *Bitches:* 1st, W. Carrick, jun. (Lill Foiler); equal 2d, P. C. Reid and W. Carrick, jun. (Ely Pickle and Carlisle Venom).

DACHSHUNDE.—CHAMPIONS—*Dogs:* Prize, W. E. Litt (Olympian). *Bitches:* Prize, W. A. Benson (Rosa). OPEN CLASS—*Dogs:* Equal 1st, M. Woolten (Zeyn) and W. J. Lake (Faust II.); 2d and 3d, Mrs. P. Merrik-Hoare (Carlowitz and Drachen). *Bitches:* 1st, G. R. As kwith (Shotover); 2d, E. W. Hazlewood (Swipes); 3d, J. Knight Bruce (Lady). PUPPIES—*Dogs:* 1st, L. Daniell (Redman); 2d, Mrs. P. Merrik-Hoare (Drachen); 3d, A. W. Byron (Roller). *Bitches:* 1st and 2d, E. M. Southwell (Schone and Schenke); 3d, J. S. Pearson (Zibeline). PRODUCE STAKES.—1st and 2d, E. M. Southwell (Schone ane Schenke); 3d, Mrs. P. Merrik-Hoare (Drachen); 4th, T. S. Daniel (Redman).

BULL-TERRIERS.—CHAMPIONS: Prize, Alfred George (Mistress of the Robes).—OPEN CLASS—OVER 25LBS.—*Dogs:* 1st, J. R. Pratt (Baron); 2d, T. H. Hewitt (Murder II.); 3d, Alfred George (Bendigo). *Bitches:* 1st and 2d, Alfred George (Vendetta and Luci); 3d, John Richardson (Maggie May II.) NOT OVER 25LBS.—*Dogs and Bitches:* 1st, Alfred J. Hudson (Guess); 2d, Robert Beulley (Young Joe); 3d, Arthur Henry Taylor (John Bull).

AIREDALE TERRIERS.—*Dogs and Bitches:* 1st, Thomas Carr (Kisghley Crack); 2d and 3d, Edward Constantine (Toss and Jock).

BEDLINGTON TERRIERS.—CHAMPIONS—Prize, J. S. Watson (Senator).—OPEN CLASS—BLUE OR BLUE AND TAN—*Dogs:* 1st and 3d, John A. Batz (The Bishop and Lord Stowel); 2d, A. N. Dodds (Hairdresser). *Bitches:* 1st, H. Burnett Watson (Topsy); 2d, John A. Batz (Durham Lass); 3d, John Sherwood, Jr. (Blue Stocking). ANY OTHER COLOR—*Dogs and Bitches:* 1st, H. Burnett Watson (Choker); 2d, John A. Batz (Pincher). *Puppies:* 1st, Andrew N. Dodds (Mark Tapley); 2d, J. Dawson (Randolph); H. Burnett Watson (Crocodile).

IRISH TERRIERS.—CHAMPIONS—Prize and medal, Charles M. Nicholson (Poppy).—OPEN CLASS—*Dogs;* 1st, William Graham (Garryford); 2d, and 1st club, R. B. & T. S. Carey (Mogue); 3d, E. S. Snow (Gerrick). *Bitches;* 1st, William Graham (Gaily); Herbert A. Graves (Pretty Lass); 3d, Charles H. Backhouse (Buzz).—UNCROPPED—*Dogs and Bitches:* 1st and 2d club, J. N. Annand (Fury II.); 2d, R. E. Palmer (Thady II.). *Puppies:* 1st, R. B. & T. S. Carey (Noggin); 2d, Charles Backhouse (Bundle).

SMOOTH-HAIRED TERRIERS.—1st, C. F. Copeman (Leading Star); 2d, Alfred George (Zazel).

BLACK AND TAN TERRIFRS—OVER 16LBS—*Dogs and Bitches:* 1st, J. & R. B. Troughear (Prince Arthur); 2d, Joseph Royle (Burke); 3d, J. W. Tucker (Duchess of Edinburg).—NOT OVER 16LBS.—1st, Webster Adams (Streamlet); 2d, Frederick M. Hurdle (Sunbeam); 3d, George Lodge (Laura). *Puppies:* 1st, C. C. Lawrence (Russian Prince); 2d, T. L. Puttock (Peter Piper).

SKYE TERRIERS—CHAMPIONS: Prize, James Pratt (Heatherbloom). OPEN CLASS—DROP-EARED—*Dogs:* 1st. Mrs. Jacobson (Cathullin) 2d, John Henderson (Pibroch); 3d, John B. Wilkes (Bob II.). *Bitches:* Prize, Mrs. Jacobson (Maggie Macdonald).—PRICK-EARED—*Dogs:* 1st, Rev. Thomas Nolan (Kingston Ray); 2d, James Pratt (Sandy Grant). *Bitches:* Prize, J. R. Kaye (Jaret).

HARD-HAIRED SCOTCH TERRIERS.—1st and 2d, Capt. W. W. Mackie (Dunolly and Dunora); 3d, Ludlow & Bloomfield (Worry).

DANDIE DINMONT TERRIERS.—CHAMPIONS—*Dogs:* Prize, John Sherwood, Jr. (Tarquil). *Bitches:* Prize, A. Steel (Linnet).—OPEN CLASS—*Dogs:* Equal 1st, W. A. F. Coupland (Border Prince) and J. C. Carrick (Pasha); 2d, J. C. Carrick (Fergus). *Bitches:* 1st, George S. Ball (Jennie Deans); 2d, Major H. Ashton (Duchess II.); 3d, William Carrick (Alma). *Puppies:* Equal 1st, J. Flinn (Percy) and W. Carrick, Jr. (Carlisle Venus); Equal 2d, Rev. G. S. Tiddeman (Mint) and J. Cunningham (Gilnockie).

PUGS.—CHAMPIONS—*Dogs:* Prize, Lady Brassey (Challenger). *Bitches:* Prize, Mrs. M. A. Foster (Jenny). OPEN CLASS—NOT OVER 20LBS.—*Dogs:* 1st, W. L. Sheffield (Stingo Sniffles); 2d and 3d, Mrs. M. A. Foster (Bradford Ruby and Diamond). *Bitches:* 1st, J. Drew (Dasey); 2d, Lady Brassey (Chiefess); 3d, Mrs. M. A. Foster (Maggie). *Puppies:* 1st, Miss Barlow (Tum Sing); 2d, Lady Brassey (Said).

YORKSHIRE TERRIERS.—Prize, Mrs. M. A. Foster (Bradford Hero).

MALTESE.—1st, 2d and 3d, Lady Gifford (Hugh, Rob Roy and Lord Clyde).

BLENHEIM SPANIELS.—CHAMPIONS—Prize, Mrs. L. E. Jenkins (Flossy II.) OPEN CLASS—1st, H. E. Jenkins (Trixy); 2d, Mrs. H. Arnold (Prince V.); 3d, George Coram (Bunchy).

KING CHARLES SPANIELS.—CHAMPIONS.—Prize, Mrs. J. A. Briggs (Alexander the Great).—OPEN CLASS—1st, Mrs. J. A. Briggs (Bend Or); 2d, Mrs. Eliza Forder (Jumbo II.).

TOY SPANIELS.—Equal 1st, Mrs. E. M. Monck (Chang II. and Kennedy's Duke of Anthony).

ITALIAN GREYHOUNDS.—Prize, Mrs. E. Bruce (Bankside Beauty).

TOY TERRIERS.—SMOOTH-HAIRED, NOT OVER 7LBS.—1st, R. Warren Vernon (Winnie II.); 2d and 3d, Mrs. M. A. Foster (Dinah and Dolly).—OTHER THAN SMOOTH-HAIRED.—1st, Mrs. M. A. Troughear (Conqueror); 2d, Mrs. E. M. Monck (Dolly); 3d, Mrs. M. A. Foster (Prince Arthur).

BANG BANG.

OUR illustration this week is of the orange and white pointer dog Bang Bang, owned by the Westminster Kennel Club, who imported him last summer from the kennel of Mr. F. C. Lowe, England. Bang Bang was three years old last month, he was sired by Price's champion Bang and is out of Princess Kate. He is of medium size, about 55lbs. weight, and a very stylish, handsome animal, he has a very good head and neck with shoulders that we have rarely if ever seen equaled His chest, loin and quarters are excellent, and his legs and feet are of the best. He is powerfully muscled and has lots of quality. Judging from his breeding and performances, both in the field and on the bench, we believe him to be a most valuable acquisition to the club as well as to breeders throughout the country. Bang Bang's first appearance in public was at the National Field Trials, Shrewsbury, England, 1882, where he won the pointer puppy stakes and the champion puppy cup. At the Kennel Club Trials, Blandford, England, the same year, he won the cup for the best pointer in the Derby, and at the St. Hubert Field Trials, Belgium, also the same year, he won third in the puppy stake and first in the All-Aged Stake. He has never been shown but once on the bench, winning first at the Crystal Palace Show, January, 1883. He ran unplaced at the Eastern Field Trials Club last November, but considering that he was entirely unacquainted with American game and ground until a short time previous to the Trials his performance was very creditable. He beat Don Juan, Scout, and Lalla Rookh, and was only beaten for the pointer cup by Vandevort's Don. Should he come to the post at his best next fall he will undoubtedly make a good race with the best of them. The cut is from a sketch by Mr. J. M. Tracy.

THE CINCINNATI DOG SHOW.

A NUMBER of valuable special prizes have been offered for the Cincinnati dog show, which commences March 4. All dogs entered in the regular classes will be eligible to compete for the specials without further entry.

The Independent Shooting Club of Cincinnati will give a three days' shoot during the bench show, on their club grounds. The shoot will commence on March 5, and will end on the evening of the 7th. Clay-pigeons will be used, and small sweepstake matches will be indulged in, so that parties visiting the bench show will have a chance to test their skill against the Cincinnati marksmen.

THE BEAGLE CLUB.

Editor Forest and Stream:

I wish to say to the members of the American English Beagle Club who take your paper, that I thank them for the honor conferred upon me, and I will do all in my power for the success of the club and its object. I have appointed the following on the committee to draft a standard: Dr. L. H. Twaddell, chairman, N. Elmore, Gen. R. Rowett. The executive committee are at work on framing a constitution and by-laws, and hope to report soon.

W. H. ASHBURNER, President.

TORONTO DOG SHOW.

THE Dominion of Canada Kennel Club will hold their second annual bench show at Toronto, Ont., on the 26th, 27th and 28th of March. We have received a copy of the premium list, which is a very liberal one. Over $1,500 will be given in prizes, besides $1,000 in specials. The Marquis of Lansdowne has consented to appear as patron, and is expected to open the show in person. The Pavilion of the Horticultural Gardens has been secured, which assures abundant space. Mr. Chas. Lincoln will superintend, and no pains will be spared to make the show first-class in every respect. Owners of fine animals in the States should improve this opportunity to compare the merits of their favorites with those of the cracks across the border, who will undoubtedly turn out in goodly numbers. Major J. M. Taylor, Mr. James Watson and Mr. W. Hendric, have consented to act as judges. Following is the prize list:

Champion English setter dogs $20, bitches the same; open dogs $20, $10 and $5, bitches the same, puppies, dogs $10, $5 and $3, bitches the same. Irish setter classes the same as the

English. Champion black and tan setters $20, open dogs same as the English, bitches the same, puppies $10. Champion pointers $20, open dogs same as setters, bitches the same, puppies $10 and $5. Champion Irish water spaniels $15, open $15, $7 and $5. Clumber spaniels $10, $7 and $5. Champion field spaniels $15, open $15, $7 and $5. Black field spaniels, dogs $15, $7 and $5, bitches the same. Champion cocker spaniels $15; open, black dogs $10, $7 and $5, bitches the same; other than black, dogs same as the black, bitches the same, puppies $10, black the same. Foxhounds $10, $7 and $5, puppies $7. Harriers $10 and $5. Beagles same as foxhounds. Deerhounds $10 and $5. Champion greyhounds $10, open $10 and $5. Champion fox-terrier dogs $15, bitches the same; open, dogs $15, $7 and $5, bitches the same, puppies $10 and $5. Mastiffs $10 and $5. Champion St. Bernards $10; open, dogs $10 and $5, bitches the same. Newfoundlands $10 and $5. Champion collies $15; open, dogs $15, $7 and $5, bitches the same, puppies $5. Bulldogs $10, $7 and $5, bull-terriers, Scotch terriers, Dandy Dinmont terriers, Skye terriers, Bedlington terriers, Irish terriers, black and tan terriers, broken-haired terriers, the same. Yorkshire terriers $10 and $5, pugs, smooth toys, rough toys, toy spaniels, foreign dogs, miscellaneous, the same.

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal;*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, or breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Young Obo. By Mr. Andrew Laidlaw, Woodstock, Ont., for black cocker spaniel dog, whelped Oct. 9, 1883, by Obo II. (A.K.R. 432) out of Darkie (A.K.R. 250).

See See. By Mr. W. A. Wheatly, Memphis, Tenn., for black and tan Gordon setter bitch, age not given (Malcolm—Dream IV.).

Sensation's Lad. By Mr. A. P. Vredenburgh, Bergen Point, N. J., for lemon and white pointer dog, whelped Sept. 11, 1883, by champion Sensation (A.K.R. 217) out of Lass (Sleaford—Dawn).

Schuyler Livingstone. By Mr. H. W. Smith, Worcester, Mass., for black and white greyhound dog, whelped June 28, 1883 (Quickstep—Molly).

Guido. By Miss Ida F. Warren, Leicester, Mass., for Italian greyhound dog, whelped Nov. 12, 1883, by Dr. Mudge's Don out of Beauty.

Nellie R. By Mr. J. W. Rushforth, Yonker, N. Y., for black, with white on breast, cocker spaniel bitch, whelped June 17, 1883, by Brahmin (Bob—Dew) out of Pansy B. (Captain—Diamond).

Grace. By Mr. James E. Bennett, Poughkeepsie, N. Y., for white, black and tan ticked beagle bitch, whelped Aug. 16, 1883 (Ringwood—Thorn).

Jesse. By Mr. John H. Davis, East Chester, N. Y., for lemon and white English setter dog, whelped Oct. 29, 1883, by Lyons's Jesse (Chips—Jessie) out of owner's Bessie (Shot—Princess Tarlow).

Bessie. By Mr. John H. Davis, East Chester, N. Y., for liver and white English setter bitch, whelped Oct. 29, 1883, by Lyons's Jesse (Chips—Jessie) out of owner's Bessie (Shot—Princess Tarlow).

PRIOR CLAIM.—Newport, R. I., Feb. 9, 1884.—*Editor Forest and Stream:* In the last (Feb. 7) of FOREST AND STREAM Mr. L. Melchor claims name Black Bess II. for black cocker bitch. As I claimed that name for one of my bitches in your issue of Jan. 10, and, having registered her in *American Kennel Register* (843), think I have the best right to the name. HARRY G HAMMETT.

NAMES CHANGED.

☞ *See instructions at head of this column.*

Faust Fan to Fannie Faust. Liver and white pointer bitch, whelped October, 1880 (Faust—Minnetonka), owned by Mr. S. B. Dilley, Rosendale, Wis.

BRED.

☞ *See instructions at head of this column.*

Lady Bang—Knickerbocker. The Knickerbocker Kennel Club's (Jersey City, N. J.) orange and white pointer bitch Lady Bang (A.K.R. 698), to their champion Knickerbocker (A.K.R. 19), Feb. 9.

Margery Daw—Beaufort. The Surrey Kennel's (Ellicott City, Mo.) orange and white pointer bitch Margery Daw (Sensation—Clymont) to Beaufort (A.K.R. 694), Feb. 6.

Belle—Bang Bang. The Westminster Kennel Club's lemon and white pointer bitch Belle (Flake—Lilly) to their Bang Bang (A.K.R. 394), Feb. 9.

Flirt—Sensation. Mr. W. S. Thurston's lemon and white pointer bitch Flirt (Glenmark—Girl) to the Westminster Kennel Club's champion Sensation (A.K.R. 217), Feb. 9.

Rhue—Arlington. Mr. Thomas Adcock's (Providence, R. I.) red Irish setter bitch Rhue (Elcho—Juno) to Mr. C. Fred. Crawford's Arlington (Dan—Ruby), Feb. 6.

Cleo—Nimrod. Mr. John Carver's (Boston, Mass.) red Irish setter bitch Cleo (Elcho—Flourish) to Ashmont Kennel's champion Nimrod (A.K.R. 631), Feb. 4.

Juno—Comet. Mr. Andrew Laidlaw's (Woodstock, Ont.) red Irish setter bitch Juno to Messrs. Durward's Comet, Jan. 29.

Pride of Missouri—Hannibal. Mr. J. D. Blood's (Hannibal, Mo.) red Irish setter bitch Pride of Missouri (A.K.R. 635) to his Hannibal (A.K.R. 616), Nov. 18.

Yolande—Colonel Stubbs. Mr. W. H. Tuck's (Wilkesbarre, Pa.) spaniel bitch Yolande (A.K.R. 523) to Colonel Stubbs (A.R.R. 302), Jan. 29.

Sheila—Pluck. Mr. Lawrence Timpson's (Red Hook, N. Y.) Irish terrier Sheila (A.K.R. 137) to his Pluck (A.K.R. 197), Jan. 25.

Lady Alice—Buckellew II. Mr. J. D. Blood's (Hannibal, Mo.) English setter bitch Lady Alice (Rough—Lady Beaconsfield) to his Buckellew II. (A.K.R. 30), Jan. 18.

Bridget P. Hatterick—Hannibal. Mr. J. D. Blood's (Hannibal, Mo.) red Irish setter bitch Bridget P. Hatterick (A.K.R. 612) to his Hannibal (A.K.R. 616), Jan. 25.

Maud B.—Bogardus. Mr. J. D. Blood's (Hannibal, Mo.), red Irish setter bitch Maud B. (Rover B.—Red Topsey) to his Bogardus (Hannibal—Pride of Missouri), Jan. 10.

Bounce—Bonivard. Mr. A. K. Johnston's (Stapleton, S. I.) St. Bernard bitch Bounce (A.K.R. 784) to Bonivard (A.K.R. 361), Dec. 31.

Theon—Cæsar. The Chequasset Kennel's (Lancaster, Mass.) St. Bernard bitch Theon (A.K.R. 94) to their Cæsar (A.K.R. 22), Jan. 18.

Jersey Gyp—Primer. Mr. W. E. Rea's (Hackettstown, N. J.) English setter bitch Jersey Gyp (A.K.R. 107) to Mr. C. N. Wade's Primer (A.K.R. 227), Jan. 3.

Toronto Jet—Bub. Mr. Andrew Laidlaw's (Woodstock, Ont.) black spaniel bitch Toronto Jet (Nigger—Belle) to Bub (A.K.R. 131), Jan. 12.

Lark—Kelpie. Mr. Geo. H. Whitehead's (Trenton, N. J.) collie bitch Lark (A.K.R. 7) to his Kelpie (A.K.R. 6), Jan. 26.

Daisy—Young Toby. The Chequasset Kennel's (Lancaster, Mass.) imported pug bitch Daisy (A.K.K. 468) to their imported Young Toby (A.K.R. 475), Jan. 5.

WHELPS.

☞ *See instructions at head of this column.*

Pride of Missouri. Mr. J. D. Blood's (Hannibal, Mo.) red Irish setter bitch Pride of Missouri (A.K.R. 635), Jan. 20, eight (three dogs), by his Hannibal (A.K.R. 616).

Sally. Mr. J. P. Swain's (Bronxville, N.Y.) Dandie Dinmont terrier bitch Sally (A.K.K. 866), Nov. 8, seven (three dogs), by his Joe (A.K.R. 865).

Lady Abbess. Mr. Fred. W. Rothera's (Simcoe, Ont.) rough-coated St Bernard bitch Lady Abbess (A.K.R. 482), Feb. 7, twelve (seven dogs), by his Priam (A.K.R. 485).

Fanny. Mr. G. Sanderson's (Moncton, N. B.) imported Skye terrier Fanny, Feb. 6, three (two dogs), by his imported Watty. The bitch since dead.

Ruby II. Mr. G. G. Hammond's (New London, Ct.) Chesapeake Bay bitch Ruby II., Jan. 15, ten (seven dogs), by Curtis's Foam (Albert—Rose).

Daphne II. The Essex Kennel's St. Bernard bitch Daphne II. (A.K.K. 480), Jan. 30, seven (three dogs), by Alp II. (A.K.R. 705).

SALES.

☞ *See instructions at head of this column.*

Nellie R. Black, with white on breast, cocker spaniel bitch, whelped June 17, 1883 (Brahmin—Pansy B.), by Mr. Jas. Middlemist, Delhi, N. Y., to Mr. J. W. Rushforth, Yonkers, N. Y.

Young Obo. Black cocker spaniel dog, whelped Oct. 9, 1883, by Obo II. (A.K.R. 432) out of Darkie (A.K.R. 250), by Mr. John Daly, Salmon Falls, N. H., to Mr. Andrew Laidlaw, Woodstock, Ont.

Black Prince. Black greyhound dog (A.K.R. 752), by Mr. H. W. Huntington, Brooklyn, N. Y., to Mr. W. H. Herrick, Montpelier, Vt.

Bonivard. Rough-coated St. Bernard dog (A.K.R. 361) by Mr. Rodney Benson, New York, to Mr. E. R. Hearn, Passaic, N. J.

Regie. Rough-coated St. Bernard bitch (A.K.R. 25), by Mr. Rodney Benson, New York, to Mr. J. W. Burgess, East Orange, N. J.

April Fool. English setter dog, age not given (Jester—Modjeska), by Mr. E. W. Jester, St. George's, Del., to Mr. R. M. Brown, Jr., Amherst Court House, Va.

Good Princess. English setter bitch, whelped Oct. 28, 1883 (Prince—Dashing Belle), by Mr. E. W. Jester, St. George's, Del., to Mr. Wm. H. Childs, Philadelphia, Pa.

Jester, Jr. English setter dog, age not given (Jester—Modjeska), by Mr. E. W. Jester, St. George's, Del., to Mr. Louis B. Wright, New York.

Modesta. English setter bitch, age not given (Jester—Modjeska), by Mr. E. W. Jester, St. George's, Del., to Mr. A. M. Wright, New York.

Othello. Black greyhound dog (A.K.R. 756), by Mr. H. W. Huntington, Brooklyn, N. Y., to Mr. C. S. Wixon, Ithaca, N. Y.

Princess Fedora. Black greyhound bitch, whelped Sept. 17, 1883, by Doubleshot (A.K.R 73) out of Dorothée (A.K.R. 72), by Mr. H. W. Huntington, Brooklyn, N. Y., to Mr. J. C. Sinclair, New York.

Queen Bess. Fawn greyhound bitch (A.K.R. 757), by Mr. H. W. Huntington, Brooklyn, N. Y., to Mr. W. H. Herrick, Montpelier, Vt.

Prince Jester. English setter dog, whelped Oct. 28, 1883 (Prince—Dashing Belle), by Mr. E. W. Jester, St. George's, Del., to Mr. A. M. Wright, New York.

Prince Castle. English setter dog, whelped Oct. 28, 1883 (Prince—Dashing Belle), by Mr. E. W. Jester, St. George's, Del., to Mr. M. Richardson, Philadelphia, Pa.

Daisy. Black and tan Gordon setter bitch (A.K.R. 829), by the Ashmont Kennel, Dorchester, Mass., to Mr. F. Chesley, New Market, N. H.

Ridgefield. Red Irish setter dog (A.K.R. 637), by Mr. Charles R. Thorburn, Ridgefield Park, N. J., to Mr. H. M. Drake, Morristown, N. J.

Sherwood. Red Irish setter bitch (A.K.R. 641), by Mr. Charles R. Thorburn, Ridgefield Park, N. J., to Mr. W. W. Sharpe, New York.

Benedict. Black spaniel dog (A.K.R. 61), by Mr. Chas. H. Mason, New York, to Mr. H. W. Huntington, Brooklyn, N. Y.

Count Louie. Black greyhound dog, whelped Sept. 17, 1883, by Doubleshot (A.K.R. 73) out of Dorothée (A.K.R. 72), by Mr. H. W. Huntington, Brooklyn, N. Y., to Mr. J. C. Sinclair, New York.

La Belle. Black greyhound bitch (A.K.R. 754), by Mr. H. W. Huntington, Brooklyn, N. Y., to Mr. A. D. Swan, Lawrence, Mass.

Le Beau. Black greyhound dog (A.K.R. 755), by Mr. H. W. Huntington, Brooklyn, N. Y., to Mr. A. D. Swan, Lawrence, Mass.

Schuyler Livingstone. Black and white greyhound dog, whelped June 28, 1883 (Quickstep—Molly), by Mr. H. W. Smith, Worcester, Mass., to Mr. F. D. B. Stott, Stottville, N. Y.

Guido. Dawn, with white points, Italian greyhound dog, whelped Nov. 12, 1883 (Don—Beauty), by Mrs. C. A. Derby, Salem, Mass., to Miss Ida F. Warren, Leicester, Mass.

Flora. Liver, with white on breast and feet, cocker spaniel bitch, age not given (Joe—Jenny), by Mr. J. W. Rushforth, Yonkers, N. Y., to Mr. A. D. Wilbur, Catskill, N. Y.

Rexford—Sylvia whelps. Red Irish setters, whelped Dec. 20, 1883, by the Rory O'More Kennels, Albany, N. Y., a dog to Mr. C. T. Pierce, Brooklyn, N. Y.; a bitch to Mr. W. R. Roeolfson, Jersey City, N. J., and a bitch to Mr. I. N. Haney, Albany, N. Y.

Pat O'More—Pearl whelp. Red Irish setters, whelped Dec. 6, 1883, by the Rory O'More Kennels, Albany, N. Y., a dog to Mr. M. H. Brensinger, Harrisburg, Pa.; a bitch to Mr. C. T. Pierce, Brooklyn, N. Y., and a bitch to Mr. W. K. Trimble, Princeton, Ill.

Doncaster. Liver and white pointer dog (A.K.R. 563), by Mr. H. B. Dwyer, New York, to Mr. Mortimer Mills, Jersey City, N. J.

Rose Gleam. Lemon and white pointer bitch (A.K.R. 565), by Mr. H. B. Dwyer, New York, to Mr. Geo. L. Wilms, Jersey City, N. J.

See See. Black and tan Gordon setter bitch, age not given (Malcolm—Dream IV.), by Mr. H. Malcolm, Baltimore, Md., to Mr. W. A. Wheatly, Memphis, Tenn.

Jet W. Black spaniel bitch (A.K.R. 851), by Mr. John Daly, Salmon Falls, N. H., to Mr. J. P. Willey, same place.

Chief—Doe whelps. Red Irish setter dogs, whelped December, 1883, by Chief (A.K.R. 231) out of Doe (Buck—Floss), by Mr. Max Wenzel, Hoboken, N. J., one to Mr. H. Thomas, same place; one to Dr. Manahor, same place; one to Mr. C. H. Miller, Hudson, N. Y., and one to Mr. F. M. Bennett, Brooklyn, N. Y.

Sensation—Lass whelp. Lemon and white pointer dog, whelped Sept. 11, 1883, by the Westminster Kennel Club, Babylon, L. I., to Mr. Louis B. Wright, New York.

Rory O'More—Gay whelp. Red Irish setter dog, whelped Oct. 12, 1883, by the Rory O'More Kennels, Albany, N. Y., to Mr. C. C. Kirkpatrick, Springfield, O.

Plantagenet—Bluebelle whelp. Blue belton English setter dog, whelped July 10, 1883, by Mr. Walter H. Beebe, New York, to Mr. Wm. Dallas, Westfield, N. J.

PRESENTATIONS.

☞ *See instructions at head of this column.*

Cona. Blue belton English setter dog, 5 years old (Rhoderick Dhu—Mina), by Mr. Walter H. Beebe, New York, to Mr. Clifford M. Gates, Galveston, Tex.

Sensation's Lad. Lemon and white pointer dog, whelped Sept. 11, 1883, by champion Sensation (A.K.R. 217) out of Seitner's Lass (Sleaford—Dawn), by Mr. Louis B. Wright, New York, to Mr. A. P. Vredenburgh, Bergen Point, N. J.

DEATHS.

☞ *See instructions at head of this column.*

Washington. Liver and white pointer dog, 2½ years old (champion Rush—Gip), owned by Mr. H. Hedeman, Brooklyn, N. Y., Feb. 5, from jaundice.

Lady Black. Black spaniel bitch (A.K.R. 731), owned by Mr. Andrew Laidlaw, Woodstock, Ont., Feb. 7; cause unknown.

Rifle and Trap Shooting.

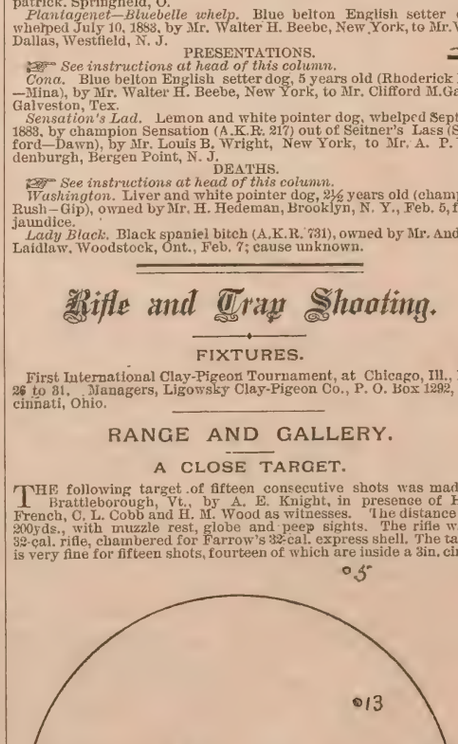
FIXTURES.

First International Clay-Pigeon Tournament, at Chicago, Ill., May 26 to 31. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

RANGE AND GALLERY.

A CLOSE TARGET.

THE following target of fifteen consecutive shots was made at Brattleborough, Vt., by A. E. Knight, in presence of H. C. French, C. L. Cobb and H. M. Wood as witnesses. The distance was 200yds., with muzzle rest, globe and peep sights. The rifle was a 32-cal. rifle, chambered for Farrow's 32-cal. express shell. The target is very fine for fifteen shots, fourteen of which are inside a 3in. circle;



the most remarkable feature is that thirteen of the bullets are inside an inch and one-half for "up and down," from 2 to 9. When we consider that this cluster is hard to beat with an ordinary 32-cal. at 50yds., the advantages of the express shell is readily seen, and proves the fact that .32-cal. is large enough for 200yds., off-hand.

CRACK SHOT.

GARDNER, Mass., Feb. 5.—There was a contest last week between the Brattleborough Rifle Club, of Brattleborough, Vt., shot at their range and the Gardner Rifle Club at Hackmatack Range in this town. The shots were exchanged by telegraph. The old Massachusetts target was used, with a possible score of 120 per man. The detail score has since been received, and is as follows:

Brattleborough Team.

M Lamb	9	10	12	11	12	12	11	12	9	10—108
G B Read	11	7	11	10	11	11	10	12	10	11—104
A E Knight	12	10	12	10	9	11	10	8	11	10—103
H M Wood	10	10	9	11	12	10	10	12	8	10—102
C H Howe	9	10	11	10	10	10	12	9	10	9—101
C L Cobb	11	10	11	10	10	11	10	9	10	8—100
W H Taft	10	9	11	11	11	10	9	9	3	12—100
A W Nichols	7	10	10	10	9	11	10	10	10	10— 97
A S Nichols	12	9	11	7	10	9	10	7	10	10— 95
T Hannon	10	6	10	6	8	9	9	11	11	9— 89—999

Gardner Team.

G F Ellsworth	13	10	11	9	10	11	11	11	9	—105
S B Hildreth	8	11	9	12	12	12	10	11	8	11—104
G C Goodale	9	11	10	10	9	11	11	11	10	11—103
Chas Hinds	10	10	11	10	12	11	9	10	10	10—103
A Mathews	9	10	12	7	11	12	10	9	10	10—100
C S Walker	9	9	9	11	12	12	10	8	9	11—100
H C Knowlton	11	8	10	10	10	10	10	11	8	10— 98
J W Dodge	12	12	9	9	9	12	9	12	10	12— 97
F H Knowlton	7	10	10	12	10	8	9	8	9	9— 92
W C Loveland	10	10	6	10	11	9	9	10	10	0— 85—987

After the match had been shot and telegraphed seven of the home team with two other members of the Gardner Club shot another string, with the following result: G. F. Ellsworth 113, A. Mathews 111, I. N. Dodge 109, W. C. Loveland 107, S. B. Hildreth 106, G. C. Goodale 103, Frank Nichols 102, Fred. H. Knowlton 101, H. C. Knowlton 101, a total of 953.

BOSTON, Feb. 10.—When the 11 o'clock train from Boston reached Walnut Hill to-day, with a few shooters on board, they found the weather condition anything but conducive to comfort. A light drizzling rain was falling, but there was no wind to trouble the shooters, and some good scores were the result. Later in the day the rain ceased, and the light improved wonderfully. The feature of the day was the achievement of Mr. Charles, who, in the combination match, Creedmoor target, made nine consecutive bulls, finishing with a 4. On a second score he made a 4 and finished with nine bulls, making two scores of 49. The other scores are as follows:

Creedmoor Practice Match.

D Kirkwood	5554454515—46	H Cushing	4444544444—41
J E Darmoody (mil)	4454445544—43	C Pierce (mil)	3243444535—37
A L Brackett	4444553454—42	S J Burns (mil)	5433425343—34

Creedmoor Prize Match.

H Cushing	4554544455—45	A L Brackett	4545551443—43
J P Bates	4454555544—45	L B Atkins	4454445444—42
R Davis	5454455544—45	B A Lappen	4444444454—41
J A Cobb	4555445444—44	A J Look	4435444444—40
A C Cash	5454455543—44	C H Best	5444344444—40

Rest Match.

H Severence, D	9 9 10 10 10 10 10 9 10 10—97		
W Charles, E	10 10 9 10 9 9 10 10 9 10—96		
R Davis, E	10 9 9 10 10 10 9 9 9 10—94		
A C Adam, E	10 10 10 9 8 9 9 9 9 8—91		
C A Glass, A	8 8 10 8 9 10 10 10 9 9—91		
B A Lappen, A	8 9 10 7 9 10 10 10 9 8—90		

MAMMOTH GALLERY.—655 Washington street, Boston, Mass.—The attendance the past week has been very good, and the well-known local and out of town marksmen are dropping in frequently. Following are some of the best scores made, rounds 10, four scores each. 50yds. range. Creedmoor target:

A B Wilson	43 43 44 46—176
R E Bellows	43 43 43 44—173
A B Loring	42 43 43 45—173
R Ford	42 42 43 45—172
J K P Purdum	40 40 42 44—166
J W Stetson	40 41 42 43—166
P D Parker	40 40 41 44—165
C B Parmenter	40 40 41 43—164
J H Bourne	40 41 41 41—163
A Strong	40 40 40 41—161

WORCESTER, Mass., Feb. 7.—Members of the Worcester Rifle Association went out to Pine Grove Range to-day. There was shooting for the record match and also for practice. The distance was 200yds., off-hand, with a possible 100, on the American decimal target. The following is the score of each:

Record Match.

A C White	9	7	10	8	5	10	10	9	9	7—79
Re-entry	8	6	8	8	10	9	10	10	6	8—83
A Williams	9	9	6	9	9	9	4	10	6	8—79
Re-entry	9	4	8	6	6	0	6	4	9	10—62
Moses Carter	6	0	8	3	10	6	10	5	2	5—64
Re-entry	9	3	7	0	9	4	9	8	4	9—62
A L Rice	9	9	5	5	2	6	8	5	5	2—57
Re-entry	8	9	1	4	8	10	4	7	5	8—63

Practice Match.

A C White	10	9	9	4	9	10	10	8	10—88	
A Williams	10	4	7	7	9	9	6	5	8	4—66
Re-entry	7	9	9	7	9	4	7	5	6	9—71
M N Joyce	8	5	8	10	3	0	9	6	7	9—65
Re-entry	9	5	8	10	5	9	4	10	7	4—71

SARATOGA RIFLE CLUB.—Saturday, Feb. 9.—The following are the highest scores of each member for the past week:

Davis	11	12	12	11	10	11	12	12	12	11—114	
Wells	11	11	11	12	12	12	10	10	12	10—111	
Gage	11	12	11	11	12	9	10	11	10	12—109	
Mitchell	9	11	10	11	10	11	12	11	11	11—107	
F D Wheeler	12	11	9	12	8	8	11	12	12	10—105	
Gibbs	12	11	12	11	11	11	7	11	8	10—104	
White	11	8	10	9	11	10	11	11	10	10—101	
Wing	9	9	10	10	12	10	10	12	8	5— 93	

A. G. HULL, Adjutant.

NEWARK, N. J.—At a meeting of the Newark Shooting Society on Tuesday, Feb. 5, it was decided to hold their annual Spring Shooting Festival in June. It will commence on Monday, the 16th, and last four days. Money amounting to over $1,500 will be distributed in addition to other valuable prizes.

BULLSHEAD RIFLE CLUB.—322 Third avenue.—Twelve-ring target; possible 120.

G Zimmermann	116	H Hackmann	109
C Rein	115	S Mehrbach	104
M Dorrler	114	J F Campbell	101
A Lober	113	D Holland	100
J Schneider	111	J Jordan	97
G D Johnson	110	H A Wasmuth	93

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

THE CLAY-PIGEON TOURNAMENT.

WE are in receipt of the official programme of the First International Clay-Pigeon Tournament, to be held at Chicago, May 27 to 31.

First Day.—International Championship Match, 10 A. M. to 2 P. M. Match No. 2: The Chicago sweepstakes, 2 P. M.; entrance $7; 5 single birds, 15yds. rise; fourth notch.

Match No. 3: Entrance $7, including cost of birds. 8 live pigeons, 26yds. rise; use of one barrel; Illinois State Rules to govern.

Match No. 4: The "miss and out" sweepstake; entrance $3; fourth notch; 18yds. rise; single bird.

Second Day.—International Championship Match, 10 A.M. to 2 P.M.

Match No. 5: The Ligowsky sweepstake; entrance $5; double birds; fourth notch. Five traps screened, to be placed at irregular points in front of the score, which must be placed 30yds. from furthest trap. The trap judge will prepare thirteen folded slips of paper containing each a number from 3 to 15 respectively, from which the shooter will draw one slip, which the judge will privately examine, and allow the puller only to see. The shooter is to walk in a general right line, from the score toward the traps, upon receiving the reply "yes" from the puller to his query, "are you ready?" When the shooter is under way the number of steps indicated on the draw slip, the puller will pull any two traps, one after the other.

Match No. 6: The miss and out sweepstake; entrance $3; fourth notch; double birds, 15yds. rise.

Sweepstakes.—In order to make the tournament attractive for all sportsmen, whether members of teams or not, the International Championship Match will, until finished, be commenced daily at 10 A. M., and continued until 2 P. M., after which there will be a daily programme of sweepstakes with 5 traps, as indicated. The executive committee reserve the right of adding to, omitting or changing any of the sweepstakes. All sweepstake (excepting the miss and out) purses shall be divided into three, 50, 30 and 20 per cent. Price of birds (clay-pigeon) three cents each. The Ligowsky Tournament Rules to govern, with such changes as the executive committee may

prescribe. Sweepstakes open to all excepting professionals and such as may be barred by the executive committee.

Third Day.—International Championship Match, 10 A. M. to 2 P.M.

Match No. 7: The professional sweepstake, open to all, including the "professionals," who are barred from the other matches, such as Dr. W. F. Carver, Captain Bogardus. Entrance $10; 5 traps; 6 single birds (clay-pigeons), 21yds. rise; fourth notch; 2 double birds, 18yds. rise. Seventy-five per cent. of the gate money for the day, with a guarantee hereby given by the Ligowsky Clay-Pigeon Company that the same shall not be less than $250, will be added to the entrance purses, to be divided into three prizes—50, 30 and 20 per cent.

Match No. 8: Entrance $7, including birds; live pigeons, 2 double rises, 18yds. rise; four moneys—40, 30, 20 and 10 per cent.; Illinois State rules.

Fourth Day.—International Championship Match, 10 A. M. to 2 P. M.

Match No. 9: The "twins" sweepstake team shoot. Any two persons form a team; entrance $6 per team; 5 single birds, 18yds. rise; fourth notch.

Match No. 10: "Miss and out" sweepstake, same as Match No. 4.

Fifth Day.—International Championship Match, 10 A. M. to 2 P. M.

Match No. 11: Entrance $10, including birds; live pigeons; 6 single, 26yds. rise, and 2 double rises, 18yds. rise; four moneys; Illinois State rules.

Match No. 12: "Home sweet home" sweepstake; entrance $7; 7 single birds, 18yds. rise; fourth notch; 3 traps, 10yds. apart.

INTERNATIONAL CHAMPIONSHIP MATCH.

Conditions—Club team shooting (5 to a team); 10 single birds, 18yds. rise; 5 double birds, 15yds. rise; Ligowsky tournament rules to govern, excepting as herein modified, and such minor changes as the Executive Committee may announce. Ten-bore and 12-bore guns allowed. Charge of powder unlimited; charge of shot, 4½drs. Five traps, screened 3yds. apart. Ties between teams to be shot at 5 singles, 21yds. rise, and 2 doubles, 18yds. rise. Special prize donated by the Ligowsky Clay-Pigeon Company: To the winning team, $750 guaranteed; to the best individual score, $250 diamond badge, cost guaranteed. The said badge shall be the absolute property of the winner, but it shall be optional with the latter to present same at the ensuing international tournament, when it shall be redeemed for $250 cash, to be deducted from the entrance fees, etc., in a match similar to this, to be again contested for in said match, and awarded to the best individual score. If said badge be not presented for redemption the Executive Committee will set aside the $250 cash as a purse for said best individual score in a similar championship team match.

The Ligowsky Clay-Pigeon Company desires it to be distinctly understood that they donate $1,000 over and above all receipts, out of their private treasury, for the above prizes.

Entrance fees $25 per team. Entrance fees and gate money, with the exception indicated in Match No. 7, (less cost of birds, grounds and advertising, not exceeding 25 per cent. of same), to be distributed as second, third, fourth and fifth team prizes—40, 30, 20 and 10 per cent. In other words, should said cost exceed the 25 per cent. of said monies, the Ligowsky Clay Pigeon Company will pay the same. Should less than 50 clubs enter this match, then a club may enter as many teams of 5 as it may see fit.

Clubs entering must be known as regularly organized gun clubs at least two months previous to this tournament; members of entered teams must be in good standing the same length of time, indorsed by the president and secretary of the respective clubs. Contestants belonging to two or more clubs must shoot with their home clubs. Contestants can shoot with one team only, and must be residents of the county from which the team is entered. If any attempt to evade this rule be discovered during tournament, entrance money will be forfeited; if discovered after, offenders will be prosecuted according to law.

Clubs should enter at once, by remitting $1 (balance of entrance money payable at Chicago, on or before first day of shoot), to the general manager and representative of the Ligowsky Clay Pigeon Company, care P. O. Box 1,292, Cincinnati, O. Copies of the rules can be obtained by applying to the latter, to whom all communications on the subject should be addressed.

The club teams will be called to the score in the order designated by the executive committee; said order will be determined by the dates of original entry, teams being allowed to choose accordingly; each team will remain at the score until it has finished; the members of the teams will be called to the score in the order designated by their respective captains, each member shooting at ten single birds in succession, and then (when the entire team has finished shooting at single birds) the members will, in similar manner, finish their scores at the double birds. Arrangements will be made for reduced railroad rates; this will be easily effected, as the National Republican Convention meets in Chicago June 3, with reduced railroad rates from all parts of the country.

BARRIER, Ontario.—The tournament at this place on the 5th and 6th inst. brought a large collection of marksmen together. The contestants shot at 12 birds each, 21yds. rise, for $200, divided into six prizes, Toronto Gun Club rules, miss two and go out:

First Squad.

J B Forbes, Woodstock	1 1 1 1 1 1 1 1 1 0 1 1	—11
D Blea, Carlton	1 1 1 1 1 1 1 1 0 1 1 1	—11
Pasco, Woodstock	1 1 0 1 1 1 1 1 1 1 1 1	—11
C Pickering Toronto	1 1 1 1 1 0 1 1 1 1 0	—10
Hardwood, Woodstock	1 1 1 1 1 1 1 1 0 1 0	—10
J Douglass, Toronto	1 1 1 1 1 1 0 0	— 7
J Wilson, Newmarket	1 1 1 1 0 0	— 5
G H Briggs, Toronto	0 0 1 1 0 1	— 4
G Grant, Woodstock	1 1 0	— 1

Second Squad.

Wayper, Guelph	1 1 1 1 1 1 1 1 1 1 1 0	—11
Walker, Woodstock	1 1 1 1 1 1 1 0 1 1 1 0	—10
J Wilson, Toronto	1 1 1 1 0 1 1 0	— 6
Moseley, Newmarket	1 1 1 0 1 0	— 4
Westbrook, Brantford	0 1 1 0	— 2
R Harris, Carlton	0 1 1 0	— 2
C Ayre, Toronto	1 1 0 0	— 2
W Smith, Toronto	0 0	— 0

Third Squad.

E Read, Toronto	1 1 1 1 1 1 1 1 0 1 1 1	—11
C Cockburn, Toronto	1 1 1 1 1 1 1 1 1 0 1 1	—11
J Townson, Toronto	1 1 0 1 1 1 1 1 0	— 6
Hickler, Brantford	0 1 1 0	— 2
G T, Toronto	0 1 0	— 1
Hinds, Woodstock	1 0 0	— 1
Price, Meaford	1 1	— 0

Fourth Squad.

J Bell, Markham	1 1 1 1 1 1 1 1 1 1 1 1	—12
Beatty, Barrie	1 1 1 1 1 1 1 1 0 1 1 1	—11
M Shanacy, Barrie	1 1 1 1 1 1 1 1 1 0 1 1	—11
R Wilson, Markham	0 1 1 1 1 1 1 1 1 1 1 1	—11
L Switzer, Toronto	1 0 1 1 1 1 1 1 1 1 1 1	—11
J Soules, Orangeville	1 1 1 0 1 1 1 1 0	— 7
C Small, Toronto	1 1 1 1 1 0 1 1 0	— 7
A Irving, Orangeville	0 1 1 0	— 2
D S Rogers, Toronto	1 1 0 0	— 2
S Proude, Orangeville	1 0 0	— 1
J Jones, Toronto	0 0	— 0

First tie, 26yds. rise.—Forbes 4, Blea 5, Pascoe 5, Wayper 5, Cockburn 4, Reed 5, Beatty 5, Shaugnessy 5, Swetzer 3, Wilson 3.

Second tie, 31yds. rise.—D. Blea 2, Pascoe 2, Wayper 1, Reed 2, Beatty 1, Shaugnessy 2.

Third tie, miss and out.—Blea 1, Pascoe 1, Reed 0, Shaugnessy 1, Wayper 111601, Beatty 111000.

LYNN, Mass., Feb. 9.—The Lynn Central held its eleventh shoot for the silver cup Friday. A strong wind, with snow, made the score look small, but there was a good party present. E. W. Webster won the clay pigeon cup for the second time, with a score of 11 out of the possible 20. J. W. Holden won the glass ball cup for the first time, with a score of 17 out of the 20. Eight sweeps at clay pigeon and four sweeps at glass balls were shot. Following were the winners in the clay pigeon sweeps:

First event, five clay-pigeons—Evans first, Webster, George and Randall second, Parker third.

Second—Webster first, Evans second, Arkerson and Parker third.

Third—George first, Webster and Parker second, Randall and Evans third.

Fourth—George and Randall first, Webster and Evans second, Parker third.

Fifth—Evans and Randall first, Webster second, George third.

Sixth—Webster and George first, Randall and Evans second, Parker third.

Seventh—Randall first, Webster and Evans second, Hardy and George third.

Eighth—Randall first, Hardy second, George third.

GLASS BALL SWEEPS.

First—Webster first, George and Lander second, Randall and Parker third.

Second—Parker first, Webster and Randall second, George and Arkerson third.

Third—Lander first, Webster and George second, Randall and Evans third.

Fourth—Webster first, Evans and Lander second, Randall, George and Parker third.

At the tenth shoot, Feb. 1, Evans won the clay-pigeon cup for the second time. The next shoot will be Feb. 15.

PROVIDENCE, R. I., Jan. 31.—The following is the score of to-day's shoot for the Ligowsky State Badge, held on the grounds of the Narragansett Gun Club:

C B Payne	1111111111111111101111	—24
E W Tinker	1111111101111111111111	—24
C H Perkins	1111111111101111101111	—23
E S Luther	1111111111111111011101	—23
L M Eddy	1111110101111111111110	—22
C C Gray	1011100101000010001100	—11

Ties on 24.

C B Payne	1111111101111111	—19
E W Tinker	1111111111101111 w	—15

Feb. 7.—In spite of the gloomy threatening weather, quite a delegation of shooters faced the five traps to-day at the grounds of the Narragansett Gun Club, and some very fair scores were made, though it was painfully evident that we need more practice in our double bird shooting, it being comparatively a new thing with the majority of the members. The first match was a postponed shoot for the State Ligowsky Badge. Following is the score:

Ligowsky State Badge.

E S Luther	1011111001111111111111	—22
E W Tinker	1011011111111011111111	—21
H L Palmer	0110101111111101111111	—21
G W Barney	1111110111111101011110	—21
C H Perkins	1010111111111101101011	—20
G W Cary	1101001111111101111111	—20
C C Gray	1111011101110001111101	—18
C M Sheldon	1110111101101011101100	—18

E. S. Luther wins badge second time.

Same day, double bird shoot, 10 pairs for club badge:

C H Perkins	1110111010110100011	—13
E W Tinker	1010101011010101110	—12

There were five more contestants for this badge who withdrew before completing their scores.

Same day, match for Ligowsky State badge, 25 clay-birds, 5 traps 5yds. apart, 18yds. rise, 4th notch:

G W Cary	1111110111111111111111101	—23
E W Tinker	0011110111111111111110111	—21
C H Perkins	1111100111001100111111	—19
L M Eddy	1010111011111101110101111	—19
C C Gray	1101001110111011111111110	—19
C M Sheldon	1111001011101010111111110	—18
G W Barney	0101011101111011101111101	—18
E S Luther	0111110011010100001w	
H L Palmer	0111111010101110100w	

G. W. Cary won badge for the sixth time.—W. H. SHELDON.

WORCESTER, Mass., Feb. 7.—There was a contest here to-day for the individual championship badge for glass-ball shooting. It was at Coal Mine Brook Range of the Worcester Sportsmen's Club. Among those present were Messrs. Bradford Moses, E. S. Ford, S.H. Barrett, Aaron Bragg and S. H. Moyott, of Springfield, and J. Cole and George S. Tidsbury, of Ashland. The judges were Ford, of Springfield; Tidsbury, of Ashland, and John Goodale, of this city. The match was for a possible 50, and were shot in strings of five as follows:

Moses	1111111111101011111101111111111111101111111111	—46
Holden	1111011111111111011011101111111111111111111111	—45

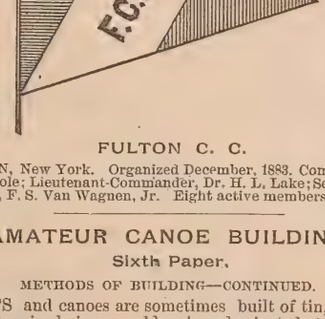
WELLINGTON, Feb. 10.—The Malden Gun Club held its regular weekly shoot at Wellington this afternoon, when a sufficient number of gunners were present to make the sport interesting. In the match for the gold medal prize, F. Loring won the first with a score of 20, while Fielding and Buffum followed with scores of 17 and 15, respectively, out of a possible 20. E. J. Brown won the second medal, with a score of 12, and F. J. Scott the third, with a score of 12 out of a possible 20. E. J. Brown was the winner in the matches for a keg of powder and a box of wads, the score in each instance being 8 out of 10. T. C. Fielding was the winner in the match for a bag of shot. The club will hold a tournament on Washington's Birthday.

Canoeing.

FIXTURES.

Winter Camp-fire.—Tuesday, Feb. 19, 8 P. M., No. 23 East Fourteenth street, Room 16. Subject—Tents and Camp Outfit."

Secretaries of canoe clubs are requested to send to FOREST AND STREAM their addresses, with name, membership, signals, etc., of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to FOREST AND STREAM their addresses, with logs of cruises, maps and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.



FULTON C. C.

FULTON, New York. Organized December, 1883. Commander, V. W. Poole; Lieutenant-Commander, Dr. H. L. Lake; Secretary and Treasurer, F. S. Van Wagnen, Jr. Eight active members.

AMATEUR CANOE BUILDING.

Sixth Paper.

METHODS OF BUILDING—CONTINUED.

BOATS and canoes are sometimes built of tin, copper or galvanized iron, soldered and riveted together, a method usually confined to ships' boats and lifeboats. Two tin canoes were present at the first meet in 1880, and seemed strong, light and serviceable, though of poor shape. No doubt an excellent canoe could be built of sheet copper, that would not leak, and would be indestructible; but the cost and weight would be considerable.

In order to obtain a smooth skin with the advantage of the lapstreak, the planks are sometimes rabbetted on their adjoining edges, half the thickness being taken from each plank, leaving smooth surfaces, inside and out, but thicker plank must be used than in the lapstreak, and the working is more difficult. In another mode the planking is in narrow strips, perhaps 1x¾in. One of these is laid in place and nailed through from edge to edge, into the keel, then another is laid alongside of it and nailed to it, and so in succession until the boat is completed. A few frames are needed to stiffen the boat near the masts.

In the boats made by the Ontario Boat Company these strips are tongued and grooved, then steamed and forced together, the strips in some boats running fore and aft, and in others running around the boat, from gunwale to gunwale. In shell boats, where a very fine surface is of much greater importance than in canoes, the skin is made of Spanish cedar, about ⅛in. thick, laid in four or six pieces, joining on the keel, and once or twice in the length of the boat, making one longitudinal seam and one or two transverse ones; but this method is not strong enough for canoes.

Paper has been used for the past thirteen years as a material for canoes, but although the boats are strong, tight, and but little heavier than the lapstreak, they have not become popular, and are but little used. The process of construction is patented, and requires both tools and experience beyond the reach of the amateur. Canoes have been built during the last five years on a similar system, using thin veneer in three thicknesses instead of paper, but, besides their great weight, no glue or cement can be depended on when long immersed in water; and they are open to the same objections as all double-skinned boats, it is only a matter of time before leakage begins, after which they are practically ruined.

One of the oldest modes of boat building was to make a frame of wickerwork or similar material, covering it with leather, a method still followed, except that canvas is substituted for the leather. This mode of building is perhaps the easiest of all for the amateur, and we shall devote a chapter specially to it further on.

MATERIALS USED IN BOAT BUILDING.

In small boats, where lightness and strength are of first importance, it is necessary that the material should be very carefully selected, both as to quality and as to the fitness of each kind for the required purpose. Beginning with the keel, the best wood is white oak, with a clear, straight grain. In planing it will be found that the grain of the wood in one direction splinters and roughs up, while in the other it lies smooth, and the keel should be so placed in the boat that the splinters or rough ends point *aft*, otherwise it will be torn in dragging over rocks and rough ground. In looking at the end of the wood, a series of concentric layers will be noticed. The piece should, if possible, be placed in such a position that the nails in it will pass *through* the layers, and not between two of them, for instance, in a keel the nails will be mostly vertical, so the layers of the wood should lie horizontally, and the same is true of the ribs, the nails through them being at right angles to the length of the boat, and the layers in each rib running fore and aft, thus avoiding any liability to split. Next to oak, either ash or yellow pine will make a good keel, but hickory should never be used in a boat, as it decays rapidly.

For the stem and stern, which are usually curved, the best material by far is hackmatack, or as it is sometimes called, tamarack, which may be had in knees of almost any curvature, from three to ten inches thick, or larger. For canoes a three-inch knee is the best, as if of full thickness, it may be sawn into three slabs, each of which will make a stem and stern. Oak knees are also used, and are very good, but heavier. If knees cannot be had, the stem and stern may be cut out of straight plank.

For the sides of a centerboard trunk, clear, dry white pine is good, but mahogany is better, though much more costly. The timbers or ribs are usually of oak, though elm is excellent for this purpose. The wood must be clear and of the best quality in order to bend easily. The best oak for this purpose is found in the shape of stave timber used by coopers for the staves of barrels. These pieces are from three to five feet long, and about two by five inches square, one being sufficient for an ordinary lapstreak boat.

For planking, the very best material is white cedar, varieties of which are found along the entire length of the Atlantic seaboard. It is usually sold in boards ¾, 1 and 1¼in. thick for boat work, and from 12 to 20 feet long. For small boats it should be clear from sap and knots, but for larger work that is painted, the latter, if hard and sound, do not matter much, in fact, the knotty cedar is considered tougher and stronger than the clear.

Where cedar cannot be had, white pine can be used to advantage; in fact, the amateur will often find it much easier to buy pine of ¼in. already planed than to work up the thick cedar himself, while pine is not so apt to change its shape in working, a source of much trouble with cedar. Where neither of these can be had spruce may be used, but it is inferior. Mahogany and Spanish cedar make excellent planking, but they are no better than white cedar and cost much more. Most of the English books on canoeing recommend oak for planking, but it is never used here, being too heavy.

For the bulkheads, floor boards and inside work white pine is the best; for decks, rudder and upper streak of planking, mahogany, and for deck beams and carlings, spruce. The gunwale may be of spruce or pine, or, if outside, as will be shown, of mahogany, oak or yellow pine, the coamings of the cockpit being of oak. Paddles and spars are made either of white pine or spruce, the latter being stiffer and stronger, but a little heavier.

The other necessary materials—nails, screws, metal work, etc.—will be mentioned in detail as are required.

DOUBLE vs. SINGLE.

"BOREAS" has an article in your issue of Jan. 24, concerning single vs. double paddles. It is well written, and his points are well taken. Wherefore, I get on my old rheumatic pins for an explanation.

"Boreas" refers to my canoe race against a guide, with a single paddle in a double-ended Long-laker, a race which came off in July, 1880. There was fun in that race. I did not paddle a "10 or 12lb. canoe," but the original "Nessmuk canoe," 17lbs. 13¾oz. She was at that time, so far as I know, the lightest clinker built cedar canoe that was in use anywhere. I had paddled her against a four-oared skiff and came out ahead. I had used the double blade years before I ever heard of Mr. McGregor and his Rob Roy. I no more believed that a lee-making, one-sided single blade could beat the double than I believed that a catboat could beat a Cunarder in an ocean race I spoke as I thought, and I backed my opinion—to a modest extent—with coin of the realm.

There is a general disposition among the guides of the North Woods to sit down heavily on any man who presumes to invade their domain and cheat the fraternity out of $3 per day by guiding himself. There were thirteen guides at the old Forge House on the morning of the race; I was alone, so to speak. Jim Barrett, the landlord, was friendly and sympathetic. Also Sam Dunakin, who held the stakes and was umpire. My opponent was Fred Hess, a muscular young guide of 170lbs., and a fine paddler. But as he paddled a canoe-built Long-laker, six feet longer than mine, and as I had 30 years the advantage of him in age with only 105lbs. of weight to carry, why, I was safe to win.

The course was from the Forge House landing to Bull Head Rock, two hundred rods. Bull Head Rock is crowned with a nail keg filled with stones to mark it in high water. It is always a land mark for the frequenters of the Fulton Chain. Jim Barrett gave the word "Go" and we went. I cut straight across the lily pads with an eye single to the nail keg. Fred in the Nellie took the open, but more circuitous channel.

About seventy rods from the landing the open channel cuts the point of the lily-pads, and at this point Fred was fifty yards ahead. The race was virtually lost to me. All the same, I paddled right along. A race is not lost until it is won. He might split or break a paddle, he might tumble overboard, or run on a snag—but he didn't.

He turned the nail keg thirty rods ahead. It was a bad beat, and sort o' reversed my notions of the paddle. Half a dozen guides with their boats had come out to see the fun. After getting my wind—for I was blown—I joined the sad (?) procession back to the Forge House, where it was vouchsafed me to hear something like the following conversation—not for my benefit—oh no:

First guide, with grim humor and sarcasm: "Well, Fred, you rather got away with our long-haired friend. Giv' him back his money of course, eh?"

Second guide: "Why Fred! I never expected to see you win a paddling race. Of course you won't keep the old fellow's money."

Third guide (my friend Dunakin): "Well Fred, you ain't much of a paddler; I can beat you left-handed. But you've come out ahead for once."

"Shall I give the old gent his money back?"

"What! You unregenerate heathen! Are you going to take money

from an old orphan, 93 years old, father and mother both dead, and 500 miles from home?" etc., etc.

Yes; it was witty, funny, humorous. But it was like the single blade that had beaten me, all on one side.

I recovered my wind. I enjoyed the fun as well as the rest, for wit is scarce; and a good hearty laugh is beyond the price of rubies. I was glad to see the guides enjoy it. In less than twenty-four hours the account of this trifling spurt had reached Blue Mountain Lake, it went all through the North Woods. Whenever I met the Nellie—and I met her often—some one would sing out "Hello, Uncle Nessmuk, do you know this boat?" And I always answered with a cheery Alleghany do-whoop, and said: "Yes, I know her, for stamps." Then they would laugh and row on.

All the same I held to my faith in the double blade. I had been beaten out of sight: it was time. But the little canoe was too short for racing; and, while I could fan her over the water at a three-knot gait as lightly as cork, it required a disproportionate amount of muscle to get another knot out of her. If I wanted five knots—well, I couldn't get there. And when I tried a racing gait she squatted down, wallowed, "snaked," and utterly refused to keep up with the procession. Notwithstanding, I believed then, I believe now, that had the motive power, the muscle, been the same in each boat, the result would have been very different. I was beaten about fifteen per cent. But my opponent had at least fifty per cent. the advantage in wind and muscle.

I went to my room with a sort of rubbed-down-against-the-grain feeling, and wrote to my builder (Rushton), giving a brief account of the race, and ordering another canoe at once—a racer. She was to be 12 to 13ft. long, 16in. beam, with an inch home tumble, sharp and plumb at sterns, 8in. rise at center, and to weigh about twenty pounds. With such a canoe, I thought an "old orphan" could manage to scuffle along with the single blades. Not that I desired to set up as a racing expert, but in that style of circus it seems more sociable to keep in line with the band-wagon.

Mr. Rushton rather discouraged me. "He would build the canoe, and she would be speedy, but cranky and unpleasant as a cruiser. I did wrong to race with a long lake. Did I know that the single blade was faster than the double? Yes; there was a Canuck guide at the meet of the A. C. A. on Lake George who, with his single blade, could beat the best double on the lake one mile in four, etc., etc."

I came down. I was hardly convinced, but I always drop to superior skill and experience; so I changed the order from racer to cruiser, and the result was the Susan Nipper, that some readers of FOREST AND STREAM will remember. She weighed 16lbs., was 10½ft. long, 27in. beam, 9in. rise at center, and was and is the most comfortable cruising canoe I have ever owned.

In the summer of '81 she was cruised in the Adirondacks. She has been ratched on buckboards and in baggage cars without cover or protection, and she is hanging peacefully out on the porch, as staunch as the day she met me at Boonville. In carrying capacity she is competent for a canoeist of 170 pounds; but for a man of that weight it would be advisable to add three or four pounds of good tough timber to her upper works in the way of stiffer gunwales and thicker skins. In everything else except size she is the counterpart of the Sairy Gamp. Each of them is light, pleasant, steady and comfortable, with all the speed that is necessary in a cruiser.

I am inclined to thank "Boreas" for a revival of faith in my old favorite, the double blade, and to doubt very much if the single can fore-reach on it under equal conditions. NESSMUK.

WELLSBORO, Pa.

A CANOEIST'S WINTER SPORT.

ON a cold day of the late fall several canoeists had repaired to the water front at Springfield, Mass., one of them, Commodore L. Q. Jones, of the Hartford C. C., to get ready for a down stream trip home, the others to see their visitor depart. This had not been Mr. J.'s first visit to his Springfield friends; on the contrary, so frequent had been his calls during the season that, on this belated occasion, some fun was poked at him; the prospect of an early formation of ice was making itself felt in the keen air, and this was mentioned to him as a providential circumstance. Nevertheless, he averred that he would come to Springfield, under sail, once more that season. "I think that you reckon without the host," remarked one of the entertainers. "And I'll come under sail, if I have to come on runners," was Mr. J.'s reply, as he glided out of ear shot.

A few days after this incident the Connecticut was rolling its waters under a cover of smooth ice, and the skaters had great sport of it. Canoeists, of course, were supposed to have laid away craft and tackle on the shelf. The Springfield gentlemen had also had opportunity to test the fine quality and solidity of the ice, and were now seated together in their place of business talking of their Hartford friend's inability to fulfill his promise of still another call, and discussing a plan of presenting him with an ice-saw, with directions for use, as a new canoe fitting, when, to their astonishment and merriment, in walked Mr. J., a sail in one hand, his skates in the other. He had been true to his word and come to Springfield under sail and on runners.

This incident may serve to remind canoeists that at least a portion of their tackle may be made use of for sporting purposes in the winter season. It is not related for the novelty of the thing, for sails have probably been employed heretofore by American skaters. A few years ago one of our monthly journals gave a description of a fine sail plan for skaters, together with illustrations. Some of the people of Northern Europe have used sails on skates for a long time past, the Norwegians employing an unusually powerful rig, a large portion of which is a topsail, with nece sary tackle, that can be hoisted and lowered by motions of the skater's head. This rig is said to develop an astonishing velocity.

Mr. J. made the mentioned trip, of about thirty miles, in virtually less than two hours, for being on the road three hours he lost more than one hour in walking around the rapids near Terry's Island on a very difficult path. This is excellent time, considering that he used a more moderate rig than the one spoken of. His sail is of triangular shape, similar to a flying jib, and is rigged up in the Cape St. Vincent style. It is made of light and strong cotton, Pride of the West, sewed together in narrow strips to give it strength. The upper, longer edge of the triangle is formed by a 9-ft. bamboo yard, tapering at the ends, so as to have some spring. The bolt lines of the two lower edges form a loop at the lower corner, between which and a loop at the middle of the yard a spreader, 5ft. long, is fastened in the fashion of an arrow on a drawn bow. The skater passes the lee arm between spreader and sail and grasps the yard with his hand. The whole sail weighs about three pounds, and can be comfortably stowed and carried, the yard being jointed for that purpose. ARSENIKOS.

HARTFORD, Conn., Jan. 31.

CANOE AND SNEAKBOX.

Editor Forest and Stream:

Sorry I can't agree with you as to the merits of the canoe and the sneakbox for cruising in open waters. The latter is probably the homeliest boat that ever floated, and I know by experience, that the denizens of the shores one visits in her will gibe the cruiser with all sorts of sarcastic remarks and allusions to "coffins," "punkinseed," etc., but when it comes to real service in wide waters, this ugly nondescript surpasses the handsome, saucy canoe in all points. She will live in a gale of wind that the heaviest ballasted Pearl would not dare face, and is almost unexapsizable; properly rigged, she will outpoint the canoe as a sailer; her stowage capacity is far greater; she draws less water than any sailing canoe; isn't so easily injured by bumps, and affords much larger and far more comfortable sleeping quarters than the canoe. She is hard to pull against a wind and sea, but there is rarely an occasion where this is necessary in bays or on large rivers or lakes, for the sneakbox will beat up wind as readily as a catboat. The peculiar shape of her bottom makes her easy to draw up on shore and push off again, and there is no necessity for carrying "shores" to "block the bilges," because a little working back and forth will settle her firmly enough in the sand to insure her stability as a sleeping apartment, and a canoe large enough and with sufficient weight of ballast to sail on open waters, will certainly be as difficult to handle ashore as the sneakbox. I never had any fear of leaks when sleeping in a canoe made for cruising in small rivers and streams, but I confess that sleeping in a ballasted canoe would give me "visions of future leaks," as the ballast, live cargo and plunder weighing heavily against the sides, even if she were blocked, would, in my opinion, be enough to spring the best made canoe. Of course, the sneakbox would be the clumsiest kind of a boat to use on small water courses or where there are portages, but for waters like the Potomac below Washington, the Hudson and the different bays, lakes, sounds and large rivers, I would by all means prefer her to any other boat for single-handed cruising. Her cost, which is half that of a fully-rigged sailing canoe, is another and an important point in her favor. SENECA.

WASHINGTON, D. C., Feb. 9, 1884.

SPRINGFIELD C. C.—Three new members have lately joined the S. C. C.: Messrs. E. H. and George Barney and Mr. George Pratt, of Springfield. Mr. Shedd has sold his Stella Maris canoe to Mr. W. H. Minick, of Pittsburgh, and will have a new model, 14x30, from Rushton. The new club house was flooded a short time since, owing to the water rising over the ice, the latter holding the house down, but it has been raised and dried out. The annual meeting of the club takes place this week.

N. Y. C. C.—The two persons captured while robbing the club house at New Brighton have been held to appear before the Grand Jury.

THE CHART LOCKER.

V.—INLAND WATERS OF MAINE.

Editor Forest and Stream:

I should like some information in regard to cruising in inland Maine, which I think you or some of your correspondents might give me.

First—I should like to know if there is any way to get from Moosehead to Megantic Lake, the latter, I believe, is the source of the Chaudiere. Then if one should get there, could they go down that river to the St. Lawrence in a light Stella Maris canoe, drawing not over 3½ inches?

Second—How long is the portage between the Kennebec and Dead Rivers? The time I should take would be July, and would there be enough water then? Also would there be enough water in that month to pass through Chesoncook and Chamberlain lakes to the St. John's?

Third—Can one pass through the Telos Canal and into the east branch of the Penobscot? If so, how long is Indian carry? Could one get from there into the Aroostook? or would they have to go by Spider and Mansungun Lakes?

Any information would be gladly accepted, especially in regard to the depth of the water in July, and in regard to the passability of the Chaudiere. X.

W. S. offers to give information about Oswego, Oneida and Cayuga rivers.

THE LOG BOOK.

V.—LOWN THE MISSISSIPPI.

[*Continued from page 35.*]

WE left Memphis Nov. 4, with a white-ash breeze and made about 35 miles. For the next two or three days we were favored (?) with head winds, against which we found it impossible to make progress, as our boat, having no flare to the bow, nosed into the short rollers kicked up in the current, and the deck was washed from bow to stern. Any canoeist who starts on a Mississippi cruise in a "smooth water" canoe will fare very badly, to say the least. I regretted exceedingly when poking into the head seas that I did not have the Spray along, as I think that her flaring bow would have kept her perfectly dry.

In my opinion the Sandy Hook is the model for Mississippi work, as I have found from my experience on Lake Michigan that it is next to impossible to take a sea in over the bow, even while sailing in very choppy water. Of course I don't consider those things that slap on the side and then deposit about a bucketful of water in your lap, for no power on earth can keep them out. The sharp boat, depending entirely upon sheer for dryness, will make very poor work of it, for though the water may not be able to get on deck right over the stern post, it will sneak over a foot further back, and once on deck, it don't stop short of the cockpit. Our coaming was 2½in. above deck and was very little protection in beating.

We reached Vicksburg Nov. 17, two weeks out from Memphis; the distance being 400 miles. The three days preceding our arrival at Vicksburg we had north winds which, although favorable, were colder than was comfortable. We used to retire with all the clothing on that we could scrape up, and besides I had a pair of woolen blankets and a cotton comforter, while B. had two pair of blankets; but notwithstanding all our endeavors we couldn't keep warm. Water left in the Spider over night was frozen solid, and the deck of the boat would be white with frost. I don't want any more sleeping in a tent in that kind of weather.

Vicksburg is not what you would call exactly on the river, that is the same as Memphis or New Orleans. The river has changed since the war, and where was once the channel, is now an island and a thought it was willows and wild ducks. The boats land about a mile below the center of the town, but they are able also to go up the "old river" and around the island in front of the town in good stages of water. In high water they go right over the top of everything. I would like to be able to explain the change which the river has made, but it would need a map to make it clear.

All along the trip we heard of "old rivers" and "cut offs," and the changes which have been made fill one with wonder. Island No. 10 is gone, and nothing remains but a sand point, for the chute has filled up and it is no longer even an island. The mouth of the Arkansas River is stopped up with a sandbar as high as the bank, and to enter the river one must go up into White River about six miles and then through a "cut off" into the Arkansas. You don't see the mouth of Red River at all, for it comes in behind an island, into an "old river," and thence into the Mississippi.

We left Vicksburg Nov. 18 in a dead calm, which lasted during the next three days, and reached Natchez Wednesday, the 21st; distance, 120 miles. We rowed all the way, and averaged about forty miles per day. We had had perfect summer weather since leaving Vicksburg, but had been threatened with rain, which finally came. We left Natchez about 4 P. M., and rowed down the river, looking out for a bar, but we went on for twenty miles without striking one.

At nightfall we thought we saw a good place on the bank, but we found it so uneven that we couldn't use it. A darky who was hunting up driftwood, told us that there was a bar just down in the bend, about two miles further on. So we started out for it and finally struck it at last, for it comes in behind an island, into an "old river," and thence into the Mississippi.

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That rather disgusted us, and we concluded to quit the "skirt" business and make for the current, and then strike for the bar about half a mile further down, which we did, and had no difficulty in landing. We pitched camp and got supper, and then drew up the boat and tied her to a stake driven in the sand. The bar here was about one foot above the water, but ascended gradually until 100 yards back it was fifteen feet. We retired early, but were very soon awakened by the rain which came down in sheets, accompanied by a strong wind. However, the tent was perfectly dry, so we turned over and went to sleep again.

About 7 o'clock I was aroused by B.'s "Wake up! The boat has gone and the water is around the tent"—a very effective eye-opener, I can assure you. The heavy rain had washed out the stake and the sand from under neath the boat, and the wind had blown her out into the current and so on down stream. We dragged the tent about fifty feet further back on the bar—getting thoroughly soaked during the operation, for the rain still continued—and started out to see where we were.

An inspection of our surroundings did not raise our spirits any; for, after making the entire circuit of the bar and finding only water, we came to the conclusion, reluctantly, though very naturally, that we were on an island. Recognizing the fact that we were "in for it," and that there was no use trying to do anything until the rain should stop and the fog lift, we betook ourselves to the tent, changed our wet clothing for dry, and started the oil stove in order to keep out as much dampness as possible.

The tent was wet and everything was clammy, and we felt very "blue" as we sat there waiting for the rain to let up, which it finally did about 5 P. M. There was a little "pocket" setting back into the bar, about fifty feet from the tent, and it was alive with teal, which quacked away and splashed around at a great rate, and the painful fact that we were without a gun made the cerulean aspect of things assume a still deeper hue.

A steamer passed down shortly after dark, and I nearly split my throat trying to make them hear me; but she was half a mile out in the channel, and although my first hail was answered, wouldn't stop. I gave it as my opinion that the river would continue to rise on account of the rain, and that we had better move the tent still further back on the bar, but B. thought differently, so we let it stand and went to sleep.

About 2 o'clock in the morning we found ourselves flooded out worse than on the first night, and had the pleasure of moving all our truck at that unseasonable hour. We had to fish for our dishes, which had been left just to one side of the tent, and succeeded in getting everything except two plates. In the morning we found six inches of water where the tent had been. J. W. KEOGH.

CANOEING ON THE WEST COAST OF FLORIDA.

Editor Forest and Stream:

I beg to report the safe arrival at this place, of Mr. Charles N. Morris, of Cincinnati, in his canoe Nellie Morris, a Princess model, built by Rushton, 15ft. x36in.

Mr. Morris reports: "Left Cedar Keys Dec. 25, at 12 M., under sail. Wind S. E. Gulf very rough. Had made a bargain with a boatman to pilot me to St. Martin's Reef, I was to follow his sailboat, but about 5 P. M. my pilot was out of sight. Weather thick. Sea heavy and was getting worse. I began to be a little uncertain about my canoe living through it, ran for land, came to some ugly reefs which frightened me more than the sea had done.

"Battered round among the reefs until 9 P. M., when I saw two lights, took in sail and made for the lights under paddle. Finally lost the lights, and soon became lost myself in a complete maze of reefs and mangrove islands. After trying in vain to find a landing I commenced yelling at the top of my voice, and very soon I saw a light, made for it with all my remaining strength (which was not much for I was nearly worn out), reaching the light at 12 P. M. It proved to be the light of Dr. Hodges, Hickory Island. I turned in in Florida style and was thankful.

"Left Hickory Island on the 26th, ran to Crystal River where I camped. On 27th got underway and found St. Martin's Reef, but I lost myself; for four weary days and nights I was trying to get out of the tangle of reef, shoals, marsh islands, etc. On the morning of my fifth day in the reefs, I sighted a small sailboat, and after setting signal of distress, and shouting and signaling I managed to attract their attention; they hove down, and piloted me safe into Bayport, where I recuperated thoroughly before I ventured on another start."

Mr. Morris tells me that he intends to cruise on the Florida coast three months yet, so you will doubtless hear more from him. He expresses himself greatly delighted with canoeing with the exception of getting lost in the wilderness of St. Martin's Reef. TARPON.

TARPON SPRINGS, Fla., Jan. 27.

THE GALLEY FIRE.

CAMP OUTFITS.

Editor Forest and Stream:

Among the many sensible, practical communications published in our old "stand-by," FOREST AND STREAM, few, in their way, have been so worthy of recognition and adoption as the letter of S. D. Kendall, in your issue of Jan. 17, headed "Camp Kits and Cookery."

This letter, with its *multum in parvo* style, contains precepts whose example should be followed by the thousands who, as the hot summer months take them in vain forcibly make it, throw off (?) every care and betake themselves to the mountain wilds, ostensibly to enjoy themselves; yet do they really enjoy themselves? It is true they drop their fly into the crystal mountain stream and extract its living treasures in countless numbers; they scour the forests and their splendid breech-loader, and perfectly trained hunting dog, will bring to bag all the fur and feather within range; still there is a barrier, though not an insurmountable one—it is the presence of a surplus amount of troublesome luggage which pleasure-seekers imagine to be so highly essential to comfort.

I do not wish to boast in the least of what I have or have not done in connection with camp life in the wilderness. Suffice it to say that I have spent the greater portion of every summer camping out since I was ten years old, and I have yet to see the first time when I shall take a cot, oil stove or any of those articles which properly belong in the city mansion and not in the mountain cabin.

In the eating line the same mistake is obvious at once to an ordinary observer. Our poor, broken down city dyspeptic decides to mend, if possible, his ill health. What course does he pursue? He packs up three or four immense boxes of the richest and most indigestible food, and lugs them off to some locality where, as he says, he "can enjoy the pleasures of camping out." How little does this poor mortal even suspect that he voluntarily and deliberately robbed himself of the very object in camping out. Not content with subsistence on the products of forest and stream, humble yet unapproachable as they are, he returns home wondering why it is that he is feeling worse than when he left his home to seek a cure he did not find.

True enjoyment in the woods, the sojourner must remember, is obtainable only by reducing his paraphernalia to a minimum; learning to hunt for his own food, how to cook it, and lastly, to adapt himself to the humility of his immediate surroundings.

If he learns these few things, he initiates himself into the secrets of pleasure and happiness in the wilderness. C. A. R.

PRACTICAL COOKERY—GRIDDLE CAKES.

Mention has often been made of griddle cakes by correspondents of FOREST AND STREAM, but no hint is ever given of the mode of preparation. Perhaps it is unnecessary; but as there may be some uninitiated, here is our method. It will take the place of bread any time, and as it can be made in a very few moments, is fresh and light and generally more agreeable. Self-raising flour may be used or common flour and baking powder. If the latter is used take four half-pint cups flour, three teaspoonfuls baking powder, and one small teaspoonful salt; mix these thoroughly together dry. Then add shortening, one tablespoonful lard or butter, and work through with the hands; next water or sweet milk, or half and half, about three gills, and mix into dough; the less mixing the better. Have spider hot and greased with lard, a little larger than a walnut; place cake (which should be flat, round, and the diameter of pan) in spider and cover as soon as mixed. The quality of cake depends in a great measure upon the cooking. The pan must be hot to make cake rise, but not so hot as to burn crust before the inside is cooked. When nicely browned remove cover and turn. One attempt will suffice to teach anyone. Cooking is like everything else; go at it boldly and confidently and you have won more than half the battle. Timidity in the amateur has ruined many a good dinner.

Wheat Cakes.—One quart milk, three eggs, and enough flour (with baking powder and a little salt added) to make a thin batter. Cook on spider over brisk fire. The proportion of baking powder to flour is always about one and one-half teaspoonfuls to one pint. Q.

Yachting.

FIXTURES.

May 24.—Boston Y. C., Opening Cruise.
May 30.—Knickerbocker Y. C., Spring Matches.
May 31.—Boston Y.C., First Match, Connor and Commodore's cups.
June 10.—Atlantic Y. C., Annual Match.
June 12.—New York Y. C., Annual Matches.
June 14.—Hull Y. C., Club Meet.
June 28.—Boston Y. C., Ladies' Day.
July 12.—Hull Y. C., Club Meet.
July 12.—Boston Y. C., Second Club Match.
Aug. 9.—Hull Y. C., Club Meet.
Aug. 9.—Boston Y. C., Open Matches, all clubs.
Aug. 23.—Boston Y. C., Third Club Match.
Sept. 13.—Hull Y. C., Club Meet.
Sept. 13.—Boston Y. C., Second Ladies' Day.

NUMBER TWELVE.

THE cutter building at the yard of Lennox, South Brooklyn, will be named Merlin. She is from a design by Mr. Geo. H. Ripley for some Brooklyn gentlemen. Length on loadline is 25ft., beam 7ft., and draft 5ft. She is being built by Daniel Bernard, and is so far the best job turned out in these parts. For fairness, first class material and workmanship, this cutter is an example a long way ahead of ordinary practice. The frames are single, steam bent fore and aft, with metal floors, and all the plank, deck stuff, clamps, etc., will be in one length from stem to stern. There is 3,750 pounds of lead on the 2x5 oak keel, secured with ¾in. composition bolts spaced 12in. apart. Lower sails contain 750 sq. ft., the mast being 10ft. from stem, and bowsprit 13ft. outboard. The model is extremely handsome. Midship section is powerful and roomy, an average between a peg-top and a U frame in shape. The timbers gradually straighten up in the forebody, and in the after half the floors are lifted by degrees to give a clear run with quite sharp water lines, the area of the loadline being well preserved nevertheless. The boat has no lump in the middle, but a good long body without any straight. The areas of cross sections have been carefully apportioned, according to Collin Archer's formulæ, and a good balance is preserved between the ends when heeled, the inclined water lines showing no humps or hauncles. Fore foot is well clipped away and post has moderate rake. The least possible wet surface has been secured with sufficiently fine lines and the largest internal room with just the right amount of bulk and displacement.

As a well digested and highly finished model, all its parts with no feature carried to excess, and yet nothing neglected, with a body which has the plumpness of a Hebe and the grace of a Venus in one, this new cutter promises to be a most taking and useful craft in every respect, and ought to prove a good one for racing in all kinds of weather. She will have a flush deck according to modern ideas, with a small cockpit for the convenience of ladies. Below there will be a big lot of room with the cosy and delightfully cool cabins for which cutters have become known. The forecastle will be long, with a birth for one hand. The cabin is to contain two long sofas, with pantries, closets and general stowage and a swing table. At the after end are two lockers reaching from floor to deck, with the companion ladder leading down between. The doors of these lockers can be swung athwartship forward of the ladder so as to act as a partition bulkhead to the cabin, by which privacy can be secured should it be

desired: Abaft the ladder is a small space of floor with a sleeping berth on one side, the end dovetailing alongside the cockpit, the opposite side being devoted to sail room. Ice chest and water below the cockpit floor. On deck there will be a hatch to the forecastle, cabin skylight, and the main companion with a quadrant slide. With all the beam necessary to make a very stiff and buoyant boat, with a high side to keep her dry, good draft and outside weight to keep her down to business in rough water, and more room below and on deck than in sloops of much greater size, the Merlin is certain to be a popular boat among all classes, and a worthy representative of the cutter for length measurement racing.

STEAM YACHTS.

OH, yes, explanations. Awfully small world this. Can't put your foot down without walking on somebody's Sunday bunion. I don't mind the owners of steam yachts who have been buzzing round my ears since I wrote a few words about them two weeks ago. I meant what I said. I have no more regard from a yachting standpoint for those forgotten-looking individuals on the back area of a steamer who allow themselves to be screwed around by a lot of hired servants and take no more interest in the whole business than to growl at the bills. I say back area, because it would be a slight to a proper quarterdeck to apply such a smart appellation to the after end of the shoal traps housed in with tenements to supply deficiency in freeboard which New Yorkers think the pink of perfection in that class. But when the builders of steam yachts arise in fire and want to know what I meant by deriding small screws, then I jump up to explain. They at least can tell the difference between a trap and a yacht. Now, I said nothing at all against steam yachts. On the contrary, I like them and easily understand their use from a spo ting point of view. There is just as much and perhaps more skill in steaming a vessel than in sailing. It was not the yachts against which I inveighed but the languid superficial methods in which owners pursued the business and their want of discernment in building. To follow and perhaps master the management of boiler and engine is particularly instructive and entertaining and of great practical benefit. The studious and observing owner of steam yachts has opportunities of conferring inestimable profit to the science and practice of steam engineering, even though he declines to roll up his sleeves, but simply directs and delegates the work to others.

Furthermore, to take charge of a steamer's deck is no child's play, but calls for quick perception, good judgment and executive ability, in the display of which your genuine steam yachtsman delights. Nothing could be more attractive or intensely absorbing than experimentation upon the numerous vital questions before the engineering world to-day, and the man with money starts out with a long lead in the race for contributing to the world's stock of knowledge and enhancing his own reputation and that of his yacht. Now, how much has any one owning a steamer in America earned the regard of the community as a man with brains besides money? Such experiments and innovations as have been undertaken have brought about nothing, unless they have made some yacht owners a butt of ridicule more than anything else. Crude departures, forbidden by tried and accepted laws, repetitions in directions long ago found out to be impossible with the inevitable failures, a reverence for the antiquated, and persistent disregard for the lesson taught elsewhere in the world, these represent the "progress" for which we have to thank the wealthy people who are ridden round by engineer and master.

Why should I take kindly to the sprawlin', low-waisted Omises, Entures, Ulies, Urlines, Ajahs and like contrivances which, though 100ft long, dare not follow a match round the Sandy Hook lightship in moderate weather? Or to the clumsy Stranglers, Horsehairs and Appleantas, which differ from coasters and carriers chiefly in gilding and paint? Oh, no; I like a steam yacht, but not the awful ghosts we see in these waters. I might mention one building concern who manage to get a flush deck and good seagoing qualities on a light draft for Florida waters, and high speed on small consumption with light weight of machinery occupying small space. And I might mention a string of good serviceable flush-deckers abroad, no longer than 50ft., all of which challenge respect in their modelling and lit tings, as well as in engine efficiency. And I might mention good little launches at home and abroad combining safety, simplicity, and even high speed. And as long as I can do this, I propose to be excused from chanting praise to hybrids half awash, loaded with boilers and tug engines which are failures as high speeds, and caricatures as cruisers. I can appreciate the steam yachtsman, but turn up my nose at the lazy steam dawdler, who is a cipher in the sporting and intellectual world as much as the feeble drifter in the cockpit of a craft propelled by sails. For the amateur tar on deck and the amateur mechanic in the engine room I have sympathy to the extent of admiration. The best tools for their purposes is what I am after. It is not steam yachting I condemn, but the shams of the real article, whether in men or in the boats they own. C. P. K.

THE MEASUREMENT CONUNDRUM.

Editor Forest and Stream:

Many like myself—my remarks are purely local—have been forced into the ungainly "spread-outs" because symmetrical forms were not protected. We have been groping about under a length measurement cloud all our lives. Is it strange, then, that we have run into excess of beam, even to the extent of two-thirds the length in width? Builders and owners alike are tired of the strain. Reduction of sail is conducive to easy forms, and leads up to better models and rig. And yet if you tax sail area, do you not tax shape as well? I cannot see my way out of the fog. When two boats are of the same size (equity), and one by her superior shape is enabled to carry more sail than the other, is she not in all fairness entitled to it? Otherwise you put a veto on progress. Most of our yachts have been built under a protest. The unfortunate designer had no alternative under the old regime but to line out his boat with as little resistance as possible with the greatest bulk and keep out of gaol. The smooth-water crafts have had their day even with us on the Delaware. Big hulls, heavy spars and badly shaped sails towering skyward, will no longer tyrannize over the modest, honest little craft which fearlessly fights a way in bad weather in our bay or along the coast, where expensive racing machines twice as large dare not venture. Small seagoing boats are coming into favor, and the new boats, regardless of the present rule, are being built with an eye to safety as well as speed. If our Quaker City Yacht Club still persists in measuring by length, then these boats will form a class of their own and sail under their own rules. As a member of the club I hope something definite will be done this season to emancipate intelligent builders from the thralldom of coercion. The London *Times* has been pleased to admit that "Philadelphians can build boats." So they can, and did, even as remote as 1776, and in later days produced a Vixen. That Dr. Valette, the prospective commodore of the Q. C. Y. C., in his judgment saw fit to throw his Esculapian eye eastward for a 70-ft. yacht, is no guarantee that the flagship will be better than a home-built vessel. The club will elect officers this month for the present year. R. G. W.

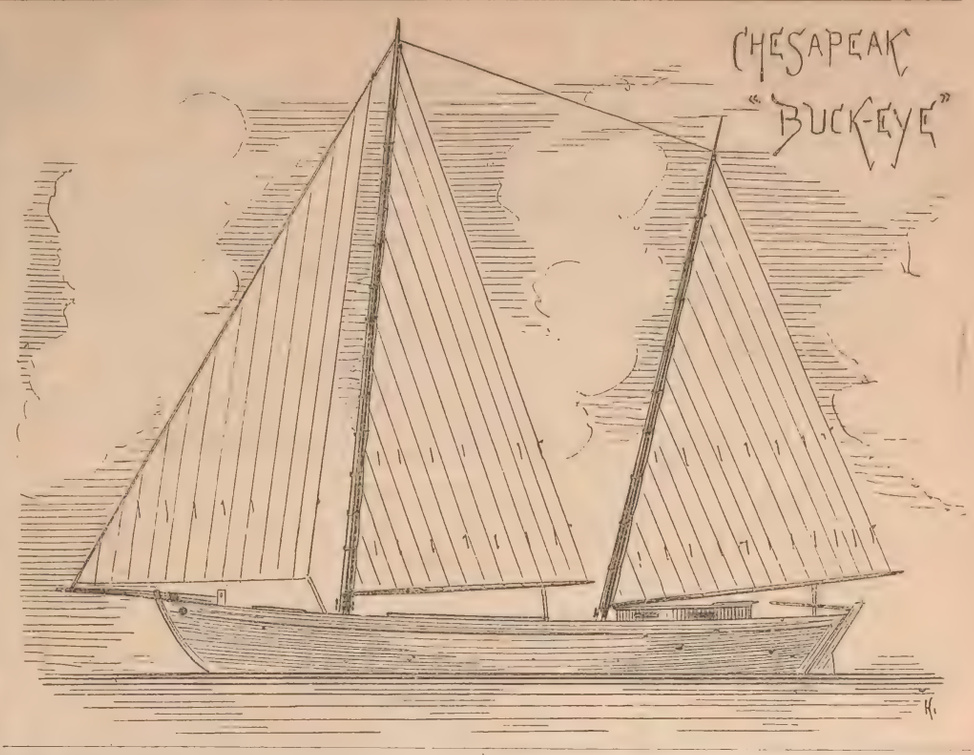
PHILADELPHIA.

[The objection to sail area rule raised by our correspondent is a perfectly proper one. It is the weak spot in the equity of the rule. To a certain extent and in certain cases it is a direct tax upon form which cannot be equitable. But between two evils choose the lesser. The length rule prescribes all but the most extravagant forms and sizes. The sail area rule bears hard on extravagant forms and sizes and encourages a more moderate average. A fair rule ought not to weigh upon any style more than another. A bulk rule bears upon size and not upon the form that size assumes, hence it is the only rule ever devised which can apply to every form under the sun without prejudice to any particular shape. A tax upon ten tons or a hundred cubic feet leaves the builder absolutely free to mould such volumes as he pleases in all directions. Neither the length nor the sail area rule can be defended upon logical or equitable grounds. Both are purely empyrical standards. As the sail area rule avoids extremes, as far as its workings are at present understood, it seems to us a preferable standard of comparison than simple length, as a makeshift, however, until the public is ready to grapple with the question more thoroughly than at present. Objections have been made to the sail rule on the score of complexity. But such persons are in need of fresh schooling and have no business to assume leadership in anything. The man who cannot read off a tapeline, then perform a simple sum in arithmetic, should wear a dunce's cap instead of putting in his oar on the question.]

NOTES FROM THE DELAWARE.

Editor Forest and Stream:

The yacht Nohma, formerly the O'Donnell, has been sold to Mr. Ferry and others of Trenton, N. J., and is now at the builders' yard undergoing the necessary alterations for a cabin, etc. She is 38ft. long, of large displacement; 2,800lbs. of iron will be placed on keel, centerboard trunk will be cut down one-half, she will have two iron boards, one working within the other with independent pivots. When completed she will be non-capsizable and fit for sea. It will be seen the Trenton public reads FOREST AND STREAM, and don't forget what they read. The O'Donnell last year entered in two races, winning third prize in her class in the Q. C. Y. C. regatta, and first prize in Klotz regatta in which the Q. C. Y. C. participated. She on this occasion beat the fleet big and little, and is one of Mr. Collins's best productions. Mr. Ferry was not asleep when he bought her, and is now wide awake to the improvements now being made. He and the builder are in perfect accord, believing a safe boat is not necessarily slow, which they hope to prove. X.



CHESAPEAKE CRAFT.

Editor Forest and Stream:

Mention has been made several times recently of the Chesapeake Bug-eye. The etymology of the term makes it "Buck-eye." These boats are an exaggeration of the "dugout" canoe, and were developed gradually by the bay shore people, as the necessity for larger boats became apparent. It was easy to get almost any desired length in a single log, but not so as to beam and depth. Very natural it was to add to beam and depth by building up and out with logs bolted to the sides of the long, narrow and shallow dugout. This was done, and masts and sails added to suit the increased size. A large boat required anchors and cables instead of being dragged up on the beach, as with the small canoe. The primitive builder bored two holes, one on each side of the stem, through which to pay out his cables. These were simply two round holes, bored with a large augur, and when the boat was coming head on, resembled, to the fancy of the negroes, the eyes of a buck. The illusion was somewhat increased by the addition of a bowsprit and its attendant gear. The leg-of-mutton sail—the primitive sail of all nations—was adopted, with two masts; the bowsprit and jib being a later accession. This is yet the favorite rig of canoes of thirty feet in length and under.

As before observed, length being the dimension most easily attainable, the Buck-eye was built long and narrow, and being heavy in body but easily driven through the water, with a low center of effort for its sails, it proved a fast and stiff boat. It was sharp at each end; the greatest beam was about one-third the distance from stem to stern, hence sloping by easy lines fore and aft, giving a clear entrance and good clearance. As to deadrise, it was a matter of choice or convenience. Generally the deadrise was slight. Its entire construction depended on convenience and economy. It had no overhang, because it was easier and cheaper not to have any. It had no stays to the masts, because it was cheaper not to have any, and besides a "springiness" to the masts was considered desirable, because sudden flaws were not so likely to knock down. The centerboard was always inserted, because the Buck-eye was intended for the shallow waters of creeks and inlets as well as for the waters of the bay. One peculiarity was the manner of stepping the masts. The foremast was longer than the mainmast and did not rake so much. To the mainmast was given a rake aft. The negroes say it makes them sail faster on the wind. In small canoes the mainmast is shifted, so as to stand upright when sailing before the wind. The accompanying sketch indicates the rig and position of the masts. Of late years imitations of the old-fashioned Buck-eye have been regularly built, timbered and planked, and the beam has been increased. This has necessitated an area of sail, and the schooner rig has been used. Sometimes only the foresail has a gaff. The genuine Buck-eye rarely has less than five beams to the length. The modern imitations sometimes have less than four. This puts them on a par with other broad, shallow boats.

The Buck-eye has a well-deserved reputation for speed and seaworthiness. It pounds somewhat in a heavy sea, but its weight forces it through, if not over, the combers. This makes it a rather wet boat, but the exhilarating sensation produced by great speed, and a sense of security at the same time, makes amends for the inconvenience of flying spray and a wet jacket. Last summer I cruised in company with a Buck-eye, 42ft. long, manned by two gentlemen of Baltimore city. She drew twenty inches without the board. In sudden and heavy flaws she was rarely luffed. She would lie over and appear to spill the wind out of her tall sharp sails, and then right again. Her crew took pleasure in tackling every sailing craft for a race; nothing under 70ft. in length ever beat her. She steered under any two of her three sails. On one occasion this craft, on her way from Cape May to Cape Charles, was driven out to sea before a heavy northwest blow. Her crew, the aforesaid gentlemen, worn out by fatigue, hove her to and went to sleep. She broke her tiller lashing during the night, and when they awoke, she was pegging away on a southeast course under her jib. They put her about, and in twenty hours were inside Cape Henry, pretty well tired out. Buck-eyes frequently run from Norfolk to New York with fruit. For shallow waters, I am satisfied there is no better craft afloat. Built deep, with a loaded keel, they would rival the English cutter in seaworthiness and speed.

We have another style of boat in the Chesapeake, the American rival of the English deep boats. It is here styled a pungey. The pungey is regularly built, that is, timbered and planked and is narrow and deep, with no waist to obstruct the seas that may sweep over her. This is a remarkably fast and able sea boat, much used for oyster dredging in winter. It is a saying here that "when a pungey reefs, a steamship had better make harbor." I beg leave to commend our Buck-eye to shallow-water sailors and our pungey to deep-water sailors, suspecting that either would be an improvement on some of the fancy yachts of our Northern brothers. BUCK-EYE.

BALTIMORE, Feb. 3, 1884.

[The "pungies" of the Chesapeake are smart, handsome crafts with many of the elements of a good vessel. The best of them have moderate beam, considerable depth and great deadrise with a V bottom. Also keel with much drag, well rounded up forward and great rake to sternpost. With the necessary refinement of lines, outside weight and corresponding increase of rig, they would rank high in all respects. They can be classed about half way between the New York pilot boat and the racing cutter.]

CONCERNING SAILS.

Editor Forest and Stream:

Let me say through your paper a few words concerning sails for yachts. Most owners insist upon too light duck. This is a mistake, and a great point in favor of small English yachts, which use duck almost double the weight we are accustomed to. Where I have my own way I always advise heavy duck. It is better for light winds, at least in the lower sails. They sit flatter and can be kept in better shape. Ballooners should of course be light. The speed of cutters in light airs I ascribe to some extent to the weight of their lower sails and large topsails, and jibs for catching the fitful breaths. I can see no object to a loose foot, however, when a laced sail is properly cut to sit flat. MAKER.

[There is much about sails difficult to explain in words. We prefer heavy duck for lower sails in light winds according to English experience. We offer this reason. Light sails not only bag, but give locally to the puffs. The force of the wind is expended in creating the bag or pucker in a spot, and nothing remains to slide along the surface of the sail, and transmit its energy to driving the boat. The local pucker imprisons and kills the light breath. But in a heavier sail, after striking, no local cul-de-sac or give cushions the breeze out of its strength, but the sail has enough stiffness to resist without being devoid of enough elasticity or spring as a whole. The wind caroms along and escapes around the leech, the time and means being supplied for transferring its impulse to the boat. A loose foot aids in the same way. The sail gives as a whole, as one surface to the puffs. When laced, the puff is more likely to be bagged in the middle. A loose foot allows the sail to adapt its surface more readily to the impulses of the wind, while a laced sail is rigid along the foot. Further, the vertical bagging of a sail is reduced by allowing play to the foot, and there is less back sail at the clew. The surface is more effective. In hard boats of the beamy style, so much sail can be carried that the small advantage of a loose foot need not be considered. In sensitive boots, whose sail power is limited, and which must be utilized to the utmost, experience seems to point to positive advantage in the loose foot. Laced sails were tried in English waters after the advent of America, but have again been discarded. Apart from all this there are solid reasons for a loose foot from the sailorizing standpoint. You are always able to control the sit of the sail by a pull or slacking on the outhaul. In light winds a sail should not sit too flat, and a cutter mainsail gives you the choice. For a hasty reef to meet a squall the tack can be triced up and foresail lowered, reducing canvas to one-half in an instant. For knocking about, for half speed when trolling or fishing and for making a crowded roadstead, tricing up the tack is a useful and handy arrangement. For sea work in a small boat, it prevents a weight of water lodging in the sail when boarded or sailing wide. For racing in beamy boats, a loose foot may be of no special benefit, though that is a question subject to more thorough experiment, but for general purposes the loose foot is a useful and convenient arrangement for any boat Heavy lower sails have been tried on many yachts in recent years with acknowledged benefit to speed in light winds, and the practice will no doubt become general. This is one of the many minor improvements for which we have to thank the "cutter agitation."]

PATRIOTISM WITH A PATENT TO THE RESCUE.

Editor Forest and Stream:

I have read the FOREST AND STREAM with pleasure and profit almost from its first issue, and I have long ago learned to respect its opinions upon its specialty, the rod and gun.

In your issue of Jan. 31 appears an article entitled "No Money for Revolutions," upon which I am sorry to join issue with you. It contains so much error and ignorance that I am constrained to violate an almost inflexible rule of my life in an attempt to set you right. This effort, however, may be considered a work of supererogation, in view of the fact that the adverse opinions of a journal devoted to the dissemination of knowledge on fishing and gunning will not have much weight among sensible men, when compared with the favorable opinions which have been expressed by such standard technical authorities as the London *Engineer* and *Scientific American*. You evidently know nothing about scientific naval architecture, and, therefore, you are wholly disqualified to write upon the subject of the important invention of Captain Lundborg for improvements in steamships, which are based entirely upon such principles.

I have known Captain Lundborg intimately for nearly two years. He is a man of the highest attainments in his profession as a scientific naval architect. His inventions are the result of many years of scientific research, aided by long experience in practical seamanship and by innumerable tank experiments upon the system of the late Professor Froude. I have submitted the drawings, designs, models and mathematical calculations of the Lundborg ship to the ablest shipbuilders and scientific naval architects of this country for their examination and criticism, all of whom concur in the opinion that the invention is important and of great public utility; and that a ship constructed upon his model will insure greater speed, greater safety, greater carrying capacity and greater comfort to passengers than has hitherto been given to the traveling public.

I have confidence in the judgment of those persons who have examined and approved of the invention, for the reason that they are competent to judge of its merits and their judgment is unprejudiced. Captain Lundborg courts and challenges the most searching investigation, and he invites intelligent criticism from all persons who are qualified and competent to treat upon the subject. I realize the difficulty in making innovations upon an old order of things. All the old fogies in creation claim the right to cry out against inventors, notwithstanding the fact that by their genius and energy they have revolutionized the industries of the world. I recollect very distinctly when Captain Ericsson came to this country with his invention for war ships, and attempted to induce our government to utilize it for the public good in preserving the union, all the fools and cranks in Christendom decried and ridiculed the proposition much after the tone and spirit of your article on Captain Lundborg, and after repeated failures to induce the government to adopt his invention, some patriotic citizens of Boston aided and encouraged him in the construction of the Monitor, which saved the nation and revolutionized the navies of the world—a fact recently acknowledged and testified to in terms of eulogium by an honorable Senator upon the floor of the American Senate. Captain Lundborg is a countryman of Ericsson's, educated in the same scientific schools in Europe, a man of genius and ability, and I am impressed with the belief that your criticism upon his invention is as unwise and unjust as were the foolish and crazy strictures upon Captain Ericsson and his invention, when he first attempted to introduce it in this country. I believe that the Lundborg invention will effect a greater revolution in the merchant marine than did Captain Ericsson's in the navies of the world, and if it can be utilized toward the restoration of the American flag upon the ocean, for regaining to American citizens their share of the ocean carrying trade, and to give to them an equal chance in the proceeds of a business amounting to over $200,000,000 a year, which is now wholly monopolized by aliens, I think it is worthy of a fair trial, even at the public expense, and upon that issue, assuming that you are a true American, your encouragement and support will not be wanting.

This letter is running to much greater length than I had intended,

and in conclusion permit me to make a few corrections of the many misstatements contained in your article.

Captain Lundborg is not "attached to the Swedish Legation." He is a retired officer of the Swedish navy.

He is not "a petitioner for national alms," as you assert, which his memorial, herewith inclosed, will prove.

He has never offered his invention to any parties, much less "hawked it about for several years." And he now simply invites the attention of the American people to the importance of his discoveries and inventions, in the hope that they may be utilized for the public good.

Captain Lundborg is not "an alien," as you allege, he is a naturalized American citizen, filled with patriotic motive, and impressed with the conviction that among the pressing needs of his adopted country are an efficient navy, and an adequate merchant marine, to secure which, he is ready and willing to labor to the best of his ability. Are you good enough an American to help in this noble work?

WASHINGTON D. C. J. H. SYPHER.

[Mr Sypher has not kept the run of events or he would hardly question the "good authority" of this journal on matters of naval design. His adverse estimate we pass over as not worth notice, because incapable of offering an opinion on affairs he knows nothing of. We suspect his letter is an effort to advertise a venture in which he is interested as a lobbyist, another canal scheme from the Mississippi to the Gulf, with a liberal profit to the promoters. It is very kind that any one should wish to revive the skeleton of our commercial marine by a patent. But we do not care to have the government funds diverted to assisting half-hatched patent specifications. We trust our remarks will aid in closing the doors of the Treasury tight to any raid in the interests of private persons. The notion that the Lumborg ship can have any influence upon the destiny of our merchant marine is silly. The notion that it will build up an efficient navy which is purely a question of congressional appropriations, is even more ridiculous. We credit Captain Lundborg with much better sense. Our maritime interests should be revived upon common sense business principles and not by spread-eagle declamation or governmental pap. It is not a difficult problem to solve. It is a simple piece of arithmetic. Buy ships where you can get them cheapest, sail them with no greater restrictions than foreigners; and that is all there is to it. If we have to pay higher wages to officers and crew, the difference will be offset by the well-known tact, energy and adaptability of the American. Wipe out at one stroke the cormorants and hordes of officials with their fees, fines and dues, exorbitant and intricate charges, and half the reform is accomplished. Buy your implement of trade in the cheapest market; and the other half is achieved. If capital is too dear, if it finds more lucrative employment on shore, nothing under the sun can help us. We must be content to twirl our thumbs till a day when the economic conditions on this side of the Atlantic will be favorable enough to give us a chance in the race. Why Captain Lundborg's appeal to Congress is out of order is noted elsewhere.]

THE CORINTHIAN CLUB.

Editor Forest and Stream:

It was not exactly the time of year that any one would have thought of organizing a yacht club, for the snow lay thick and white outside the greenhouse windows, and the wild Channel waves rushed up and spattered over cosy little Sea Cliff, at Bangor, Belfast Lough, Ireland. The den was pretty full for all that. Arthur, secretary of the Royal Ulster Y. C., one of the mighty men who go down to the sea in ships, was doubled up in a wicker chair, while her ladyship, one of the best whips ever held tiller and made a boat do just what she could, was perched on an old chair which had descended from her great grandparents. John, most practical of all architects, was hidden behind a cloud of smoke, and Ally, just back from America, did his best to help out harmony with a long cigar. The boats were all laid up in winter quarters; but they were present on the wall in photographs, in spar drafts and in models, while along the bookcase was a long line of gracefully-draped winning flags, fourteen in number, which marked the prowess of the yawl Glide. We had had a pleasant season's sailing, though in those waters the summer starts late and is soon over, and this winter evening all were gathered around, chatting about the past. Then somebody suggested we should institute a practical Corinthian club, and we did. The club has lasted, taking in new members and doing its work thoroughly and well, year after year, until it commands almost as much interest as its chartered brother, the Royal Ulster.

Every one knows what a "Corinthian" club is, but even in such organizations as the Seawanhaka of New York, there is a good deal of work done for and not by the amateur, while the chief feature of the Bangor Club is that its members shall do all their sailing work, and at any rate, know how to attend when required to the rigging. Every one who joins (ladies are eligible for membership as well as the sterner sex) is balloted in, and thereby entitled to the honorable position of "boy." Boys may second candidates, vote at general or special meetings, form part of a crew, but may not own or steer a boat in a club race. The "boy" remains such until he has learned enough practical seamanship to answer correctly every one of the following questions:

1. Make a sheet bend.
2. Make an anchor bend.
3. Make a rolling hitch.
4. Make a blackwall hitch.
5. Make a timber hitch.
6. Make a clove hitch.
7. Make two half hitches on a belaying pin.
8. Make a reef knot.
9. Make a bowline.
10. Make a cat's paw.
11. Make a short and long splice.
12. Make an eye splice.
13. Put a whipping on the end of a rope.
14. Belay a sheet on a half pin.
15. Sheepshank a rope.
16. Name the standing and running rigging in a sloop, cutter and schooner.

This examination must be passed practically, the work being done with ropesends in presence of the examiner. The "boy" then takes rank as "ordinary seaman."

In the early days of the club, Sea Cliff was fairly populated with boys and girls educating one another how to splice and go through the seaman's manual.

An "ordinary seaman" receives a plain paper certificate to that effect, and is entitled to steer a boat but cannot own one. When he has passed for A. B., having fulfilled the following questions, he can propose a member, own a boat, and is eligible for election as a committee-man. He must have conquered the questions 1 to 16, and also the following:

17. Make a studdingsail bend.
18. Make a running bowline.
19. Make a bowline on a bight.
20. Make a grummet.
21. Make a Turk's head.
22. Make a double wall and double crown.
23. Herringbone a split sail.
24. Name the points of the compass.
25. State the rule of the road.
26. What are the different fog signals?
27. What lights are carried by vessels?
28. Describe the method of restoring apparently drowned persons.
29. How would you note the position of an anchor or moorings in case you had to slip?
30. How can oil be used in broken water to save the sea breaking aboard of a boat?

Next in order comes the star to the certificate, which is given when the yachtsman has further satisfied the examiner on the following, this examination being had in a boat under way:

31. Set sails and get under way from moorings.
32. Gybe.
33. Reef.
34. What would be done in case of a sudden squall, the direction being stated by the examiner?
35. Make a floating or sea anchor.
36. Bend a rope to an anchor so that you can clear it should it catch in rocks.

The examiner should also test applicant as to what he would do if halliards or gear carry away.

An "A. B." with a star is entitled to a parchment certificate, and may present himself for further examination for mate's papers, after which he is eligible for election as a flag officer of the club. During last year the club raced nearly every Saturday afternoon, and as many as twelve boats were entered at one time, there seldom being less than five. The boats were measured as follows: Multiply the sail area by the length of loadline, and divide by 4,000, the quotient to be "sail tonnage," one-fifth of overhang to be added to length of loadline. The scale for time allowance was the ordinary Y. R. A. table. In the case of peculiarly constructed boats the carpenter was authorized to report to the committee, who had power to award special certificates of measurement. Every boat and her gear were necessarily the property of members of the club. Every boat in a race was obliged to carry a life-buoy. Five minutes before the start the blue Peter was hoisted and gun fired, after which the boats were considered under the rules. At the expiration of five minutes the blue Peter was hauled down and the starting gun fired. Any boat across the line before that gun was sent back by showing her number from the battery. The following are the rules of the road:

"A boat which is running free shall keep out of the way of a boat which is close-hauled.

"A boat which is close-hauled on the port tack shall keep out of the way of a boat which is close-hauled on the starboard tack.

"When both are running free with the wind on different sides, the boat which has the wind on the port side shall keep out of the way of the other.

"When both are running free with the wind on the same side, the boat which is to windward shall keep out of the way of the boat which is to leeward.

"A boat which has the wind aft shall keep out of the way of boats on the wind."

Each boat to go fairly round the course and not to touch any flag-boat. A question arose in one race where a boat put her nose over the winning line, and having done so fouled the flag-boat. She claimed the race and, after consultation with the yachting authorities of Great Britain, it was decided that the instant the end of her bowsprit crossed the line she must be held to have completed her course: that the race was over, and that no subsequent fouling, on her part, could deprive her of the prize. After this decision provision will, probably, be made to prevent a recurrence of such an incident. Only sailing is allowed. A boat might anchor during a race, but must weigh anchor and not slip. In case of an accident or assistance rendered by a racing boat, if the committees deem that such a boat was prevented from winning a race, they have power to order a resail between the boats so prevented and the actual winner. Protests had to be filed within an hour after the arrival at the finish.

Such are some of the leading rules and regulations of the Bangor Corinthian Sailing Club. They are the result of considerable study by competent authorities, and ought to be useful as precedents, particularly at this time when Corinthian yacht clubs are becoming so popular both on the sea coast and the lakes of America.

BANGORIAN.

[Practical seamanship and competitive interest among the owners and sailers of small boats would be greatly benefited by the establishment of similar clubs in American waters. Pride and emulation in the race for the highest certificate would lead to study and proficiency in practice. To be an A. B., or eligible to a flag officer's berth in a club, founded upon an aristocracy of learning and experience, would not fail to receive proper recognition. The public would quickly bestow its approval and support to a club in which brains rank ahead of wealth, no matter how small the tonnage of the boats. To sport a flag which is a trade mark of capacity in yachting attainments has a meaning and dignity which commands respect for merit from all sides, and though flown from a two-tonner only, outranks the empty emblem of a "society leader" aboard a huge white elephant, or a picnicking dawdler afraid of an occasional wet jacket.]

THE PROPOSED ASSOCIATION.—Commenting upon the proposition to form a national association in America, *Le Yacht*, of Paris, remarks: "Certainly the programme of FOREST AND STREAM is an excellent one, the realization of which would be of wide utility; unfortunately, we think it will for a long time remain in the realm of Utopia in the United States, no matter how great progress yachting may have made in that country. First, there is a material obstacle which will interpose against the establishment of a central society. This is the distance between the clubs, extending along the immense length of the coasts of America. Besides the local conditions which influence the form and nature of construction will hinder the adoption of a common rule of measurement. In England, where yachting has prospered more than half a century, where the race courses are found over a relatively confined coast compared to that of the United States, the Y. R. A. has been able to establish, after a fashion, almost general uniformity of its rules, because the conditions surrounding construction are almost the same everywhere. But we cannot hope to see this uniformity in the United States, where so much difference exists in the boats, and where every club claims its own rules the best. For example, in the single city of New York the two largest clubs, the New York Y. C. and the Seawanhaka Corinthian Y. C., cannot agree on the application of a system of measurement by length and sail area combined, although they both accept the same principles in their rules. Nevertheless the proposition of FOREST AND STREAM will recommend itself to all sincere friends of yachting, who can draw from it great profit. The questions which it puts merit and challenge attention, and for that reason we have thought its proposition worth discussing."

A VARIED EXPERIENCE.—Marine Architect Saefkow, of the Imperal German Navy, writes us that in the past ten years he has designed and built for his own use fourteen yachts of all kinds, from the widest centerboard to the narrowest of cutters. One of his last designs was the cutter Rhe, 30ft. loadline, 9ft. beam and 5ft. draft, with 8,000 pounds on the keel. She sailed from the city of Kiel to Konigsberg on the Baltic, a distance of 400 miles, passing through a severe gale in comfort and safety. She is notably fast in light winds, being more than a match for the best centerboards of local renown. The five-beam cutter Anna, we are informed, is the driest boat of all. Lieut. Saefkow ever sailed, and as "quiet as a girl" in a sea, no one being seasick on board in heavy weather, as was always the case with the wide boats he owned. The Anna is a great success, and will appear in the English races next summer. Lieut. Saefkow has constructed the curve of stability for a sandbagger like the New York Parole, and found she attained her maximum at twenty-seven degrees, and her vanishing point at sixty.

THE JANUARY NUMBER.—The London *Nautical Magazine* for January has reached us, freighted as usual with instruction and interest to sea-going people. The contents for this month include "The Stability of Merchant Ships," "Insubordination of Seamen," and "The Panama Canal," a timely article for all Americans to read. While we are fully dreaming of cutting across Nicaragua and indulging in threatening bluster about our rights and prestige in the case, foreigners have gone to work with energy and capital, and in spite of all difficulties, the Panama canal will become an accomplished fact before we finish blowing off laudable but futile patriotic steam. The magazine also contains the usual notes on navigation, correspondence from ship masters and similar matter, which is the only literature the handful of American seamen can reach in the total absence of any nautical periodical of our own.

REAL YACHTING.—A gentleman writes from Liverpool, England, that he has bought a regular "nailer" in Southampton, and expects to sail her round to her new hailing port in February. She is 31ft. 6in. over all, 26ft. 6in. loadline, and 6ft. 6in. beam, with 5ft. 6in. draft, and flush deck. Forecastle with cot for one hand, main cabin with sofas, and after cabin with two standing berths, washstand, etc. Polished pine cabins and teak deck fittings. This cutter is nearly same loadline as the little Yolande lying in Seawanhaka Basin, Staten Island, with 6in. less beam. The voyage round the Land's End to Liverpool is six hundred miles. Englishmen think nothing of such ventures, but here a man's soundness of mind is still questioned in many quarters if he moots going to sea in a big schooner, or has ambitions which take him beyond the confines of one day's run in the Sound.

CRUISE OF THE FALCON.—Sampson, Low & Co., of London, have published a new yachting volume in which is detailed the cruise of the little yawl Falcon, from Southampton to the coast of Brazil and the South Atlantic, made by the owner, Mr. Knight, and two friends as the amateur crew. The Falcon is only 42ft. long, yet the extensive voyage was accomplished in safety and comfort and hugely enjoyed. The volume is full of instruction, useful to the mercantile service, as many unchartered ports and islands were visited and notes made upon their hydrography, best approaches, etc. The owner left the yacht at Barbadoes, intending soon to return and continue the voyage through the West Indies and home. We may recur to this volume at greater length when chance offers. It is commended to those in search of real yachting without the expense attached to "luxuriant" palaces afloat.

DETROIT'S FLEET.—The sloop yacht Petrel, built in July, 1883, at Chicago, and brought through the great lakes to Detroit, has been purchased at the latter place by Messrs. Aug. Marxhausen, Jr., W. F. Baisch, H. Kees and George Boehnlein, for the sum of $300. She is a cabin yacht of fine lines, being 37ft. over all, and having a beam of 10ft. 3in., deep draft, and carries five sails, viz., main, top, and storm staysails, jib and flying jib. Although she is not rigged for racing, having been used for cruising only, her owners intend entering her in all regattas and private races which may take place on the lakes. Yachting has been very quiet in and around Detroit, but through the efforts of these and other gentlemen there will be quite a boom in it this season.

BIG CUTTERS.—The prospect for some live racing in the 80-ton class in English waters is exceedingly good. Fay & Co., of Southampton, are building two new flyers of about 85 tons, from lines by Mr. Joseph M. Soper, the superintendent of the yard. They are also overhauling the Erycina of 90 tons, in view of the coming contest. Mr. Soper is the designer of many fine vessels. The Daisy, soon to be in our waters, is from his hands. The same builders have underway some new cutters to sail in the length and sail area classes in Southampton waters. One of these will be much like the Daisy, 25x8x6½ft. and 35ft. over all, with a Buttercup stem.

KNICKERBOCKER Y. C.—Officers for the years: Commodore, Geo. R. Hobby; Vice-Com., W. T. Onderdonk; Secretary, William R. Morse; Treasurer, Chas. Lamb; Measurer, John Hyslop. Spring match fixed for May 30, open to five classes. Sixty-five yachts in the fleet, and 130 members. The lectures delivered before the club by Mr. Hyslop have been well attended and appreciated. They have so far covered the methods of designing boats, and others are promised detailing the planning of rigs and Mr. Hyslop's original wave area experiments which antedate the investigations of Collin Archer in Europe.

NEW YORK Y. C.—Annual matches fixed for June 12. Mr. Ogden Goelet, Norseman schooner, has offered two cups, value $1,000 and $500, for schooners and sloops and cutters to be sailed for off Newport next season. Officers of the club for the year: Commodore, James Gordon Bennett, Namouna steamer; Vice-Commodore, W. P. Douglas, Arrow cutter and Aida steamer; Rear-Commodore, Samuel R. Platt, Montauk schooner; Secretary, Chas. A. Minton; Treasurer, Jas. O. Proudfit; Measurer, John M. Wilson; Racing Committee, J. Fred. Tams, Chas. H. Stebbins and Jules A. Montant.

RIGHT MOVE.—It is but a very short time since that any one counselling outside cruising and racing was considered more or less demented. People have learned better by this time. Extended cruises are the order of the day, and a yacht not fit for such work no longer ranks high in esteem. The New Haven Yacht Club, though starting in life as a local Sound organization, are up to the enterprise of the day and propose an ocean match from club-house around Block Island and home. The Sound is fast loosing its mesmeric hold upon progressive men.

THE LOWELL CUTTER.—A cutter yacht which Williams & Stevens, of Lowell, are building is about half planked. Her bilge is straight from rabbet to bilge of garboard, and the dimensions are as follows: Length over all, 25ft. 6in.; loadline, 20ft. 6in; 6ft. moulded beam; depth of middle section, 5ft. 3in.; draft, 4ft. 11in. There is a small cockpit on deck, and a wash board on the outside. The cabin has two berths and room for a hammock, and there are lockers, water tanks, etc. The cutter will readily find an owner.—*Boston Herald.*

A GOOD EXAMPLE.—Mr. Wm. Gardner has left for England to enter the Royal School of Naval Architecture and pass through a regular course of study, with the object of mastering the theory and practice of shipbuilding. Mr. Gardner has already been under the tuition of Mr. Harvey in this city, and has spent some time in the yard of John Roach & Son at Chester. He has voluntarily entered upon his self-education from, enthusiasm for the science, a worthy example for others of independent means to follow.

BOSTON Y. C.—The following fixtures have been settled upon: Regular club cruise every Saturday, returning Sunday, during the summer months. Also, May 24, review and cruise, commodore in charge. May 31—First club match. Connor and commodore's challenge cups and regular prizes. June 28—Ladies' day. July 12—Second club match for regular prizes. Aug. 9—Open match; entries from all clubs. Aug. 23—Third club match; regular prizes. Sept. 13—Second ladies' day.

"HUNT'S MAGAZINE."—This London publication for January contains a number of readable yachting cruises, the lines of a small 3-ton cutter, and general yachting notes. Published by Hunt & Co., 119 Church street, London. Subscription $1a year.

CRUISING.—Schooner Gitana, W. F. Weld, Jr., arrived off Gibraltar Rock, Feb. 4, and the Dauntless, C. H. Colt, was heard from about the same time at St. Michael, Azore Islands. It is expected they will race in the great Nice International.

PHOTOS.—We have received from a gentleman in England, some handsome photos of the crack schooner Miranda, the cutter Silver Star, and the tiny three-ton Chittywee, all under way in live breezes.

IMPORTED FROM THE EAST.—Several gentlemen of Brooklyn have bought a cutter 32ft. loadline from Mr. Decator, of Portsmouth. This boat will appear in New York waters early in spring.

SAIL AREA.—In the table of elements of small cruiser last week, the area of sail per sq. ft. of wet surface should read 2.45sq. ft., including surface of rudder, or 2.60sq. ft. without it.

NEW ENGLAND YACHTING ASSOCIATION—Has been organized and will hold next meeting Feb. 20, Parker House, Boston. Report of proceedings next week.

ENGLISH AND AMERICAN YACHTS.—The introductory to an article under this head by Dixon Kemp, appears in the London *Shipping World* for January.

ILEEN.—We are able to state that so far as the Ileen is concerned there is no foundation for the rumors of a proposed race with the Hildegard.

HULL Y. C.—Will hold meetings each second Saturday in June, July, August and September.

FORTUNA—Left St. Thomas Feb. 3, bound for St. Croix.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

A. J. H., Pontiac, Mich.—Try Glover's mange cure.

R. M., Youngstown, O.—Write to Gen. F. A. Bond, Jessup, Md.

F. G. B., Boston, Mass.—We know of no well-bred retriever for sale.

HUDSON, Hudson, N. Y.—Write to Dr. M. H. Cryer, 1,111 Girard street, Philadelphia, Pa.

ACCOMAC.—A mixture for whitening sails was given in FOREST AND STREAM Sept. 13, 1883. No preparation will prevent mildew, unless the sail is well cared for.

SNOW SHOES, Dunbarton, N. H.—For snow shoes write to John Henderson & Co., Montreal, or to Renfrew & Co., Quebec. Describe to them the style you want.

F. M. L., Summit Station, Ohio.—1. The rifle will be ready about March 1. 2. For descriptions of the other arms named send for catalogue to the manufacturers of them, who advertise in our columns.

C. B. T.—Are split-bamboo rods worth the price asked for them as compared with the best wooden rods? Ans. Split-bamboo rods are, like wooden ones, of all degrees of excellence. The best wooden rods are nearly as expensive as the bamboo. We think that a good rod of split bamboo is well worth the price usually asked.

NIGHT HAWK, St. Paul's School, Concord, N. H.—Will you have the kindness to tell me where I can get a pair of live grouse of any kind, ruffed especially desired? Ans. We think it very doubtful if you can obtain them. Once in a while Reiche Bros., of Chatham street, New York, have them. Possibly some of our correspondents may be able to help you.

J. W. L., Gildersleeve, Conn.—Will you tell us about the habits of the great Northern hare? 1. Do they frequent hilly or swampy localities? 2. What kind of woods do they prefer to live in? 3. How fast do they breed young, and how many at a litter? Ans. 1. Are usually found in dense swamps, though sometimes among the thick pine woods on the hills. 2. Cedar, hemlock and pine. 3. Probably breeds twice a year, having from four to six young at a litter.

H. B. Glasco, N. Y.—Several days ago, a boy brought to me, for mounting, an owl which I have never seen before. In size it is between the screech owl and barred owl. Wings long and pointed, breast and stomach buff, with dark brown or black markings, feathers on legs and feet buff, claws black; under surface of wings nearly the same, except the points which are black; back, wings, and tail dark buff, with dark brown or black bars, beak black, eyes yellow, pupil blue black. What is it? Ans. Very likely a short-eared owl (*Asio accipitrinus*).

B. H., Norman Co., Minn.—1. What baits are best for pickerel, pike, rock bass, sun bass, redhorse, whitefish and catfish? 2. Can any of these be taken with the artificial fly, and if so, what kinds? There are no angle worms in this part. Ans. 1. Small fish are best for all the fish named except whitefish and redhorse. The whitefish does not often take bait, and the redhorse is one of the sucker family and can be taken with small strips of tough beef cut in the shape of worms. Pickerel and pike can be taken with revolving spoons. 3. Bass can be taken with the fly. Write to any of our advertisers for an assortment of good bass flies.

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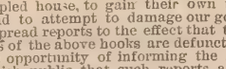
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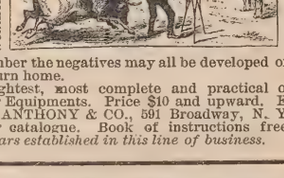
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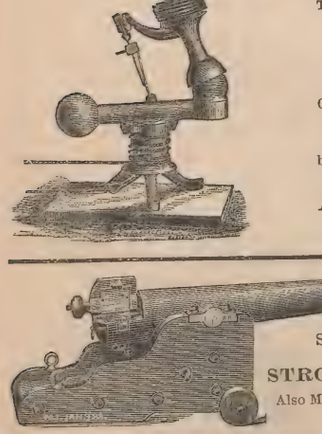
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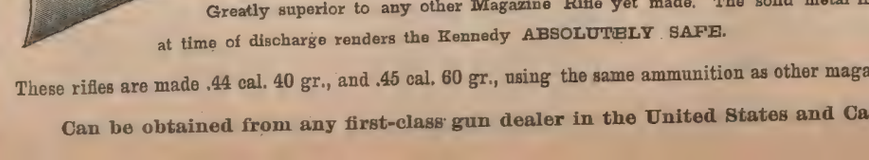
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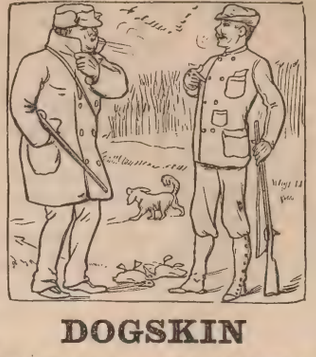


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THE FOREST AND STREAM is the recognized medium of entertainment, instruction and information between American sportsmen. Communications upon the subjects to which its pages are devoted are respectfully invited. Anonymous communications will not be regarded. No name will be published except with writer's consent. The Editors are not responsible for the views of correspondents.

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UNIFORM GAME LAWS.

THIS is a very old topic. Possibly it may be considered hackneyed. To suggest anything new in relation to it is quite impossible. We are assured, however, that the subject is not one to be put aside and lost sight of. It has been often discussed. It ought to be discussed more. We are making progress in the field of game legislation. The country is too large for a uniform game law applying to its entire extent. To talk of a national law, prescribing the same season for Maine and Florida, is folly. But it is highly desirable, and we have faith to believe that it may some time be entirely practicable, to secure uniform laws for contiguous States which lie in the same isothermal belts. Such laws would be based on the soundest common sense.

The one obstacle in the way of securing such a system is the wide and almost hopelessly irreconcilable differences of opinion prevailing among sportsmen respecting the proper seasons for killing and not killing game. In each individual State this diversity of sentiment is strongly marked, and so aggressive that it stands in the way of enacting laws that would secure the greatest good to the greatest number.

There is one point, however, upon which all might agree: That is the season for marketing game. If the sportsmen of New York, New Jersey and Pennsylvania cannot agree upon an uniform open season for game killing they might agree upon the date when game selling should be stopped by law. This agreement might extend further than this. Why should not Massachusetts and New York and Pennsylvania regulate their game-selling seasons by an uniform law, which should have contol of the game of these three States and the game of the West as well? Why should not the game market regulations of Illinois be identical with those of Michigan, Wisconsin and Minnesota?

The right way to secure such laws is to unite for action. A national association for such a purpose has been tried. It was too big. It fell to pieces. If another one be organized that too will fall to pieces. What is needed is the association together of a restricted number of States. Such a meeting was held in Boston the other day. The New England States were represented. The interests of the several sections were identical. A law was drafted, which will be presented to the legislatures of the several States. A uniform law for New England will be a great step in advance.

FOOLISHNESS IN THE WOODS.

FOREST lands. The lumberman's axe. One tree cut for lumber. Twenty others destroyed in getting the one out. The ground littered up with brush. Fire. Desolation. That is the way our forests in this country have gone and are going. And that is the way they will go unless some wise and sufficient action be taken to call a halt in the work of destruction. The New York Legislature is asked to provide a remedy for the vandalism of Adirondack forest destroyers. The welfare of the whole nation is directly concerned in this issue. The members of the Senate and Assembly at Albany cannot afford to shirk the responsibility of providing some measure to avert the calamities which will most surely follow if the present system of forest waste is persisted in.

THE FIGHT IN NEW ENGLAND.

A SPECIAL meeting of the Boston Produce Exchange was called on Monday, and resolutions were passed protesting against the proposed alterations in the game laws of Massachusetts. A committee of five was appointed to take measures to protect the interests of the marketmen as against the ideas of those who would so adjust the present statutes as to prevent the possession and exposure for sale of game and game birds when out of season in this and other States. The present law permits the sale of frozen quail, prairie chickens and deer after the close time in that and the other New England States, as well as the West. What has been the result? Simply that the Boston market has become noted as the dumping ground of game out of season. It is the shutting off in this traffic which the Boston marketmen fear, and it is here that the fight will begin, for "there is going to be a fight." The marketmen resolved to oppose "any change in the law by all proper means," which means to raise thousands of dollars and employ able counsel to fight their case before the Legislature now in session.

The marketmen say that it is a fight between kid-gloved sportsmen and business men; that a great business interest will be sacrificed, if the proposed game law passes, to the whims of an association of dandy sportsmen—meaning the Massachusetts Fish and Game Protective Association—"a crowd of swell-front and swallow-tail wine guzzlers, who want all the game protected by law for their own private shooting." Such is about the size the Boston marketmen give the question of uniform game laws throughout New England, as proposed by the late convention of Fish and Game Commissioners from six New England States lately held in that city.

But these marketmen have counted without their host this time. They suppose that they are crossing swords with the Massachusetts Fish and Game Association only, as on former occasions, when, in fact, they have got to fight a strongly-planted, fast-growing public sentiment, engrafted all over New England, for the better protection of the little there is left of fish and game. Perhaps they do not know, or at least would like to hide the fact, that their miserable traffic in game out of season has caused the true laborers for game protection more trouble than anything under the sun. Maine has been obliged to frame a non-exportation law to keep her fish and game out of the Boston market, even in close time. More than 1,500 deer went from that State last year to the Boston market—this year hardly fifty. But there are chances that the non-exportation law may be lost at the next session of its biennial Legislature in 1885, because of its non-popularity with market-hunters. This general law of close time and shutting of the Boston market to fish and game after close time will shut the doors to market-hunting just as firmly. The Boston marketmen see it. They see the end of grouse from Maine, purchased at 20 cents a piece and sold in close time at $2 per pair; the end of deer bought at 5 cents per pound and sold out after close time in saddles at 200 per cent. profit. This is "kid glove" against "business man." No matter how long the game lasts; there is more money in it for the marketman unprotected than protected.

"Kid gloves," Mr. Marketman, cover up too many claws for you this time. You have had your share. You have daunted frozen quail, prairie chickens and deer in the face of honest game protection till all New England is awakened and each State proposes to put a universal game law upon her statute books; and no back tracks will be taken to please fifty game dealers in Boston. "Kid gloves," as you call them, include some of the best business and professional men in Massachusetts, and such men as Augustus Hemmingway, Darius Forbes, Governor Robinson and Senator Bruce are backing up honest and earnest fish and game protection with their money and their influence. Such protection is the belief and nearest the hearts of the prime movers for the suppression of an open market for game in Boston, out of season everywhere else.

DEATH OF REUBEN WOOD.

The very sudden death of Mr. Reuben Wood on Saturday last was a shock to his many friends. He dropped dead of heart disease.

Widely known and as widely respected for his sterling honesty and simplicity, he was always the center of a party of anglers at the tournaments at which he had taken more prizes for his beautiful fly-casting than any other man. Mr. Wood was born in Greenbush, Rensselear county, N. Y., in 1822, and was therefore sixty-two years old. At an early age he moved to Syracuse, where he has since lived and been in business. He was a trustee of the First Baptist Church. He was president of the Onondaga Fishing Association, and a member of the Sumner Corps. He leaves a wife, and the children who survive him are Mrs. C. C. Francis, of Pittsfield, Mass.; George B. Wood, of Syracuse; Charles W. Wood, who is attending Williams College, and Miss Mabel L. Wood.

We have personally known Mr. Wood for over forty-five years, and both as schoolboy and man he bore the same open hearted, sympathetic disposition which has made him respected wherever he was known. Always enthusiastic on angling, he was particularly fond of trips to the Adirondacks, where he could enjoy wilderness life, and a short time ago he told us of his intended trip to Meacham Lake next May. Last year Mr. Wood was one of the staff of the American Commission to the International Fisheries Exhibition at London, in charge of the display of angling implements, and made many friends on the other side. His singularly open character and cheerfulness brought him friends everywhere, and "Uncle Reub.," as he was familiarly known, was very popular among all classes. Many will miss his kindly face at the tournaments and on the streams.

THE DOWEL QUESTION.

THE utility of dowels on the ferrules of fishing rods forms the subject of a very able article in another column, by Mr. Henry P. Wells. This is one of the live questions which should be fully and fairly discussed from both sides. That there is another side may be inferred from the fact that most rod makers use the dowels; and we would be glad to have those who believe in their utility give reasons for the faith that is in them. Mr. Wells insists that the dowel must go; that it is a relict of an old method of making jointed rods which once had a reason for existence, but that its day of usefulness is past and that it is now not only useless, but injurious to the strength of a rod. We commend the article by Mr. Wells to the careful consideration of both anglers and rod makers.

DOG TAX AND GAME LAW.

IN another column will be found a communication in which the writer proposes that the income derived from the tax on dogs should be devoted to the execution of the game laws. This is a very sensible suggestion. The plan includes the rigid enforcement of the dog law, and the collection of the dog tax. That means the weeding out (or drowning out) of the worthless curs; that, in turn, means that the sheep killers will be decimated. The sheep will not suffer; the sheep owner will have no claim for damages. The dog tax fund can then be utilized for game protection. Why should it not be?

No. 36.—The authorship of No. 36 has been determined. The several claimants who are busy writing postal cards and requesting that we forward the prize without delay, may therefore cease from their labors.

INTERNATIONAL MATCH CONDITIONS.

IT is pretty certain now that there will be no international rifle match during the present season. The old feud between the Amateur Rifle Club of this city and the small-bore men of Ireland seems to have died away. The Palma emblem of the small-bore long-range championship rests rustingly in the rooms of the Military Service Institution at Governor's Island, and with the defeat in July last of an American team at Wimbledon ended the series of two matches which the British Association had so cleverly arranged to catch the Americans on their weak point of long-range military shooting. There is, therefore, no match now on the slate, and there are no notes of preparation on either side the Atlantic. Thus far not a single official letter has passed on the subject of a match in 1884.

During the visit of Col. Howard to England last year there was some talk of a match in the following season. The American team captain had, however, no authority to make any arrangements for a contest beyond the one which he was sent over to conduct, and this fact was known generally. The English riflemen, elated by their success in downing the Americans, talked much of following up their victory by giving the Americans another lesson, and we believe that a sum of money toward the expenses of the team was either collected or guaranteed. The British Council, in whom alone the power exists to bind the Association, did nothing, nor did the American Directors take any step in the matter.

The seeming apathy of the Americans was in part due to the fact that there was a change of directors by the election of January, when the annual meeting of the Association was held, and the outgoing directors did not care to do anything which might bind the incoming board or leave them a legacy of work in the shape of a match. The new directors have not thus far thought it wise to take any steps toward starting a competition, and so the matter lies quiescent at a time when a brisk pushing of preparation would be the rule if there is to be a meeting of the British and American teams in 1884.

There is much diversity of opinion as to the expediency of having a match in any such frequency as to require the crossing of the Atlantic by a team each year. Some of the younger and more enthusiastic spirits are in favor of a fight with each recurring season, but the older heads among the managers are shaken cautiously, and the question asked why it is necessary to make the international match an annual occurrence. Each match entails a great deal of work and responsibility upon a few, and it is not always easy to raise the considerable sums of money needed equally, whether the competition is held on our own or foreign soil. There is no liberal fund from which to draw, no Government appropriation to be depended upon, and those who can shoot well, and whom it is proper to send to the front as representative marksmen, are not always able to pay their own way in addition to the loss of time which must be allowed in each individual case.

Apart from the financial aspect, it is doubtful whether there is much gain in the way of increased knowledge of firearms by having annual meetings. A defeat to be profitable needs to be studied. If the arms used were found inferior it would seem to be a sensible thing to take an off-year for the purpose of private practice and improvement, and even for the men it may be found necessary to devote a season to careful drill and record-making on the home ranges before a formal match is entered upon. There is no sensible reason why a match should not be made a biennial or even a triennial matter. There is no time lost, the science of small arms shooting goes on advancing just the same, and then a renewed zest is given the competitions when they do come off. Rifle manufacturers and those interested in the gate money which comes in connection with the matches, may seek to bring about annual gatherings and stir up the popular interest which comes with each international contest, but even these individuals may find that they have killed the goose which laid the golden egg if they push matters too far or too rapidly.

Just at present America may, with a good grace, seek to introduce the idea of matches at longer intervals. We have been defeated and naturally feel anxious for such return matches as shall enable us to demonstrate the fact that our present make of long-range military arms are fully equal to those of English make. That is the general conviction here, and with anything short of that execrable and super English weather which met the American team at Wimbledon in July, we think that the chances are more than even for a victory to our team. Under these circumstances our managers may very properly make such advances and suggest such steps to our English friends as shall give us a match of importance under certain definite conditions and occurring not more often than once in two years, and which shall then be regarded as the championship match in the style of shooting covered by the rules of the competition. Such a match we should be glad to see inaugurated, but against this annual infliction of spasmodic contests we wish a relief.

CHEAP QUAIL.—Quail is a favorite dish on New York bills of fare. Landladies of boarding houses serve quail for dinner because it is cheap. Dishonestly sold contraband quail is not so expensive as honestly bred barn yard capon. The game protector in this city is not smart enough to stop this unlawful game traffic.

The Sportsman Tourist.

THE LAND OF THE GOU-GOU.

A TRUE TALE.

"And from out the heavy fog gradually appeared the figure of a woman of beautiful form and majestic appearance, with long, flowing drapery extending indefinitely back into the dense sea mist. From her girdle hung a bag, and, stretching out her arms, she seized the rapacious fishermen, and, depositing them therein, slowly faded from view. And they told us it was the Gou-gou who frequented those coasts."—*Legend of the Micmacs.*

THE shores of the Gulf of St. Lawrence offer a great variety of scenery and many interesting geological formations. In parts bold, so bold in fact that in many places the common cables of the fishermen are unable to reach bottom close under the shore, and backed by high mountains; in other parts low with long sandy points running out into the sea, and with outlying banks of sand, affording breeding grounds for the cod, haddock and hake which love the clear cold waters and the abundant food of this region.

Centuries ago, ages before the hardy and adventurous fishermen from the channel islands had found their way to these waters, off one of the outermost points of the mainland, old ocean, under the influence of the wintry winds from the east, began throwing up a sandbank, which by slow accretions rose above the surface. Here a sparse vegetation sprang up, probably of the coarser beach grasses, and this, in the course of years, by growth and decay, formed a soil capable of nourishing some of the hardier scrubs sown by the winds from the mainland or deposited by the birds in their southern flights from the bleak barrens of Labrador. These again by their death furnished new life to still other plants, till finally the bare sandbank became covered with a vegetation, not luxuriant to be sure, but sufficient to change the yellow mat of sand into a green carpet; and eventually, by some of the many mysterious ways which nature adopts for such processes, trees sprang up in some places and covered large tracts with a forest of white and yellow birch, spruce and fir. In other parts, and those more directly exposed to the fierce gales of those latitudes, any extended growth of trees was impossible, and the annual deposits of each year only served to raise the island higher by a layer of peat, and the best efforts of nature only succeeded in planting here and there a few junipers which, exposed to the full force of the ocean blasts, were unable to attain more than a stunted and gnarled growth. The intervening spaces were, however, filled with abundance of scrubs and moss, whortleberry, blackberry, and a few other varieties of low bushes; the black bankberries, bake apples, upland cranberries; the dry, crisp gray moss so common in the haunts of the caribou, and which, more than any other one thing, is characteristic of the so-called caribou barrens of the Eastern States and Provinces; and finally the wet, green moss, such a favorite with the trout fisherman for filling his creel and thus keeping his fish fresh.

As the height of the island increased, a natural system of drainage was established, the loftier portions of the peat sank under the weight of snow and rain, and toward these low spots the drainage of the surrounding plain naturally gravitated till the water rose above the surface of vegetation with the result of destroying it, and thus increasing the depth of the pool, while at the same time the recurring seasons raised the general surface higher and higher, and increased the amount of refuse water, and the soft spot of peat at first converted into a bog-hole, became slowly a pond of considerable depth. Many of these ponds thus formed over the barrens at slightly variable heights by the laws of gravitation, sought communication with each other, and the trickling water wearing away the soil, established brooks or rather ditches, often through three or four ponds before the water finally reached its level. Some of these ponds, from their proximity to the sea, started their drainage in that direction with the result of forming brooks of perpetual flowing water. Again, in some of the larger ponds, a new factor appeared, for, exposed as they were to the winds from every direction, and with low banks affording no shelter, the action of their waves was sufficient often to tear away or at least undermine the banks, thus enlarging the water surface, and each increase in size still further favored the process of growth till in several places large lakes were formed.

The dry moss and the resinous scrubs furnished favorable tinder for a conflagration, and after man appeared upon the scene, fire began to play a not unimportant part in the development of our island, filling the peat with a layer of ashes which increased its solidity and enriched its soil, and to this agent, probably, more than anything else, is due the rich growth of berries of all kinds.

But while old gray-bearded Neptune was diligently shoveling the sand into a heap to get it out of water, even his long arms were insufficient to land each tridentful directly on top of the previous one, or it may be Boreas was loafing about and chaffing him, for, toward the sea, certain irregularities in the deposit existed, and when some of the fresh-water lakes began to drain toward the sea the water accumulated in some of the depressions just within the outer beach, forming again lakes of considerable size till their waters, rising more and more, found a path over the ridge and kissed the ocean. A short time now sufficed to wash away the soft sea sand and establish a brook, and at the next full moon the spring tide took up the work of excavation in the opposite direction, and the large fresh-water pond became brackish and began to rise and fall with the outer tides. A new soil thus introduced brought a new and different vegetation, and the brackish bay became filled with the succulent eel-grass in many places, while the action of the waves outside sent in with each high tide an abundance of sand which, being precipitated in the still water of the bay, formed in places low and bare sandbars and kept the depth of the whole bay shallow.

Imagine then an island composed of six to eight feet of peat resting on a sandbank with sloping sandy shores, the highest point not more than fifteen feet above high water. Several square miles of this covered with a dense forest composed largely of evergreens (*Abies* and *Larax*), but with a fair sprinkling of birches, the remainder of the island covered with a growth of low scrubs and vines and moss, and dotted with ponds of from six inches to as many feet in depth in every direction, the size of the ponds varying from a couple of rods to a mile in diameter; they number nearly two hundred. Their surfaces often covered with the leaves of the pond lily, their banks usually lined with the rich green moss raised but a few inches above the level of the water, and almost all of them having one or two small clumps of dwarf hackmatacks only a few feet high, and twisted by the winds into every conceivable shape. Add to this, miles upon miles of blueberries, whortleberries, bankberries, bake-apples, cranberries, and occasionally, blackberries. Remember the shallow bays of brackish water one to two miles in diameter filled with young short eel grass, the sandbars barely covered at high tide, the isolated situation, and is there any doubt what you will find there? What better place can the dusky duck find to rear her brood than the thick cluster of bushes on the edge of that little pond, whence as the wandering instinct is developed, they may find easy access to the next and larger pond through the connecting brook. As September approaches, can you not hear the cooing of that flock of dough-birds among the blueberries, and their whistle as they rise from sheer exuberance of spirits to circle about and again alight? Do you not notice the louder whistle of the jacks occasionally with the others? Would you not expect that the golden plover in leading its young from the northern wilderness would find such a spot a congenial halting place? As you approach that pond with the mossy banks, can you not see a flock of teal preening themselves in the bright sun, and while you are gazing at them are you startled or not by the loud *ongchk* from the old goose at the head of her clutch who, recognizing while still in mid-air, all the elements of an anserian paradise, young eel-grass, fresh water and convenient sandbars, announces her determination, not, however, without considerable discussion on the part of the youngsters, of staying till cold weather?

Here formerly the caribou in large numbers ranged freely over the whole island, cutting the moss into deep, narrow and meandering paths as they followed each other in single file from one pond to another, and many of the paths over the barrens, now used by the few inhabitants, are asserted to be the original caribou trails. The animals themselves disappeared from the island, from eighty to one hundred years ago. On the sandy shores of the island in former days the walrus was accustomed to land, and must have afforded noble and successful sport to the hunters of those times, for large heaps of their bones were still in existence, and seen some sixty years ago, rapidly being buried by the accumulating soil. At the present time these evidences of a fauna long since extinct are lost to view, and their place of burial even is unknown; tradition merely asserting that it was somewhere in the dense forest. On the open and quaking bogs the Canada geese formerly built their nests and reared their young, content with this bleak and desolate plain without pursuing their further journey toward the Arctic circle, and there they were annually slaughtered in large numbers by the Micmacs with simple clubs during their moulting season till, after one raid, more determined than usual, goose patience became exhausted and the whole colony migrated, and has never returned for breeding purposes, although the Indians have long since given up frequenting the island, and the knowledge of its topography is rapidly becoming a mere tradition of the tribe. Here, some two centuries or more ago, Charles, afterward the Sainted, one of the many enthusiastic Jesuits so intimately and honorably connected with the early history of Canada, is known to have established a mission, which implies a considerable number of inhabitants, but all traces of them and their works have so completely disappeared that no tradition even exists of the seat of their settlement. Early in the present century a few families of Scotch and French settled in some of the less exposed situations, and their descendants still remain, combining the occupation of farming, fishing, shooting and, as opportunity occurred, honest wrecking; a hardy, hospitable race, many of them with the intelligence which is begotten of intimate association with the wild aspects of nature, and especially with the ocean, and all of them with what we are given to calling thriftlessness, an outward expression of the inward despair produced by the continual contention with the elements.

Here for many years a friend and myself have found a resting place when on our annual pilgrimage from the heat and worry and rush of the city, till we have got to love the bleak barrens, the roaring sea and the howling winds. Every nook and corner is known to us; there is scarcely a pond at which we have not shot ducks or geese, a sandbar upon which we have not grounded our canoe, a gully or brook which we have not explored. On the banks of one of the salt-water bays stands a group of about a dozen hackmatacks which have attained the unusual height of twenty feet, a veritable oasis in a desert of whortleberry bushes and moss. Among the trees runs a small brook of clear, fresh water, taking its head from a couple of small ponds a few rods back in the moss, having worked for itself a channel into the peat some five feet deep. Beneath these evergreens we have for many years pitched our tents as the summer approaches its end, ourselves and our faithful French canoemen, who have piloted us up and down many a noble stream in other portions of the Provinces when we were casting the fly for salmon and trout.

Our youthful enthusiasm is somewhat abated; the cold, gray dawn has lost much of its early charm, and several hours in the bushes wet with dew before breakfast has ceased to have their old fascination. I fear we should be called but lazy sportsmen.

> "Forty times o'er let Michaelmas pass,
> Grizzling hair the brain doth clear;
> Then you know a boy is an ass,
> Then you know the worth of a lass,
> Once you have come to forty year."

A bright day, with the ever changing light and shade on the barrens, the views on the mountains twenty miles away over the sea, the ripple or the surf of the ocean, the wonderful cloud effects, these, with a very moderate amount of sport, constitute our true enjoyment, and we could justly say with the Duke in "As you Like it:"

> "Who would ambition shun
> And loves to live i' the sun,
> Seeking the bread he eats,
> Content with what he gets,
> Come hither, come hither, come hither.
> Here shall he find no enemy
> But winter and rough weather."

The pursuit of the game possesses all the elements of true sport, an intimate knowledge of the habits of the birds, a study of the wind, weather and tides, familiarity with the country, the use of dogs for retrieving, a quick eye, a steady hand and a hard shot.

The dusky ducks breed upon the island in large numbers; all other game visits it only in the course of migrations north and south. One of the earliest to arrive in the latter part of

August is the dough-bird, soon followed by the jack curlew, and by a large variety of the different sorts of shore birds, plover and sandpipers. The first northerly winds after the 10th of September bring a few geese, often in clutches of from two to ten, but occasionally in flocks of from thirty to fifty, and as the weather becomes colder they arrive in larger numbers and remain till driven away by ice. With the geese fresh ducks come, dusky ducks, gadwalls, blue and green-winged teal, scaup, and the non-edible and therefore not game birds, cormorants, loons, shelldrakes and grebes. Large flocks of golden plover are early mixed with the curlews, although they always seem to be a little later in arriving. With the first real cold of October the brant appear, and by this time the curlew and plover have mostly departed south.

Come and visit us for a few days' sport, but as you land from your boat be a little careful in entering the precincts of our oasis, for the two Chesapeake Bays, stretched in the sun in front of our tent, have quick ears and sharp eyes, and, although perfectly good-natured at home, when they get away into the wilderness seem to think it their duty to guard us against all intrusion. Down Ripple! Down Rogue! Now come in and go through the canine introduction of being smelt, and you are all right, only do not touch anything. It is a bright sunny day, with a moderate breeze from the westward. At sunrise we saw several hundred ducks come down from the ponds into the next bay, where they are still feeding on the seeds of the eel-grass, but in a couple of hours the tide will begin to make there, and when the water becomes too deep for comfortable feeding they will go up to drink and preen themselves at the same pond from which they came in the morning. Meantime John will get us an early dinner. The walking is very heavy; at every step the foot sinks several inches, but fortunately our destination to-day enables us to use boats. We row about a mile, then cross on foot from the bay to the shores of a large lake, and launching a birch canoe which was hidden in the bushes, paddle to the opposite shore. As we go you see at a glance the whole geology of the island; the banks, almost perpendicular, show each successive layer of peat, and the traces of fire are distinctly visible in many of them. Having crossed the lake, about a mile, we walk some forty rods and come to the suspected pond. An examination of its shores proves that we were right; the wet moss on the edges shows many little oval depressions where the ducks have rested, and the edges of the water are covered with dry feathers, the refuse of the toilets of many birds which slept here the night before. In those two clusters of dwarfed junipers we conceal ourselves, and soon see a host of birds arise from the bay two miles away, but after circling once or twice they all pitch again; no, not all either, for a half dozen separate and start straight for their drinking place. As they get over the Big Lake they leave and are lost to view, but suddenly appear over the bank and pitch into our pond, where, just as they are touching the water, we drop two and wound a third. The two dead are readily retrieved, but the wounded one disappears beneath the surface and does not again show himself.

With the dog we begin the circuit of the pond, he is still a puppy and has not learned to do it himself, when suddenly with a single "quack" the duck springs from the bushes on the bank into the water and immediately dives, but the dog saw him, and springing with his whole strength on to the spot where the last bubbles appear, he vanishes for an instant as completely as the duck had done, and emerges with the bird in his mouth. For the next two hours the ducks are continually leaving the bay, some come our way, some go to other ponds. By the time it is high tide in the bays all will have left their feeding grounds and have settled in fresh water. We shoot with variable success; some are easy shots, many are difficult, for the birds may appear on the right, left or directly overhead, and the misses are frequent enough to take all the conceit out of us. As the sun is sinking behind the forest we start for camp. Our bag is not large, a dozen black ducks only, which would make a Long Pointer or Chesapeake Bay gunner smile with contempt, but it will feed the camp for two or three days, and as we set the sail of our canoe and dance across the lake with a fair wind we think we have had our fill of enjoyment in the scenery, the air, the dogs and the game.

To-morrow with favorable weather we will try for a goose. They are in fair numbers, have not yet been disturbed and have got into their regular courses, feeding at night in the small bays on the roots of the young eel-grass, and as the tides rise in the morning, they go to the Great Lake to drink, thence to the large outside bays for the forenoon low tide, and as the next flood comes return to the lake to drink and then again to the small bays for the night. A strong head wind is necessary to bring them down within gunshot, the stronger the better, up to half a gale. If it is from the westward we will try to meet them as they enter the lake in the morning; if from the eastward we must meet them on their return in the afternoon. The pocket aneroid shows a fall of thirty-hundredths since noon and a small bank of clouds is visible on the sea horizon, but considerable changes of the barometer often occur here without much meaning, and the glorious, clear sunset looks like fair weather. The geese also do not believe there is to be a change, for although feeding in hundreds, not a quarter of a mile from camp, there is a general conversation among them, but only an occasional slight quarrel between two young ganders.

John's axe wakes us the next morning, and untying the flap of the tent we look out. It is a dead calm; the bay in front of the camp and the ocean beyond are absolutely without a ripple, and the fiery rays of the rising sun are shooting far up toward the zenith from behind the bank of clouds which has not risen perceptibly since last night. On the further side of the bay the geese and ducks seem twice their natural size through the almost imperceptible mist over the water. There is no need of hurry this morning; the birds will not move till forced by the tide, and when they do they will fly sky high. A luxurious bath in an excavation of the brook with just a suspicion of smudge from a couple of brands from the camp-fire to keep off the mosquitoes, and a leisurely breakfast of boiled teal, "whack," eggs, coffee and toast fill up two hours without giving any improvement in the weather. But the off-shore wind of yesterday and the calm this morning have given the striped bass a chance to cross the bars and get at the sand eels, smelt and other small fish which abound among the eel-grass of the bays; the water in the bays is just right, turbid enough from the intermixture of sand to prevent the fish seeing us even though the sun is bright, and yet not so roily as to prevent their seeing the bait.

Taking our rods and light guns we walk across the neck to the next bay where we have another canoe, and in twenty minutes are at the gully, picking up a few redbreasts and sanderlings from the flats on each side of the channel as we go. The fish here, with this slightly turbid water, are not fastidious; a single shrimp on a five-gut snell, even if the shrimp could be obtained, would get you but small fish. We rig our two hundred yards of braided linen line with a double gut leader, and a large hook with double snell, so as to use a sliver of fresh herring three inches long. If the water is sluggish a small sinker and float are advisable, but as the current increases with the tide, the float can be dispensed with. We take a few fish at the gully, but successive swirls up the channel above us show that the fish are rapidly passing, and we hasten to get to the forks of the channel half a mile above, where every fish must pass within sight of our bait. Anchored here, we have our hands busy for the last two hours of flood tide, each rod with a fish on almost all the time, and sometimes eighty yards of line out on each side of the canoe at once. Twenty-four fish to two rods is a fair morning's work; the largest is sixteen pounds, the smallest three. Exceptional states of weather and tide, however, only give such full scores. On our way home we get a crack at a flock of golden plover, and of the four brought to bag three are young birds as shown by the plumage, about the same proportion which we have generally found here.

Meantime a southeast wind has sprung up, the bank of clouds to the eastward has risen so as to obscure the noonday sun, the barometer is down another half inch, and we are evidently in for a storm. Rain keeps up in camp the rest of the day, and by night we have a southeast gale and a perfect flood of rain, but our tents are absolutely waterproof from a soaking with parafine wax, and our only risk is from the wind, in some of its sudden gusts, "blowing everything out of the gaskets." However, we make a fair night of it, and look out the next morning on leaden skies filled with low-flying scud, heavy rain and no abatement of the gale; the outer shore lined with foaming breakers, and the air filled with their roar. Not a bird is to be seen, but we know they are gathered under the lee of the high banks and will not stir in such weather, the whole ocean becomes a fresh-water pond in such rain, and if we could get near enough we should see the geese twisting their long necks till they could seize the feathers between the shoulders in their bills and then running their bills along the whole back scoop the fresh water off the feathers by the mouthful, while others, more dainty, take their drink by skimming the fresh water from the surface of the bay as the housewife skims off cream from the milk. After noon the scud begins to fly higher, the clouds are to be seen through it, the rain ceases, the wind hauls into the east and becomes only a stiff breeze. Toward sunset the clouds partially break up, and a streak of sunshine appears, but beneath the clear sky in the west is a dense, leaden cloud, and the barometer sticks at 29.30. Having finished supper and congratulated ourselves on the stars which are appearing through the clouds, we look again at the aneroid to find 29.20; *facilis est descensus Averni*, in ten minutes more we have 29.12. We call all hands, and, notwithstanding the loudly expressed willingness of John to take the aneroid for his share of breakfast if the storm is not over, we settle the tent pins and posts more firmly, and stretch every rope taut. Not a useless precaution, for in half an hour, as suddenly as though discharged from some immense cannon, a gale from the north is upon us, in comparison with which that of the previous night seems a zephyr. We turn in, but you might as well try to sleep in Bedlam; the creaking of the trees, the hissing of the wind through the branches, and the flapping of the fly and back of the tent render it impossible, but thanks to thorough workmanship and new ropes, everything holds, and as the gale abates toward morning we get a nap.

The rising sun gives us clear skies, and 29.90 on the aneroid insures us a heavy northwest wind. It is such a perfect goose day we will take all the chances and, sending canoes into each bay, we turn out every goose there, knowing they will go outside and return to the lake at the next flood tide with the wind in their teeth. The wind has raised such a swell on the lake that we must walk to-day, and the three miles we have to cover is equal to ten of ordinary travel so far as fatigue is concerned, for the footing is very soft. We make the circuit of the Great Lake and take our stands on a sand beach of the lake toward which a little "sag" in the plain leads, with a bank five feet high in front of us. The beach is in a little bay which projects a few rods toward the spot at which the geese are feeding two miles away, but lies a considerable distance to leeward of their direct course to the lake. Your goose, or at least our geese, when pressed by head wind, and flying low, prefer the lowest land and make for the nearest bit of water, recognizing that their enemies are all terrestrial. One old gunner who has studied them for fifty years, is confident we are within forty rods of the place where every goose will pass into the lake if the wind only holds steady, and by crouching under the bank we can shift our position by ten rods in either direction. This ought to give us some good chances.

Peeping over the bank we see the first flock rise and head far up-wind, but as they approach nearer they fall off, then again head up; thus by a sort of tacking they get near, and as they recognize the vicinity of the lake, lower till they are not more than ten feet above the plain, and head directly for us. Wait till they are abreast of you, aim about the end of the beak, and a little above if they are to windward, a little below if they are to leeward, old W. says, for they will swerve when you put up the gun. We try it and one drops; I make a clean miss at the leader, not having calculated the swerve properly, but as he is rising almost perpendicularly the second barrel, thrown fully three feet above him, brings him into the lake with a splash, and Rogue with a yelp of enthusiasm carries him into the long grass. No command or coaxing will make him bring the bird in; it is the puppy's first goose, and, laying it down, with long-drawn breath he revels in the (to him) delicious aroma, and mouths and noses it till the feathers stand out in every shape, and I, dreading what I shall find, hasten to get it from him; but the skin is not even broken. Soon another flock rises in the distance, then another and another till a dozen or more are headed for us. The first of these is a little high, and W. whispers to us to let them pass, for just behind are two or three flocks which are lowering every minute. They pass over our heads, and getting above the lake set their wings and begin tumbling, using their outstretched pinions as a parachute. The next two flocks give us some good shots, but those behind see the smoke and rise beyond our range. Once over the lake, however, they tumble like the others with a sense of perfect security.

Ripple is off in the stormy lake after a wounded goose a quarter of a mile out, which she secures; Rogue is sent for another in the calm water under the bank; it is good practice for him, as the goose is only wing-tipped and will probably dive, but as he approaches the true goose nature is seen, for instead of disappearing, she contents herself with stretching her head and neck along the surface of the water, and keeps still till he seizes her by the rump and tows her ashore, where he lays her down to shake himself. But if goose stupidity was shown before, we now see goose slyness, for as soon as the dog's eye is off her she slides into the water and disappears with the dog after her, who in an instant has her again on the bank, and a pin inserted at the base of the skull severs the cerebellum and ends the "circus."

The next flock passes to windward about two hundred yards, and it is evident the wind is falling. We shift our places also to windward and get two or three more shots. Then as the wind dies out the birds fly high, and their course cannot be calculated; we give it up, and sending a man for the canoe, ferry ourselves and bag across the lake, thus saving two-thirds of the walk back, no inconsiderable saving with a load of eight geese. Two wounded geese in the lake will undoubtedly climb the bank, be caught and devoured by foxes before morning. With the canoe we might even now find them, but with an eye to the future, we prefer not to disturb the hundreds of geese yet in the lake. Let us hope the foxes are grateful.

Such are a few samples of our days; the bags are never large; our best day yet is thirty ducks, but the variety of the game and the uncertainty of what is coming next, makes the sport interesting, and nature in her milder and in some of her sternest moods is seen here to great advantage.

TOOTOOGUSE.

BETWEEN THE LAKES.

Fifth Paper.

THE RETURN TO CIVILIZATION.

THE morning following our arrival of our young friends, Cox and Weller, it was proposed by them to go in search of a trout stream, of which they had heard from the lips of an old land-looker, who had gone through the country some time before, in the interest of some one of the numerous lumber companies that operate in the pine woods. The Greek Professor declined to go, as he purposed jerking a part of his deer killed the day before, in order that he might carry it home and show to his friends and especially to the president and faculty of his college that he had killed a deer. And, I may add in this connection, that he not only took the jerked meat home with him, but the skin of the deer also; and I have it on good authority, that his "Liddell and Scott," the very one he uses in his recitation room, is covered with that identical skin; and it is further reported, that whenever a rascally student slips up on a particularly difficult rendering of a passage in Homer or Xenophon, and the patience of the preceptor is put to the strain in consequence, that student adroitly manages in some way to introduce the lexicon cover, when the professional frowns are removed and the delinquency is overlooked.

I do not vouch for this, however.

The particular place we set out for that morning was a widening in a stream constituting a small lake in the woods about three miles from our camp, and I was much impressed with the skill in woodcraft displayed by our friends. We went in the Wawa to the east end of Beaver Lake, where, after inspecting the map, young Weller went ahead with compass in hand for the new trouting grounds. I do not think I ever had quite so ugly a tramp as that morning's. The compass bearer started on a line, and the success of his leadership depending on keeping that line, he swerved from his course for nothing. No matter what the obstacle, it must be surmounted. Nor did he dally on his way. He had been connected with the lumbering interests from his youth up, and locating pine lands was a familiar business to him, and he had been trained to celerity of movement. Down tree tops were climbed over or crawled under; swampy places were waded; brush thickets were squeezed through. The Judge, who went in advance of me, found his 220 pounds a greater inconvenience than ever before, and he went crashing his way through tree top and brush thicket, and floundering over logs and swampy places like a wounded buck. A half a mile of cedar swamp brought us to a high hill, the ancient lake shore, which we climbed, and our guide, after taking his bearings, next led us through a comparatively level brushy woodland, and finally brought us out as nearly the center of a little lake—the result no doubt of an ancient beaver dam on a small creek—as we possibly could have come. The correctness of judgment in locating the lake, which neither one of the young men had ever visited, and the accuracy with which they had held to the right line through swamp and woods, was a marvel to me.

The first thing we took notice of on emerging from the thicket, was a large buck with wide-branching antlers, standing on the further shore of the lake. He was no doubt an old inhabitant of these woods, and had visited this lake hundreds of times before, and for the first time he saw men on its shore. He was greatly amazed at the sight, and as he lifted his head aloft, at not to exceed seventy-five yards distance, and gazed wonderingly at us, I thought he was one of the most beautiful animals I ever saw. Although we carried two rifles, not a shot was fired. We had venison in camp, and so when the lordly fellow threw his great wide-spreading tail over his saddle and disappeared in the thicket, our riflemen were glad he was gone.

The little lake was found to be about an eighth of a mile in length by about seventy-five yards in width, and it was literally swarming with brook trout. Fishermen who have never seen the trout save in swiftly running streams, will reluctantly give credit to my story when I say they went in schools of hundreds like minnows. At the low end of the little lake, under some old logs, we took them, running from eight ounces to a pound; elsewhere they were from five to ten ounces, a few running to fourteen ounces. After three or four hours' fishing we returned to camp, taking with us 305 trouts, and getting there in time to witness the most gorgeous sunset I think I ever saw.

The sun at that season went down in the northwest, over the broad lake, and on this evening the waters were as smooth as glass. A bank of purple clouds lay in the track of the descending luminary of sufficient density to destroy its dazzling brightness. For twenty minutes before it disappeared it shone like a great rose-colored ball of fire, and a luminous track, equal to the sun's apparent diameter, ran from the shore at our feet, out and up to the sun itself. As the sun neared the lake's surface it assumed an elongated appearance, due to atmospheric effect. In its neighborhood the heavens were aflame, and the waters beneath reflected back like roseate hues. Presently it touched the wave and slowly passed out of sight. When half gone it resembled a crimson crown set far out in the bosom of the still waters,

and maintained its beauty thus till it finally disappeared. And now the lake claimed our attention. The roseate hues that veiled the waters gave way to bands of soft purple and gold alternating, running parallel with the shore and extending nearly out to the line of vision, where a luminous veil-like band interposed, more beautiful if possible in its sheeny softness than anything that had gone before. From our lofty outlook we sat in our camp chairs, and in silence drank in the beauties of the scene. The sunsets from our camp here were always beautiful, but this one was preëminently so. The day done, the camp-fire was mended, and the long twilight enjoyed. To the dweller in the lower latitudes, one of the most interesting features of this region is the long twilights. The transcendantly beautiful lake sunsets may occasionally be seen, but the long twilights are of nightly occurrence, and the summer wanderer never forgets to admire them. To the sportsman everywhere the camp-fire brings comfort and happiness, but to the sportsman in the Lake Superior latitude the camp-fire and the long and gloriously beautiful twilight, and the murmuring lake breeze in the pine boughs, gives a witchery to the summer evenings nowhere else to be found.

The succeeding day, in company with our young friends, we went back to the scene of our trouting the day before. The Greek Professor, on having sufficiently cured his jerk, accompanied us. The same buck (we guessed him to be), that had been so much surprised at our appearance the day before, returned to the lake while we were there, and walking out of the brush to the water's edge, he was once more astonished to see men on the opposite shore, and he again scrutinized us closely, his scrutiny resulting as it did the day before, he again spread his broad tail and disappeared in the brush.

Our catch this day was about the same as the day before. The Judge took but few saying that he was tired of that kind of sport, but the Greek Professor, zealous to outnumber his catch of the day before, held on till he was one ahead, when he too ceased. In the two days, 754 trout were taken, which our young friends put on ice and sent up to Marquette, to be distributed among their friends.

And now, if any one wishes to rise in his place and denounce "trout hogs," about this time is as good as any. I have no defense to make, but will have something myself to say in the prosecution before I close.

Before leaving, rain began falling, and we had a wretchedly bad trip home. Our guides lost their way, and led us through thickets and swampy places, until it began to look as if we were destined to lie out over night. In their wanderings they came to the little lake lying northeast of Beaver Lake, and which is a part of the system to which that lake belongs, and they re-discovered it and named it Rainy Lake. Finding our way out of the woods, however, we reached camp barely in time to escape a soaking rain. That night we prepared and ate our suppers under great difficulty. About dark, a violent thunder storm passed over the lake, from the west to the east, and after some time it (or another) returned, and went back to whence it came. The elements over the lake seemed to be in great commotion, and notwithstanding our greatly wearied condition, we sat in the door of our tent and watched the play of the lightning and listened to the bursting thunder till a late hour. The flashing lightning gave momentary illumination to the black, boiling waters, and far out we could see the outline of a steamer, and the long trail of smoke hanging low over the inky waters behind her. At a late hour we went to bed, and all through the night, whenever awake, I could hear the rain beat upon our tent and the waves pounding on the shore.

For two days the weather was catchy, but on the evening of the second our two friends left us and returned to Munising. Our time being up, we commissioned Mr. Cox to send a boat for us as soon as he returned, and on the following Saturday morning he himself came after us. The Indians were all gone on a "packing" expedition for a company of land-lookers to Minnesota, and so he came in lieu of one of them.

There was quite a breeze blowing that morning, with a prospect of a gale toward the middle of the day. But the fishing tug which made Munising, its headquarters, was off the Grand Portal two or three miles, and if we could manage to get to that place in time, we were sure of being picked up by that steamer on its return. In a very short time we "pulled up stakes" (see the origin of the phrase) and went aboard the Sand Piper. "Now don't get scared!" said Skipper Cox assuringly, as his vessel swung round till the wind filled the sails. And then away she went over the waves like a courser. Now it was that the Judge's 220 pounds became useful. Seated amidships, it became his duty to "cut ship" by sliding to the right or left, according to the force with which the wind blew. Unfortunately for our comfort, it came in cat squalls, and in spite of the nimbleness which fear lent to the ponderous Judge, it did seem that we would capsize. At any other time and place I think the shuttle-like swiftness with which his heavy keel slipped back and forth on the cross board would have produced boisterous merriment, but with the danger of capsizing at any moment staring us in the face, we watched the ponderous shuttle-like movement in solemn silence, with a feeling that as long as it was kept agoing the chances were with us.

At length we reached the leeward side of the Grand Portal, where we lay in a little haven till the tug came along, when our boat was made fast to it and we were taken on board. By this time the wind had increased to quite a gale from the west, and the little steamer found it no holiday affair to plough her way through the rising waves.

In a large tank aft the little cabin, a hundred fish or so, whitefish, lake trout, and perhaps some others, represented the morning's catch. The lake fishing all the season has been poor, so poor that the catch had not defrayed the expenses, and in two weeks thereafter the tug was taken off that part of the lake. The fishermen with whom I talked, spoke freely of the annual decrease in the numbers of fish taken in the lake—a decrease which, if it continues but a few years longer, will see the end of the fishing industry on the lakes.

Shortly after we went aboard and the little steamer was on her way, one of the men, who, with others, had just completed the work of cleaning the fish, seized a handful of the offal and threw the bloody mass overboard. A flock of gulls had been following and screaming in the wake of our vessel, and as soon as the mass struck the water they pounced down upon it and gulped such bits down as they managed to get hold of. "Feeding the gulls" was an every-day occurrence with these fishermen, and the birds had learned not only to follow the vessel but to look for their choice food, at the motion of a hand. A bit not too large was gulped down in a trice, but if it were too large to swallow readily, the finder would either drop it after an ineffectual effort to swallow, or else be robbed of it by some of his greedy companions. Frequently two, three or more would get hold of the same morsel, and sometimes a straggler, who could not find a beak-hold in the piece itself, would seize a neighbor by the wing and swallow at that. And such a screaming and flapping of wings would ensue, until perhaps the flock would fall to the water, where the screaming and flapping might go on for some moments longer until indeed the morsel were swallowed or else lost in the waters.

About 3 P. M. we reached Munising, and the seat of the Judge's trousers being greatly worsted by the morning's work balancing the Sand Piper, we went into quarters to give him a chance for repairs.

Our camp we made on the bay shore under the shadow of a cluster of maples, and within thirty yards of the tent, in a dimple in the bay's bottom, we caught with the fly speckled trout of fair size and of gamy quality. The only difference we could discover between them and their cousins of the streams was in their color. The markings were the same, but their bright colors had faded out. At the dock we were told, trout from two to three pounds in weight were frequently taken. The natives insert hooks in an empty metallic rifle cartridge and pouring melted lead into it, make a grappling hook that never fails to do its work when once in a trout's mouth. This cluster of hooks they bob up and down and the large trout, attracted by the polished shell, lay hold and are yanked to the dock.

DOWN THE YUKON ON A RAFT.

BY LIEUT. FRED'K SCHWATKA, U. S. ARMY.

Sixth Paper.

As we floated out of Lake Marsh it was known that somewhere ahead there would be found the largest rapids on upper river, and by some form of improper interpretation the from our Indians, or in some way we had the idea that they would occur very soon, within three or four miles, so to speak, and I undertook the herculean task of walking on ahead on the beach and finding them to signal the raft so that it would have ample time to reach the bank, for the river was now 500 to 600 yards wide in places. It turned out afterward that the rapids were more than fifty miles further on. I had walked more than three miles when I came to a peculiar kind of creek distinctive of this district of the river, that is, not very wide, but altogether too wide to jump, with slippery slopes of clay, and so deep that the bottom could not be seen or reached with a pole. These streams have a current like a glacier, and the one that stopped me—and I suppose all the rest—had the same unvarying width for over a half a mile from its mouth, beyond which I dare not go for fear the raft passing me, when I returned and fought mosquitoes, and waited for it to come along, when I would have the canoe pick me up.

The first traveler along the river was one of our old Tahk-heesh friends, who came down paddling his cottonwood canoe with his family, a squaw and three children, wedged in the bottom. He comprehended my situation and I tried to make him understand that I wanted simply to cross the canal-like creek, while he, remembering a few trifles he had received at a few camps back, thought he would extend his services and take me a short way down the river, to which I did not object, still believing that the rapids were but a short distance ahead. The rain was falling in a persistent drizzle, which, coupled with my cramped position in the rickety canoe made me feel anything but comfortable. My Indian patron was evidently feeling worried about not meeting other Indians (for he had previously promised me that he would have a number at the rapids to portage my effects around if my raft went to pieces in shooting them, as they were all confident it would) and he was stopping his not unmusical gurgling strokes of his paddle every minute or two to scan the river banks or to listen if he could hear anything of them. Finally he became discouraged at the prospect, after he had descended about three or four miles, and diving down into a mass of dirty rags and Indian bric-a brac of all sort he fished out one of the brass mounted Hudson Bay flint lock horse pistols I have already described in a former article as one of their possible possessions, and I was horrified at the sight for I felt sure he was going to use it as a signal. He took out the bullet and held it in his teeth, and I felt the least little bit better but still terrified beyond measure, and it was not until he pointed it directly at me in the other end of the canoe that I felt at all safe, and as I heaved a deep sigh of relief, he fired, and I could not help but thrill with the liveliest gratitude for his consideration for me, and the warmest admiration for his indomitable courage as he stood unflinchingly at the butt of it and pulled the trigger. For fear that he might ask me to fire the next one, however, I told him in the sign language that I would swim ashore and run around in the woods and back country and look them up, if that didn't bring them to a response. It awakened no reply, from which I inferred that none of the others had mule pistols, at least within a radius of 500 miles of here, or probably did not fire them off, and as it was getting well along in the evening my "Stick" friend pointed his canoe for an old camping place on the east bank of the river (although the canoe was so warped and its nose so broken that you could have conscientiously said it pointed in any direction), and with a few strokes of his paddle he was soon at the shore and I went into the simplest camp I ever did in all my life, for all that was done was to pull an old piece of canvas over a pole and crawl under it and imagine it kept out the rain, which it did about as effectually as if it had been a crochet tidy. I certainly think that if he had covered me with his horse-pistol again it would at least have been warmer.

There was one good thing about a rain storm in Alaska, however, and that is the philosophical repulsion that exists between a moving two-grain rain-drop and a stationary grain of mosquito when they come in contact. All along this bank the dense willow growth crawled up and leaned over the water, and I was afraid there was no camping place to be found, until I saw a place where a little spur of spruce-clad hillocks infringed on the shore, and here I halted the raft and we made an uncomfortable camp. Everywhere we could see muskrat wakes as they went swimming backward and forward across the river, but we secured none. Fish of some sort kept jumping in the river, but the most seductive "flies" were unrewarded with a bite, although the weather was not of the kind to tempt one to hunt or fish simply for sport.

The next day, the 30th of June, was but little better, and we got away late from our camp, our Tahk-heesh friend accompanying us in his canoe for the purpose of telling us just where we should find the rapids, and of course, disappearing ahead so as to keep us feeling more anxious about it. At one time, about eight o'clock in the evening, we heard roaring ahead as we swung round a high clay bluff, and were conscious of the fact that we were shooting forward at a more rapid gait, and the raft was swung on shore and a prospecting party sent out, which revealed that there were rapids extending a distance out into the river, but of no consequence to us. In fact, they were directly in front of our position on the shore, and so swiftly was the current, that we could not get out into the stream fast enough to avoid sticking on the rough bar of gravel and boulders, and shortly after the crew had jumped in and were preparing to pry the raft round into the stream, the most violent splashing was heard on the outer side of the craft, and it was soon found that a goodly-sized grayling had hooked himself into a line that some one had allowed to trail over the logs in their hurry and excitement of attending to more important duties connected with the supposed rapids. He was divorced from the hook and when thrown over another one repeated the operation, and it soon became evident that we were getting into the very best of fishing waters. After the raft swung clear of the outer boulders of the reef, several lines and flies were gotten out and it was quite amusing and entertaining to see the long "casts" or rather attempts at them as we rushed by distant ripples near the bends of the banks, more than one of which were successful in landing a fine grayling.

That evening we camped late (about 10 P. M.), near where a couple of ripples were formed by gravel bars running out into the stream, and some fifty or sixty grayling rewarded the three lines that were kept going until about 11, or till it was too dark to fish with any comfort. The grayling caught that evening seemed to be of two distinct sizes, the larger averaging about a pound in weight, the smaller about one-fourth as much.

On the morning of July 1, we approached the great rapids of the Yukon River, our adventures around which shall form the main part of the next article.

[To be continued.]

LIFE AMONG THE BLACKFEET.

BY J. WILLARD SCHULTZ.

Twelfth Paper—Folk-Lore.

THE ADVENTURES OF KUT-O-YIS.

Long ago there lived on the Maria's River a very rich old man, and he had a wife and three beautiful daughters. All the young men looked at these young women and wanted to marry them, but their father said no. No one but the richest young man could have his daughter. From a far off camp came a young man, very rich, and he married the three sisters.

After a time this young man began to treat his old father-in-law very badly. He took all his dogs away from him and his weapons, and gave him very little to eat. Not far from where they lived was a large cave, where this son-in-law, whose name was Many Feathers, kept a herd of buffalo, and every time he wanted meat he would let one out and kill it. One day, when he let one out, he only wounded it, and it ran out on the prairie. He gave his father-in-law a bow and arrows and sent him after it. The old man chased the buffalo a long way, but could not catch it. As he was going along the trail he picked up a large clot of blood which had dropped from the animal's wound and hid it in the folds of his robe. When he returned home Many Feathers was very angry, and he said: "Why did you not kill that cow?" "Because I couldn't catch it," replied the old man. "What did you pick up out there on the prairie?" "Nothing," said the old man. "I ran a prickly pear in my foot and stooped to pick it out."

Then the old man went to his lodge and said to his wife, "Go quickly, old woman, and get some water, I have a clot of blood which we will boil and eat." When the water was hot they threw the clot of blood in it, and pretty soon they heard a cry like that of a child, but they looked in the kettle and could see nothing. Three times they heard this cry, and when they looked in the kettle the third time they saw a beautiful baby boy, and they took him out and named him Kût-ō-yĭs: Clot of Blood. In one day the boy grew to be a man, and he said to the old man, "Father, why have you nothing to eat in your lodge?" Then the old man told him how his son-in-law had taken all his dogs and weapons away from him, and that they would have starved to death had it not been for their youngest daughter, who stole a little meat for them whenever she could. "Never mind, father," said Kût-ō-yĭs, "let us make a bow and arrows and a knife and we will go hunting." When they had made the weapons they went out on the prairie and Kût-ō-yĭs killed a fat cow.

When they were skinning it the old man saw Many Feathers coming toward them, and he was afraid; but Kût-ō-yis lay down behind the buffalo and said: "Let him come, I will kill him." When Many Feathers came up close he said, "Who killed that cow?" "I did," replied the old man. "Well, I am going to kill you," said Many Feathers, and he commenced to string his bow, but Kût-ō-yis jumped up and shot an arrow through his heart. Then they went home and Kût-ō-yĭs killed the old man's oldest daughters, for they had not pitied him, and he took the youngest one for his wife.

Now, way out in the Sweet Grass Hills, there lived a big wolf, so big that a man was only a mouthful for him. Kût-ō-yis went to kill this wolf. When he came to where the wolf was, he let it swallow him, and when he got in its belly he found many people there, some dead and some yet alive. And Kût-ō-yis said to the living, "Get up and dance," and they all danced. Kût-ō-yis held a knife firmly on the top of his head and every time he danced the knife cut into the wolf's heart, and pretty soon they felt the animal sway and fall over dead. Then they cut a hole in its side and crawled out, and Kût-ō-yis took off the scalp and gave it to the sun.

Kût-ō-yis killed all the bad animals. There were two great man-eating snakes which he killed, and he let only one little one live. "The people will not be afraid of little snakes," he said, "so you can live and make little ones."

New Glasgow Rod and Gun Club.—At the annual meeting of the New Glasgow (Nova Scotia) Rod and Gun Club, held Jan. 31, the following officers were elected for the ensuing year: President, H. T. Sutherland; Vice-President, John K. Fraser; Secretary-Treasurer, J. Howard Cavanagh; Executive Committee, W. B. Moore, R. A. Walker, Jas. S. Fraser. The club is in a prosperous condition, owns a club-house, boats, decoys, and a trap-shooting outfit, and the members expect to do some tall shooting this season.

ADIRONDACK FOREST WASTE.

Editor Forest and Stream:

You are keeping the Adirondack Park question before the people. I am very glad to see the interest in it manifested by so many of the newspapers. But the side taken by the city papers is not the only strong side to the question. I am, as an individual, as much interested as any one can be in the preservation of the forest. My whole property interest is in the proposed park, and aside from this, I have given the subject of forest protection much thought, and have looked on with much anxiety at the destruction going on each year about me. There seems to be a general feeling that as soon as one is in the woods he is to have full liberty in all directions. If he wants a bit of wood ever so small he takes it from any tree within reach, no matter if it does destroy a large tree, valuable for lumber or shade.

The lumbermen, at least in this section, have never been particular about the timber taken from their lands. Their only aim has been to get all that would make lumber at that cutting, for in most cases fires follow the choppers within one or two years, and after the fire, in most cases, the land goes back to the State for non-payment of taxes.

The most destructive interest at work in this section is the cutting of spruce for clapboards. Very few trees are either large enough, or free from knots, to make clapboards. They must round up at the small end of the log fifteen inches at least, and where one log is taken twelve feet long, fit for clapboards, there will be from two to three other logs which would make good lumber, but as they are not wanted, they are left to rot on the ground with all the other cuttings in making roads and clearing away from the stump by the chopper, the whole forming a nice place to start a fire. Within ten miles of here there are hundreds of acres which have been cut over and have gone to the State in this way. The cutting of the hemlock for its bark is also very destructive to the forest in this season. It does not pay to draw the logs to mill for lumber. In the felling of each tree for its bark and in the cutting of roads there are at least twenty other trees broken or cut down. Most of the pine cut in this township in the last fifteen years has been cut to make shaved shingles, and as not one pine in five that are cut down will make shingles, there are hundreds of large pines on the ground rotting away.

A few weeks since I was in Malone and Potsdam. Each village is the center of quite a lumber interest. I met many persons who, knowing I lived in the woods, wished to talk about the proposed park, and I was greatly surprised to find so few persons who knew anything about the woods; but they seemed astonished that any one should think them of importance enough to need legislation for their preservation. Among others, I met several members of both branches of the Legislature. They, too, wished to talk about the woods, and were glad to hear the other side of the story. The real interest of Franklin county is the preservation of every bit of forest, but I fear the controlling influence will be the lumber interest, which means the cutting of everything possible to be made use of, either as lumber, firewood, or bark. Then much of the land will go to the State, as it is worth nothing for agriculture.

The one great complaint of the residents in the proposed park has been that the State holds its land but pays no taxes. They are right when they complain of this. As in my own case, I am the only resident in this road district, which is seven miles long; and nearly all the land has gone to the State. If the State pays no highway taxes I must do all the work on this seven miles of road.

Of the proposed bills Senator Lansing's is the least objectionable to the inhabitants of this section, and if it should pass, it would have to be changed in many ways to be of any value. A very strict enforcement of the law against all offenders must be made in every case or the law would be worse than no law. A great majority of those who frequent the woods look upon State lands as open to plunder for all purposes without a chance for punishment. They call it God's land—free to all." A. R. FULLER.

MEACHAM LAKE, Adirondack.

Natural History.

HORNS OF THE FEMALE CARIBOU.

Editor Forest and Stream:

I note with pleasure that you are bringing out a new edition of Judge Caton's admirable work on the antelope and deer of America. The volume is one which should be in the hands of every still-hunter who desires to really know about the game which he pursues. This announcement and the perusal of your notice of the book leads me to think that this is a fitting time to ask a question of your readers in relation to one species of our deer.

I do not know that the fact that the female caribou is always or nearly always provided with horns has ever been satisfactorily explained. This is the only species of our deer in which that sex bears horns, though there are on record a very few cases in which the female Virginia deer has been found to have one or a pair of simple spike horns. It is not to be supposed that in the caribou these horns have been retained in the female without some reason. What is it?

An intimate knowledge of the life history of the caribou would no doubt furnish a clue to the anomaly, but unfortunately very little is known of the habits of the species. During a recent visit to the home of the woodland caribou I received some information which perhaps gives a hint as to the use of the antlers to the female *Rangifer*. It is well known that the caribou, during the greater part of the winter, subsist almost wholly upon the reindeer moss which they obtain by scraping away the snow with their fore feet. When the snow covers the ground to any considerable depth, the pits which they dig to reach the food below, are excavated with considerable labor, and each deer has to work hard for its living. At this season—in the case of the woodland caribou, at least—the males and females collect together in herds which vary in number from ten to one hundred individuals. At this time the stronger deer drive the weaker ones away from those places where the food is best, or most easily accessible, and when a small deer has scraped away the snow from a good feeding place some larger and stronger animal is very likely to attack and chase it from the spot, and take advantage of the work done by the other. It will readily be seen that this condition of things might operate very disastrously for the young and female deer, if they were no better provided with weapons of defense than the larger and stronger ones, as while the older males lose their horns about the last of November, the young males retain theirs much longer, and the females do not drop their antlers until the spring. The possession of these weapons at a period when they may be so useful in aiding their possessors to obtain a fair share of the food, which can only be secured with some exertion, enables the younger and weaker members of the herd to stand on a more nearly equal footing with the stronger than they would have if they were without horns. This struggle for food continues during the whole winter, for in the region inhabited by the caribou the snow often covers the ground until May or June, and during all or the greater portion of this time food must be obtained by digging. During the winter the females are carrying their young, and therefore require more nourishment than do the males, young or old, and this may account for the fact that the horns are retained until the time when the young are about to be brought forth. This explanation of the existence of horns in the female of *Rangifer grœnlandicus tarandus* and its southern race seems on the whole not unreasonable.

I should like to ask your many Canadian readers whether any of them can suggest an explanation which is more satisfactory than the one I have mentioned, or can add anything to this. I should be much gratified to learn through your columns or otherwise what views are held on this subject by those who live nearest to the home of the caribou.

GEO. BIRD GRINNELL.

NEW YORK, Feb. 18, 1884.

OPHIDIANA, OR SNAKE GOSSIP.

BY CATHERINE C. HOPLEY, AUTHOR OF "CURIOSITIES OF SNAKE LIFE."

LOOKING over a file of FOREST AND STREAM for the last six months, a few notes on the subject of the Ophidia seem to invite a little discussion. "Ouachita," of Monroe, La. (Oct. 11), in allusion to my paper (Sept. 20) on the "spreading adder" or "puffing viper" (*Heterodon*), writes: "If my memory is not faulty I have found fangs in their mouths." To this, in the issue Oct. 18, "S." replies that he has "killed scores, but never found any fangs." Now, like the men of Cowper's poem on the chameleon's color, both correspondents, "Ouachita" and "S." may be correct. "S.," perhaps, sought *Heterodon's* so-called fangs in the usual place, viz., the front of the upper jaw. "Ouachita," perhaps, found them in the unusual place, at the back of the jaw; or, when he sought them they might have been erect and conspicuous, and when "S." examined the snake's mouth the fangs might have been depressed and inconspicuous. For, among the many seeming anomalies of serpent organization these harmless *Heterodons* have not only a pair of long, fang-like teeth, but they are mobile, *i. e.*, can be erected or depressed and put to use at the will of their owner, like true viperine fangs. Only they are solid teeth after all, not perforated and grooved, or connected with a venom gland. The family is for this reason called *Hetero-don*, which word, divided into two parts, easily suggests its meaning. As hetero-dox is something contrary to a usual saying or belief, and heterogeneous is a deviation from ordinary rules, so *Hetero-don* is an unusual or abnormal condition of teeth, supposing the normal rule to be a set of a regular and equal size, as in most harmless snakes; one of the latter group being called by some herpetologists *Tso-dons*, or even-toothed. Then, again, there is a family of *Lycodons*, which might be mistaken for venomous serpents, as they have a long, wolf-like tooth or harmless fang in front of the jaw. And there are the *Oligodons* or jaw-toothed snakes; the *Anodons* or toothless family; and the *Xenodons* or strange-toothed family, of which *Heterodon* is a member. The *Xenodons*, natives of Brazil, bear just as bad a character there as do the poor little harmless *Heterodons* of the north; they also have a movable back tooth, looking like a fang, but that does no injury. I believe I may claim to be the first who has described, if not the first who has observed this mobility in *Xenodon's* fang-like teeth. I also saw and described *Heterodon's* fang which I saw moving while the snake was feeding, the latter fact being confirmed by Prof. E. D. Cope, who himself had seen the same, though not committing his observations to print. Long back teeth in several families of snakes have been well known to herpetologists; but none of them, so far as my researches have gone, have mentioned the mobility of those in the *Xenodons*; not even Dumeril, our first and best authority. Having heard of these "strange teeth" in the Brazilian *Xenodons*, and that the snakes were looked upon as venomous, I became very desirous to see a living example and ere long I was able to examine the jaws of one, and then witnessed the working of this strange back tooth, and felt it, too, on pressing the jaw with my finger, as described in chapter XXII. of my work on snakes. These long teeth are, no doubt, useful in retaining the prey, which, for the most part, consists of toads and frogs swallowed alive and actively struggling. This singular dentition is only another example of those remarkable features in which snakes of such distinctly opposite families appear to be allied. Thus the innocent *Heterodons* have a broad head and a viperish aspect, even a movable fang, and in spreading themselves when molested they remind us of the cobra.

The child mentioned by "S." as having been ill after the bite of one of these "spreading adders," was probably timid and delicate, and might have suffered similarly from the claws of a cat, or the bite of any harmless animal. Terror alone would aggravate the danger. In the case of a cat, not the claws themselves, but the foreign and noxious particles which cling to the claws may injure the blood. The ill effects, therefore, in "S.'s" little girl were not a proof of a venomous snake, though even the common saliva of a non-venomous one may be acrid or injurious in the poor blood of a feeble person.

Though snakes may be broadly divided into the venomous and non-venomous, the teeth are largely concerned in classification, and as regards dentition, only the true viperine snakes (among which the whole rattlesnake family is included), possess the solitary pair of moveable fangs, "solitary" implying the absence of simple teeth in the upper jaw. In replying to "Ouachita," Sept. 20, last, I inadvertently said, "if he found four *rows* of upper teeth, he might be sure the snake was harmless." I ought to have added, "except in the *Elaps*," the character of the *Elapidæ* being a fixed fang and a *few* simple teeth behind the fang. Of this group are the Indian cobras. North America has no true vipers, South America only two, as yet known; all the most dangerous of the western serpents belong to the rattlesnake tribe, *Crotalidæ*.

"Ouachita" suggested that "constrictors and venomous snakes" might distinguish the two great classes; but a very large number of the smaller harmless snakes seize their prey and swallow it quickly, never once loosening their hold of it, and therefore have no need to kill it by constriction. Constrictors proper, are for the most part the largest and most powerful snakes, boas, etc., though several smaller families are truly constrictors, such as the American racers, and the little *Etaphis* of the eastern continent. And it is remarkable that some small snakes, though not true constrictors, that is, with an especial organization to enable them to constrict, make use of their coils to control unmanageable prey. This I have seen on several occasions while watching snakes feeding. In the small Brazilian *Heterodon d'orbignii*, which feeds on frogs, I once noticed the snake trying to swallow an inconveniently large frog, when *Heterodon* brought its coils to its assistance, to—as it were—help hold down its prey while it got a more convenient hold. *Xenodon* also does this, and so does the English common snake. It never occurs to them to kill the prey by constriction, their organization and instincts not dictating such a process, but being sufficient in case of need to help them out of a difficulty. Indeed the more we watch a snake and study its habits, the more we find in it to excite our wonder—it may even be our admiration—considering how the lack of limbs is compensated by the extraordinary powers it possesses to enable it to exist at all. Many readers of FOREST AND STREAM enjoy such opportunities for observation on their own farms and fields, others on visiting zoological gardens can witness and study snakes, and should they happen to be feeding at such a time, the observer can not fail to be interested and amazed at an organization so wonderfully adapted to their needs.

Before taking leave of the *Heterodons*, I may mention a case of the death-feigning, for which these curious little snakes are celebrated, and lately came to my knowledge. A lady in Florida was sitting reading on the piazza of her dwelling, when her son brought home and laid down near her a "spreading adder." The ladies of the family objecting to such company, he gave the snake a kick and sent it several yards on to a gravel path. The lady, as she sat reading, glanced occasionally at the snake, which for a long while lay on its back so motionless that she thought it was dead. But by and by the reptile almost imperceptibly—so cautious and gradual were its movements—got itself round to its natural position, and then by very slow and almost invisible degrees, crawled away till it reached a fence, when, like a shot, it was through and away out of sight. The lady thinks nearly two hours passed while the *Heterodon* was thus stealthily creeping off. The actions had certainly the suspicion of trickery; but, then it is possible that the snake was stunned and was thus slowly recovering from the injury. These *Heterodons* are worth studying.

A BLACK PIN IN A HAWK'S MAW.—Dr. A. K. Fisher, of Sing Sing, N. Y., one of the superintendents of bird migration, made a strange discovery last week. A fine specimen of the red-shouldered hawk (*Buteo lineatus*) was brought him by a friend. When he proceeded to skin the bird he was much surprised to find it in such good condition, and from this led to examine quite minutely the contents of its maw. Here he found portions of a frog, a salamander, a shrew, some feathers of a bird, and a bird's head entire. But what was the Doctor's astonishment to find a black pin, such a pin as ladies use in pinning their dresses. This was something new in a naturalist's experience, though had it been found in the crop of a domestic fowl the thing would not have seemed so strange. But now had the creature devoured a lady and found it hard to digest some of her pins? Here, however, the Doctor's mind was soon set at rest. His friend told him that in baiting the trap to catch the hawk a dead snowbird had been used. "And that to make the bait look natural a black pin had been thrust down through the back of the head and through the neck into the body to make the bait hold its head up." This pin the hawk, in his voracity, had swallowed. But perhaps a more singular thing is, that after the hawk had been caught by one claw in the trap, he should still have persisted in eating the bird, and swallowed the head whole.—A. H. G. (Scarborough, N. Y.).

BREEDING OF SQUIRRELS.—*Editor Forest and Stream:* I see in the last two FOREST AND STREAMS statements of squirrels breeding in autumn as if it were something unusual. When I was a boy I shot gray squirrels with an old Kentucky rifle full-stocked (what was left of it), loose in the lock, loose all over, and ran ninety to the pound. But it would put its bullet where you aimed it every time, and many a squirrel have I dropped with a hole through its head. That was in Ohio, and the point is, that we expected to find young squirrels in September about as much as in June; and many a young squirrel have I shot in the hazy days of the delightful Indian summer, when the hickories were loaded with nuts, and the sound of the dropping hulls and shells told too plainly where the nimble rodents were enjoying their breakfasts. It was an accepted fact that gray squirrels breed twice a year, and I was surprised when I saw that it was new to some of your correspondents.—S.

ADIRONDACK WINTER NOTES.—Thus far our winter has been favorable to the game. Deer are still roaming as they please. Partridges can get good feed, and as everything indicates an early spring, I think the prospects good for the season of 1884. I have seen no signs of the larger animals called wild; only one lynx crossed the clearing two weeks ago. No signs of bear nor cat, and no signs of wolves for the last five seasons. We have great numbers of the winter birds about the buildings; crossbills, snow buntings, finches, bluejays, and a little bird of the size and plumage of the goldfinch, who also has his note. I have not thought best to kill one to decide who he is, as I am too glad to see him about the door. Have heard only one owl during the winter; one of the small ones who came out before our last thaw.—A. R. FULLER (Meacham Lake, Adirondacks, February, 1884).

BUTCHER'S WORK.—St. Albans, Vt., Feb. 11.—Some weeks ago, I found in a thicket what appeared to be the remains of a finch. The bird was suspended by the neck in a crotch, and the back of its head and its brain were wanting. I thought it might possibly be the work of the great northern shrike. At any rate, the bird was hung up in a very butcher-like manner. I have known several instances of the shrike's breeding in this vicinity.—J. [No doubt the work of a shrike.]

QUAIL IN CONFINEMENT.—Mr. J. B. Battelle, of Toledo, O., has received from Tennessee a number of quail. He will domesticate them and, we understand, try to breed the birds in confinement.

THE ENGLISH SPARROW.

THE following circular concerning the proposed investigation of the English sparrow explains itself:

The American Ornithologists' Union, an organization resembling the British association of similar name, and including in its active membership the most prominent ornithologists of the United States and Canada, purposes, among other objects already engaging its attention, to determine as nearly as possible the true status in America of the European house-sparrow (*Passer domesticus*), commonly known as the English sparrow, in so far as the relations of this bird to mankind are concerned. The Union hopes to secure through the solicited testimony of others, as well as the personal observations of its members, the facts necessary to settle the question of the eligibility or ineligibility of this sparrow as a naturalized resident of this country.

The question of the European house-sparrow in America is regarded as one of great economic consequence, to be determined primarily by ascertaining whether this bird be, upon the whole, directly or indirectly, injurious or beneficial to agriculture and horticulture. Its economic relations depend directly and mainly upon the nature of its food; indirectly upon the effect, if any, which its presence may have on useful native birds and beneficial insects.

The accompanying formula of questions is respectfully submitted to the attention of those who may be able and willing to record statements of positive fact and value derived from their own experience. Concise and unquestionable answers returned to the undersigned on inclosed blank, or otherwise, or communicated to any member of the committee will be appreciated and prove of high value among the data upon which it is hoped that this vexed question may be set at rest. The evidence thus obtained will be carefully considered by the committee in preparing its report to the council of the Union, and a digest of the same, with recommendations, if any, will be submitted by the council to the mature judgment of the Union at its next annual meeting.

The following named active members of the Union were at the first congress appointed a committee to investigate and report upon this subject:

Dr. J. B. Holder, of New York, Chairman; Mr. Eugene B. Bicknell, of New York; Mr. H. A. Purdie, of Boston, Mass.; Mr. Nathan Clifford Brown, of Portland, Me.; Mr. Montague Chamberlain, of St. John, New Brunswick; the committee having the power of increasing its membership at its discretion. Dr. J. B. Holder, Chairman,

(American Museum of Natural History, Central Park, N. Y. City.)
New York, February 2, 1884.

The appended list of questions show very clearly the character of the information desired:

1. Is the European house sparrow (*Passer domesticus*) known in your neighborhood, and if so, about when did it appear?
2. Is your neighborhood city, suburbs or country?
3. Is this sparrow abundant?
4. Is it increasing in numbers?
5. How many broods and young, yearly, to a pair?
6. Is this sparrow protected by law?
7. Is it artificially fed and housed?
8. Does it molest, drive away or diminish the numbers of native birds?
9. If so, what species?
10. Does this sparrow injure shade, fruit or ornamental trees?
11. Does it attack or injure garden fruits and vegetables?
12. Does it injure grain crops?
13. Is it an insect eater or a seed eater?
14. What insects, if any, are chiefly eaten by this sparrow?
15. What is the principal food it carries to its young?
16. What insects, if any, are carried by it to its young?
17. Does the food of the old bird vary with the seasons, and if so, in what way?
18. Does the food of its young vary, and if so, how?
19. If any insects are eaten, are they beneficial or injurious species?
20. Does this sparrow eat the larvæ of the vapourer moth (*Orgyia leucostigma*)?
21. Does it eat ichneumon flies?
22. Do you determine the nature of this bird's food and that furnished by it to its young by inference, direct observation or dissection?
23. Have any injurious insects been exterminated or materially lessened in numbers by this sparrow?
24. Have any injurious insects increased in numbers, or appeared where unknown before, in consequence of the destruction of other insects by this sparrow?
25. Have these sparrows in your neighborhood been destroyed systematically or otherwise, and if so, by what means?
26. What bounty, if any, has been offered for their destruction?
27. What is the general sentiment or balance of public opinion respecting the European house sparrow in your locality?
28. On the whole, in your judgment, is this sparrow an eligible or ineligible species in this country?

FUR QUOTATIONS.

THE following prices, for prime skins only, according to size, color and quality, as realized by the New York commission merchants, have been furnished by Messrs. Wm. Macnaughtan's Sons, commission merchants, No. 3 Howard street, New York:

Antelope—North America, raw, ₱ lb	$ 30@ 35
Dressed, as to quality, ₱ lb	1 00@ 1 25
Deer—Florida, raw, ₱ lb	30@ 40
Rocky Mountain, raw, ₱ lb	30@ 35
Pacific Coast, raw, ₱ lb	25@ 30
Elk—Pacific Coast hides, ₱ lb	20@ 30
Western skins, ₱ lb	25@ 30
Dressed, as to quality, ₱ lb	80@ 1 00
Mountain Deer—Western, ₱ lb	20@ 25
Reindeer—American, raw, ₱ lb	30@ 35
Dressed, as to quality	80@ 1 00
Beaver—Labrador, large	8 00@10 00
Lake Superior and Canada, large	6 00@ 8 00
Upper Missouri, large	5 00@ 7 00
Southern, large	3 00@ 5 00
Badger—American, large and full furred, each	80@ 1 00
Bear—Hudson's Bay, black, large, each	15 00@30 00
United States, brown, large, each	7 00@10 00
Southern U. S., black, large, each	7 00@10 00
Cubs from ½ to ⅔ of the above.	
Buffalo robes, in bulk	8 00@10 00
Buckskin—Western, ₱ lb	1 00@ 1 25
Pacific Coast, ₱ lb	1 25@ 1 75
Cat—Wild, each	40@ 60
House, each	10@ 30
Ermine and white weasel	5@ 10
Fisher—Dark cased	9 00@12 00
Pale	7 00@10 00
Reddish	5 00@ 8 00
Fox—Red, United States, each	1 40@ 1 60
Red, Territories	1 60@ 1 80
Cross, ordinary	3 00@ 6 00
Gray, United States	1 00@ 1 10
Kitt, North America	50@ 60
Silver, North America	25 00@50 00
Lynx—Canada	4 00@ 5 00
Minnesota	3 00@ 4 00
Marten—Dark	2 00@ 3 00
Pale	1 25@ 1 75
Mink—Pale, Southern U. S.	40@ 50
Pale, Western United States	60@ 70
Dark, Minnesota	75@ 1 00
Dark, New England	1 00@ 1 25
Dark, Quebec and Halifax	1 25@ 1 75
Musquash—Spring, Canada and Eastern	20@ 22
Spring, Western United States	14@ 18
Spring, Southern United States	10@ 12
Fall, Canada and Eastern	16@ 18
Fall, Western United States	10@ 14
Fall, Southern United States	8@ 10
Opossum—Cased, Ohio	30@ 40
Southern United States and common	10@ 15
Otter—Labrador, cased	10 00@12 00
Northern United States	7 00@10 00
Western United States	5 00@ 7 00
Southern United States	2 00@ 5 00
Raccoon—Michigan	90@ 1 10
Western United States	70@ 90
Southern United States	40@ 60
Rabbit—Raw, America	2@ 3
Skunk—Black cased, America	1 20@ 1 30
Short stripe, America	70@ 80
Long stripe, America	30@ 40
White, America	10@ 20
Territory, long stripe	30@ 40
Wolf—Large, each	3 00@ 5 00
Timber	1 50@ 2 00
Prairie	1 25@ 1 50
Wolverine—North America	3 00@ 5 00

Game Bag and Gun.

THE LAW AGAINST SPRING SHOOTING.

Editor Forest and Stream:

The long period of murky weather we have lately had started the woodcock and snipe to migrate from the south, and I have heard of quite a number having dropped in about Philadelphia and the near counties of New Jersey. The cold snap coming on us at the present time, although not severe, will cause our early visitors to seek springy spots as the ground has hardened again, and in ordinary places cannot be punctured by the bill of either woodcock or snipe.

Friends who were near Absecom, N. J., fitting up a new club house, last week, told me they started a few Wilson's snipe on the fresh meadows bordering the salt marshes near that place, and I have every reason to believe their report. Of course the bulk of birds will delay their coming until the weather is fairly settled and the frost is entirely out of the ground, but I think we will have poor snipe shooting this spring with us, for the reason that the birds will not in any great numbers migrate our way, but be attracted west of us. The vast extent of country inundated by the late overflow of western rivers will create most excellent feeding grounds when the waters have subsided to their normal condition, and the snipe will most surely seek them, and the migrations of the great body of birds will be to the west of the Alleghenies Mountains on their way north. These inundated and, as it were, irrigated regions, will produce during the coming summer a rank and heavy growth of vegetation, and cause the grounds to be unfavorable for snipe, and we no doubt will be benefited by the birds returning to the south more directly passing our way on the Atlantic coast, thus allowing us the better to make their acquaintance.

Sprigtail ducks are plentiful in our bay and river. Mr. Milburn has returned from a trip to-day with an excellent showing. On both the New Jersey and Delaware State shores of the Delaware, the flats and marshes at low water are thronged with marsh ducks of all the varieties. The snow geese still remain in their favorite locality below Bombay Hook, and use the marshes there regularly. A few have been seen as high up as Port Penn, and a pair killed there. An albino mallard, or black duck—it is difficult to decide which—was shot near Chester, Pa., by a local gunner, who has brought it to John Krider, Philadelphia, for mounting.

We are all hoping the States of New York, New Jersey and Delaware will pass a similar law relative to the web-footed game as our State did at the last session of its Legislature, and that we will soon have throughout the entire land the protection of all game in the spring. As yet the law applying to duck shooting in our State does not go into effect on the Delawnre, but applies only to inland waters, owing to the fact that our neighboring State across the river has not adopted a similar one. As soon as New Jersey passes such an act there will be perfect protection for fowl in the spring; or, I should say, there will be a law providing for the protection of wildfowl, if it is ever carried into effect. We have, however, enough faith in the West Jersey Game Protective Association to believe it will see to the enforcement of all laws which come under its jurisdiction.

Spring appears to be near upon us, already shad fishermen are overhauling their gilling nets, and from talks with the weatherwise ones among them we are expected to have an early opening; but "one swallow does not make a summer."

Philadelphia, Feb. 16. Homo.

UNIFORM NEW ENGLAND LAWS.

WE give below the draft of the proposed uniform game law, which was adopted at Boston by a convention of representatives from the New England States. The movement is due to the efforts of the Massachusetts Fish and Game Protective Association, and at the meeting the following Commissioners were present: Maine—Hon. E. M. Stillwell, Henry O. Stanley, J. H. Kimball; New Hampshire—E. B. Hodges, Edward Spaulding, Luther Hayes; Vermont—Hiram Cutting, Herbert Brainerd; Massachusetts—E. A. Brackett, Hon. E. A. Lathrop, Prof. H. W. Putnam; Rhode Island—Alfred A. Reed, John H. Borden, Newton Dexter; Connecticut—Dr. W. M. Hudson, Robert G. Pike, George N. Woodruff. Among the invited guests were His Excellency Gov. Robinson, Hon. George A. Bruce, president of the Senate; Charles V. Whitten, chairman of the Board of Aldermen; Rev. E. A. Horton, Hon. Chas. Levi Woodbury, Augustus Whittemore, president Boston Merchants' Association, and Wallace F. Robinson, president Produce Exchange.

The provisions adopted were as follows:

Section 1. It shall be unlawful to wilfully take or kill any woodcock, or ruffed grouse, commonly called partridge, or any quail, between Jan. 1 and Sept. 15 following, within the limits of this commonwealth.

Sec. 2. It shall be unlawful to buy, sell, offer for sale or have in possession any woodcock, or any ruffed grouse, commonly called partridge, or any quail, between Jan. 1 and Sept. 15 following, wherever or whenever the birds aforesaid may have been taken or killed.

Sec. 3. It shall be unlawful to wilfully take or kill any wood or summer duck, black-duck or teal between April 1 and Sept. 1 following.

Sec. 4. It shall be unlawful to take or kill any plover, snipe, sandpiper, rail or any of the so-called marsh, beach or shore birds, except Wilson snipe, between April 1 and July 1 following.

Sec. 5. It shall be unlawful to wilfully take or kill any pinnated grouse, commonly called prairie chicken or heath hen, between Jan. 1 and Sept. 15 following.

Sec. 6. It shall be unlawful to wilfully take or kill any wild or passenger pigeon, Carolina or turtle dove, herring gull, tern, sea swallow, or mackerel gull, between April 1 and Sept. 1.

Sec. 7. Any person violating any of the provisions of the preceding sections of this chapter shall be punished by a fine of $20 for every bird taken, killed, bought, sold, had in possession or offered for sale in violation of the provisions of this act.

Sec. 8. Whoever takes or kills any domesticated bird not named in the preceding sections, except birds of prey, crows, crow blackbirds, English sparrows, jays, wild geese, herons, bitterns, and such fresh water and sea fowl as are not named in the preceding sections, or wilfully destroys, disturbs, or takes a nest of eggs of any undomesticated birds, except birds of prey, crows, crow blackbirds, English sparrows and jays, shall be punished by a fine of $10 for every such offense; provided any person above the age of sixteen years having a certificate from the board of commissioners of inland fisheries and game, to the effect that said person is engaged in the scientific study of ornithology, may take the nest or eggs of, or at any season of the year may take or kill any undomesticated birds, except those named in section 1.

Sec. 9. Whoever hunts, chases or kills a deer within the counties of Plymouth or Barnstable between Dec. 1 and Nov. 1 following, shall be punished by a fine of $100 for every such offense; and whoever in said counties at any times hunts or chases a deer with a hound or with any dog weighing more than 25 pounds, or hunts or kills a deer in any pond or river or within 100 yards thereof, shall be punished by a fine of $100 for every such offense.

Sec. 10. Whoever takes or kills a gray squirrel, hare or rabbit between March 1 and Sept. 15 following, shall be punished by a fine of $10 for every such offense.

Sec. 11. Whoever at any season of the year takes, kills or destroys a game bird, hare or rabbit by means of a trap, snare, net or springs, or by the use of a ferret, or whoever for the purpose of taking or killing a game bird, hare or rabbit, constructs or sets any trap, snare, net or springs, or uses a ferret, or whoever shoots at or kills any wild fowl or any of the so-called shore, marsh or beach birds, with or by the use of a battery, swivel or pivot gun, or by the use of a torch, jack or artificial light, shall be punished by a fine of $20 for every such offense.

Sec. 12. The possession of any deer, or of any of the birds or animals mentioned as protected in sections 3, 4, 5, 6, 8 and 10 of this chapter, during the time in which the killing or taking of the same is forbidden, shall be prima facie evidence of the unlawful killing of the same.

Sec. 13. The commissioners of inland fisheries shall have authority to act as game commissioners also and their authority shall extend to the protection and preservation of game birds and animals in like manner as to fishes.

Sec. 14. It shall be the duty of every officer qualified to serve criminal processes to arrest without warrant any person whom they shall find violating any of the provisions of this act, and bring such offender before a magistrate. Any officer neglecting or refusing diligently to enforce the provisions of this act, upon proper information and complaint, shall be punished by fine or imprisonment, or both.

Sec. 15. Any justice or magistrate on receiving proof, or having reasonable cause for believing in the concealment of any game mentioned in this act during the time the possession of such game is prohibited, shall issue his search warrant, and cause search to be made in any market, store or other building, except dwelling houses, or in any boat, car or vehicle of any description whatever; and for that end may cause any apartment, chest, locker, box, crate, basket or package of whatever nature to be broken open and the contents examined.

Sec. 16. All fines accruing under this act shall be paid one-half to the complainant and one-half to the city or town wherein the offense is committed.

Sec. 17. Chap. 92 of the Public Statutes, chap. 199 of the acts of 1882, chap. 169 of the acts of 1883, and all acts and parts of acts inconsistent herewith, are hereby repealed.

Secs. 4, 7, 9 and 13 were recommitted to the Massachusetts Fish and Game Association for amendment; the rest were adopted for presenting to the Legislatures of the New England States as early as possible.

The matter of fish laws was taken up, and it was voted that the closed time for lobsters should be from Aug. 15 to Sept. 15, and no lobster less than twelve inches should be sold.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

I notice, in your issue of Jan. 24, an article on the "Performance of Shotguns," signed "Backwoods," and what he says in relation to the effectiveness of the "muzzleloader" over the new fangled "breechloader," corresponds with my experience exactly.

I own a muzzleloader that was bought in New York city in 1849, for the sum of $60, and a better shooter no man ever carried. I have killed a single dove seventy yards with No. 7 shot, and many squirrels in the tops of the tallest cypress trees in our swamps, have fallen victims of its unfailing power. The gentleman from whom my father bought it (in 1855) told me that he had killed a buck with it 125 yards, using common buckshot for his load. The charge was one dram of powder and thirteen buckshot. Now where is the breechloader that can make such a record as this?

The barrels are worn as thin as a knife-blade at the muzzle, and within the past year it has, for the first time, shown signs of failing. It is a 13-bore, 32-inch, weighs nine pounds. Can you suggest a plan whereby I can thoroughly clean and resmooth the barrels? If this could be done, I think it will shoot as good as ever.

What I want, is a gun that I can kill a quail or dove with No. 8 shot, sixty yards, or seventy if need be, and a breech loader, chokebored or not, will not do it. At least I have never seen one that would, although my experience is limited. Ogeechee.

Wadley, Ga.

Editor Forest and Stream:

I notice in your issue of Jan. 24 an inquiry as to the respective shooting qualities of the muzzle and breechloading gun. I thought that question had been unanimously, so far as shotguns were concerned, settled in favor of the breech loader, but I see that away down in Virginia there is yet a "doubting Thomas" on this subject. In answer to his inquiry as to the proper performance of a good breechloader I would say that at forty yards, with 1¼ ounces of No. 6 shot (Tatham's 400 to the ounce) and 5 drams of powder, a good 10-gauge gun should put from 375 to 440 pellets in a 30-inch circle, with penetration equal, if not superior, to any muzzleloader it has ever been my fortune to experiment with. I do not believe that there ever was a muzzleloader made, no matter how carefully bored, that would give the same pattern and penetration as a chokebored breechloader. I do believe, however, that a greater quantity of powder must be used in the breechloader to get equal results in penetration with a muzzleloader, in guns of equal bore and the same weight of shot. Oct.

Editor Forest and Stream:

I have made some tests and trials that have been both satisfactory and beneficial to myself. Last fall, before the opening of the season, I purchased an entire new outfit. The gun was the latest improved arm of one of our most prominent American makers; a .12-30-7½ modified choke.

The pattern of this gun, as it came from the maker, was

very good, but did not quite suit me, so I set me about to improve it. As every one knows, the only means of securing a good pattern is by repeated trials at target, at different distances, different amounts and kinds of ammunition and different manners of loading shells. Never having seen a target for such practice, I made my own. In the center of a large sheet of paper, I drew a two-inch circle and colored it, then circle after circle, an inch between, until the diameter of the outside circle reached 24 inches. The distances shot at the above target were 45, 50 and 60 yards.

After repeated trials, I found the proper charge to be 3¼ drams Orange ducking powder to 1⅛ ounces of No. 8 Le Roy shot, with two best pink-edge wads resting firmly on powder, and a light cardboard wad on shot.

With the above charge, my best patterns at 45 yards (strict measurement) were 163, 165 and 167 pellets within the 24-inch circle, placing 2, 3 and 4 pellets within the 2-inch center.

My experiments with greater charges at same target, but at greater distances, were equally as good.

I also find that this gun will shoot B, BB and buckshot sufficiently well for any purpose. I should be pleased to hear the result of such trials as others may have made.

PENNSYLVANIA. FARMER.

Editor Forest and Stream:

In FOREST AND STREAM of Feb. 7, a correspondent from Vermont says, that in his experience the muzzleloader makes better pattern and penetration at long range than the breechloader. My experience is just the opposite, and decidedly in favor of the breechloader. I have not owned one of the former for a number of years, but of the latter, I have had and tried at targets as many, probably, as any one in this State, and in every instance I have beaten the muzzleloaders.

There is a heavy muzzleloader of 6-gauge and 12 pounds weight owned near here; this gun was said to be a wonderful shooter. One day I shot a 9½ pounds, 10-gauge Daly breechloader against it, each gun being loaded with 1¼ ounces shot. The big gun was so badly beaten at the first trial that its owner refused to continue shooting, saying that his gun had fallen off very much in its shooting qualities, although before the trial he was very confident of success.

Nearly all the guns in this vicinity are muzzleloaders, and if the statements of the owners can be relied upon, they (like the wonderful Zulu gun advertised in some of the country papers, and sold for the high price of $5.00) will kill at any distance from 5 to 150 yards. The shooters about here, with few exceptions, use very large shot for all kinds of game, and occasionally kill a hawk or crow at 80 or 90 yards, and without measuring the distance, they afterward declare that their guns are good for twenty-five rods every time. I saw the owner of one of these guns shoot a squirrel not over forty yards distant, and he afterward insisted that he killed it at fifteen rods.

Your correspondent speaks of shooting foxes. I think I kill as many of them as any one, considering the number of shots, so far this winter, using a 10-gauge 9-pound 10-ounce Scott premier hammerless. I have killed nine foxes—every one I have shot at—and in only one instance have used the second barrel. The distances have been from twenty-five to seventy yards. This gun, however, is the best shooting breechloader, for pattern and penetration, that I have ever owned. At forty yards, with 4½ drams powder and 1⅛ ounces Tatham's No. 3 chilled shot, it puts from sixty-five to seventy-two pellets in a 12-inch square.

If your correspondent ever indulges in trap-shooting, and will attend one of the shooting matches of the Boston Gun Club, on their grounds at Wellington, Mass., I will meet him there and shoot my hammerless Scott breechloader against the best muzzleloader he can find in the Green Mountain State, at any reasonable number of straight away clay-pigeons, at distances from twenty to forty yards rise, for fun or money, each gun to be limited to 1¼ ounces shot. Should he not wish to shoot himself, this is open to any resident of his or this State, barring professionals.

C. M. STARK.

DUNBARTON, N. H., Feb. 11, 1884.

Editor Forest and Stream:

I am glad to see in your last issue, of the 7th inst., that several of your correspondents are as anxious as myself to know practically what our modern breechloading shotguns will do.

Now, I am well aware that there are published tables of records of some guns of particular manufacture, and am equally aware of like tables published by some former writers on such subjects, "Frank Forester" for instance. Yet of all the guns I have handled (and they have been no inconsiderable number) I have shot very few indeed that came up to this theoretical scratch, so to speak, and of breechloaders, in my experience, not one in twenty will do it.

Like your correspondent, "Buckeye," I have been much interested in the discussion of hunting rifles (I do not claim to be a rifleman, yet I have used them just enough, as "the boys" say, "to keep my hand in"). My favorite weapon from my boyhood up has been the shotgun. I may here remark that the rapid extermination of all the larger carnivora and dangerous animals, except in the remotest localities, renders the pursuit of field sports one confined almost exclusively to that commonly pursued with the shotgun.

Now, while we are all striving to attain the same end—the obtaining of the best and most suitable arm for a given purpose—let us by all means have the record and testimony of practical performance.

I can add my mite and affirmation to the truth of a remark made in that admirable work, "The Sportsmen's Gazetteer" by Mr. Hallock, "that, after a most crucial test, the advocates of the chokebore are not satisfied as to results." No, gentlemen; many of the acquaintances of your correspondent are not satisfied. It may be advocated as an advancement to trade and the demands of fashion, and, I may add, that unexplainable feature in human character that is constantly demanding something new; but many of us demand also a mixture of practical utility with the new, at least in the BACKWOODS.

BEVERLY, West Virginia.

[The comparison of the muzzleloader and the breechloader is a dead issue. The muzzleloader is the gun of the past; the breechloader the arm of the present and future. More to the point than a discussion of muzzle vs. breech would be relations of experiments and tests in loading to secure pattern and penetration. There is no question of the breechloader's good qualities. Ineffectual results very probably follow from incorrect loading. We think that some hints on this point would prove of real service to a vast number of sportsmen, and shall be glad to have communications on the subject.]

NEW YORK ASSOCIATION.—The parlor at Pinard's was occupied last Monday evening by the members of the New York Association for the Protection of Game. There was a large attendance, among others Vice-President B. T. Ludington, Fayette S. Giles, Wisner H. Townsend, Wakeman Holberton, J. Harson Rhoades, Henry T. Carey, Thomas N. Cuthbert and Henry N. Munn. Messrs. David W. Judd, W. W. Heaton and W. B. Dickerman were elected to membership and the resignation of Eugene Schieffelin was accepted. A letter from Seth Green instructed the members of the association to distinguish the sex of brook trout. Mr. Fayette S. Giles was directed, by vote of the association, to attend the meeting at Delmonico's on the subject of protecting the Adirondack forests. Mr. J. H. Goodwin, Jr., the official game protector for this city, reported upon his doings in repressing the violations of the game laws. One member said that to his knowledge quail and partridge had been served at the Manhattan Club within the past few days. Another member said he had seen quail served at a Fulton street restaurant recently and within the close season. A third member said that on the previous evening he had seen over fifty quail served at a regular table d'hôte dinner. The counsel of the board was instructed to make an example of some prominent club or restaurant instead of continuing his efforts to street hucksters and minor dealers. Mr. Godwin said that his main trouble now was with striped bass, which were sent to the market from a distance, and with lobsters which were brought to market while entirely under weight. Mr. Munn spoke earnestly in favor of so amending the game laws as to prohibit the shipping through the State of any game when out of season. It was not enough to make it unlawful to kill birds in this State. Something should be done to prevent this city and Boston from being open markets for the disposition of the out-of-season game. Mr. Munn also called attention to the trapping of game, especially on Long Island, where the brakemen and others on the railroads bought the birds and sold them in the city. A resolution was passed asking the railroad authorities to check the practice.

WILDFOWL ON THE PACIFIC COAST.—East Portland, Oregon, Feb. 10.—What has become of the canvas-back this season? I have been living in Oregon twenty-seven years, and always found plenty of them on the Columbia bottoms from November to April. Have killed from fifty to eighty several times in one hunt. They are also very scarce in California this season. The climate is dryer than I ever knew it at this time of the year. There seems to be the usual flight of mallard, widgeon and other ducks, but no canvas to amount to anything. What few come, leave in a few days. The lakes are thick with what the Indians call wappatoo, about like small potatoes, which are very sweet and have always been favorite food for canvas-back ducks. I can not account for it, unless they have taken this season some other direction for their feeding ground. The geese this season, which always are so plentiful during November, took some other direction in their flight from the north last fall. I wish some of your subscribers will please state through your columns if there is the same scarcity of birds in their favorite localities.—T. H. P.

FISHER'S ISLAND.—A consignment of 130 quail has been received by the secretary of Fisher's Island Club, to be put out on their island as soon as the weather allows it. More birds are on the way and the club has contracted for six hundred birds in all, intending to turn loose about this same number every spring. These quail are western birds, large and healthy, and can be inspected at the residence of MAX WENZEL, 89 Fourth street, Hoboken, N. J. A *Herald* reporter announces that the Fisher's Island fresh-water ponds "are to be stocked with fish, partly to afford angling to the club men, but mainly to attract waterfowl." Wherein the said reporter is manifestly muddled.

MEDINA GUN CLUB.—Medina, N. Y.—The Medina Gun Club has been organized by the election of the following officers: President, C. F. Hurd; Vice-President, Fred Mead; Secretary, Harvey L. James, M. D.; Treasurer, A. F. Ellicott; Directors, Aaron Shisler, Frank Barker, A. A. Smith. The object of the association is the enforcement of the laws regarding illegal killing of game out of season and for the mutual benefit and pleasure derived from the meetings of the members. Bi-weekly meetings will be held and glass ball shoots indulged in. The membership now numbers seventeen, which, it is anticipated, will be increased to twenty-five or thirty.

WISCONSIN AND MICHIGAN.—Mr. H. F. Whitcomb, of Milwaukee, general passenger agent of the M. L. S. & W. R. R., will shortly publish a guide and map of Northern Michigan and Wisconsin. The map will be of such detail that it will very materially aid sportsmen to find their ways to the lakes and streams of that charming country.

GEORGIA.—Macon, Ga., Feb. 11.—The recent two weeks of April-like weather has affected our shooting, small bags being the result. Both man and dog suffer in walking and make failures as to numbers. I was out on Saturday with two others and we killed only twenty-one Bob Whites.—J. H. J.

KANSAS.—Morantown, Kan., Feb. 4.—The ground hog saw his shadow on the 2d inst. Robins, crows, ducks, and large numbers of geese have arrived here from Texas. The grass has started in the low grounds, and all nature seems to be rejoicing. Lots of quail and pinnated grouse left over.

BRINDEAU, the famous sporting fop, had a costume for every kind of game that he had shot at. One day, invited to the Duke of Orleans's shooting party, the Duke drew his attention to a hare, suggesting he should fire. "I cannot, monseigneur; I am in my partridge toilet," he replied.

MORICHES BAY.—State Game Protector George W. Whitaker, of Southampton, Long Island, offers fifty dollars reward for such information as will lead to the conviction of any person or persons pursuing wild duck, geese or brant after sunset, or with light or lantern in Moriches Bay.

A man by the name of Taylor, who has a ranch six miles west of the head of Cattle Creek, in Colorado, is building an enclosure, which will contain over 3,000 acres, for the purpose of raising deer and elk for the Eastern market, as curiosities for parks, etc. The fence is to be sixteen feet high. He expects to complete the park by next fall, in time to catch the deer and elk as they come from the mountains. He will leave gates over the trails and is confident he can catch all he wants. Mr. Taylor says young elk or deer will sell readily in the East for $100.

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

Alas! that every one cannot be pleased! Alas! that in rifles, as in everything else, we cannot have in one arm all the elements desirable in a hunting gun, and alas! again, that target rifles, gallery rifles, long-range, short-range, light-ball, heavy-ball, express, non-express, squirrel rifles, tiger guns, elephant rifles, magazine rifles and singleloaders cannot all be "assimilated," and one rifle evolved which will suit for all and for everything, from the smallest to the biggest game, for the house-gallery practice so many like, and the long-range target shooting so many are fond of. Truly, so long as mail lives, tastes will differ, and gun-makers, as well as others, will have their hands full trying to suit each individual taste, so many not being satisfied with a compromise.

The .40-90-300 magazine rifle, first proposed by me to the manufacturers, and mentioned in my letter published by you Sept. 13, 1883, and from which all this discussion has sprung, was proposed as a "compromise gun," to contain as many of the elements desirable in a hunting gun as might be possible in one gun, and to answer the strictures on "breechloaders" contained in the numerous letters of Major Merrill, who, by the way, has not answered the above-mentioned letter. It was not proposed to construct a "bone-breaker" or a "smasher," as there are already enough of such guns now on the market, but to try to construct a gun that would throw a naked bullet in as flat a trajectory as possible, and unite with this quality great killing power, accuracy of shooting, ease of manipulation, rapidity of fire, and safety to the shooter, together with as great a range of game that might be killed by it as might be possible.

The .40-caliber was selected as a "compromise" between heavy and light caliber. Many like to shoot small caliber rifles at target in preference to heavy calibers, while there are, doubtless, many whose only game is that which requires light caliber. For many of these doubtless the .40-caliber is too heavy, as the ball might tear chickens or squirrels too much unless skillfully killed, but to go lower than .40-caliber would be to impair its usefulness at the other end and make it too little effective on the middle class of game. On the other hand it was not thought of as a gun to hunt grizzlies or other dangerous or ferocious game, the hunter who desires such sport being able generally to own more than one rifle or to provide himself with the heavy "bone-breaker" and "paralyzer" necessary for safety to himself in hunting such game. At the same time a gun was sought that would not be wholly non-effective even if by chance one had, for his own safety, to "tackle a grizzly," but that would have the power and number of shots to take care of a cool man in a tight place.

As the original proposer of this gun I am, of course, interested in its success, and all the discussion pro and con. that your paper has contained has been read with much interest. Now that the gun "has been born," and has been tested by so high an authority as Mr. Farrow with such favorable results, let us see what we have:

First—We have a gun whose range of game is greater than that of any .45-caliber rifle, its caliber and ball being small enough for small game and yet its killing power being great enough for elks or buffalo, as witness the favor of the .40-90 Sharps with a great many Western hunters on heavy game, and also witness the success of the .40-caliber military rifle now being experimented with by the British army, whose bore is heavier in foot pounds than the blow of similar rifles of .45-caliber.

Second—we have a gun whose trajectory is as flat as any rifle not especially made as an express—if not fully as flat as those—and one that will obviate the necessity for such close estimation of distances within hunting ranges up to 200 yards. There being but three inches drop at the 200-yard target, when fired with the 100-yard (point blank) sight (Farrow's letter in January 17 number), any game within 200 yards would probably be hit in a deadly spot with the use only of one and that the point blank sight. Or, in other words, we have a rifle whose "dangerous space" has been much prolonged beyond the same space for the general run of .45 or .50 caliber rifles.

Third—We have a gun whose accuracy of fire is as great, if not greater, than that of any other breechloader, one that will shoot where you hold it, and close to the same spot every time without cleaning and with a naked ball. Patched bullets may be used if desired in the same gun for accurate and close target shooting or for special shots in the field. It is true that I have not shot this gun as yet myself, and I therefore am not stating my own experience; but I for one am willing to take Farrow's shooting in preference to my own as a specimen of what the gun can do in the shooting line.

Fourth—We have a magazine gun, which, in spite of the experience of many, is undoubtedly the gun for hunting, and one that contains sufficient ammunition for almost any emergency, and from which shots can be thrown with almost incredible rapidity when necessary. Understand that I—no more than the advocates of the singleloader—do not believe in rapidity of fire as a necessity for the successful hunting and bagging of game. Cool and deliberate shooting from the singleloader will get away with rapid and wild shooting from the magazine gun every time; but times may come, and have come, in the experience of many, when the magazine rifle was a necessity to save one's life, or to bag game badly wounded, but not killed by the first shot, or to assist in the rapid but cool shooting necessary when one wishes to secure meat from a startled herd of elk, when perhaps meat and not fine sport was the question for a hungry crowd depending upon the success of the shooting.

In proper hands the magazine rifle no more conduces to rapid or wild shooting than the singleloader. With skillful hunting one or two shots would probably bag the unsuspicious game, and then the magazine would be at once filled again, to have the full amount in reserve for any emergency, virtually using the gun under such circumstances as a singleloader. In proper hands again no "dead locking" of cartridges in the magazine would ever result; such accidents only showing carelessness and inattention, if not downright stupidity, on the part of those permitting them, the first care of any sportsman, hunter, ranger or soldier being to keep his gun in thoroughly serviceable condition for any and all emergencies.

Fifth—We have a gun whose safety cannot be greatly doubted. It is true that accidents to magazines have happened, but the liability to such accidents has been reduced to a minimum. In this gun the bullet is flattened on the point, not enough to destroy its fine-shooting, but enough to keep the point of the bullet from resting on the primer of the cartridge in front of it in the magazine, and this, with the tight hold of the feeding spring, keeps the shock of the recoil from having any very great liability of producing an explosion in the magazine. Apart from the magazine we have a gun whose breech mechanism is more than amply strong to stand the force of the explosion of the cartridge. Its bolt is held in place by a heavy strut in rear which must break before the bolt can be driven back by any force in the cartridge, and this strut is amply strong to stand any shock to which it may be subjected.

I have the diagram of this mechanism before me, and from it I see that this strut is pivoted on the same screw as that upon which the hammer revolves. It is short and thick and, when the gun is closed, stands leaning slightly from the vertical, and in the right direction to stand the strain—under the rear of the heavy breech block that closes up in rear of the plunger or bolt containing the firing pin. In this this gun differs materially from the Winchester, for example: In the Winchester the whole strain is taken upon a pair of links upon each side of the gun (I have the Winchester diagrams also before me), which links are not in a straight line when the gun is closed, but depend for their stiffness upon their hold upon the pin in the head of the lever; they are held upon this pin by the position of the side plates of the breech frame, these side plates being held in place by screws passing through and through—and should these screws "strip" their threads, or become worn and loose—then the side plates and links may, as they already have done, blow out from the links, slipping off the pin in the lever head and exert side pressure enough to tear off the side plates and then allow the bolt to fly back.

Sixth—We have a gun whose weight and length are not excessive, but with sufficient weight to make the recoil of the 90 grains powder not unpleasant, and with the right length for a "handy" gun, either on foot or horseback, and still have sufficient length for good shooting for the distance required.

Seventh—We have a gun whose ammunition is not bulky or heavy or unreasonably long. Its powder and lead are about as 1 to 3; its bullet is 2½ calibers long, is naked, and has sufficient cannelures to hold lubricant and take the grooves of the rifle properly, and the 300 grains lead has sufficient "staying power" and "remaining velocity" to give a good account of itself at the distances for which it is intended. Being intended for only short or hunting distances proper—say up to 200 or 250 yards—its route, flight, etc., at longer ranges can only be determined after experiment.

It is true we have a "bottle-necked" shell, and this may be objectionable to some; but on the other hand we could not very well have the straight shell of .40-caliber without increasing its length beyond reason, and it also seems to be a fact that the bottle-necked shell gives more force, weight for weight of powder, than the straight shell, while it can be as readily extracted from a clean gun (by which I mean one free from rust or grit, and not one that has not been fired) as the "straight shell," which is not straight at all, but conical.

Having mentioned some of the things we have, let us see what we have not.

First—We have not a light gallery rifle, or one intended for the lightest of game, but it is believed that even this gun could "bark a squirrel" in skillful hands.

Second—We have not a "long-range" target or hunting rifle, but one intended purposely not to be long range, with the 90 powder and

300 lead, but also one perhaps that may be successfully used as such by the adaptation of less powder and more lead, as has already been proposed by me in former letters.

Third—We have not a rifle intended expressly for heavy game shooting, nor as a "bone-braker," "paralyzer," or for grizzlies, tigers or elephants, but a rifle that probably would be able to give a good account of itself even against heavy game, when any emergency arose to make it necessary for the hunter to defend his life.

And generally we have not a gun that is expected to fill all the requirements for a hunting gun against all kinds of game, but a "con promise" that fills the bill for as much as may be for the general hunter or target shot, leaving the specialists either on large or small game, and the long range target or hunting shots to select for themselves from the guns already on the market, or to "evolve" some new gun more suited to their requirements than either this gun or those to be now had elsewhere. And may success attend such "evolution." C. D.

Editor Forest and Stream:

The great length of the shell of course hinders its effective use in rifles like the Winchester or Kennedy, but could not the Spencer be used for that length of cartridge without using too much of the weight and losing too much of the strength, that it would in the Winchester. The only objection to the Spencer is its unhandy manner of loading by withdrawing the spring; now if that could be obviated by merely using an opening like the Winchester, it would, I think, make it the best of actions for the desired .40-90. HAWKEYE.

NORTH GRANVILLE, N. Y.

Editor Forest and Stream:

In September last I provided myself with a Hotchkiss (.45-70), sent it to the factory, had the triggers eased to 3½ pounds pull and put in clean condition generally, and on the 19th of the month started for Southwestern Colorado. I arrived at my son's cattle ranch about the 1st of October. Here I found two friends of the young men who had anticipated my coming and had come over to engage with us in the hunt. They were well skilled. One sported a .40-70 Marlin magazine, and the other a .40-90 (I think a Ballard single breechloader). Of course, I was a "tenderfoot." The glare of the sun so affected my eyes and the high altitude (7,000 feet) my breathing that for a few days I was not of much account. Soon, however, I began to get used to the situation and concluded to venture out, but from long want of experience with a rifle hardly dared then to trust my chances to that weapon. Game, especially deer, was very plenty. I had a good 10-bore, 10½-pound Parker, and cartridges loaded 4½ drams powder and 12 buckshot, 9 to the ounce.

The boys fixed me upon a gentle old mare (which was wonderfully corpulent with grass, and was nursing a four-months colt), the first time I had bestraddle of a horse in nineteen years. Two of the boys, also mounted, started off at the same time at right angles to my line of hunt, and left me to climb a mountain to a plateau about a mile away. On reaching the plateau I hunted around among the scrub oaks for some time without success, and finally concluded I would turn back. I had not proceeded on the back track far when, like a cotton-tail, up jumped a deer not forty yards, running straight away. I leveled the gun, got sight just below the flag and blazed away. The old mare may have dodged a little, but the first thing I knew I was wallowing in the brush, heels up, and a confusion of horse's feet and stirrup straps was disappearing among the scrub oaks. The fact was the old mare had taken in her dimensions to that degree that the cinches were all slack, and bearing a little harder on the off stirrup the saddle turned with me in getting up, adjusting my torn corduroys, and getting my gun in shape, I attempted to trail the mare, but soon lost track. My only course appeared to be to go back and report. I could see nothing but the destruction of the mare and saddle. On reaching the foot of the mountain I met my son and the man who had started with him at the time I did. We returned. I mounted on my son's horse, and in five minutes after getting the track the mare was found quietly picking the grass, without a scratch and nothing broken but one stirrup strap. Of course the saddle, lariats, etc., hung suspended from the emaciated belly of the beast. The deer was also as easily found dead not over fifty yards from where I last saw it. This was the only deer I killed with the shotgun.

I saw so many deer out of range of shot I concluded to go into practice with my Hotchkiss. The first shot I fired from it was at a hawk sitting on a tall pine 130 yards away. Standing on one knee and resting my elbow on the other, I let loose, and the hawk came tumbling down through the branches dead. The shot was a dead center.

The next day, going out with my .40-70 friend, he pointed out to me a large buck lying on an opposite hillside a distance of 80 yards. He gave me the shot. The ball struck in the throat at the point of the jaw, and passed up through the opposite side of the head, tearing out the eye. The next day I concluded to try it, as the fellow went to get married, "afoot and alone." On hunting around a while, I struck fresh tracks in the mud, and on ascending a slight rise, I looked up and before me saw the head of a deer, with ears erect and eyes bulged out from the stand point. I stopped a little, ran to the top of the rise and saw an old doe taking rather a wide circuit 80 yards off, while the tails of two well-grown fawns could be seen bobbing up closer under the hill. I opened fire and gave the old doe two shots, running to the right, when she tacked about and I got in three shots, running to the left when she dropped. I had hit her every time, and each shot was a fatal one. From this time my exhibition of nerve was not so good, scoring many misses, and I must say many good hits considering my long years of inexperience. Five of us in eight days hung up 36 deer, 1 grizzly (silver tip), 1 cinnamon, 2 turkeys and a number of sedge hens, prairie chickens, grouse, jack rabbits, etc., with little hunting, the deer sometimes running within two rods of the cabin door.

Let me now introduce our friend of the .40-90 R. B., who proved the angel of Leadville in the winter of 1878. That year the rush was great to that place, and winter setting in early, found the 6,000 or 8,000 inhabitants with little meat. In their distress R. B. descended on the town with a burro train of thirty asses at a time, loaded with elk. During the winter, he assured me, he killed with his own Sharps rifle 161 elk and many deer, and marketed them in Leadville. He informed me that in his eight years' experience as a Rocky Mountain hunter, he had owned several good guns, but his .40-90 was the strongest shooting gun he had ever seen; and it required the least adjusting of sights. He almost always made his own bullets and reloaded his shells. He assured me that lead alone would upset to about the form of an ordinary haystack and generally turn over, but that with 1-14 tin and well swaged, the balls would go as straight as a gimlet, and the trajectory was very small up to 300 yards, while with his habit of eyeing his sights his point blank was about 125 yards. He got his .40-90 in 1882; and that fall he killed the first seventeen deer he shot at without shooting a second shot at any one of them. While with us, he let us do the most of the shooting, and busied himself about the ranch. During my stay of five weeks he only shot six deer, but they were scored at consecutive shots, and the nearest he came to a miss was when he broke the back of one at 150 yards after sunset.

He thought we were killing too many deer and would not hunt, and soon we all thought so too. When I left, there were about fifty deer hung up to cure. The hams were cut out, then the shoulders, next the rump was severed, the tenderloins taken out and the carcass split. These were rubbed with salt and Mexican chilly. Our best. My opinion is that the missile which presents the largest surface to contact of equal weight, conveys the greatest shock and consequently kills the deadliest, consequently a truncate kills deader than a pointed missile, and a .45 caliber than a .40, provided the missile is driven with force enough to go through. M. R.

NEWARK, N. J.

Editor Forest and Stream:

In your issue of Jan. 24 the articles by J. W. Shurter and J. Duane are very near my ideas on the subject indorsed by my past experience. Mr. Shurter has made a "bullseye." There is a happy medium in all things, but in this world we poor mortals seem inclined to rush to one extreme or the other. It is within the memory of all probably who take any interest in these matters that originally the majority of breechloading rifles were of very large caliber, 50 and more. Now the fashion seems to be to rush to the other extreme, and many advocate .40 and .38 and even .32 caliber. Are we not going too fast? My experience has been that a .44 or .45 ball is superior to a .50-caliber with the same amount of powder. Yet I would not argue that the .50-caliber with enough powder to carry it would not be more destructive; but then there is increased weight, recoil, cost of ammunition, etc., to be considered, without any great gain, for if we can obtain all that is needed in power with an engine of certain horse power, why have a larger one? Therefore, why a large bore rifle if one smaller will do? Methinks I hear some advocate of small bores exclaim, "There, now, we've got him! Why he admits the small bore is best, and why a .44 or .45? Why not a .40?" Softly, my good friend, "too much of a good thing," etc., and too small a bore in a rifle likewise. I think this matter easily adjusted, and am bigoted enough to believe that others will think so, too, when they look at it in their right light.

We can sum up the requirements of those who shoot a rifle for game into two classes—those who want a rifle for grouse, squirrels, turkeys and the like, and those who, though they may not "tackle" anything larger than a deer, want to be prepared for anything they might "run on to." The majority of sportsmen, while they might not be eager to open hostilities with "Old Ephraim," would no doubt feel more contented if the arm they carried were capable of coping successfully with "Eph," if a good opportunity offered. Now, while I do not want to say that the .40-caliber is not the thing, I will ask its advocates if, for the purposes named above, would not a .38 or even a .32-caliber do just as well and cover all required points as regards lightness, slight recoil, handiness (as regards size and weight), ammunition and small cost of same? If such is the case, does not the .44 or .45-caliber more nearly fill the other requirements of a powerful missile than the smaller .40? If these two points are admitted, why the need of the intermediate caliber for all practical purposes? The point has been advanced that the length of the cartridge of the .40-90-500 is against it. I think it well taken, as, aside from the increased length of the action of the rifle, too long a cartridge would be unhandy. By increasing caliber we get increased powder capacity with less length of shell. Then, again, the ball. A 500-grain .40-caliber ball is too long for practical purposes, or at least some of your correspondents so prove; and there is no question but that a ball weighing from 350 to 405 grains (the government ball) would do as good work as the .40-caliber long ball, for what would be gained by length (unless we expect ball to strike sideways) in killing power and for hunting distances, will not the other ball be long enough to have a steady flight.

Let us have a .45-caliber repeater, with 90 to 120 grains of powder, and ball from 350 to 405 grains, straight shell. Then at a "pinch" the government shell could be used as a singleloader. And as most of our heavy game is shot in the West, this fact will cause the rifle to be popular in that section. With such an arm, with an action that will stand the "racket" and always work, the *ne plus ultra* of an all-round sporting rifle will be reached for the present. What the future has in store for us, judging by the improvements in the past, "We dinna ken." PRAIRIE DOG.

DETROIT, Mich.

Editor Forest and Stream:

The men of leisure and means want to have the inside track all the time. They are not satisfied with any reasonable battery, nor willing to take chances with the hunter who can only afford one gun. The cry is for a costlier and deadlier weapon that will kill every thing before it. The big-duck guns were seized and broken up, because forsooth they killed more ducks than the fine-haired city swell could with his Greener, sinkboats, decoys and all. Game protection is right and should have been thought of long ago; yet it should be in spirit what it pretends to be in form—for the preservation of the game, for the benefit of the masses, and not for the favored few. There seems to be an envious under-current in this matter of game protection. Sportsmen who only have a yearly vacation are, of course, anxious to kill all the game possible in a certain limited time. They are to some extent jealous of the gentleman sportsman of means and leisure alike unlimited; and he in turn of the backwoods hunter, who, with the faithful old muzzleloader, kills more than both of them. This is all wrong. The game is not confined by meets and bounds but falls to the man who can stand the toil of tramping day after day, or stand shivering on a runway for hours in the hope of one chance at a fleeing deer. The present hunting rifle is good enough, far too good for our supply of big game. Give the game a little show. Only a little while and game shooting will be a thing of the past. Manufacturers of guns are killing the "goose that lays the golden egg." What would you think of a man carrying a 4-bore, 10-drams powder, 3-ounce shot on quail? Explosive bullet, hollow express balls that cut a deer in two, extreme long-range rifles with "great smashing powers." Though carried on large game, should be classed in the same category as No. 4 on quail—murderous. We won't need guns much longer. 38-LONG.

Editor Forest and Stream:

Whether there is sufficient demand for a .40-90 repeater to justify its manufacture is a question yet to be determined. I, for one rifleman, doubt it.

I have mentioned before the advantages of using in our .45-caliber rifles more powder and less lead. In your issue of Jan. 17, your correspondents W. Milton Farrow and "C. D." mention this.

Mr. Farrow speaks of putting his shots thirty-two inches higher with a .45-85-295 shell than with a .45-70-405 shell from the same rifle.

The government shell can be loaded with 85 to 90 grains powder and a 300-grain ball, and will give about the same result, and for hunting purposes, deer especially, is much more satisfactory. It will catch a deer's back along midrange that the regular ammunition would overshoot. Most of the reloading tools for the government shell will seat a 300-grain ball just as perfectly as the regular ball. I know that the tool formerly manufactured by the Providence Tool Company will. Sportsmen who use the .45-75 bottled shell in their repeaters should by all means try a 300-grain naked ball with all the powder the shell will hold.

This ammunition is so much superior to the 75-350 load, that I believe no deer hunter will return to the latter. Make the balls tolerably hard and they will follow the grooves. By using a 24-inch loading tube, at least 90 grains of Hazard FG powder can be put in this shell, and you will find the balls do go down the range in a hurry. The recoil is but slight, and the blow-out-behind theory is all bosh. Would the shell hold it, I would not hesitate to use 150 grains in my repeater (the new Whitney Kennedy), and believe it would stand much more.

I also find the trajectory of this rifle a little flatter than others in which I have used the same ammunition. I prefer the solid ball, and believe 300 grains heavy enough for all game but buffalo and grizzly. Of the first we have no more, and but few hunters comparatively look after grizzly.

Then again, this ammunition is used in a 9 to 9½ pound gun, which is about as heavy as a man wants to carry all day. I would sight the rifle with the Van Dyke sight (described in his "Still-Hunter"), for 100 yards.

These sights are certainly worth a trial, and any one can make and put them on. BIG INJIN.

DELANA, ILL.

Editor Forest and Stream:

I read with pleasure the article by "Drocidep," in your issue of Jan. 17. I can heartily agree with him in thinking that a .25-caliber would be popular among those who hunt small game. I have been using a .32-caliber Remington, for some time back, but I have long thought that a smaller bullet would answer my purpose just as well, if not better. I think that a .22 is too small and that a .32 is larger than is necessary in hunting small game. H. J. R.

HAMILTON, N. Y.

Editor Forest and Stream:

As it now seems to be in order for sportsmen to express their preference for sporting rifles I wish to suggest still another pattern which, in my opinion, would become a great favorite among that class of sportsmen who have given some attention to glass-ball and wing-shooting with the rifle. I am a believer in the capabilities of many sportsmen to kill birds on the wing with a rifle, and for those who hunt for sport, recreation, and health, and not for "meat," one bird killed in that manner must certainly afford more satisfaction than a dozen killed with a shotgun. Of course considerable practice is required to hit rapidly moving objects with a rifle, but it has been done by hundreds, and can be by thousands more. Where game is plenty sufficient practice can be had with little inconvenience after one has acquired some proficiency at old oyster cans, glass balls, and the like.

The rifle best adapted to this style of shooting, or "snap" shooting as it is called, is the .22-caliber. Now the rifle I want to suggest is a .22-caliber magazine gun with underneath lever action similar to the Winchester or Marlin and shooting the rim fire cartridge, either the short or long will do.

The object is to get two or more shots at single or double balls, or as many as possible at flying or running game without removing the gun from the shoulder.

The .22-caliber rifle is pre-eminently the one for practice and for many kinds of work in the field, and for the following reasons preferable to the larger calibers: First, it is sufficiently accurate for all practical purposes; second, makes little or no report to frighten game; third, no smoke to obscure the vision when a second or third shot is necessary; fourth, does not tear the game into strings; fifth, can be used without danger or without disturbing any one near town, or even in a large city, for target shooting or snap shooting at stationary objects. Only a plank four or six inches thick and a foot square is necessary for a butt and a back yard is sufficient range.

Perhaps the most potent recommendation is the trivial cost of the ammunition, a thousand rounds of the short costing only about $2, the long about $3, while the .32 and .38 caliber center fire cost in the neighborhood of $12 and $15 per thousand respectively. For a person using one or two hundred a day this margin is an important item, unless his bank account is very plethoric. To become expert requires lots of practice, and a person practicing should never be haunted with the feeling that he cannot afford the expense.

In conclusion, the killing power is quite sufficient for all birds like quail, doves, grouse and ducas, and for such animals as squirrels, rabbits, muskrats, badgers, etc. I even know of one instance where a yearling buck, mule deer, was killed with a .22-caliber Remington rifle using the long cartridge. He was shot through the heart at about fifty yards, and, starting to run, received a second shot, which struck his backbone, bringing him to grass. Both bullets in this case passed clear through, making four holes through the skin.

I am very desirous of seeing such a rifle from some of our reliable makers placed on the market, which fact must be my apology for this intrusion on your own and readers' patience. PICTE.

FORT BIDWELL, Cal.

Editor Forest and Stream:

About five years ago I purchased a Sharps mid-range rifle .40 caliber, using the 2½-inches traight shell (65-330) mainly for use on the range, and having no other hunting rifle concluded to try this with the ordinary ammunition. I had no trouble hitting my game at the ordinary hunting distances, but did have about as much difficulty finding my game after being shot as I did to look it up in the first place. About this time the express system began to attract attention. It did not take me long to make up my mind to try the express bullet, and the first one was a 275 grains, which I used a season with good success, only the bullet jammed in cold weather when loading after two or three shots and sometimes I could not get it into the chamber without tearing off the patch. The trouble was that it was too much of a cylinder, and I resolved to have a new mould made, with the bullet tapering more, and of lighter weight. The first was 250 grains, which I afterward reduced to 240 grains, to take the small sized copper tube made by the U. M. C. Co., and I think it the best .40-caliber express bullet made. I use 70 grains powder and lubricating wad, would use 80 or 90 grains if the shells would hold it. With this ammunition I can get excellent targets at 300 yards, and the trajectory is comparatively flat; for a singleshot deer hunting rifle I don't think this can be beat much.

For some years back I have been wishing for a double express rifle, but on account of the heavy import duties kept putting it off till a more convenient season (when the duties would be lower). I happened to be in New York during the International Military Match of 1881 and became acquainted with some members of the British team, among others Mr. McVittie, with whom I had a talk about double express rifles and their makers. On account of his experience with sporting arms, I of course plied him with all manner of questions, pertaining to those arms, which he kindly answered. Among the different makers of repute, he recommended the Messrs. D. & J. Fraser, of Edinburgh, Scotland, very highly as makers of express rifles, and said they were using an improved kind of rifling that very much reduced recoil and fouling, and gave a very flat trajectory. I placed an order with them for a double express .45-caliber, using 110 grains C. & H. powder and 280-grain bullet, which in due time came to hand. They call it a double grip, un er lever, with extension rib, Damascus steel barrels, back action, rebounding locks. The barrels are twenty-eight inches, the whole gun weighing a little less than eight pounds, and when compared with our ten and eleven pound guns it is a seeming toy. The sighting is perfection, if such a thing can be. It seems just as easy to use it in the thickest hemlock woods as in the nicest gray light, and I have yet to see a sportsman who has handled it that was not at once captivated with the sights, and in fact the whole gun. I did not get the gun until late in October, and have not had a full season with it yet, and cannot report fully, but from the few deer I got this fall with it, I am satisfied it will prove a very superior weapon.

Now in regard to the choice of a hunting rifle, I am willing to admit there are some kinds of game where a solid bullet is better than an express, at least I judge so from the tone of many letters from Western correspondents, but for all-round hunting I consider the express system as far in advance of the solid bullet as the breech loader is ahead of the muzzleloader. I have used the solid bullet about ten years and the express about five, and am well convinced that the express system has only to be better understood to be more generally used. D. MCG.

HARRISVILLE, Mich.

Camp Fire Flickerings.

"That reminds me."

104.

FIVE of us went into camp in the Indian Territory, and we drew lots to see who should begin to cook. Dr. B. drew the black bean and cooked a very decent supper an hour after we located camp. Sitting around the fire before bedtime arranging plans for the coming three weeks of camp life, and swapping such glorious shooting and fishing lies as only honest sportsmen know how, the happy thought struck me (what would our lives be without the dear old "happy thought?") that one man should cook till some other fellow found fault, and then the faultfinder should cook till he in turn was found fault with. When I proposed it everybody consented, none more cheerfully than Dr. B., who knew too well what an abominable cook he was and felt sure of being relieved soon. Day after day passed and no word of complaint came from any of us, though the Doctor seemed to take a fiendish delight in serving up such fearful mixtures as made us leave camp sorrowing. Finally, getting desperate at the prospect of spending the rest of his days over the pots and kettles, and believing we had secretly banded together to keep him there till camp life ended, he dumped a quart of salt into the dough for the breakfast bread one morning, and when it came on the table smoking hot he sat back to watch the effect, with a diabolical gleam in his eye. Judge M. was the first man to help himself, and as he swallowed a piece of Dr. B.'s bait he heaved two or three times, and yelled out, "Je-ru-sa-lem crickets! that bread is salt; but, Doctor, its good, don't you forget it." J. W. M.

ST. LOUIS, Mo.

CRITICS' CORNER.

Editor Forest and Stream:

Now that we have a critics' corner and every one is doing a little growling and giving hints, I would like to do my share with the rest. Add to the *Index Expurgatorius* "yanked," or "taken in out of the wet." I also put in a plea for angler instead of fisherman. Though I know of no exact authority for this, yet we all recognize that a fisherman is one who gains his living by fishing and an angler one who fishes for sport. Who ever heard of the "Marblehead cod anglers." And I think we have all tired of such stereotyped expressions as "feathery lure" for fly, the "pliant rod" and others too numerous to mention, but which every reader of angling literature will recognize. Let us strive to attain a simpler, more condensed style and give more facts and less fancy.

If anglers in writing accounts of their trips would give accurate information, as to where they went (unless they wish to keep this a secret), how they got there, where they put up, what sort of accommodations and access to the water they had, what time of year, and what kind of weather it was, what sort of bait or flies they used, the condition, depth, etc., of the water, how many fish they took, and the approximate average weight, the kind of fish and any particular incidents or other details they can give, and necessary expenses, their accounts of their journey would not only be as interesting but very valuable and we would soon accumulate an invaluable mass of information on angling matters, which we now, to a great degree, lack.

PERCEVAL.

Professor Skeat notes in the London *Academy* that in Hoyt and Ward's "Cyclopædia of Practical Quotations" there is at least one which has found its way, with comical effect, into strange company. The words of Pistol in "Henry V." IV., 1.—"Trail'st thou the puissant pike"—are given under the head of "Angling."

Sea and River Fishing.

TROUTING ON THE BIGOSH.

WADING THE STREAM.

THE Colonel drew me to one side and said, "You do not intend to go with the Doctor and wade to-day, do you? I know that you care nothing for wading, more than I do, and I am surprised that you talked of doing it."

"Wading," said I, "is not real enjoyment for me, and perhaps I can do some bank fishing; you know that I agree with you that the height of pleasurable fishing for trout is on a lake or stream, where one can sit on a hard seat until his backbone gets kinked in five or nine different places, and the lower end of it blooms like a cavalryman's, and then to throw the fly near shore in the early season, or into the spring holes later. Yet a change may be a good thing in making one return to his first love. Some one has said that life would be endurable if it were not for its pleasures, and his remark is true in many cases. A coal miner would be happier if he never came out and took a sniff of fresh air, saw the blue sky, and heard the robins pipe, then he would think the mine was his natural place, and would know no better. The sailor after months of hard labor looks to port for a week's carouse as the summit of all human happiness, but must go to sea again."

"Then," interrupted the Colonel, "I may assert that you would be better off in the regular yearly round of your labors than to have a vacation and spend it in fishing with 'we three.'"

"Yes. There are men who claim that a vacation is not only enjoyed but that they return to the treadmill with a zest for it, but with me I confess to a feeling of regret at resuming the harness after a vacation, which passes quickly when in my opinion it should last forever. Therefore there is truth in the saying. Now wading a stream is not so disagreeable, it is a form of pleasure not quite up to boat fishing, but far preferable to no fishing, or to being shut up in an office, or a coal mine, besides our friend, the Doctor, wishes me to go, as you will not, and it would be selfish to deny him a day on the stream because I prefer the lake or the river. I have waded many streams in my younger days, and enjoyed it, my taste has changed in this, but I can still get some pleasure from it. Besides this, the Doctor is an accomplished stream fisher and I can learn from him; he is coming, draw him out and get him to talk on his favorite subject."

"There is no use in whipping a stream unless we can get off in the morning or be on it toward evening," said the Doctor, as he came into camp with his low wading shoes, ready for the fray, "the trout do not usually rise well at mid-day, and it is nearly five now, and will be an hour later before we wet our flies in the stream."

"Do you prefer to wade up or down stream?" asked the Colonel.

"It depends so much on the stream," answered the Doctor, as he sat upon the log upon which the Colonel was resting one foot as he smoked, "that it is impossible to give an intelligent answer in a few words. No doubt it is the most successful and scientific mode to fish up stream, but it is usually most pleasant to fish down. In up-stream fishing a short line only can be used, and as it continually comes back to you it necessitates constant casting. In this case the fish, which always lie with their heads up stream, do not see you so readily, nor are they alarmed by any stirring of the bottom by your boots. This is a question on which anglers are divided. For my part, I prefer to fish with the wind, let it be up or down, because it is discouraging to have a breeze strike you as you turn a bend and bring your line about your ears. In down-stream fishing the current carries your flies where you want them by governing their course with the rod, and there is less exertion. A longer line must be used because the fish can see you better, especially in shallow water, and are conscious of a disturbance in the water by the particles of sediment sent down as you wade. Of course I refer to fly-fishing. If I used a worm I would always fish down stream. If a stream has weedy margins and is swift in the middle, I always fish up stream."

"Why this invariable rule for a weedy stream?"

"Because the trout lie above the weed beds, and as you are effectually hidden from their sight and cast above them, they rise more readily. When hooked keep a taut line on him and keep him clear of the weeds, get the fish below you, into clear water, if possible, and fight it out there."

"Doctor," I interrupted, "it has seemed to me that when I have hooked a fish above me, and it starts down stream, it is a difficult matter to keep a taut line on the fish. With twenty feet of line at least, and the fish rushing down stream, past your legs, and possibly with branches overhead to entangle your tip, I have found this easier to talk about than to do."

"Exactly," acknowleged the Doctor, "I meant to keep the line as taut as you can. When the fish gets past you into a pool or into wider water below, bring the strain on it as soon as possible without tearing the hook from its mouth. A struggling fish in a weedy or snaggy place can often be led into safer water by slacking the strain so as to give him his head and follow, and gently direct his course, so that he thinks he has it all his own way for a while. The fish, when played up stream, plays much lighter and strains the tackle less, and it is most desirable to keep it above you when fishing up stream if you can. It is impossible to lay down inflexible rules for stream fishing, which is the most artistic of all fishing, and requires more knowledge of the habits of fish and changes of tactics to meet the varying moods of the weather. We never find exactly the same conditions on the same stream, and any one desiring to become a successful stream angler must fish at all proper seasons and in all weathers, no matter how disagreeable, for on the worst of days we have good sport. I prefer a clear, lively stream with occasional pools, as there can be found a variety of fishing, such as dapping the flies in the rapids and casting in the pools, but this stream which we propose to visit to-day, and which Jack has already christened the 'Little Bigosh,' promises from all accounts to be dark, sluggish, and overhung with bushes. Cedar logs will no doubt be plenty, and there are usually pools under them which are claimed by large trout which prefer solitude to the company of their own species, which they drive off. In such places a back-handed cast is often necessary in order to reach under the overhanging bushes."

"I should think," said the Colonel, "that it would be difficult to cast in the exact spot where a trout has risen when the water is moving rapidly and the bushes are low."

"The bushes are always to be watched, but the cast must be made a yard or more above the swirl of the trout," answered the Doctor, "for a fish is not so apt to rise to a fly that is behind it, he prefers to meet it. In coming to a deep pool I prefer to cast from the most favorable side to the lower edge at first, and so avoid disturbing the fish lying in the swift water above until I have picked up the stragglers."

During this conversation I had stood all ready for the start, and tried several times to stop the flow of information which the Doctor was pouring out; not that I differed with him, but because at school I had information pumped into me against my will when I would prefer to be fishing, and I have imbibed a dislike for all information.*

The Colonel started in with another question, which, no doubt, would have been followed by a dozen more, had I not pointed to the rising sun just showing above the eastern hills, and called his attention to it by quoting:

"* * * 'tis morn, and jocund day
Stands tiptoe on the misty mountain tops."

The Doctor saw the necessity of action and we started, leaving Jack untangling his line and the Colonel musing on the charms of wading as compared with lake fishing.

FRED MATHER.

* In this truthful narrative I have tried to restrain the Doctor from pouring out his knowledge which, in his case, is the acquirement of a life-time, but when he gets wound up he goes it until run down. I have cut down this chapter lest I be suspected of trying to smuggle in a dissertation on fishing in the guise of a chronicle of a fishing trip. I hope the reader will not suspect me of trying to slip a gilded pill down his gullet, that is peculiarly the province of the Doctor.

LUCK WITH THE LONGNOSES.

ONE fine day last September the Doctor and the writer drew up in front of the barn belonging to the owner of the picnic grounds on the beautiful lake in M. It was 1 o'clock and the horse stood heaving after a long drive. We quickly tumbled out, horse under shelter, traps overhauled, and in five minutes were making our way to the lake.

Arrived at the shore under the shade of a huge old hemlock, we took dinner, such a dinner as only hungry men can enjoy, and washed down with draughts of cold spring water, to take the dusts of the road away.

After dinner, while we discussed a glass of grog and our cigars, we laid out our plans. It was a beautiful day in early autumn. It was warm and fine after some cold rains and a light mist clouded the air, through which the sun shone with a soft light. A gentle breeze rippled the surface of the water. I prophesied luck. Looking at the lake the Doctor said:

"Up through this cove and across that point we used to take some fine bass with the fly in years gone by, when they were first put in."

"Well, we've got the tackle here now, and we will try it again," said I.

All being ready we got aboard our boat, and while the Doctor rowed, I made a number of casts with a whip made up of approved patterns. We also trolled them gently over some fine bass grounds, but never a leap did we see. At length the Doctor grew tired.

"Let us anchor in by that rocky bank and try still-fishing," said he.

By this time the breeze had freshened, and little dancing waves were plashing against the sides of our boat with a musical murmur. It required both anchors down to hold her. We now tried grasshoppers and crickets, and the Doctor amused himself by using a handline also, baited with a worm, in hopes of taking some perch. All was calm and still. The lake looked lonely and deserted; not a boat but our own, nor a human being but ourselves, to be seen. On the opposite side, a quarter of a mile away, where the lake narrowed, the mountains came down steeply to the shore. They were covered with a young growth of timber, whose leaves, mellowed by the heats of summer and touched by the first frost, showed the tints of autumn. Among them the purple red of the ash was conspicuous. Now and then the sweet wild bell-note of the bluejay floated across the lake through the soft mild air. Not another sound to be heard save that and the murmur of the water.

Soothed by the calm beauty of the scene I was fast falling into a drowsy, careless state, when I was roused by the voice of the Doctor, "This will never do. We must not go home without some fish, or we shall be laughed at as unsuccessful anglers."

"Then let us change our place once more. I have had one bite and you none. There are no hungry bass here that is certain," said I.

"We will cross over and anchor just inside that point where the rocks jut out. We will see if there are any bass or perch there. If we have no luck there we will try the pickerel at the upper end of the lake."

While the Doctor was speaking we had lifted our anchors and our little craft was skimming along. The Doctor had the oars and I was artistically trolling a grasshopper of mammoth size astern at the end of about seventy-five feet of line, more to kill time than in hopes of catching anything. Just as we stopped at the proposed place a fish took the grasshopper and struck out for deep water. "If he is a bass he is not very large," said the Doctor, who was putting down the anchor. My rod bent to the strain, but the run was short and I thought the same. I put on a vigorous strain, and in a moment he came alongside and was lifted in, a perch of about a pound's weight, and a very fair size for a perch, too, in that lake. "Well, we are after bigger game than perch, but if we don't catch anything more here, we have at least got the wherewithal to seduce the pickerel," said I.

An occasional perch came to hand, but an hour wore away and no bass. So we lifted anchor and rowed up the lake. We noticed as we went up that the lake had been much lowered by drawing off water for the mills, some ten miles away, to which this lake acted as reservoir. The further up we went the more apparent did this become, until at last we rounded a point, and the end of the lake and also a curious scene lay before us. The whole end of the lake which usually covered many acres and was of a shallow, weedy character, lay bare from the lowering of the water, save where a deep channel ran between the shore and the island. This channel opened up into many little shallow bays in which many gaunt stumps which had before been submerged, lifted their withered arms in the air. The whole extent of the old pickerel grounds had been contracted to a small body of water. The Doctor and I gazed at the scene in astonishment. It had never been so low before.

"Well, let us try it here for a moment, and see if there are any fish left," said the Doctor, dropping the anchor into one of the little bays. My rod was not well adapted to this sort of work, and I was afraid I would strain the tip, but nevertheless, I cut a thin strip of white belly from one of our perch and twined it around a light gang of hooks. Drawing out about thirty feet of line I cast the bait inshore, and in a minute the white lure slowly cut the waves. At the second cast a large pickerel took it savagely, making the water boil as he seized it. I struck, and in a moment he was alongside and trying to get under the boat. Before he could cut up any tricks he was jumping on the bottom of the boat. Meanwhile, the Doctor had a stick and was getting his captive alongside. I fixed my bait and cast again, and in a moment had another savage strike. Having snap tackle I struck him immediately, and the next moment he was in the air shaking his head wickedly, and then made a straight bolt for the boat. I went to lift him in, when he calmly opened his mouth and I only lifted the hooks out, while my friend swam off, looking over his shoulder, and no doubt feeling happy. And here I would like to say that I think an angler loses a larger number of pickerel for a given number of bites than any other fish. I consider a pickerel one of the wiliest fish that swims in the matter of getting off from a hook. He never wastes his time in hard pulling, trying to tear it out by main strength like a bass or trout, but calmly bids his time till he is alongside and you have hold of a short line when, with a sudden and desperate wrench and jump, away he goes. How in the world is it that so many pickerel which have been securely hooked manage to get off? I think it is their very calmness and "loginess," as many writers call it, that deceive you; one thinks that they are all exhausted and played out, and that they are coming tamely to hand, when in reality they are only waiting to get an opportunity to bolt. There is nothing more exciting in angling than the sudden, savage dash with which a large pickerel takes your minnow, and if to this and his craftiness he only added the steady, stubborn fight of the true game fish, he would be called a splendid game fish, and this in spite of his ugly looks and ignoble haunts and associates.

Well, we tried the bay a few moments and then rowed up and drifted down the channel, just far enough distant from the island to make a good cast inshore. The island used to be quite a curiosity. It was not over an acre in extent and made of driftwood, bushes, grasses, etc., held together by a rank growth of aquatic vegetation and used to drift up and down the lake under the influence of the wind. In the last few years it seems to have taken root at the upper end of the lake in the shallow water. Its sides, composed of the roots of bushes, afforded some fine lurking places for pickerel. As we passed along it they bit like mad. At every cast the water boiled with a fresh strike. My light 8-ounce fly-rod was being severely tested. Once as I made a cast an old veteran took the bait with a splash that made the Doctor jump. I struck with nervous energy and the next instant I saw his head and body coming out till he looked as long as my arm. Then with a vicious shake of his head he sent hooks and bait flying. We used up a number of gangs; their sharp teeth cut the lashings through and through till in a short time the gang was useless. We lost a great number, far more than we brought to creel. It seemed impossible to hook them securely. They seemed to "blow out" the bait, as Francis expresses it. It was very irritating, and one fish, a small one, aggravated his crime till I lost all patience and took summary vengeance in a way that made the Doctor shriek with laughter. I made a cast and this little wretch took the bait and allowed me to bring him alongside, when he calmly let go and swam off slowly. The bait was not injured, so I cast it over him as he went. He took it, turning quickly, and the same result followed. I grew provoked; cast again, and again he took it and escaped. I threw after him once more, and I could distinctly see him take the bait about fifteen feet away. This time I laid plans for revenge, if he escaped being hooked. I let him have the bait to gorge for awhile, and in the meantime I got a stretcher from the bottom of the boat. Then I struck him again and led him gently alongside and attempted to lift him quickly in with my left hand. As usual, the hooks and bait came but not the fish. But this time I was ready, and as soon as he let them come out of his mouth I hit him a most tremendous thwack with the stretcher in my right. No doubt he carried a sore spot for some time, and I hope it taught him not to fool with anglers who mean business. Meanwhile, the Doctor was taking it in with screams of delighted laughter.

Moral: Never forget your landing net when you go fishing or you'll be sorry for it.

But now the sinking sun threw long shadows of the neighboring hills upon the water and warned us our time was up and that we should be homeward going. Fain would we have staid for they bit as hard as ever, and we regretted the time we had wasted in the afternoon still-fishing. It seemed as if all the fish in the lake had gathered in that one narrow channel. Though we had been there but an hour, as I rowed homeward the Doctor strung sixteen goodly fish upon a stout cord, besides many we had used as bait and numbers of little ones thrown back as they came to hand.

There is nothing that makes an angler "wend his way homeward" with such self-complacency as a fair string of fish taken in a brief, exciting hour after a long day of unsuccessful fishing.

Rapidly we drove through the gathering dusk, and as the home lights shone out in the valley below us we felt we had ended our luck with the longnoses.

PERCYVAL.

ANGLING FOR CHARITY.

Editor Forest and Stream:

My attention has been drawn to a communication from Chicago in your issue of Jan. 3, entitled "Probable Trout Hoggishness," calling your attention to an extract from a Scottish paper, anent a Mr. George Wilson, M. A. I am sorry that your correspondent should use "bad words" against a gentleman who is an utter stranger to him. My long-time worthy friend, Mr. Wilson, now well on to seventy years of age, is a retired school teacher, who, after thirty years of active service in various parts of the world, finally settled in his native country and county, intending to follow his profession there; and with that intent studied and took out a certificate under the new school laws of Great Britain. Unfortunately for Mr. Wilson's active habits he has never been able to get a school, owing to the strong competition of younger men; and to prevent himself from being eaten up with ennui he fell back on his old pastime of angling. To show you what he does with the fish when caught I will just give an extract or two from one of his letters of January, 1880: "I undertook to supply eleven families with trout. Nine of these families I supplied once a week, the other two I supplied daily, reserving only as many as furnished my own supper." "I never made any charge for the fish which I freely gave away, even when I had not a sufficient supply to meet the demands of my own supper." "On

several occasions, when there was a deficiency, I had to content myself with bare potatoes." "Among the families there were seven old people, four males and three females, the oldest ninety, the youngest seventy-six." This giving away has been Mr. Wilson's constant practice since ever I became acquainted with him, I never knew him to sell a fish. Your correspondent seems to have a suspicion that he was wronging my friend when he prefixes the word "probable" to the offensive term, and I regret that it has found an entrance into your genial journal. T. P. D.

Cargill, Ontario.

THE DOWEL PIN IN FLY-RODS.

Editor Forest and Stream:

Mr. "Couples" has my thanks for his suggestions in reference to the article on "Leaders" in your issue of the 7th. It is hoped soon to give the results of further experiments in that direction, when his suggestions will be considered.

But now missionary labor is in hand.

A short time since a well-known rod maker, while admitting that the use of dowels on the joints of fly-rods, and the excessive length of ferrule necessitated thereby, was a disadvantage, declared that the fault lay not with the makers, but in the prejudice of the buyers, who would not purchase a rod otherwise made.

To combat this prejudice, if it exists, and to provoke that discussion which is the life of progress, are the purposes of this article.

Since the value of an opinion bears some relation to the experience and competency of him who gives it expression, it may not be out of place to say, that for the last twelve years I have made every article I use in fly-fishing, excepting lines and hooks, and including ferrules and rods of almost every attainable material, including 6-strip split bamboos. That I have also made ten quite protracted trips, armed with rods and ferrules so made, to the Rangeley region of Maine and beyond, and have handled therewith many vigorous trout from 7 pounds 2 ounces down.

First—It would seem an elementary principle of fishing lore, that a one-piece rod without any joints whatever, would be the most uniform in action and efficient in use. But convenience of transportation, since it is given to but few to cast the fly except at a distance from home, precludes such a rod. Nevertheless it is the ideal rod, and the nearer it is approached the better will be the result. So far there will be little difference of opinion.

Certainly the chief feature to which the merit of such a rod is due, is the absence of stiff and inelastic places therein. Its bend is uniform from one end to the other. This can be approached in a jointed rod only by reducing the inelastic portions to a minimum; or, in other words, by shortening the ferrules to the utmost extent consistent with safety. If this is so, it is conclusive that the dowelled ferrule is, in this, inferior to one without dowels, since not only must the ferrule itself be longer, but it must be capped at the junction of the ferrule and joint as well, thus further prolonging the unbendable portions of the rod.

Second—Though little complaint can now be made of the prices asked for good rods, considering the really elegant workmanship displayed and the great difficulty and expense of obtaining fit material—a difficulty and outlay not justly appreciated by the uninitiated—still the purchaser might with propriety wish the benefit of any diminution of cost, which neither impaired the value of the rod nor lessened the already reasonable profit of the maker.

The dowelled ferrule and its mate practically consist of two ferrules, one cap for female ferrule, metal dowel fitted to end of joint, wooden dowel within, and on which the metal dowel is fitted, boring out recess to receive dowel, and lining same with metal.

The simple ferrule and its mate are two pieces of plain tubing, one fitted to enter the other. As the male ferrule in either case may or may not be capped, such cap is not included in the above enumeration.

Therefore it is clear that as far as cheapness of production is concerned, the dowelled ferrule is at a disadvantage.

Third—It will not be questioned that a large majority of breakages take place at the ferrules. Nor will facility of repair be lightly valued by any one, who has once met with this accident when distant from the repairer, and after a considerable journey to his favorite stream.

To repair on the ground, in camp, or at such lodgings as trouting regions usually afford, presents these difficulties, If the break is above the male ferrule, it becomes necessary to shorten the rod by the length of both dowel and ferrule, to say nothing of extracting the broken wood from the metal parts, and the nice fitting required to make even a temporary success of the job. If the ferrule is secured by that abomination, a pin, the difficulty is increased. It must be borne in mind that not only must the wooden spike, upon which the metal dowel is to be placed, be made central and in line with the axis of the rod, but it must fill the metal nearly or quite its whole length and also fit tight therein. Otherwise, in the first case, the rod will not come together so as to be safe against that most disgusting mishap of throwing apart; while in the second case, when the rod is unjointed, the metal dowel will remain behind in its socket.

Again, shortening a favorite rod between the butt and second joints by two inches or more, will so change the action as to make its owner fairly sick at heart.

On the other hand, if the rod breaks below the ferrule, he is even more helpless; for aside from ridding the ferrule and cap from the broken portion, how is the tapered hole to be bored to receive the dowel? Yet unless this is done somehow, the dowel will strike against the end of the joint within the ferrule, and the male ferrule, if it enter at all, will not do so sufficiently to permit the rod to be used.

Again and again have I known the accident to occur, and never knew it to be remedied short of some kind of a shop; while, except in a few rare cases and with common rods of little value, it has been a case of immediate quarantine and subsequent hospital treatment by a professional rod doctor.

But if a rod provided with the simple ferrule is so broken, a few matches softens the cement which retains the ferrule in position, the broken piece is pushed out and the ferrule replaced with the very minimum loss in length, and that by the merest tyro in repairs. And in fifteen or twenty minutes he goes on his way, if not rejoicing, still not a fit candidate for a madhouse. Here surely the advantage is not with the dowelled ferrule.

Fourth—But it strengthens the rod:

A sane man would hardly anchor a 16-foot catboat with a frigate's best bower anchor, though that would undoubtedly strengthen that boat's hold on the bottom. And so, if without the dowel and its complications the requisite strength can be obtained, it would scarcely seem common sense to retain it for that reason alone.

Through ten trips in Maine I have used the plain ferrules. That on the end of the butt-joint is scant two and one-half inches long, and made from metal of the thickness of an ordinarily heavy visiting card, considerably thinner than any other make of ferrule that I have ever noticed on a flyrod. Yet I am unsparing in my demands upon a rod. When the September sun is just about to vanish behind the hills of Western Maine, there comes a time when all that gambling spirit which actuates enterprise in man, takes possession of that angler so fortunate as to be on the ground. He wants no third or fourth prize in the lottery. His casts are for the first, or at least a good second—five pounds, no less, will pass; while if beneath the water there is any sense whatever of the fitness of things, it is the plain duty of an eight or ten pounder to offer.

At such an appointed time, and it is brief at best, minutes are precious, and a two and a half or three pounder—anything which it is humanly possible to derrick with the tackle in use—is reeled in and got rid of without the slightest ceremony, and with the reverse of thanks for his attentions. I have done my share of this with ferrules, as described, and never yet has one bent or given way. It is to be borne in mind that before a tube will bend it must collapse, and if the rod is so put together that the ends of the joints within the metal are close together (say one-eighth to one-sixteenth of an inch, which is quite ample to allow for wear) it is plain that to bend the ferrule will require a power almost equal to the tensile strength of the metal itself, a strain to which, in use, no fly-rod is ever even approximately subject. It would, therefore, appear that in this particular the simple ferrule, properly constructed and applied, is practically quite the equal of its dowelled rival.

Fifth—It strengthens the rod! And this is the only assertion in its favor I have ever been able to elicit.

But is this assertion true?

I believe that it is not only false, but that the direct contrary is the truth. A ferrule may be able to endure any possible strain with impunity, while the rod to which it is applied may be as brittle as a pipe stem. Of course the weakest point in the rod measures the strength of the rod.

This is just the case in point.

A dowelled ferrule in itself is undoubtedly stronger than a simple ferrule, but the rod to which it is applied is weakened thereby, and is not as strong as it would be were a simple ferrule of proper construction substituted in its place. The strain brought on the unyielding metal is localized and concentrated at its extremities. The ferrule and its mate act as one single lever, in which the power is applied at one end, while the fulcrum is at the other. It is elementary and axiomatic that the longer the lever the greater will be its power. If the weight to which the lever transmits its effort (the timber beyond the ferrule), and that effort exceed the strength of the fulcrum, the latter will surely be crushed, *i. e.*; the rod will break at the ferrule.

This simple principle of natural philosophy seems to demonstrate that, other things being equal, the introduction of any ferrule weakens a rod, and that a longer ferrule weakens a rod more than a shorter; since with equal pull at the tip, more strain is concentrated at the end of a long ferrule (or lever) than at the end of a short ferrule (or lever).

It is a corollary to this that in all jointed rods the points where the ferrules terminate are subject to a degree of strain considerably in excess of the proportion due to their location—or in other words, in excess of the strain imposed at the same point under like conditions upon a like single-piece unjointed rod.

Therefore fracture at those points should be more common than at others; and that such is the fact every one knows, one theory tells us such should be the result—our experience shows such *is* the result. Therefore it would seem the theory has stood the regulation verification by experiment, and that it may be safely accepted as sound.

A dowelled ferrule must of necessity be long. A simple ferrule may and should be short. Wherefore it again appears the verdict must be against the dowel. How it first came into use I think I can understand. At the comparitively recent period, when the American rod maker ceased to be a mere imitator of the English, and allowed his individual ingenuity and brains fair play, each maker, of necessity, made his own ferrules, bending the plate metal over a mandrel, and soldering the seam himself. Then placing the tube so formed upon a tapered mandrel and the latter in his lathe, he forced a steel roller against the nascent ferrule while it revolved, and thus rolled it into shape and condensed and stiffened the metal at one operation. To accomplish this result it was requisite the ferrule should adhere to the mandrel and revolve with it. This necessitated the use of a tapered mandrel, so that the ferrule as it stretched and shaped itself under the pressure, should always fit snugly upon and receive its motion from the mandrel. A tapered ferrule was the result, one which, while it fitted its mate at the mouth, was too large within. Something therefore was required to steady the inner end of the inserted joint, and to accomplish this the dowel-pin was employed.

This was all very well in the then state of the art. But why it should still survive, when in any city tubing of any required size can be procured drawn inside and out; and that, if ordered in quantity, cheaper than it can be made by one not in the business, I am at a loss to conceive.

If any one knows of any advantage the dowelled ferrule possesses, I should be pleased to be instructed, for I can imagine none.

In conclusion I would suggest three points to the favorable consideration of those whose ideas and habits are not as yet formed beyond change—all tried in many a contest, and believed to be of value.

Use a handle with a ferrule immediately above it—or, better still, sunk into it—to receive the butt joint, the whole so arranged that while the handle remains still the butt joint can be turned readily so as to present the rings beneath or on top of the rod. One handle will thus do for all single-handed fly-rods, heavy or light. You can cast with the rings underneath or above, while the reel always remains in its normal and only convenient position—that below the hand and under the handle—and you can change from one to the other as your fancy dictates. You can play your fish in the same way, changing the direction of the strain in an instant and a dozen times on the same fish if you wish. Thus in ordering a new rod you will not only save the expense of a new handle and its furniture, but avoid the temptation to use strong language when you find your old reels will not fit. Again, your rod, even if of inferior material, will always remain straight and uniform in action.

Next to discarding the dowel pin, I believe this to be the most valuable improvement which can be applied to the fly-rod as at present made. I am aware this construction is not altogether new; but it is uncommon, while its great merit should make it universal. And even when employed, it is not unfrequently regarded either as a mere ornament or as a device to make possible a cheaper or lighter handle, while its most important function (the ability frequently to reverse the direction in which the strain is brought upon the rod) is altogether ignored. Let any gentleman have one of his rods (especially if it has already taken a set) cut immediately above the handle, and a short, well-fitted, simple ferrule inserted to reunite the divided portions, and then try it for one campaign.

Of course, to bring the rings above, but half a revolution of the butt joint in the handle-ferrule will be required, and the line will then wrap in a long spiral half way round the rod. Now if, in reversing the rings to underneath the rod, the precaution be taken always to reverse the motion as well (so that the line will lead straight to the rings and not wrap all the way around the rod), it—the line—will be found to render equally well in either position of the rings.

And, unless the teachings of ten years' practical experience are delusive, the more particular he who tries it is in regard to his tackle, the more certain he is to adhere to it ever after.

Second—Be liberal in the use of rings. If you seize a piece of wood of uniform strength by the ends and break it, it does not give way where it is grasped, but at some intermediate point. And thus with a fly-rod. By being liberal in the matter of rings you diffuse the strain, so that though its aggregate be great, yet at no place will it reach the breaking point.

Third—Place a ring close to each ferrule and its mate; *i.e.*, so that when the rod is jointed a ring will be both above and below the unyielding metal, for thus, for reasons before stated or implied, you lessen the danger of accident at those points.

I will throw in one more point for good measure and for the benefit of those who don't already know and use it: Always tallow or oil your ferrules and then wipe them as dry as you can before jointing your rod. You will then never be plagued by having the joints stick and refuse to separate. This is of especial importance when the handle hereinbefore recommended is used.

The truth is, Mr. Editor, us anglers have fallen, or are falling, into a rut, and are three-quarters asleep besides. Occasionally some book on our favorite pastime appears, and the fraternity is momentarily galvanized; but a speedy relapse follows. We cannot fairly expect aid from the professional class to wake us up; if for no other reason,, because if they tried it the effort would probably be misunderstood. Nor have they, as a general thing, time for that actual practical experience which teaches the defects of the old and discovers the new. We business and professional men, amateurs, whose only purpose is to share with others the benefit and pleasure we ourselves receive and enjoy, can do this. It is, and must be, a labor of love.

In a moment of impulse, perhaps of folly, I have thrown my feather-weight into the scale. So far the result has not been very encouraging, but hope is not yet quite dead.

Is it possible that the great fraternity of fly-fishermen are dumb, or are they ignorant, or is it because they show at the writing table a degree of indolence and selfishness they would blush to exhibit in the field?

A comparison of the correspondence in your paper in reference to the art and implements of the angler with that in reference to other sports is a standing shame and reproach to every man who handles a rod. Let us hope for a better future. Henry P. Wells.

New York City.

THE CHRONICLE OF THE "COMPLEAT ANGLER."*

THE scholarly fisherman is under many obligations to Mr. Satchell for the complete and beautiful manner in which he has reproduced the Library of Old Fishing Books. The volume before us is a chatty discourse on the many editions of Walton and Colton's famous book, and is evidently prepared by one who loves his task. The book is handsomely printed, bound in half leather, Roxburghe style, and is one that reading anglers will appreciate. In closing, it says: "Fishers have increased and fishing books have multiplied, but where is the fisher blest with such a 'heavenly memory' as our Izaak, and where is the fishing book so rich in honor and renown as his? On royal and noble shelves—the brown overcoat unscorned by the purple and splendor of courtiers and dramatists and poets—there do we find you, O little book 'of eighteen pence price.' Shakespeare looks kindly on you; Bacon eyes you with a kindly smile; Sir Philip Sidney and you are paired, in the pairing of pastorals; Elizabethian wisdom and Elizabethian quaintness and pathos own you for an equal."

*The chronicle of the "Compleat Angler" of Izaak Walton and Charles Colton. Being a Bibliographical Record of its various editions and mutations. By Thomas Westwood. A new edition, with some notes and additions, by Thomas Satchell. London: W. Satchell, 19 Tavistock street, Covent Garden, 1883. (Price, 10s. 6d.)

English Grayling for the St. Lawrence.—Mr. S. Maltby, of Montreal, writes to the *Star*, favoring the introduction of English grayling into the St. Lawrence River. We do not know wherein this fish is superior to the Michigan grayling, it is not as handsome. The letter says: "I attended the late meeting of the Montreal Fish and Game Protection Club, but my time being rather limited I did not have the opportunity of bringing before the meeting the importance of introducing the English grayling into our noble St. Lawrence. If this were done, it would be a great boon to thousands of our fishermen who have not the opportunity of spending a season in the Lower Provinces. The Old Country grayling is not to be equaled for pluck; it will rise at the fly after being pricked with the hook, not once but several times. In fact it may be considered a perfect bulldog, as it will hang on to the last, until it eventually succumbs to the net. The St. Lawrence is about the same temperature as the River Trent in England, with the exception that it is considerably colder in winter, but this would be no disadvantage, as the grayling generally selects the coldest streams and thrives better in them. Once introduced into the St. Lawrence, no fish would equal it as a delicacy of the table, unless we except salmon. Trout in the Old Country bring twenty-five cents per pound, the grayling thirty cents. The grayling season commences at the close of the season for trout, and we have in Canada three months of beautiful fall, and in the winter season even the grayling comes in within a few yards of the shore, thus affording the angler or fly-fisher a delight seldom excelled. The fish will rise at the fly when the ice is coming down the river. The grayling

is out of season in the latter part of April, when the noble bass comes in for its share of glory. Pressure of business prevents our fly-fishers from following up this sport except on Saturdays, when most of our business houses close at one o'clock, and I can say with certainty that the half holiday would be taken advantage of by hundreds of our young aspirants in fly-fishing. I hope the society will take note of this and endeavor to introduce the grayling into the St. Lawrence."

Fisheulture.

THE MENHADEN QUESTION.

Editor Forest and Stream:

Your correspondent "W. M. H." takes exceptions to my statements as published in your issue of Jan. 24, and refers me to the hook and line fishermen between Cape Cod and Sandy Hook, and also to some of the fresh fish dealers of Fulton Fish Market, New York City. In my opinion three-quarters of the hook and line fishermen on the coast he names would subscribe under oath to an opinion exactly opposite to his, and as to the Fulton Market fish dealers I should not want any better evidence than their books afford, that there is no scarcity of fish on our coast and never has been. He says he has been bass fishing for seventeen years, if so where has he fished, up the river among schools of menhaden or off the rocks in the surf of the open sea? If it was, as he and others state, that bass depended on menhaden for their daily food, they would be found in their company, but we know to the contrary, and have men with over forty years experience to prove it. I have yet to learn that a striped bass was ever caught in the Narragansett Bay in a purse seine, and as he does not seem to be posted as to their manner of working, I will state for his benefit that river purse seines are seventy-five feet deep, nine hundred feet long, and are as effective to take fish in six feet of water as in six fathoms. As to the parts of nine full grown menhaden he found in one bass, it only proves that they were thrown into the water as bait, for bass never masticate their food. Our menhaden boats always have the best of lookouts aloft, and it comes within their observation to know what feeds on menhaden, and they report that no fish known to our markets are ever seen feeding on them except bluefish and bonitas, and they not often, but sharks and whales and fish of like species are constantly preying upon them by wholesale, and it often happens that we can't save menhaden after we catch them, for the reason that sharks tear the seines and let them out, and if we inclose whales, which we occasionally do, a seine is no obstruction when they conclude to swim away. We estimated that our boats landed in one day during the season of 1883, over one hundred tons of sharks at our Rhode Island factory, and their average size was larger than a kerosene barrel, and there were over two hundred menhaden in the stomach of each shark.

His statement that no menhaden could be procured in this vicinity for love or money during 1883 fresh enough for bait, is not borne out by the facts, for there were plenty of menhaden in Narragansett Bay during the whole season. Capt. Charles Winslow, with a sail gear, took over 10,000 barrels, and John Brownell with a steamer took over 23,000 barrels, and it has been reported to me, although I know nothing of the truth of the report, that excellent bass fishing has prevailed at West Island during the season of 1883. It is my opinion, after twenty years or more experience as a hook and line, trap, pound and purse seine fisherman, and from what I have learned of others and read, that there are periods of flood and drought constantly occurring with salt-water fish, and man is no more responsible for the droughts than he is for the floods, and as an argument to prove my opinion I submit the following:

First—During the winter of 1856 and 1857 most of the tautog between Barnegat, N. J., and Plymouth, Mass., were destroyed by frost, and on that account that fishery was abandoned during the fishing season of 1857; but in four years they were as plenty as ever. The same disaster happened to the same fish during the winter of 1874 and 1875, and the fishery amounted to almost nothing during season of 1875, but during season of 1878 they were as plenty as ever before known.

Second—Squeteague were plentiful in the waters of Narragansett Bay fifty years or more ago, but they left before the days of traps, pounds, or purse seines, and were gone for many years. During 1870 a flood of that fish prevailed, and before 1878 we had a drought, and since the last date mentioned another flood has prevailed.

Third—Porgies, or scup, were unknown to our waters before the year 1800, and were called at first Jefferson fish, for the reason they made their appearance the year he was elected President of the United States. They remained in our waters until 1867. From this time to 1870 there was a drought, but during the last mentioned year there came on a flood, and while it prevailed there were days together that the traps were not lifted, although they were overflowing with fish. The reason of their not being lifted was, no market for the fish. I don't know as Mr. Rogers could have bought sixteen hundred barrels for sixteen cents per barrel, but I had ten times that amount offered me at twenty cents per barrel and did not buy them. The same state of things existed during the spring of 1882, although the heavy fishing was brought to a sudden close, for a heavy storm with a high sea tore up the traps and pounds, and stopped all fishing for several days. After it was over, it was found the scup had left the coast.

Fourth—Sheepshead used to be plenty in this vicinity many years ago, but left and have never come back, and in my experience I have never seen one east of Sandy Hook.

Fifth—There used to be on the coast of New England an abundance of Spanish mackerel, a different fish from our present Spanish mackerel, but not one of that species of fish has been seen in our waters for the last thirty years.

Sixth—During the mackerel flood of 1831, 335,559 barrels of mackerel were inspected in Massachusetts. During the drought of 1841 only 50,992 barrels were inspected in the same State. During the mackerel drought of 1877 about 100,000 barrels of mackerel were inspected in Massachusetts, and the cry went up that mackerel were gone forever, and a stringent law was called for to prevent their being taken with purse seines, for their scarcity was charged to them; but the mackerel flood of 1882 wiped out that delusion, for there were during that year 260,000 barrels inspected in Massachusetts, and the sum total for the three States of Massachusetts, New Hampshire and Maine was 378,592 barrels.

Seventh—During the year 1840 a flood of shad made their appearance on the coast of Cape Cod, extending west to Narragansett Bay. They disappeared during the fishing season of 1842, and have never been back.

Eighth—Zacheus Macy in his history says: Bluefish left the coast of New England during the year 1765, and we have no record of one being seen for seventy years. They made their appearance again during the year 1832.

Ninth—A flood of codfish prevailed between 1875 and 1878, and the wholesale price ruled as low as one cent per pound delivered in New York, Boston and Philadelphia. Since then there has been a drought, but at present there is another flood and the wholesale price in Boston is 1¼ cents per pound.

Tenth—Twenty-four years ago there was a flood of sea bass, and they were caught in such abundance that they could not be sold in market for enough to pay the expense of handling and transportation, and as a result thousands of barrels were sold for manure. This flood lasted for several years, and then a drought came on which lasted until two years ago, when all at once a flood of this fish made its appearance from Cape Malabar to Virginia. Said flood is now in existence, and from appearances there will be a surplus of sea bass for several years to come.

Eleventh—About forty years ago there was a drought of menhaden which we know extended from Sandy Hook to Cape Cod, and the fishery was abandoned by a large number of the fishermen, and it was almost the unanimous verdict that overfishing was the cause of the trouble, as a few sail gangs had been added to the menhaden fleet the year before. The old croakers figured up the millions of fish that had been destroyed, and their conclusion was that no fish could stand such wholesale destruction. Afterward they made their appearance, and the fishery has been prosecuted with varying success ever since. The most noticeable drought ever experienced has prevailed since 1878 on the best menhaden grounds ever known, situated between Cape Cod and Eastport, Me.

During 1882 there was a dearth of menhaden from Cape Cod to Sandy Hook, and it was the current opinion of those that believe that man is responsible for the absence of fish that overfishing had caused them to disappear north of Cape Cod, and that the same influence had driven them from the waters between Cape Cod and Sandy Hook, and if the depletion went on menhaden would disappear from our coast. The catch fell off nearly one-half, and fourteen steamers and seventy-six sail gangs were withdrawn from the business. But the results of the menhaden fishery for 1883 have confounded all the croakers, for it is a conceded fact that more menhaden were present on our coast during 1883 than were ever before observed, the catch, notwithstanding the large reduction in the menhaden fleet, being over 850,000 barrels larger than in 1882.

In conclusion, we will say that we have the most skillful fishermen, and, as it was proved at the London Fishery Exhibition last year, the most perfect fishing apparatus on earth, which bespeaks their pluck, energy and ability. They furnish to our farmers guano at a low price, equal in value to Peruvian; they are educating and disciplining young men to the knowledge and hardships of practical seamanship, who can, if necessity calls, fight on the ocean the battles of their country, or compete, when a chance is given them, for our part of the carrying trade of the world. Their calling at best, through the uncertainties of fish, dangers of storms, and perils of navigation, is hazardous and uncertain, and should be encouraged and fostered. Most every other business in the country is protected, but the Government of the United States affords none to its fisheries, but allows the importation of oils and fish duty free to our markets. DANIEL T. CHURCH.

TIVERTON, R. I.

CARP IN SOUTH CAROLINA.—The following note on making fish ponds in rice fields would suggest that the fish are more profitable than rice: "Columbia, Jan. 18.—The State Fish Commissioner expects to establish, about Feb. 1, a carp hatchery at Donaldson's plantation, on Winyah Bay, opposite Georgetown, the place recently so favorably reported on by Superintendent Huske. Twelve and a half acres of rice field will be flooded and converted into fish ponds, and it is expected that the ponds so formed will be admirably adapted to the breeding of carp. The ponds will be stocked with 150 four-year old and 400 two-year-old carp. The Commissioner expects to supply the young carp for the next season's distribution from these ponds. After the first year of carp culture in this State the number of fish distributed yearly has doubled annually until this year, when 18,000 carp were sent out, making a distribution four times as great as last year. It is expected that these Georgetown ponds will yield, at the lowest estimate, 10,000 young carp annually per acre, and if the anticipations of the Commissioner are fulfilled there will be 125,000 young carp ready for distribution next winter. When it is considered that a thousand ponds in the State were this winter stocked with carp, it will be seen that the raising of this fish must become a large industry in South Carolina."

AMERICAN FISHCULTURAL ASSOCIATION.—The date of the next annual meeting has been fixed for May 13, 14 and 15, in Washington. It is expected that there will be a good attendance and many valuable papers.

The Kennel.

FIXTURES.

BENCH SHOWS.

March 4, 5, 6 and 7.—Cincinnati Bench Show, Melodian Hall. Entries close Feb. 25. Charles Lincoln, Superintendent, care of B. Kittredge & Co., Cincinnati, Ohio.

March 12, 13 and 14.—New Haven Kennel Club's First Annual Bench Show, Second Regiment Armory. Edward S. Porter, Secretary, Box 657 New Haven, Conn. Entries close March 1.

March 26, 27 and 28.—The Dominion Kennel Club's Second Annual Bench Show, Horticultural Gardens. Charles Lincoln, Superintendent. C. Greville Harston, Secretary, Toronto, Canada.

April 3, 4 and 5.—The Cleveland Bench Show Association's Second Bench Show. Charles Lincoln, Superintendent. C. M. Munhall, Secretary, Cleveland, Ohio.

May 6, 7, 8 and 9.—The Westminster Kennel Club's Eighth Annual Bench Show, Madison Square Garden. Entries close April 21. Chas. Lincoln, Superintendent. R. C. Cornell, Secretary, 54 William street, New York.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **869.** Volume I., bound in cloth, sent postpaid, $1.50.

ALMOST A DOUBLE.

Editor Forest and Stream:

A sentence in the letter of your West Virginia correspondent, in Jan. 17 issue, recalls a little incident in my own experience that, if not unusual, at least serves to point a moral.

"I don't like to hear a sportsman say that he shot a quail and partridge at one rise," and yet I came very near accomplishing that feat some years ago, and only failed through a severe attack of the quail "ague."

My old slow setter and I (he is mentioned first because he had more hunting sense than I shall ever be able to acquire) had been hunting for an hour or two in the afternoon, anxiously looking for quail and partridge, with fairly good success on his part, and the usual indifferent results on mine, when we came upon a small clump of trees and undergrowth, in the middle of a large salt meadow, which we had never explored, and as a forlorn hope I whistled to "old high head" and waved him toward it. Hardly had we stepped inside the fringe of shrubbery surrounding it, when the old dog "froze" with his head well twisted to the right, but as I neared him, his tail trembled a little and he very cautiously turned his head equally as far around to the left, and solidified again, remaining so for perhaps a quarter of a minute, he as carefully returned his head to its first position, and remained steadfast, true to his first love.

As no amount of coaxing or force could ever make the staunch old fellow go on, I stepped a few yards ahead of his nose, and up boomed an old cock partridge, which I surprised myself and the dog by stopping with the first barrel, and at the first boom of his wings away went a big bevy of quail at my left, startling me so that I shot the remaining barrel at the bunch and killed —— the usual number.

Perhaps many sportsmen can recall just such instances, but I pen this simply to call attention to what my old (dog) friend said to me at that time as plain as dog could speak: "I was broken on partridge and learned to love them when I was a little fellow, and although a big bunch of quail smell very nice to me I still like my oldest friends the best."

We afterward worked the place thoroughly, and got ten or eleven of the quails, so the bunch in the meadow proved quite a corral.

Moral: First, stick fast to your old friends; second, always break your dog on the game you most desire to hunt, as "Old Tom Buckley," once a noted duck and woodcock shooter of this city, used to say: "You git de woodcock snuff in his nose de fust bird he smells, and he'll neber forgit it if he lives a hundred years." SLOW DOG.

NEW HAVEN, CONN.

THE DOG TAX AND THE GAME LAWS.

Editor Forest and Stream:

I have long observed that while thousands of sportsmen are calling aloud for efficient game laws, and equitable dog laws, none seem to advance any practical plan for their execution were they enacted. Even the laws we have would do pretty well if enforced. I beg leave to submit a plan for the enforcement of such laws in the hope that a discussion may be aroused and the sportsmen led to fix on some one good plan and work together to carry it out.

The only way to get laws enforced is to pay somebody for doing it. Now, where is the money to come from? I say from ourselves mainly. Let the taxation of sportsmen pay for their protection. Let all money obtained from the taxation of dogs be devoted to the execution of dog and game laws. Dog laws should provide for the taxation of all dogs over six months old, at a given sum per head. It is improper to tax the bitches at a higher rate, because it is not right to legislate against dog breeding. Counties should be divided into districts of convenient, size and in each district a dog constable appointed who should also be game and fish warden. This constable should assess and collect the dog tax, and destroy all dogs for which no tax is paid, or in case such dogs are valuable, he might be permitted to sell them, in a manner to be prescribed by law, and turn in the proceeds to the dog tax fund. In case persons harbor dogs of which they deny the ownership, the constable should be required to procure from the justice of the peace or other judicial authority, a warrant empowering him to enter the premises of such person for the purpose of securing any untaxed dogs. The constable would, in the execution of the dog law, be enabled to have an eye on all persons who would be probable violators of the game law and thus be all the more efficient as a game warden.

The money arising from the rigid collection of the dog tax would be ample for the purpose in view. At present I do not believe that one-fifth of the possible yield of the dog tax is collected. I am aware that the claim of sheep-owners to payment from this fund for sheep destroyed by dogs is a difficulty to be overcome. But, in my opinion, the sportsmen will do best to admit that claim as the first to be paid from the fund, and avoid arousing opposition in that quarter. In the practical working of my plan it would be found that the horde of ill-bred curs owned by irresponsible parties, and who do more than nine-tenths of the sheep killing, would be exterminated, and dog owners paying taxes would be more careful to look after them. Again, the constable, in the course of his duties, would come to know which dogs were addicted to sheep killing, and would generally be able to fix the damages on their owners.

On the whole, we may conclude that the sheep damages would make but a slight inroad on the fund. I believe such a law could be passed in any State if sportsmen were to press it earnestly, and if passed it would put a different complexion on their interests. I hope my scheme will be carefully considered and amended in every desirable way. That my fundamental idea is the right one I do not believe can be denied.

In urging the passage of such laws we always meet the objection of the uninterested. "Why," say they, "should the class of sportsmen be allowed to burden us with laws for their benefit." Never have I seen or heard a satisfactory answer to this question, but I shall endeavor to give one. "Without game there would be no sportsmen, and sportsmen are absolutely necessary to the national defense. The introduction of breechloading and repeating long-range rifles has changed the art of war. The lines of battle and the massive columns, and the field artillery of a few years ago are no longer to be used. The rapid fire and long range of the rifle forbids it. Dynamite torpedoes with electric batteries are coming in to augment the difficulty of maneuvering soldiers in any sort of approach to a close formation when in the vicinity of the enemy. It will become well nigh impossible to maneuver a large force at all. As Skobeleff said: "Batteries must now be fought by skirmish lines, and the reserves must be a tremendous distance to the rear to avoid destruction, by reason of the target they present." Now the skirmish line is nearly impossible to control, as the men are so far apart; therefore, men of intelligence, nerve and skill enough to act a good deal for themselves are necessary for this work.

What is the difference in efficiency between a thoroughly skillful and courageous man, and an average man, both armed with repeating rifles? The history of the James boys, "Wild Bill," "Billy the Kid," Rande, and a good many similar characters, is most instructive on this point, as also the various recent Indian wars. It appears that a man who is a crack shot and is versed in field craft, *i. e.*, can find his way anywhere, and take advantage of the nature of the ground he is passing over, if courageous and well supplied with ammunition, can defy almost any number of ordinary men similarly armed. It is not for nothing that the hardy people of our frontier towns often submit to the rule of a mere handful of desperadoes. The power of a Slade or "Billy the Kid," or other such worthy is as real as any that ever was, and people submit because they must. The disparity between the power of the desperado to kill and that of the citizen, is as great as was that between the mail-clad knight of the Middle Ages and the burghers he was wont to plunder. We have got back to something very like the conditions that existed in the days of Hector and Achilles. Battles will be decided by the skill and courage of individual soldiers. We shall see armies of ten to thirty thousand men instead of hundreds of thousands.

A small army of intelligent, highly skilled men, to whom handsome salaries will be paid, and whose social position will be so good as to make the service an object of ambition, such is what we will see in the future.

To-day, by reason of the prevalent interests in field sports, the United States could raise such an army more easily than any other nation.

But twenty years hence, when the game shall have been exterminated, we shall be at the mercy of any nation wise enough to preserve its game and encourage field sports. Our isolated position will not save us, for with the small armies required and steam navigation the transportation of troops will be a bagatelle. Let nobody imagine that military drill of any kind can educate men to the proper degree. Shooting quail and woodcock, still-hunting deer, etc., give one an alertness, the power to take advantage of the unexpected, and the great art of finding one's way and a close habit of observation, all of which are to the full as necessary as marksmanship for the soldier of the future, and these can only be obtained by field sports. Again, were it even possible for this to

be effected by military drill, is it not better to get it done without cost to government?

I hope none of the readers of FOREST AND STREAM are so foolish as to think war is soon to be abolished, or that the habit of nations conquering others whenever they are able has fallen into the least disuse. We have but to look at the changes in the map of the world wrought within the last twenty years to show us that the only way to get or keep liberty is by force of arms.

Oh! But some one will say, "This is only an artist, a dreamer." True enough, but the artist has heard the whistle and felt the sting of bullets, and the vision is inspired by the haunting memory of battlefields where, with his own eyes, he has seen the breechloader do its awful work.

J. M. TRACY.

FOX HUNTING ON CAPE COD IN 1884.

Editor Forest and Stream:

I take the liberty of sending to you herewith an account of a fox hunt which took place at the close of last month within the limits of the old Bay State.

Of course I would not compare our sport here with the more delightful method of enjoying this pastime in "merrie" England. I am too familiar with the music of the Warwickshire and North Warwickshire hounds, and with the top and width respectively, of the hedges and ditches which skirt the hunting grounds about Leamington to draw the comparison, albeit ten years have passed since I joined with the members of the hunt there in the run 'cross country.

Now the scene is changed, and the beautiful pasture lands of Warwick give place to the sandy pine-growing hills of Cape Cod, with acres of scrub oak, dotted with ponds and intersected by little streams. Here a sportsman could not follow on horseback, and we who love to hear our foxhounds "sing the news" must enjoy the sport on foot.

It happened that on a day peculiarly adapted to fox hunting a party consisting of Mr. C. H. Nye, the agreeable superintendent of the Cape Cod divison of the Old Colony Railroad, Mr. James Taylor, an old fox hunter of West Barnstable, Mr. G. L. Bassett, of Hyannis, and others, together with Mr. Wm. D. King, of Newport, R. I. (who took with him to the cape Mr. George A. Strange, of Berkley, Mass.) assembled for a New England fox hunt. So motionless was every tree and shrub, that but for the hunt, nothing would have broken the stillnes of nature, save the shrill whistle of the passing locomotive, the noise of the wood-carts, the song of the woodman or the sound of his laboring axe. A thin sheet of snow which covered the ground made the scent of the fox most favorable for the sagacious dogs.

After driving two miles to the scene of our sport, we hastily tied our horses in woody lanes, and took our stands at points properly distant from one another, leaving our dogs to do their work. Nor did they betray this trust. In a few moments we heard them, and their first occasional notes were very soon followed by that thrilling burst, which always greets our ears when reynard is up and away. Probably each one of the party, when, in the early morning hour, he heard the dogs give out their measured and unbroken tongue, mentally ejaculated, "that is a start," for so it proved. In the language of our fox hunters, reynard "played well," and we listened for two hours to the entrancing sounds which came from the lips of each of our "favorites." happy when they were far away, carrying the responsibility of the shot elsewhere, still and almost breathless when they were near, lest a chance movement of ours should turn the quarry, and forfeit the brush. At about half past 9 o'clock the fox crossed within thirty yards of Mr. King's view, when a shot from his Parker gun ended the run, and for a short time silenced the music in the air.

It was the work of but a few moments to place fox No. 1 in a wagon, divide into two parties within good hearing distance of one another, and attempt another "start." Mr. Bassett soon discovered the track of an old "settler," and at once placed his splendid animal Alto upon the trail. In a few moments she drove the veteran upon his feet, and away she went alone and unattended to wait upon this fox which had so long baffled the hunters of the locality. One of the party now sought the railroad near by, having learned that it was the custom of this particular fox to go and run the rail, thus throwing the dogs off the scent. Though he failed to place himself in a position to get a shot, Mr. Bumpus, however, saw the fox come upon the track, witnessed the running of the iron for some distance, and watched the animal as he slipped off the rail and hopped up the hill, pausing there for a moment to look behind. Soon along came Alto, in full cry until she reached the iron rail, there all scent was lost, of course, and so running over, and back and forth, the intelligent beast, unable to rectify the fault, submitted to the call of Mr. Bumpus, who placed her where the fox had left the iron, when away she flew carrying her beautiful head well in the air and uttering the language, "this time you are mine," clothed with all the melody of a fox hound's tongue. At noonday Mr. Strange succeeded in crippling, at long range, the sly old fox, which Alto finally brought to bay, and then it was that a charge from Mr. Taylor's 10-bore relieved the dog of any further duty in that direction, and stretched a handsome twelve-pound fox at his feet.

About the time that Alto had started the second fox, and but a short distance away, Mr. Nye's beautiful spotted dog aroused another from his morning nap, and began a run which lasted nearly the remainder of the day, through a partially burned district, the scene of our hunt. She was at once joined by Mr. Taylor's pet (the hero of many a day's sport) and by Mr. King's white dog Dick (celebrated in Sullivan county, N. H., especially in the vicinity of Newport, and who to-day was hunting away from his native hills for the first time). The second fox having been dispatched, Alto entered with the others upon the race for the third, and now came the grandest chorus of the day.

Brother fox hunters, old and young, who love the woodlands and the cry of hounds, listen, with your ears of memory and experience, to the music of those hours which were passing, alas all too quickly, by.

Until late in the afternoon the dulcet tones of Alto, mingling in glorious harmony with the clarion voice of Dick (ever in the van of the chase), were echoed back by the combined melody of the slower but none the less true four-footed followers belonging to Mr. Nye and Mr. Taylor. Once I caught a glimpse of them, and again I saw them as they crossed the lane in the distance; first the flash of yellow fur, then, with superb dash and ringing chorus, Alto with the white dog, followed by the rest, and all pointing to the fleeing fox with the accuracy of the needle to the pole.

This was rapture itself, and could the English bard have been in the midst of us perhaps he might have qualified his verse:

> "In thee alone, fair land of liberty,
> Is bred the perfect hound, in scent and speed
> As yet unrivalled; while in other climes
> Their virtues fail a weak degenerate race."

With the declining day, the crack of Mr. King's breechloader secured to him a second brush, and ended the song notes which had so long marked the devious path over which the fox had been leading. The fatal shots alone had interrupted the incessant cry of the hounds from morning until nightfall.

On our way to the wagons the indefatigable Alto, familiar as she was with every part of the hunting ground, stole away from us and started another fox, which we were reluctantly obliged to leave. Thus we had secured three foxes, in runs occupying nearly the entire day, and had started a fourth fox, and these were full grown foxes and not early cubs.

By the participants in this fox hunt the 30th of January, 1884, will be counted as a red-letter day in the annals of their fox hunting, and such, I think, it will be considered by your readers, who may be interested in this kind of sport. K.

BERKLEY, Mass., Feb. 11, 1884.

CINCINNATI BENCH SHOW.

Editor Forest and Stream:

Numerous have been the inquiries as to whether the flood here would stop the holding of the bench show. I am glad to be able to state that the river is receding fast, so that by next week the railroads will be all right and the show will be given as advertised, 4th, 5th, 6th and 7th of March. The entries close Feb. 25. CHAS. LINCOLN, Supt.

CINCINNATI, Feb. 16.

BEAGLES FOR FOX HUNTING.

Editor Forest and Stream:

I am a New England man, and fond of fox hunting. To me it seems that the foxhound of to-day is a degenerated dog. Am I right, or is it only that I am growing old, and the notes of the old-time dogs came to me more mellow and musical in memory than they really were? Whatever be the true cause of my discontent, one thing is certain, I am looking about for a successor worthy of the hound I knew when a couple of decades younger than I am now.

Your columns have recently had much about the beagle. Is he the coming dog? And how would the beagle do for fox hunting? Is he too slow? Will some of your readers who are conversant with the qualities of the beagle give, through your columns, their views on the points referred to? BUGLE.

VERMONT.

THE BEAGLE CLUB.

PRESS of business has prevented me from expressing sooner my thanks for the honors conferred upon me and the confidence shown in me, by members of this club, to most of whom I am a stranger. I shall faithfully serve the club and its interests, and do all in my power to make it a successful and strong organization.

The present condition of our club is flattering indeed, and beyond our most sanguine expectations. Its membership is growing from day to day, and I hope, at no distant day, to be enabled to report a membership of five hundred, as you, dear editor, think we ought to have.

Let me once more call upon all, not only breeders and owners of beagles, but all those who take an interest in the beautiful and useful little hounds, to enroll themselves with us, in this, our mutual cause, and send in their name at an early date. A. C. KRUEGER, Sec'y and Treas.

WRIGHTSVILLE, Pa.

THE POINTING INSTINCT.

Editor Forest and Stream:

I am the possessor of a dachshund puppy now some four months old, the mother of which was imported last summer from the celebrated kennel of the Duke of Saxe-Coburg, in Germany, said to be the finest strain of black and tan dachshunde in that country, she giving birth soon after her arrival here to four puppies, all of which, except one, have since died. I am told in olden times they were used for birds as well as rabbits, badgers, foxes, etc. The mother this last fall came across a bevy of quail and stood them as staunch as any old setter or pointer. Is it in the blood or an exception? My dog is a perfect beauty and house pet, and quick as lightning and very intelligent. YORICK.

[It is not uncommon for individuals of many of the different breeds of sporting dogs to imitate the point of the setter and pointer. We have shot a ruffed grouse over a foxhound, who pointed it as staunchly as a setter. We have also seen a half-bred rough-haired terrier frequently point sparrows in the street, remaining perfectly rigid until the bird flew.]

THE CLUMBER SPANIEL.

[*Concluded from page 34.*]

THE Earl of Arundel, at Wardour Castle, has or had some ten years ago a nice strain of the breed; but those I have seen have been rather on the small side, and resembled very much in appearance Prince Albert's strain. I have seen several of them at work, and nothing certainly could be better; and although the Clumber spaniel should be large and heavy, I think, if this strain is purely bred, which there is no reason whatever to doubt, though, as I have stated before, of a different character to the Duke of Newcastle's, his lordship's keeper, Adams, who took great pains in breeding them, erred on the right side, as far as a sporting spaniel is concerned, in encouraging the stamp of dog which I have seen there and at Mr. Bevan's, at Weston Grove, Southampton, who was particularly partial to them; and he is no mean judge of what is required in the field, whether it be setter, spaniel, or retriever.

The Earl Spencer has long cultivated the genuine breed of Clumber spaniels at Apethorpe, Northamptonshire; and so thorough a sportsman is likely to have the best, though I have never had the pleasure of seeing his kennel. Mr. Foljambe's breed was long held in high and just repute, but whether it is still kept up I do not know; his blood is justly prized in most of the best Clumber kennels of the day.

"Stonehenge" says the Clumber is invariably long, low, and heavy; but I have, I believe, shown that this is not so, and that a slight divergence from this rule in the Prince Consort's and Lord Arundel's breed seems to point very strongly to the theory which I have propounded that there may have been an original breed of Clumbers in this country before that imported by the Duke of Newcastle from France. The weight of the Clumber varies, but he averages about 40 lbs. or 45 lbs., though many dogs will weigh from 60 lbs. to 68 lbs. I think the prize dog, Duke, which I sold to Mr. Sam Lang, of Baldwin street, Bristol, for fifty guineas, was over 56 lbs.; he was a fine dog, and had beautiful feather, coat, and color, but he was too short in the back, and carried his stern high, two very bad faults in a Clumber, and when I took him to Mr. Holford's kennel and compared him with his team these faults were very manifest. The Clumber spaniel must be white and lemon; for many years the judges wavered about orange markings, which are decidedly wrong, and the less color about him the better. He should have great bone and very short legs, and they should be straight; he should be well feathered, and his coat should be perfectly straight and silky in texture, and it can hardly be too thick. The eyes should not be large, and should be deeply set in the head, and in mature dogs the haw is often shown as in the bloodhound; a cherry-colored nose is, in my opinion, fatal to any chance of being considered of pure blood. The ears should not be lobe-shaped or long, and they should have little fringe to them and lie close to the head. The loin should not be arched, but the back must be straight; above all the stern must be set and carried low when in work, though he generally carries it gaily when he is not, and should not be docked too short, and be well covered with hair, having a good flag. Jock, the dog whose dimensions were given in "Dogs of the British Islands," and which were taken by myself, was perhaps the best Clumber spaniel ever seen, and he was considered so by Garland, who sent him to Birmingham Show in my name as an experiment. I told him he would be beaten by Duke, who was then in my possession; and so he was, though Duke was not to be mentioned in the same twelvemonth with Jock.

The worst fault a Clumber can have is to give tongue, and no one who values his kennel would keep one who did. There are very few really good Clumbers now being exhibited, and the champion, Looby, is, in my opinion, not worthy of his position; he is too leggy, his eye is wrong, and he has not a Clumber head. The dog Bruce, which is the dog given to illustrate the breed in "Dogs of the British Islands," was not a Clumber spaniel; he was admittedly cross-bred; he was a very fine dog, and had, perhaps, the best feather ever seen.

I measured it on his forelegs at over eight inches, but his head was far too long and pointed, his forelegs very crooked, his color too deep, and his eye large and full. How so astute a judge as Stonehenge could have selected him to illustrate such an important work, I am at a loss to conceive; he was, moreover, pig-mouthed; that is to say, his under jaw was very short, and receded from the upper. Bruce was largely bred from at the time, and, in my opinion, did more harm to the breed of Clumber spaniels than any other dog I have ever known.

As I have before said, the Clumber spaniel is an aristocratic dog, and requires to be treated as such; he is a difficult dog to rear to begin with; but, when once reared, he is very hardy, and will stand a good deal of work, and when once broken is a very valuable dog; but, although he is hardy, and will last for many years, I do not think he is the dog to stand the general wear and tear we require of a spaniel. He is not fit for every kind of covert; and when you have to work all day in a rough, wild country, thinly stocked with game, the Clumber spaniel is not the dog; the kind of ground he should be worked over is that where game is tolerably plentiful, and not too rough, and he should be always worked in a team. Take, for example, hedgerow shooting where you expect to meet with a few brace of pheasants, a hare or two, and plenty of rabbits. He is decidedly not cut out for that kind of thing. He is too big for the rough woodcock shooting in the large, straggling coverts of Wales and Devon. He is not at home there, as a more active and quicker working dog is required. In a recent book on the dog I was rather amused in the article on this dog by its being laid down that a team of Clumbers should consist of nine. I do not know what magic there is in this number, or why it should be neither more nor less. At all events, a couple of Clumbers is of very little use for ordinary shooting. They are too heavy, and cannot force themselves into places where a smaller and more active dog can, though they are by no means deficient in pluck, as I have seen a team of Clumbers come out after working a thick piece of gorse with their eyes all torn and their ears covered with blood. Nobody ever thinks of shooting to spaniels of any kind in covert now where game is heavily preserved, as the pheasants and hares are all reserved for a grand day or two near Christmas; but I prefer a team of good, well-broken Clumbers, and a brush through the coverts half a dozen times in the season for sport before all the battues in the world. I know well that this is impossible where a large head of game is to be kept up; I only say what I like best; but it is only in outside coverts or where game is not very thick that the Clumber is made use of. In commenting on the Islington dog show of 1862, the writer of the article called "The Omnibus" in the new *Sporting Magazine* of that date says: "The eyes and general style of Earl Spencer's Clumbers place them quite beyond Mr. Holford's, and in both classes Western Birt bowed to Althorp." Just before this he says: "The sweet dish heads of the Irish setters attracted many a visitor." Now, with all due deference to such an authority, if in nothing else, this was a point in which Mr. Holford's dogs were certainly a long way superior to Lord Spencer's. I remember examining all the dogs thoroughly, and have no hesitation in declaring the award a mistake. Mr. Holford's dogs had the correct eye, whereas those of Lord Spencer's were too full. Mr. A. W. Langdale, who has bred and shown many Clumber spaniels, thinks the weight of dogs should be from 60lbs. to 70lbs. I cannot help thinking this latter weight excessive, and do not recollect seeing more than one or two dogs of the latter weight, though I have not known many over 60lbs. Mrs. Smale's dog Wynn, of Lyonsdown, New Barnet, weighs 60lbs. or over. I have not seen him, but Leatherhead spoke highly of him when he won first over John o' Gaunt, Tower and other good ones at Alexandra Palace last year. Mr. Langdale's bitch Libnah, weighed 50lbs. I never remember seeing this bitch, but she must have been a large one. I never saw a Clumber bitch who reached that weight; they are generally much lighter than the dogs.

The champion Psycho, belonging to Mr. Charles Frucn, is a very good stamp of Clumber, but much too dark in color, and I should not care to breed from him.

Mr. Homes's John o' Gaunt is a good dog, showing many good points of the Clumber in perfection; but unfortunately his pedigree is unknown. Notwithstanding this I should not fear to breed from him, as I feel convinced that he is a really well bred one.

Mr. Herbert Moser's Bachelor is a fine dog, but bad in his hind quarters. His young dog Baronet I liked much, and I think must have grown into a fine dog when he finished. The same gentleman's bitches, Lance and Loll, have been frequent winners at most of the leading shows. I have not had an opportunity of attending any show for over a year, but I believe there are several good candidates for fame.

The breed of Clumbers is still kept at Clumber Park, where they have some remarkably good bitches; and the kennel would have been much strengthened and improved last season if they had succeeded in breeding from them, but unfortunately they, strange to say, all failed to produce whelps. I do not know what dog was used, but I should say most decidedly that the fault was on the side of the sire.

The Earl of Cawdor has a strong kennel of Clumbers, and shoots a great deal to them. He has a good deal of Mr. Foljamb's and Sir Vincent Corbett's blood in the kennel. His bitches perhaps are rather lighter in the head than is exactly in accordance with the accepted form of the Clumber, but are a rare working sort, with capital coats and good legs and feet. I do not think they are ever exhibited. His lordship's keeper told me that, contrary to what is usually the case, he finds no difficulty in rearing the puppies, rarely losing one from distemper. The Clumber when once reared is not at all a delicate dog, and will last and keep fresh for many years. This is perhaps to be accounted for by the slowness of his pace. This spaniel does not show to full advantage when tied up on the show bench, and they should always be shown as a team, which is certainly an attractive sight at a show to sportsmen, and the dogs having more room and liberty show themselves off to the best advantage. The well-known spaniel breeder, Mr. P. Bullock, exhibited a very good Clumber, Nabob, for many years. He was by Foljambe's Beau, and was own brother to his Duke by Bang, out of Lord Foley's Fan. I think this dog must have been a bad stock-getter, as I have no recollection of seeing any of his progeny, though he was at the stud for years.

Lord Foley was at one time celebrated for his kennel of Clumbers, and his blood was much sought; but I am not aware whether the kennel is still kept up or not. Clumbers always have and always will command a good price, as they are comparatively scarce, and likely to remain so.

I came across, the other day, an original engraving from the picture of the Duke of Newcastle and his spaniels, which I have before referred to. A part of this picture appeared in an engraving in the old *Sporting Magazine* many years ago, but this contained the keeper and the spaniels only. This original engraving represents the Duke of Newcastle and a friend returning from shooting, both on horseback; and Mansell, the keeper is examining a woodcock, several others with pheasants and other game are lying about, and three spaniels are surrounding him. If this is a correct representation of the duke's spaniels, I think we have improved them; the character of the head is slightly different, being short, but not so square as the modern dictum requires; they do not appear to be so large as the modern dog, in fact I should say they are about 35 to 40-pound dogs; they are not quite so low on the

eg, or so long in the body, and, although their coats are flat, there is more curl in the feather, particularly on the stern, than is now approved of. The dogs altogether resemble very much the breeds I have referred to as belonging to Prince Albert, the Earl of Arundel and Mr. Bevan; but they look like workmen all over.

One great characteristic of the Clumber spaniel when pure is his fondness for the scent of feather in preference to fur; in fact, he seems to despise the latter, and takes very little notice of hares and rabbits when winged game is present. This is a faculty to be cultivated in all spaniels, as most of them take to fur fast enough when allowed; and I have, I believe, before advocated entering young spaniels to winged game, instead, as is generally the case, of their being first entered to rabbits. —*An Old Judge of Spaniels in Land and Water.*

CLEVELAND DOG SHOW.

FOLLOWING is the premium list of the bench show to be held at Cleveland, O., April 2, 4 and 5; Champion English setter dogs $20, bitches the same; open, dogs $20, $10 and silver medal, bitches the same; puppies, dogs $7 and $3, bitches the same. Champion Irish setter dogs $20, bitches the same; open, dogs $20 and $10, bitches the same; puppies $7 and $3. Black and tan setters, same as Irish setters. Champion pointer dogs, over 55lbs., $20, bitches, over 50lbs. the same; open, dogs $20 and $10, small pointers the same; puppies, dogs, $7 and $3, bitches the same. Champion Irish water spaniels $10, open $10 and $5. Champion field spaniels (any color) $10; open, $10 and $5. Champion cocker spaniels (any color) $10; open (other than black) $10 and $5, black the same; puppies (any color) $5 and silver medal. Champion foxhounds, silver medal; open, dogs $10 and $5. Champion beagles, silver medal; open, dogs $10 and $5, bitches the same; puppies, silver medal. Dachshunde $10 and silver medal. Champion fox-terriers, dogs silver medal, bitches the same; open, dogs $10 and $5, bitches the same; puppies $7 and $3. Greyhounds $10 and $5. Deerhounds, $10. Champion mastiffs, dogs champion medal, bitches the same; open, dogs $15 and $5, bitches the same; puppies $5 and silver medal. Champion rough-coated St. Bernards, dogs, champion medal, bitches the same; open, dogs $15 and $5, bitches the same; smooth-coated St. Bernards the same. Newfoundlands, $10 and silver medal. Champion collie dogs, champion medal, bitches the same; open, dogs $15 and $5, bitches the same; puppies, dogs silver medal, bitches the same. Champion bull, champion medal; open, dogs $10 and $5, bitches the same. Champion bull-terriers over 25lbs., champion medal; open $10 and $5; under 25lbs., the same. Wire-haired or Scotch terriers $10 and silver medal; black and tan terriers over 7lbs., Dandy Dinmont and Irish terriers the same; champion Skye terriers (drop-eared) champion medal, open $10 and $5; prick-eared the same. Champion pug dogs, champion medal; bitches the same; open, dogs $10 and $5, bitches the same, puppies silver medal. Champion Yorkshire terriers, silver medal, open (over 5lbs.) $10 and $5; under 5lbs. the same. Toy terriers under 5lbs., $10 and silver medal; King Charles or Blenheim spaniels, Japanese spaniels and Italian greyhounds the same. Poodles $10 and $5. Miscellaneous $10, $5 and silver medal. In addition to the above there will be a large number of specials given which will be duly announced.

Major J. M. Taylor will judge the setters, Mr. J. M. Munson the pointers, and Mr. J. F. Kirk the remaining classes.

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, or breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Bang. By Mr. J. R. Oughton, Dwight, Ill., for blue belton English setter dog, whelped November, 1883, by Dashing Lion (Dash II.—Leda) out of Queen Anna (Zanzibar—Lady Elgin).

Chiefley. By Mr. H. C. Miller, Hudson, N. Y., for red Irish setter dog, whelped Nov. 13, 1883, by Chief (A.K.R. 231) out of Doe.

Adam and Eve. By Mr. H. C. Miller, Hudson, N. Y., for black and white pointers, dog and bitch, whelped Sept. 26, 1883, by St. John (Snapshot—Belle) out of Folly (Rock—Sleaford's Fan).

Carter, Dan, Pint, Irish Dan, Irish Dick, Mike Carter, Nelly Carter and Fannie Carter. By Major Lovejoy, Bethel, Me., for red Irish setters, whelped Jan. 1, 1884, by his Trim (Ned Elcho—Ruby) out of his Roxie (Ned Elcho—Bridget O'More).

Countess Ringwood and Duchess Ringwood. By Mr. E. S. Hawks, Ashfield, Mass., for black, white and tan beagle bitches, whelped Nov. 21, 1883, by imported Ringwood (Ranter—Beauty) out of Music III. (Flute—Victress).

Burt, Scott, Crisp, Bro nie, Dan, Aberdeen, Lassie and Jennie. By Major Lovejoy, Bethel, Me., for Irish water spaniels, six dogs and two bitches, whelped Jan. 11, by Irish Bob out of his Irish Bess.

NAMES CHANGED.

☞ *See instructions at head of this column.*

Peg to Peg Peg. Liver pointer bitch, whelped Sept. 12, 1882 (Snipe—Ruby), owned by Mr. H. C. Miller, Hudson, N. Y.

BRED.

☞ *See instructions at head of this column.*

Jolly Daisy—Buckellew. Mr. W. A. Coster's (Flatbush, L. I.) English setter bitch Jolly Daisy (Druid—Jolly May) to his Buckellew (A.K.R. 30), Jan. 6.

Jolie—Buckellew. Mr. Theo. A. Gill's (West Park, N. Y.) English setter bitch Jolie (Lathrop's Dick—Gen. Ely's Sylph) to Mr. W. A. Coster's Buckellew (A.K.R. 30), Feb. 3.

Dinah II.—Master Wade. Mr. W. Wade's (Pittsburgh, Pa.) mastiff bitch Dinah II. (A.K.R. 13) to Mr. W. L. Jones's Master Wade (A.K.R. 157), Feb. 5.

Peg Peg—Knickerbocker. Mr. H. C. Miller's (Hudson, N. Y.) liver pointer bitch Peg Peg (Snipe—Ruby) to the Knickerbocker Kennel Club's Knickerbocker (A.K.R. 15), Feb. 13.

Sal—Bob. Mr. G. W. Amory's (Boston, Mass.) imported pointer bitch Sal to his imported Bob (Price's Bang—Princess Kate), Jan. 20.

Shoo Fly—Hector. Mr. Dan Storrs's (Lebanon, N. H.) beagle bitch Shoo Fly (Victor—Bess) to Hector (Victor—Beauty).

Syren II.—Arlington. Mr. A. S. Guild's (Lowell, Mass.) red Irish setter bitch Syren II. (Elcho III.—Mag) to Mr. C. Fred. Crawford's Arlington (Sam—Ruby), Feb. 14.

Red Lassie—Glencho. Mr. Thos. D. Husted's (Peekskill, N. Y.) imported red Irish setter bitch Red Lassie (Rory O'More—Queen Elfie) to Glencho (Elcho—Norcen), Feb. 13.

Franzelle—Fritz. Mr. Samuel Scranton's (Olneyville, R. I.) dachshund bitch Franzelle to Major Lovejoy's Fritz, Dec. 20, 1883.

Bridget O'More—Ned Elcho. Major Lovejoy's (Bethel, Me.) red Irish setter bitch Bridget O'More (Rory O'More—Lotta) to his Ned Elcho (Elcho—Stella), Jan. 1.

Lorna Doone—Prince. Dr. Spencer M. Nash's (New York) English setter bitch Lorna Doone (A.K.R. 39) to Mr. J. H. Goodsell's Prince (Pride of the Border—Petrel), Jan. 29.

WHELPS.

☞ *See instructions at head of this column.*

Gipsy Queen. Mr. H. P. Dortch's (Goldsboro, N. C.) English setter bitch Gipsy Queen (Gladstone—Clip), Feb. 11, fourteen (nine dogs), by Mr. J. C. Higgins's Dashing Monarch; eight dogs living.

Hornell Ruby. The Hornell Spaniel Club's (Hornellsville, N. Y.) cocker spaniel bitch Hornell Ruby (A.K.R. 67), Feb. 4, eight, by Obo II. (A.K.R. 432).

Irish Bess. Major Lovejoy's (Bethel, Me.) imported Irish water spaniel Irish Bess, Jan. 11, eight (six dogs), by Irish Bob.

Roxie. Major Lovejoy's (Bethel, Me.) red Irish setter bitch Roxie, Jan. 1, eight (six dogs), by his Trim (Ned Elcho—Ruby).

Kitty Mac. Mr. Jas. Lindsay's (Jersey City, N. J.) collie bitch Kitty Mac (A.K.R. 539), Jan. 2, seven (six dogs), by his Rex (A.K.R. 149).

Josephine. Mr. John E. Thayer's (Lancaster, Mass.) bull-bitch Josephine (A.K.R. 388), Feb. 7, six (three dogs), by his Tippoo (A.K.R. 390).

Bellissima. Mr. John E. Thayer's (Lancaster, Mass.) imported bull-bitch Bellissima (E.K.C.S.B. 11,931), Feb. 4, two dogs, by Slendermau (E.K.C.S.B. 6,553).

SALES.

☞ *See instructions at head of this column.*

Dashing Lion—Jessie Turner whelps. English setters, whelped November, 1883, by Mr. G. W. Ballantine, Washingtonville, O., a black and white dog to Mr. T. C. Eldridge, Knoxville, Tenn.; a black and white dog to Mr. J. W. Slocum, Knoxville, Tenn.; a black, white and tan dog to Mr. J. E. Campbell, Knoxville, Tenn.; a black and white dog to Mr. A. E. Burche, Washington, D. C.; a black and white bitch to Mr. R. B. Johnston, Bellefontaine, O., and an orange and white bitch to Mr. Russell West, Washington, D. C.

Dashing Lion—Queen Anna whelps. English setters, whelped November, 1883, by Mr. G. W. Ballantine, Washingtonville, O., a black and white dog to Mr. J. R. Oughton, Dwight, Ill.; a black, white and tan bitch to Mr. C. Valentine, Edinburg, Ind.; a black, white and tan bitch to Mr. J. S. Vannatta, Shelbyville, Ind., and an orange and white bitch to Mr. B. F. Jones, Akron, O.

Maud Muller. Black and white English setter bitch (Rob Roy—Pocahontas), by Mr. G. W. Ballantine, Washingtonville, O., to Mr. Hugh Hill, New York.

Duke. Black and tan Gordon setter dog, whelped Oct. 22, 1883, by Dinks (Nat—Bess) out of Flirt (Cap—Gipsy), by Mr. J. F. Hartwell, Providence, R. I., to Mr. G. H. Dean, Jr., same place.

Dan. Black and tan Gordon setter dog, whelped Oct. 22, 1883, by Dinks (Nat—Bess) out of Flirt (Cap—Gipsy), by Mr. Geo. A. Ayers, Pawtucket, R. I., to Mr. H. B. Whitman, Providence, R. I.

Rad. Black and tan Gordon setter dog, whelped Oct. 22, 1883 (Dinks—Flirt), by Mr. Geo. A. Ayers, Pawtucket, R. I., to Mr. Wm. Ayers, Providence, R. I.

Guess. Black and tan Gordon setter dog, whelped Oct. 22, 1883 (Dinks—Flirt), by Mr. Geo. A. Ayers, Pawtucket, R. I., to Mr. C. N. Radborn, Bloomington, Ill.

Jennie. Black and tan Gordon setter bitch, whelped Oct. 22, 1883 (Dinks—Flirt), by Mr. Geo. A. Ayers, Pawtucket, R. I., to Mr. F. Quintard, New Haven, Ct.

Jessie. Black and tan Gordon setter bitch, whelped Oct. 22, 1883 (Dinks—Flirt), by Mr. Geo. A. Ayers, Pawtucket, R. I., to Mr. H. L. Hartwell, Providence, R. I.

Trim. Black and tan Gordon setter dog, whelped Oct. 22, 1883 (Dinks—Flirt), by Mr. Geo. A. Ayers, Pawtucket, R. I., to Mr. E. H. Simmons, Erie, Pa.

Dexter. Black and tan Gordon setter dog, whelped Oct. 22, 1883 (Dinks—Flirt), by Mr. Geo. A. Ayers, Pawtucket, R. I., to Mr. J. McGee, Worcester, Mass.

Dash. Black and tan Gordon setter dog, whelped Oct. 22, 1883 (Dinks—Flirt), by Mr. Geo. A. Ayers, Pawtucket, R. I., to Mr. M. J. Flaherty, Boston, Mass.

Weland Dick. Red Irish setter dog, whelped March 29, 1883 (Ned Elcho—Bridget O'More), by Major Lovejoy, Bethel, Me., to Mr. Chas. B. Lancaster, Boston, Mass.

Jack. Imported liver and white field spaniel dog, 2½ years old, by Major Lovejoy, Bethel, Me., to Mr. Elmer Brady, New York.

Dick. Imported liver field spaniel dog, 3 years old, by Major Lovejoy, Bethel Me., to Mr. Chas. Wing, Philadelphia, Pa.

Nick. Brown setter dog, age and pedigree not given, by Major Lovejoy, Bethel, Me., to Mr. Chas. Thomas, Brooklyn, N. Y.

Jim. English setter dog, age and pedigree not given, by Major Lovejoy, Bethel, Me., to Mr. W. White, St. Louis, Mo.

Ringwood—Music III. whelps. Black, white and tan beagles, whelped Nov. 21, 1883, by Mr. E. S. Hawks, Ashfield, Mass., a dog to Mr. Joseph Brady, Fall River, Mass.; a dog to Mr. L. S. Farrer, Bath, Me.; a dog and bitch to Mr. N. Elmore, Granby, Ct.; a bitch to Mr. Haven Doe, Salmon Falls, N. H., and a bitch to Mr. C. P. Ferguson, Springvale, Me.

Skipper. Liver spaniel dog, 2 years old (Dash—Bess), by Major Lovejoy, Bethel, Me., to Mr. Geo. Blanchard, Waterville, Me.

Wycliffe. Red Irish setter dog (A.K.R. 724), by Miss Ida F. Warren, Leicester, Mass., to Mr. Ewin Brown, Worcester, Mass.

Elcho—Meg whelp. Red Irish setter bitch, whelped July 21, 1883, by Elcho (A.K.R. 22) out of Meg (A.K.K. 425), by Mr. Benj. F. Clark, Manchester, N. H., to Mr. Frank Prendergast, Boston, Mass.

Nigger Tom. Black greyhound dog, whelped Aug. 5, 1883 (Charcoal—Queen Bess), by Major Lovejoy, Bethel, Me., to Mr. H. Savage, Brocton, Mass.

Joe. Fawn English pug dog, 4 years old (Jumbo—Topsy), by Mr. Jas. Mortimer, New York, to Mr. Geo. H. Hill, Cincinnati, O.

Echo. Red Irish setter dog, age not given (Elcho—Stella), by Mr. H. D. Ogden, Chatham, N. J., to Mr. Wm. DeLand, Fairport, N. Y.

Wallace. Red Irish setter dog, whelped June 5, 1883 (Kit—Bixby's Ruby), by Mr. J. H. Grimes, Somerville, Mass., to Miss Ida F. Warren, Leicester, Mass.

PRESENTATIONS.

☞ *See instructions at head of this column.*

Annie Laurie. Black, tan and white collie bitch, whelped Aug. 28, 1882 (champion Marcus—Isle), by Mr. J. C. Faxon, Boston, Mass., to Mr. Wm. A. Faxon, same place.

DEATHS.

☞ *See instructions at head of this column.*

Chipps. Liver pointer dog, 7 years old (Cæsar—Moll), owned by Mr. Geo. Goodhue, Danville, Canada, Jan. 15.

Blackie. Imported black spaniel bitch, whelped Oct. 1, 1877 (E.K.C.S.B. 9,288), owned by Mr. F. F. Pitcher, Claremont, N. H., Feb. 15, in parturition.

NEW HAVEN DOG SHOW.—A large number of special prizes have already been offered for the New Haven dog show, and more are promised. Many of them are cash prizes varying in amount from $5 to $15, and include nearly all of the different breeds. There will undoubtedly be a large entry, and we would suggest to the management that many of the classes in which no distinction as to sex is now made, be divided into dog and bitch classes, or at least that they announce that this will be done in all cases where the number of entries will warrant.

ST. LOUIS DOG SHOW.—It is rumored that there will be a bench show at St. Louis this spring.

KENNEL MANAGEMENT.

☞ **No Notice Taken of Anonymous Correspondents.**

C. R. H., Manchester.—Select the one with the most courage.

C. M. S., Bethel, Conn.—From your description we should say that the ball will do no harm. Show him to your family physician, he will probably be able to inform you.

C. F. H., Clarksville, Mich.—Your dog has canker of the ear. Carefully wash out the ears and fill with the following mixture, gently kneading the base of the ear for a short time: Bromo chloralum and laudanum, equal parts, diluted with six times their bulk of water. If the case is not of too long standing one or two applications of this will effect a cure. We should not advise the use of kerosene.

THIRTY CENTS A WEEK, at age 25, buys a life policy for $1,000 in the Travelers, of Hartford, Conn. Cheapest first class goods in the market. Apply to any agent, or the home office at Hartford.—*Adv.*

MONTHLY LIST OF PATENTS.

For Inventions Relating to Sporting Interests, Bearing Date Jan. 22, 1884. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

291,533. Manufacture of Boats from Celluloid, etc.—C. P. Pitman, of Freehold, and H. Allaire, Allaire, N. J.

291,043. Ball Trap.—J. C. Parmalee, Pedalia, Mo.

291,891. Metallic Patch for Bullets.—G. V. Fosbery and Henry Pieper, Liege, Belgium.

291,123. Live-box for Fish.—Richard A. Lindsay, Baltimore, Md.

PUBLISHER'S DEPARTMENT.

FARNHAM'S AUTOMATIC TROMBONE WHISTLE is a handy little knick-knack which is growing in favor among sportsmen.

BETTER late than never get a box of Esterbrook's superior and standard steel pens. Are furnished in all the popular styles. Stationers have them.—*Adv.*

The ostriches of the Anaheim farm in California laid 305 eggs during the season from the 1st of May last until the 1st of October. The birds have been plucked twice since their arrival. The first clip in May last yielded $500. The clip in December yielded 2,500 quills of all kinds from eighteen birds, and is valued at $1,000.

Rifle and Tray Shooting.

FIXTURES.

First International Clay-Pigeon Tournament, at Chicago, Ill., May 26 to 31. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

SOME RIFLE QUERIES.

Editor Forest and Stream:

With your consent, I would propound a few questions for the consideration of the many amateurs and professionals, who eagerly scan all intelligent discussions in your columns of whatever relates to nice points of rifle manufacture and shooting. My object is to draw forth opinions and explanations, all the more stimulating to further investigation if they should be conflicting.

1. Who of your readers will furnish the most lucid and convincing answer to the question which may be put in this form. Shooting at 200yds., if the moving of the wind-gauge sight one-one-hundreth of an inch will vary the striking of the bullet in the target two and one-half inches, how much elevation or depression of the bullet will be caused by the raising or lowering of the peep-sight an equal distance? If the variation in shots, under the supposed conditions, would not be the same, up, down or lateral, let it be explained why. No off-hand, random speculation will solve this enigmatical problem. The rear sight is believed, from some cause, change of trajectory or other, to be the most sensitive in actual practice.

2. What reason for a positive opinion can be furnished, that the pushing of a bullet ahead of a cartridge, say one-eighth of an inch, will increase or lessen its upset when fired? Or, in other words, what effect on the expansion of a bullet into the grooves in the rifle, and its course after it leaves the barrel, may be attributed to a small air-space between the powder charge and the bullet?

3. Can the maximum and most uniform power of a 50-grain cartridge be obtained from the use of a No. 1 Winchester primer, or others of like size and force? Is not more fulminate required to penetrate and fully ignite the charge?

4. Using a paper-patched bullet, what condition of the barrel is more uniform and favorable to close shooting than that it be clean and dry? Is not lubrication unnecessary and objectionable because extremely liable to be variable, with however much painstaking?

5. Why are short and mid-range target rifles better or more easily manipulated with the wind-gauge sight at the muzzle rather than at the breech?

6. On the supposition that a paper-patched bullet should fit the rifling so that it can be pushed through with a gentle pressure, and not be deformed by the upsetting, how can it be placed beyond the shoulder of the chamber so its axis shall be exactly the same as that of the bore of the rifle? Or will the Gordian knot be cut by the authoritative assertion that the position of the bullet does not call for any such nice adjustment, but will right itself on the discharge of the gun?

7. Of the two, is not the sure and instantaneous shedding of a paper patch when a rifle is fired of more consequence than the exact proportion of tin to lead in the composition of bullets, never varying much from a medium standard? Patched bullets, I think, are largely of home manufacture, for economical considerations, if no other. But the saving will not be justified unless a process is followed which will insure accurate shooting. Stripping, and adhesion of paper beyond the muzzle, it is of the first importance to avoid. But by what precautions? When the bullet is in direct contact with the powder, no wad being used, is it not more certain to be discharged from the confining twist of the patch at its base?

8. Change of light being regarded as the most deceptive adverse condition with which the marksman has to contend, what concise practical directions can be given for mastering it? Careful observation would be safe general advice; but who that has profited by long and sharp watching will volunteer to part with any precious secret he has discovered, and lay down some simple rules for novices?

9. Is there no dissent in the high court of experts from what general use shows to be the prevailing opinion, that for short and mid-range target-shooting, with rifles of .38-caliber or upward, the most desirable powder is of the grade of Hazard's or Oriental FG, or Laflin & Rand's Creedmoor No. 5, these being of suitable grain, slow-burning, sufficiently strong, and of moderate cost? Leaving the cost out of the question, and balancing remaining advantages and disadvantages, is there no valid plea to be urged for the use of higher grades of powder for increased accuracy in rifle practice, such, for instance, as Hazard's No. 3, duck shooting? It may be that the final word has not been said on this matter, and that time will change the popular choice.

There are readers of the FOREST AND STREAM who are competent to handle the foregoing topics with skillful familiarity, and let it be hoped that they will respond to this call to elucidate what is too dimly apprehended by the great body of the rifle-shooting fraternity. If the oracles should be found to disagree, the fact may justify this communication as not having been dictated by stupidity. Something is reserved for a later day, when the result of this venture will have been disclosed. J. J. P.

WORCESTER, Mass., February, 1884.

Editor Forest and Stream:

From all these discussions does it not seem that the choice of a hunting rifle cannot be limited to one style of arm? To build a rifle for all round work is like building a yacht on a like plan. You can't do it for all conditions and uses. So let us have as great a variety as may be, and then every one can take his choice and blame himself if not satisfied.

But will some expert tell us which is best in loading a cartridge, to compress the powder or to leave it loose as possible?

Another thing, and more important it seems to me, is this: Place a sheet of paper close to the muzzle of a gun and fire through it, and the paper will show the marks of powder grains unburnt before they leave the gun. Light as well as heavy charges of powder will show this. Or, if fired in the dark the flame bursting in sight is a sign of powder burning outside the gun. What causes this? The powder is ignited at the bottom of the shell and, before all is burned, the expansion of part of it has forced the ball and some unburned powder out of the gun. Power is lost, you may get more power by putting in more powder, because more proportionately will be burned; but you won't get all the power of the powder. Is there any remedy for this?

Suppose you could ignite the powder just at the base of the ball, on the top of the cartridge, what would be the effect? G. F. W.

RANGE AND GALLERY.

THE ZETTLER RIFLE CLUB held its regular shoot on Feb. 12, 12-ring target, possible 120: P. Fenning 116, C. G. Zettler 116, V. Steinback 115, A. Lober 114, M. Dorrler 113, M. B. Engel, 112, D. Miller 111, C. Judson 111, H. Holges 110, B. Zettler 109, R. Zimmerman 108, T. C. Noone 108, H. Schutt 103, H. Fuckhaber 98, J. Adrian 92. Feb. 5, 12-ring target: M. B. Engel 115, J. H. Brown 115, M. Dorrler 113, T. Fitz 106, H. Holges 115, B. Zettler 107, C. Judson 115, A. Lober 112, C. G. Zettler 111, T. C. Noone 104, R. Zimmerman 110, H. Schutt 100, J. Adrian 104.—A. D. WARD, Sec.

NEWARK.—The match between the Zettler Rifle Club, of New York city, and the Frelinghuysen Club, of Newark, will take place on Monday evening, Feb. 25, at the range of the former. The conditions are: Ballard rifle, .22-caliber, 3lbs. pull, 10 men per team, 10 shots to a man, distance 85ft., Massachusetts ring target, possible 120 points. The return match will be shot on the Frelinghuysen range.

The fourth match of the Newark Rifle Association commenced on Monday evening, Feb. 11, at the Domestic range. The next match to be shot will be decided at the meeting of the N. R. A., the Warren and Plymouth Clubs having tied on score—420. The scores made last week were as follows:

Celluloid—W. A. Vreeland 42, C. E. Coe 42, H. Babbit 44, S. T. Simmonds 43, Wilzey 44, Brant 44, A. Erhard 47, Jackson 43, Puder 41, W. Coe 43—433.

Frelinghuysen—G. Williams 49, William McLeod 49, A. C. Neumann 49, S. Shackelford 48, R. Westerman 45, G. Zimmer 47, F. W. Lynn 47, G. Weigman 47, E. O. Chase 44, J. L. Tobin 43—468.

Warren—G. L. Freche 43, Theo. Miller 44, Wm. Nunley 43, Charles Waag 42, J. Schaeffer 38, Wm. Alexander 44, J. Wolf 44, L. Meyer 39, P. Keenan 38. Ed. Burns 45—420.

Domestic—J. E. Velsor 45, T. Porter 43, F. A. Valentine 41, J. Long 43, Wadams 43, Reynolds 44, Dainty 48, Wm. Connell 42, Jeffreys 43, Leitz 46—446.

Plymouth—J. L. Sommers 44, A. A. Baldwin 45, J. A. Fosters 38, H. L. Leibe 38, P. L. Sommers 44, C. H. Townsend 47, H. Grewe 42, G. M. Townsend 40, E. Pollard 44, J. B. McCullum 38—420.

The National Shooting Festival will be held in this city from June 9 to June 12 of this year.

BOSTON, Feb. 16.—There was the best attendance of shooters at Walnut Hill for a long time past, and the shooting was fine. In the early part of the day the flags hung motionless and limp, but about noon a light air sprung up from the east, but not enough of it to spo

the shooting. All that was necessary to get a bull was to hold on and the white disc was sure to be shown. On Friday next, Feb. 22, there will be shooting all day, and if the conditions are at all favorable there is sure to be a good crowd. All the current matches will be on, and as there are so many all can be sure of being satisfied. The following are to-day's scores:

Creedmoor Practice Match.

D Kirkwood	5555545445—47	J Payson (mil)	5445444544—43
C E Berry	5455445545—46	C O Reed	4444545341—42
K A Davidson	5445555544—46	G Welch	4544454314—41
C A Allen	4455545454—45	Dr Langmaid	5443445452—40
J A Carr	5555454545—45	A J Look (mil)	4444434441—39
T C Field	5445544451—44	B I Barnum (mil)	5443353344—38
C F Farr	4544554544—44	S F Burns (mil)	3424333141—34
C B Edwards	4545444445—43		

Creedmoor Prize Match.

I B Thomas	5554545455—47	C F Tarr	4554534455—44
Re-entry	5444555541—46	A J Look	5445444445—43
H Withington	4545454554—45	B A Lappen	4545444441—42
H Cushing	5545545444—45	F Chauncey (mil.)	4444454444—41
K A Davidson	5545544444—44		

Combination Match—Creedmoor Target.

W Gardner	5554454545—46	C E Berry	5455445545—45
C B Edwards	4455455544—45		

Combination Match—Decimal Target.

C E Berry	5	9	10	10	5	10	4	6	9	9	—77
C B Edwards	8	6	8	9	3	9	8	7	9	4	—71
J P Bates	7	8	8	5	10	4	7	6	9	5	—64
J A Cobb	5	5	4	1	4	8	8	10	9	7	—61
A J Look	4	8	8	5	10	5	4	4	6	5	—55

Victory Medal.

J B Fellows	10	8	7	10	6	10	9	5	6	10	—82
C A Rand	7	7	10	5	10	6	8	6	6	10	—75
A J Look	8	9	9	10	7	7	6	4	7	8	—75
J A Hatfield	9	7	9	5	10	10	10	6	6	3	—75

BRATTLEBORO, Feb. 17.—Following are the record scores made by the Brattleboro Rifle Club Feb. 12. First ten shots, 200yds., off-hand, on Massachusetts target:

Nichols	12	10	12	12	9	12	9	10	11	11—109
Smith	11	10	10	12	11	9	11	11	9	12—106
French	10	10	11	12	9	9	11	12	12	10—106
Thorn	12	11	10	12	11	11	12	9	10	8—106
Cobb	10	12	10	9	11	8	11	11	11	10—103
Howe	10	11	11	10	11	12	9	12	9	8—103
Knight	9	10	12	11	11	8	10	11	10	9—101
Lamb	10	10	8	11	10	10	8	9	10	11— 97
Pentland	9	10	9	9	12	11	11	9	12	5— 97
Lawrence	10	9	10	9	8	9	10	10	11	10— 96

TYPOS AT THE SCORE—Jamestown, N. Y., Feb. 16.—Last evening, at Burns's gallery, occurred the third annual Printers' Rifle Match. Three offices were represented by three men from each office, the other three offices having failed to comply with the terms of the match.

Jamestown Journal.		Jamestown Standard.		Morning Dispatch.	
P M Dean	44445—21	E A Brooks	54545—23	F J Budget	45444—21
C B Potter	45444—21	M E Thomas	44454—21	S Burnham	34354—19
J Clary	54444—21	O F Dean	53044—16	C White	04344—15
	63		60		55

SPLITTING CARDS turned edgewise to the shooter is considered one of the most difficult feats in pistol shooting. The mark presented is a hair line, and if the card is placed perfectly true the bullet cuts it into two pieces as cleanly as if the shears had been used. In some instances when the bullet just grazes the card, its path is marked by a lead line. At Conlin's Rifle, Pistol and Record Gallery, Broadway and Thirty-first street, this city, a playing card is exhibited in the record room, which has been grazed by two consecutive shots, showing the leaden lines in both cases running entirely across the card. This is a good illustration of the accuracy requisite for cutting the card. The bullet must not deviate either to the right or to the left the thickness of the playing card—but a "line" shot has more boundary, as a hit at any point counts equally well. The following are a few of the records kept at Conlin's gallery: Splitting cards, with rifle—E. E. Tiffany, 7 in 10 shots; George Bird, 7 in 10; Frederick Sands, 5 in 10; Geo. E. Rogers, 5 in 10; Maynard Bixby, 5 in 7; J. B. Blydenburgh, 6 in 10; H. H. Bishop, 4 in 7; W. B. Young, 2 in 3. With pistol—H. W. Wickham, 5 in 6 shots; W. M. Chase, 4 in 5; E. T. T. Marsh, 7 in 10; J. B. Miller, 5 in 10; H. W. Wickham, 3 in 5 shots at the word; Col. J. J. Dunne, 3 in 5; A. L. Caldwel, 2 in 4; Dr. E. T. T. Marsh, one card on second shot at rifle range. Dr. Marsh, 2 cards in 4 shots with ducking pistol; Mr. Wickham, 2 in 5. Dr. Marsh and Mr. Wickham both split 3 cards in 5 shots with .32-cal., Smith & Wesson revolver.

JAMESTOWN, N. Y., Feb. 16—Score of C. S. A. medal match, Creedmoor target, 200yds., possible 50; wind light at 7 o'clock; light, very bright. S. N. Ayres 45, N. J. Forster 45, A. F. Ward 43, W. H. Sprague 43, A. F. Warner 42, J. Haycock 41, R. H. Burns 41, J. R. Moore 40, O. H. Lilly 40, E. Mayhew 35, C. Salisbury w.—R. H. B.

A BIG PRIZE—Carlisle, Pa.—The Cumberland Valley Rifle Association of this place have decided on a contest in which they will offer as first prize a Steinway piano, H style 1, 7½ octave, price $700. Seven additional prizes will be offered amounting to $150. The shooting is to be at 100yds., the date in the near future not yet determined. The match will be open to all.—W. E. M.

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

THE CLAY-PIGEON TOURNAMENT.

Editor Forest and Stream:

Any changes in or exceptions to the programme as printed and rules indicated thereon can hereafter only be made by the Executive Committee when they meet in Chicago. In answer to a few specific questions we desire now to explain existing rules as follows:

First—The traps must all be loaded after each shot.

Second—To determine which trap shall be pulled the trap judge or assistant will use the ordinary pool balls and bottle, drawing one ball for single and two balls for doubles, which he will show to the puller only, or a patent automatic pulling apparatus will be used. In double-bird shooting, therefore, any two of the five traps may be sprung.

Third—The direction (horizontal angle) of each trap shall be changed whenever it is reloaded.

Fourth—Ties between teams to be shot at 5 singles, 21yds. rise, and 2 doubles, 18yds. rise, all from 5 traps.

Fifth—A sportsman residing in a county in which there is no club, and desiring to shoot in the championship match with a club from some other county of which he is a member, can apply to the Executive Committee through us for authority to do so.

Sixth—Note this error in programme: Charge of shot "1¼ drams" should be "1¼ ounces".

THE LIGOWSKY C. P. Co.

PROPOSED NEW ENGLAND ASSOCIATION.—Providence, Feb. 1. —*Editor Forest and Stream:* At a meeting of the Narraganset Gun Club it was voted to issue a challenge to any or all gun clubs in New England, to shoot a friendly match at clay-pigeons, our object being to create a friendly rivalry between the shooters of the different States, and if possible to result in the forming of a New England Association. We should be pleased to join with other clubs in procuring a medal or trophy emblematic of the New England championship, and would prefer to shoot for some such prize. The conditions of the present match to be a team shoot, five or ten men on a side, as twenty clay-pigeons each man, the birds to be sprung from five traps, placed five yards apart, traps set on fourth notch, and the rise to be either 15 or 18yds., use of one barrel only. We would be pleased to have the first match take place on our grounds, when we shall hold ourselves in readiness to shoot a return match, if desired, at as early a date as possible. I hope some of the many clubs in New England will accept the above challenge in the spirit in which it is given, that of increasing the interest of trap-shooting in the New England States, and if we are defeated we shall have accomplished this, equally as well as if victorious. We are now enlarging our club house by raising it another story, making two comfortable rooms 24x12 with a balcony 6ft. wide extending the length of the building, so we shall not lack for accommodations for our visitors. Our grounds are very pleasantly located on Broad street, and the horse cars pass the building every hour (half hourly in the summer) it being about a half hour's ride from the center of the city. All challenges or acceptances may be addressed to C. F. Baldwin, Secretary Narraganset Gun Club, No. 2 College street, Providence, R. I., or to that best of all mediums for sportsmen, the FOREST AND STREAM.—W. H. SHELDON.

A NATIONAL ASSOCIATION.—Mr. J. E. Bloom recently said to a reporter of the Evansville (Ind.) *Argus*, speaking of the diversity of trap-shooting rules: "This is a subject that has given us great annoyance and labor. We have no national association in this country, to whose standard we might have reference. To-day Illinois shoots under one set of rules, New York another, Massachusetts a third, and so on. It has been our endeavor to establish a set of rules which would please all; rather, a majority—for there are always a series of chronic grumblers whom it would be impossible to satisfy under any circumstances. We announced this tournament last August, since which time we have been receiving suggestions from numerous clubs and individuals, many of which have been adopted. It will be our endeaver during the tournament to organize a national sportsmen's association, whose main functions shall be the framing of national sporting rules for each species of shooting, and the organizing of future annual tournaments. The rule that members of a team entered for the principal champion contest must be residents of the county from which the team is entered," was adopted at the suggestion of a Cleveland sportsman, and is intended to prevent the combination of the best shots of a State or section, in one team (which must be composed of five members of at least two months' good standing as such). Take the State of Illinois for example; it would be an easy matter to pick out five of her best shots from all parts of the State, and form a team which would be practically invincible, this would deter dozens of teams from country towns or local clubs from participating in the tournament. The rule is adopted to avoid this contingency. We organized this tournament not for the benefit of the few best shots of the several States, but for the delectation of hundreds of local amateurs throughout the country. We do not wish this to be a tournament for a dozen clubs—but rather for a hundred. I am confident that with this rule there will be over one hundred teams entered for this match. We already have entries from Florida, Missisippi, Massachusetts, Wisconsin, Ohio, Kentucky, Pennsylvania, New York, etc. Let the 'kickers' organize a club in their respective counties. How much more pleasure will result to all sportsmen, if local gun clubs were started in every county in the Union. There is a certain *bon comradeship* between devotees of the gun which only needs a feature of this kind, joined to a national organization to fully develop same, and which would result in establishing a 'body of men' scattered throughout the country, with whom thousands would take pride in co operating for any worthy purpose or emergency which might arise. A number of parties have endeavored to infringe upon our patents, but thus far unsuccessfully. By means of our patent process we are selling clay-pigeons cheaper at retail, than ordinary potters could manufacture them at wholesale. True, we sank $20,000 in devising this process and we have the same amount on hand with which to fight any parties who might try to infringe our patents. Moreover, we have the good will of the sportsmen of the country who now realize that while working for ourselves we at the same time cater to their sport—that we are doing more to foster tournaments than any set of men have ever done—or would do, were our patents overthrown."

FOUNTAIN GUN CLUB.—There was a fair attendance at the Prospect Park Fair Grounds, Brooklyn, at the monthly club contest. The birds were the strongest fliers we have had for a year, and it was quick work to stop them. The weather was fine and the shooting, with a few exceptions, remarkably good. Appended is the score:

Regular Monthly Badge, 7 birds. 5 traps, both barrels.

Class.

B—John Rathgen, 25yds.	1	1	1	1	1	1	1—7
A—W. McLaughlin, 27yds	1	1	1	1	1	1	1—7
B—C. R. Weed, 25yds	1	1	1	1	*	1	1—6
B—C. Fisher, 26yds	1	1	1	1	1	1	0—6
B—W. Cherry, 26yds	1	1	1	1	0	1	1—6
A—H. Hoermans, 27yds	0	1	1	1	1	1	0—5
B—T. Livington, 26yds	0	1	1	1	1	0	1—5
A—A. Eddy, 30yds	1	1	0	1	1	0	1—5
C—O. Sarony, 23yds	1	1	1	1	*	0	1—5
B—L. Duryea, 26yds	0	1	0	1	1	1	1—5
A—W. Hughes, 30yds	1	0	1	1	*	1	0—4
C—F. Donnelly, 21yds	0	*	0	1	0	1	1—3
C—H. Altenbrand, 23yds	1	*	1	1	0	0	*—3
C—J. Fried, 21yds	1	0	0	0	0	0	1—2

Winners: Class A, Mr. McLaughlin, 7; B, Mr. J. Rathgen, 7; C, Mr. O. Sarony, 5.

*Dead out of bounds.

Sweepstakes, 25yds. rise, 3 birds

C R Weed	1	1	1	1	1	1	1—7
John Rathgen	1	1	1	1	1	1	1—7
T Livington	1	1	1	1	0	1	1—6
Dithifson	1	1	1	1	1	1	1—7
Place	1	1	0				—3
W Cherry	1	1	0				—3
A Eddy	1	0					2
H Hoermans	1	0					2
W Hughes	1	0					—2
O Sarony	1	0					—1
E Brown	1	0					—1

B. McVaughlin, C. Fisher and H. Altenbrand missed first. Dr. Weed and John Rathgen divided; Mr. Ditifson won 3d money.

RAMBLER.

BLACK VS. WHITE.—I must record a great event in the sporting annals of 1884, being no less than a match for the championship of Flatbush and a sister burg—Flatlands Neck. The former was represented by four white gentlemen, and the latter by four colored gentlemen, the arrangements being to shoot with four men on a side, 30 glass balls apiece, 18yds. rise, Bogardus trap, one colored and one white judge, ditto scorers. Stakes—Championship and a keg of lager. Below I give the detailed summary:

Flatlands Neck Team.

T Powers, M L	1	0	1	0	0	1	0	1	0	1	0	1	1	0	0	1	1	1	0	0	1	0	1	—15
John Powell, B L	1	1	1	0	1	0	0	1	1	0	1	1	1	1	1	1	1	1	0	1	1	0	1	—21
T Jackson, M L	1	0	1	0	1	0	1	1	0	1	1	0	0	0	0	1	1	0	1	1	0	1	1	—15
S Anderson, M L	0	1	1	0	0	0	1	0	1	1	0	0	1	0	1	0	0	1	1	1	1	0	0	—16—67

Flatbush Team.

Skidmore, M L	0	1	1	1	0	0	0	1	1	1	0	1	1	1	1	1	0	1	1	1	0	0	0	—15
H Cook, B L	0	1	1	1	0	0	1	1	1	0	1	1	0	1	1	1	1	1	0	0	0	0	0	—20
D Rumph, B L	0	0	0	1	1	1	0	0	1	1	1	0	1	0	1	0	1	0	0	1	1	0	0	—15
Hagaman, M L	0	0	1	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	1	1	0	1	0	—15—65

The best of feeling prevailed even after the announcement of the result, and the outcome of this good-fellowship is a return match at an early day. Will report.—SEAWANHAKA.

KNOXVILLE GUN CLUB, Feb. 15.—The first regular match for the Ligowsky Champion Medal this season, resulted as follows. There was a strong wind and the birds flew with unusual velocity from the fourth notch at 18yds. rise:

C Hebbard	1 0 1 0 1 1 1 1 1 1 1 0 1—12	A E Mead	0 1 1 0 0 0 1 0 1 1 1 0—7
T Armstrong	1 1 1 1 1 0 1 0 1 1 0—10	M O French	0 0 1 1 0 0 0 1 1 1 0 0 1 1—7
J C Duncan	0 1 1 1 0 1 1 1 1 0 1 0—10	J W Slocum	0 0 1 1 0 0 1 1 1 1 0 0 0 1—7
T C Eldridge	1 1 1 1 1 0 0 1 0 1 0 1 0—10	C Deaderick	1 0 1 1 1 0 0 0 0 0 0 0 1—6
S B Dow	0 1 1 1 1 0 1 0 1 0 0 1—9	C Woodbury	0 0 0 0 0 0 1 0 0 1 0 1 0 1—4
W Jenkins	1 1 0 1 1 1 1 0 1 0 0 0—9	M McClung	1 1 0 0 0 0 1 0 0 0 0 0 0 0—3
H Worsham	0 1 0 1 0 0 0 0 1 1 1 1 1—8		

EAST PROVIDENCE, R. I., Feb. 12.—There was a very large attendence at the meeting of the Watchemoket Gun Club, many being present from Providence, Pawtucket and other places. The following was the score for the clay-pigeon cup, best out of a possible 20, from five traps:

E S Luther	1 1 1 0 0 1 1 1 1 1	10	10	10	11	01—13
E W Tinker	1 1 1 1 1 1 1 1 1 1	10	11	11	10	11—18
O Payne	1 1 1 1 1 1 1 1 1 0	11	10	11	10	00—15
George Barney	1 1 0 1 1 1 1 0 0 0	10	10	00	00	11—18
Mr Saulsbury	1 1 0 1 1 1 0 1 0 0	10	10	10	10	10—11
Isaiah Barney	0 1 1 1 1 0 0 0 0 1	10	01	11	11	10—13
T W Penney	1 0 0 1 0 0 1 0 0 0	withdrawn.				

The cup goes to Mr. Tinker for the first time.

This cup has been won by Mr. Luther four times in succession, and as it is almost impossible for any one member to win it five times in succession, it is thought advisable at the next regular meeting of the club to have it shot for in the same manner as the Ligowsky State badge, now held by the Narraganset Gun Club of Providence.

For the glass-ball cup the following was the score, best out of a possible 20:

E S Luther	1	0	1	0	1	1	1	0	1	1	0	0	0	1	0	0	0	0	1	1	0			—10
George Barney	1	1	1	0	1	0	1	1	0	1	1	1	1	1	1	1	0	1	0	1	0			—15
Isaiah Barney	0	0	1	1	1	1	0	1	0	1	0	1	1	1	0	0	0	1	1	0	0			—11
T W Penney	1	0	1	1	1	0	0	0	1	1	1	1	1	1	1	1	0	1	1	0	1			—15
E W Tinker	0	1	1	1	1	withdrawn.																		
C Payne	1	1	0	1	1	withdrawn.																		

This being for resident members only, it was awarded to George Barney, for the first time.

There was then a sweepstakes shoot, five clay-pigeons being used by each contestant. S. E. Smith took first money, E. W. Tinker second and George Barney third. Except for the fog, the day was very favorable for the practice.—O. J. R.

YONKERS, N. Y.—Following are the officers of the Terrace City Sportsman's Club: John E. Rockwell, President; John Hien, Vice-President; John L. O'Brien, Secretary; Simon Belzel, Treasurer. Executive Committee—John Dearman, William Gormley, James Thompson.

SHOT FOR CLAY-PIGEONS.—Buffalo, O., Jan. 26.—In this week's issue you invite your readers to send their opinions as to the best size shot to use in clay-pigeon shooting. I have shot at them considerably, and I should say that good results can be obtained by using either 6s, 7s, or 8s. It depends something as to when they are shot at, too. The shooter who catches them quick can safely shoot smaller shot than he who lets them get further off before shooting. My experience with my gun (an 8¾ chokebore) is that with 4 drams good powder and an ounce of No. 6 shot, I make better scores than when loaded any other way. In our opinions here the clay-pigeons make the best trap-shooting, far surpassing glass or puff balls, and fully as hard to hit as live pigeons, without being open to the objections against live pigeon shooting.—F. S.

THE NARRAGANSETT GUN CLUB, of Providence, R. I., will raise their club house one story, making a spacious dining hall above, while the lower part of the house will be used as before for the accommodation of the shooters. The club intends holding a series of tournaments as soon as it is completed. The treasurer's report shows a flourishing condition of the club as we are out of all debt, besides having quite a handsome balance in the treasury. There is also much enthusiasm among the members, and the season of 1884 promises to be the liveliest we have had here for a long number of years. The club will be pleased to arrange a friendly match with any New England club, five or ten men on a side, to shoot clay-pigeons.—W. H. S.

Yachting.

FIXTURES.

May 24.—Boston Y. C., Opening Cruise.
May 30.—Knickerbocker Y. C., Spring Matches.
May 31.—Boston Y.C., First Match, Connor and Commodore's cups.
June 10.—Atlantic Y. C., Annual Match.
June 12.—New York Y. C., Annual Matches.
June 14.—Hull Y. C., Club Meet.
June 28.—Boston Y. C., Ladies' Day.
July 12.—Hull Y. C., Club Meet.
July 12.—Boston Y. C., Second Club Match.
Aug. 9.—Hull Y. C., Club Meet.
Aug. 9.—Boston Y. C., Open Matches, all clubs.
Aug. 23.—Boston Y. C., Third Club Match.
Sept. 13.—Hull Y. C., Club Meet.
Sept. 13.—Boston Y. C., Second Ladies' Day.

SHARPIE RUDDERS.

Editor Forest and Stream:

It seems to me plain why sharpies carry their peculiar rudders. A shoal boat, not being able to have its rudder go deep down in the water, in order to get a grip, must have it reach out aft. Now any one who has handled a shoal skiff boat, with a big wide rudder, and has afterward handled the tiller to a balance rudder, can testify to the ease with which the latter works in comparison. The strain on the rudder stock and tiller head is also less, and consequently allows a smaller and neater rudder stock. Many also claim that a boat works quicker with a balance rudder; in giving a cant to a boat which has sternway on it is very effective, and it also will almost instantly stop a boat when shooting up to a wharf or buoy, with too much headway on. On one boat at least, that I know of, the dropping the rudder down lower, as allowed by pins through the stock, helps greatly in a light breeze. I think these qualities explain why "sharpies have always" used them. It is not the absence of a skag, for I know three sharpies which have skags and still use the balance rudder because of its good points, and with a skag there is no hitting bottom, catching snags, etc. L.

NEW ENGLAND YACHTING ASSOCIATION.

AT a preliminary general meeting, Feb. 7, Parker House, Boston, organization was effected as follows: Clubs represented—Bunker Hill, Beverly, Boston, Dorchester, Eastern, Jeffries, Hull, Lynn, Portland, Salem Bay, South Boston and West Lynn. Mr. Charles F. Loring, Boston Y. C., was elected chairman and Mr. Peleg Aborn, Hull Y. C., secretary. The committee on plans reported as under: First. The name shall be the New England Yachting Association. Second. That the association be governed by suitable by-laws providing for its permanent officers and their election. Third. That a system of uniform measurements and time allowances for yachts belonging to the several clubs represented in the association shall be adopted, such rules to apply only to union regattas. Fourth. Recommending a uniform code of signals for the use of the yachts of the clubs belonging to the association. Fifth. Providing for the continued membership of clubs in the association and the admission of new clubs to membership therein.

Officers were selected for the present as follows: President, Chas. F. Loring, Boston, Y. C.; Vice-President, J. P. Phinney, Boston Y. C.; Treasurer, B. W. Rowell, West Lynn Y. C. A committee to draw up by-laws was appointed, comprising the following gentlemen: W. Lloyd Jeffries, Bev. Y. C.; C. A. Perkins, H. Y. C.; L. M. Clark, D. Y. C.; Parkman Dexter, D. Y. C., and Dr. John Bryant, E. Y. C., to which the chairman, C. F. Loring, B. Y. C., was added *ex-officio*. Another committee to recommend sailing rules and time allowance was selected by the chairman, to report at next meeting, Feb. 21, at same place. This committee is composed of: D. H. Rice, S. B. Y. C.; P. M. Bond, B. H. Y. C.; Sidney Burgess, E. Y. C.; Thomas Dean B. Y. C.; E. C. Neal, L. Y. C.; C. F. Loring, B. Y. C., *ex-officio*.

SMALL YACHTS.

Editor Forest and Stream:

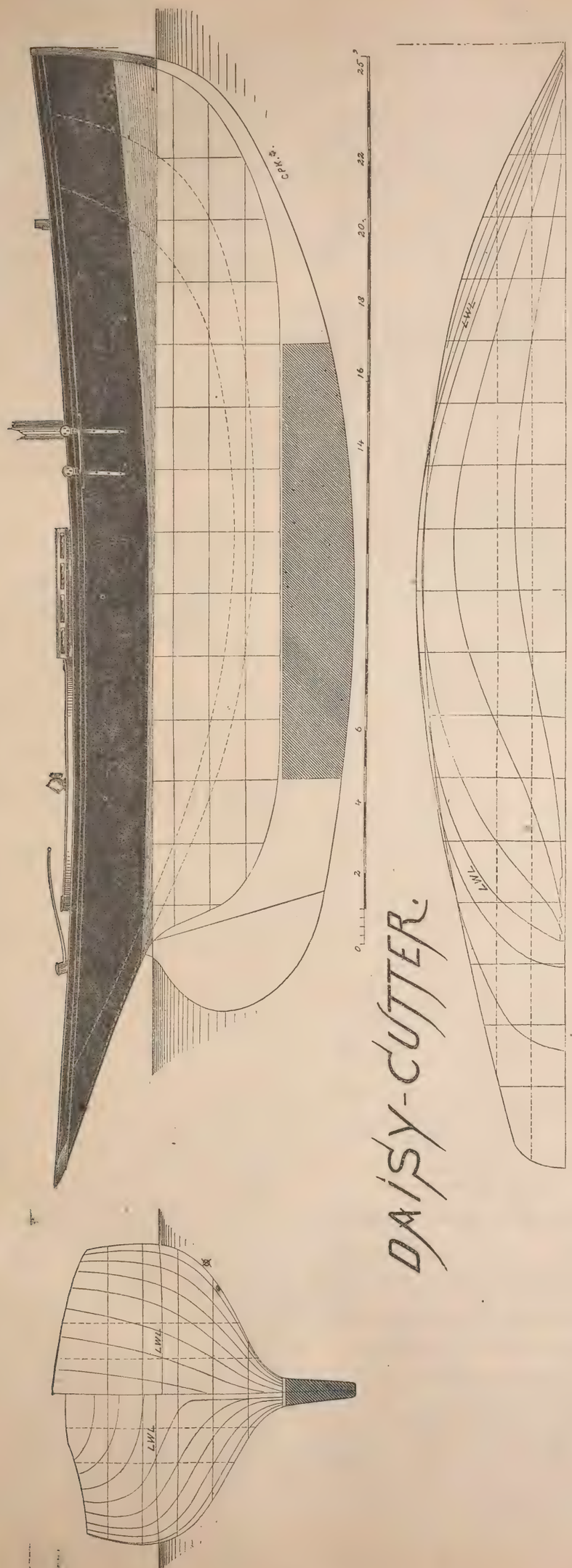
I read with great interest your advice to single-handed yachtsmen, and will give you the figures of a 23ft. catboat I now sail, and which has proved in three years' actual experience to be what I consider the kind of a craft needed for comfort and safety. She is 3ft. 6in. deep and draws 3ft. 3in. without centerboard, will work well in a heavy sea without board. I use it only in racing. The box makes the table, leaves to turn up when used as such. Cabin is 8ft. long, 6ft. wide, 4ft. 3in. high. Transoms 7×2ft.; lockers for stores and dunnage; cockpit, 6×5ft., tight and with scuppers. Doors to cabin made to shut watertight. House is 4in. high and 6ft. wide, leaving 2ft. gangway each side. One thousand pounds lead are fitted to the skin and 2,000 trim on top, all being well below water line. Spars for cruising are mast 22ft. deck to hounds, 15ft. gaff and 26ft. boom. Head of sail peaks to an angle of 75 degrees. For reefing the tack earing reeves through a sheave on the goose neck of the boom and leads to a cleat. The clue pennant reeves through the cringle on leach and down again through cheek sheave on boom, so that the sail can be hauled down to first or second reef while the boat is in stays. Her floor is quite sharp, which makes her easy in a seaway. At anchor an awning is stretched over the boom and stopped tent fashion to sides of cockpit, making a space for berthing two in moderate weather. She is much the same style of boat I commenced my yachting with some fifty years ago, and although I have built many large yachts during that time I am now more than ever satisfied that there is more pleasure and sport in being actual master of a small boat than being under the guardianship of a professional skipper and steward. I would recommend all young persons who wish to enjoy a week's cruise on their own hook to build a staunch, deep-draft and well-ballasted boat with snug rig and take comfort. The danger of driving your boom under water in a cat can be obviated by making the topping lift fast to the outer end of boom, reeving it through a block at masthead and leading it through a sheave on deck to cockpit. You then can set taut without trouble and lift the boom as desired. BALLAST.

Editor Forest and Stream:

My idea of a single-hand yacht is a cabin large enough to eat, sleep, cook and dress in comfortably, in a hull which will combine the greatest possible speed and safety. The question is, What is the best form of hull? Is this small yacht of the future to be a cutter or a catamaran, or what modification of these extreme types? SERANG.

[We know of no boat which meets the wants of the single hand for best average work and regular yachting purposes better than the small cutter or yawl of 18, 20 or 22ft. loadline, with about 6ft. beam, with nearly all the ballast on the keel. Such boats combine the most room, safety and greatest ability on a small draft from 4 to 5ft. Attempts are frequently made to save some of the draft and displacement. All such attempts only rob the boat of just what you seek, and it is not good policy to save a few dollars at the spiggot and lose at the bung what is most worth having in a small boat, power and ability with permanent habitation on board. We have published a number of suitable designs, not to be followed strictly, but to afford a cue to the chief points which should be given prominence in such boats. Catamarans on a small scale are of no account, being thrown out of trim and lacking in power, as well as without accommodation].

ANNA.—This Baltic cutter, hailing from Kiel, designed by Constructor Saefkow, of the German navy, has already been noticed in this journal. Her lines appear in the London *Field* for Feb. 5. She is a handsome, fair yacht all through, and although but 7.43ft. beam on 41ft. loadline, is described as a specially stiff, able and dry boat of superb seagoing qualities. Displacement 18.7 tons, of which 0.620 is represented by 11.5 tons of lead ballast, 10 tons thereof being on the keel. Draft 8.2ft. Lower sail area 1,333ft., which is considered rather snug. Center of gravity of boat and equipment 1.75ft. below center of buoyancy, and meta-center 1.1 above C.B. Statical stability at 35 degrees is 29.8 foot-tons. Maximum stability at 130 degrees. Ballast on keel is 18in. thick, 28in. deep and 14ft. long, or say one-third loadline. This concentration accounts for her extreme dryness in a sea. Least freeboard to plankSheer is 2ft. 9in.



THE DAISY.

THE lines of this English-built yacht, soon to show her number on this side of the Atlantic, will prove of great interest in comparison with the keel sloops which have of late come into such general favor in our own waters. The Daisy was built to sail under the loadline rule temporarily enforced in Southampton waters and immediate neighborhood. The influence which that rule has upon modelling is at once detected in the close resemblance existing between the cutter Daisy and the most approved keel sloops of the East. Considerable beam and depth, with a deep keel and great displacement to act as a counterpoise to the beam and a large rig to correspond, are the principal features of all such boats. The Daisy has, however, much the advantage in point of style, as appears from her graceful sheer, straightish topsides and long fantail. With her rocker keel, flush deck, free from encumbering house and full cutter rig, she is a much smarter and more ship-shape craft than the roundish sloops of the East, which are all of a heap and stubby, as well as cheap in rig and equipment.

The fact that small boats on a given length are at a disadvantage with large boats in respect to power and general ability quickly forced itself upon the conviction of builders abroad, and they were not slow to take advantage of the weak spot in the rule by adding to the size, weight, draft and rig of boats in succession until the maximum bulk on the length was attained by experiment. Up to this maximum every racer must be built and in face of the prejudice for bulky boats shown by the length rule, all forms of more moderate proportions are driven out of existence. To meet the peculiar exigencies of the length rule the Daisy was designed by Mr. Joseph M. Soper, whose artistic eye and practical proficiency materially promote the good fortunes of the famous yard of John G. Fay & Co., of Southampton, where scores of handsome yachts have risen in frame to give excellent accounts of themselves in later days.

Daisy was built in 1882, and in the Solent matches won for herself an enviable record. She is certain to receive popular indorsement on this side of the pond, for she has all any one can ask on 25ft. loadline. It is possible she will be raced now and then in the Seawanhaka Corinthian matches and we also hope to see her voyage East and try on some of her own breed of American origin. Her principal occupation, however, will be knocking about the coast anywhere between Halifax and the West Indies. The spars of the Daisy are necessarily of the most liberal proportion, so that to mitigate their influence in pitching, the mast has been stepped well amidships. As we propose to publish cabin plans, building section and rig, it will be enough here to add the chief dimensions and elements.

Length over all	32ft.
Length on loadline	25ft.
Beam loadline	8ft. 6in.
Least freeboard to plankshear	2ft.
Greatest draft	5ft. 9in.
Displacement, long tons	7.86 tons.
Coefficient fineness to rabbet	0.26
Ballast on keel, lead	4.38 tons.
Ballast inside, lead	0.25 tons.
Ratio of ballast to displacement	0.59
Area loadline plane	149sq. ft.
Area midship section	20.75sq. ft.
Area longitudinal section, with rudder	120sq. ft.
Area wet surface, with rudder	328 sq. ft.
Area three lower sails	862sq. ft.
Center of sails abaft middle L.W.L.	1ft.
Center of lateral resistance ditto.	1ft. 5in.
Lower sail per sq. ft. wet surface	2.69sq. ft.
Wet surface per long ton displacement	40.7sq. ft.

AROUND LAKE ONTARIO IN THE KATIE GRAY.

THE first cold winds of fall bring to the yachtsman's mind the many pleasing memories of summer's visit, and hasten him to his pen, that in the savage blows of winter and in the seasons to come the cruise may lose none of its happy recollections. Cruises in all kinds of yachts are composed of incidents and day to day life, similar one to the other, but as we think we had about the jolliest crew afloat, harmonious in all things, and the famous record of our sloop for speed, our trip around Lake Ontario and down the St. Lawrence River may interest some of our salt-water brother yachtsmen as well.

A four days' blow, commencing on the night of the 2d of August, drove us back pell mell from about eight miles up the lake. G. D. and the Major, strong fellows constitutionally, "went over the side of the ship and heaved their lives away."

For three days our only communication with the shore was by signal code. At daylight, Aug. 7, we were off, and with a heavy sea and wind dead ahead, we made Fair Haven, fifteen miles, in one stretch. We could have fetched ten miles further, but we were hungry, so we ran in and cooked a square dinner. At daylight next morning we were still working to windward, having thrashed fifty-one miles. All night we were just able to keep a tow abreast of us, which we found in the morning to consist of the tug C. P. Morey, Capt. Fred. Papa, drawing three coal barges. The wheelman on the last barge caught our towline, and at 7 A. M. we were in Charlotte, seven miles from where we lowered our canvas.

Aug. 8.—A hasty change from our heavy clothing into our yachting uniforms, a rush for the train, and with the first mate missing, Rochester was soon reached. Dined at the Powers Hotel. The evening paper mailed to us at Toronto read, The Rochester *Post-Express* contained the following: "The yacht Katie Gray, of the Oswego Y. C., arrived at Charlotte this morning at 7 o'clock from Oswego. The captain of the Katie Gray is Vice-Com. W. B. Phelps, Jr., and the crew is composed of G. D. Hart, J. D. Henderson, R. G. Majorossy, and J. P. Phelps. They are passing the day in Rochester, calling on their friends and making hosts of new acquaintances. Their yacht is a very fine and handsome craft, and manned by genial, pleasant gentlemen." At 3 P. M. we were standing out into the lake; dropped Capt. John Parsons at the lighthouse. Wind fell when a few miles out. Becalmed all night, not a breath of air. Our little clock rang the bells through four watches before our bow cut the water.

Aug. 9.—A more beautiful day or favorable breeze could not be wished. As the dishes were being cleared away a N. E. breeze set in, and steadily increased to a lively air, and held its own all day. We were heading W. by S.; spinnaker did good service. Passed Oak Orchard 9 A. M.; Thirty Mile Point 11:45 A. M.; Olcott 1:35 P. M.; Wilson 2:35; Niagara River at 4. After passing Niagara the wind gradually fell until it reached a calm, leaving us unmanageable half a mile from Port Dalhousie. This was quite a disappointment, as we had "slicked up" and blacked our boots, etc., and it looked as though the night was to be spent afloat. In the course of an hour all hands gave a slue to their trousers, and the Major skipped a trialaloo on the cabin top as a light air swept us into the piers at 7:30. Two hours later the schooner Preston came in. We beat her eight hours in the 140 miles. Chartered an old springless democrat and drove three miles to St. Catherine's. The firemen were having a big celebration. Companies from both sides were in the long torchlight procession. The "ons" of the country folk and the "ahs" of the city fry were intermingled with howling brass bands as the rockets bursted in air, and flaming Niagara spread her volume of colored fire. We were taken for firemen by the uninitiated, and had the freedom of the grounds. As we drove back, the colored lights on the bridges and banks of the new Welland Canal presented a very striking picture.

Aug. 10.—Under way at eight bells; wind S.W. We could just squeeze on our course. Breakfast was scarcely partaken of when the breeze hauled a little more southerly, so that our jibtopsail pulled nicely. Met steamer Hastings with large party aboard. The day was warm and the wind very fickle, leaving us entirely when a few miles from Burlington Piers. The skipper pulled away a mile ahead in the dingey. The Major slept. J. D. took the polish and scoured the brass work. It was 5 o'clock as the great railroad bridge swung to let us through, and 6 as Capt. Monck, of the yacht Coquette, rowed out and boarded us and piloted us into moorings. Our snug uniforms were speedily rifled out of our satchels, the yacht was put in complete order, and under the wings of Capt. Monck and Mr. Charles Goodeve the Hotel Royal dining room was taken possession of, and right royally we enjoyed our meal. At this hotel we found everybody obliging and alive to the wants of the visiting strangers. A merry time we had ashore, and we feel under obligations to Messrs. Monck and Goodeve for their kind attention.

Aug. 11.—Market day. If you have been up early in the morning in a Canadian city, and witnessed the uncovering and locating of the thousand and one articles, you have seen something that will enhance the flavor of your morning coffee. It is Fulton and Washington Market on wheels. The plump little cackling chickens, the big fresh eggs, the rosy complexions of the pretty farmers' daughters proved such an interesting scene that cold breakfasts awaited two of our crew. Our skipper had a narrow shave from total annihilation. He was presented to Hamilton's fairest belle, and for many miles at sea he could be discovered gazing into Ontario's blue depths, silent and sad. After dinner at the hotel, we took the street car to the yacht, bade our friends good bye, and with a head wind, 6 o'clock found us going through the draw at Burlington Beach. In the evening we gave a display of fireworks in front of the hotel. Midnight we let go with three Hamilton gentlemen aboard, who were to join us in the run to Toronto. A light air carried us about six miles and there dropped us for the night, a repetition of our previous experience off Charlotte.

Aug. 12.—At eight bells a light breeze sprang up from the eastward

dead ahead, and held all day. A flat-sitting gafftopsail was spread, and we began to knock the miles off between Toronto and Hamilton. As we sighted Oakville a fleet of nine sails was coming out. We soon found ourselves working through the Toronto Y. C. squadron bound for Hamilton. The leading yacht was a small one, and appeared to be doing more miles than the large ones. A salute was exchanged, and after signaling the Guinevere with our code signals to heave to and dine with us, we received signals in return stating that time was pressing and position in the line enviable. Our attention was directed to the large yachts as weather-gage of us six or seven miles, the Verve and Alarm. We hauled sheets a bit flatter and went for them. During the next four or five hours they were hidden from our sight by a misty atmosphere. We gave them a long chase, and in the afternoon when we made them out they were well to leeward of us. The American shore was sighted as the air cleared. We came about and had an attack of calm, but drifted into Toronto Bay, and made fast to the Queen's wharf for the night.

AUG. 13.—At daybreak the mainsail was hoisted, and we shot along the city front until opposite the Union Station, where we dropped anchor. Registered at the Queen's Hotel and inspected our mail. It was quickly noised about among our friends that the Katie Gray was in—so we were soon in good and hospitable hands. Hanlan's Island was visited among many other points of interest. We met a great many members of the Royal Canadian and Toronto yacht clubs. All were very hearty in their greeting.

AUG. 14.—At 3:30 P. M., after sailing the yacht clear of the fairway for passing steamers into which she had dragged, we put everything in seagoing order and shaped a course for Coburg, 65 miles distant; wind W. One of our crew was too much taken up with Toronto to sail with us. He remained behind, with the understanding that the night train would overtake us at Whitby or Coburg. At dusk the wind came around E. E. by N., making close work for us to hold our course. The moon was out in a clear sky, the night was perfect, and at 7 A. M.

AUG. 15.—We were abreast of Port Hope. The wind hauled E. and in a short time a heavy chop sea drove the Major from the stove, where he was using three different languages to induce the coffee-pot to remain on the fire. As we shot into Coburg piers our lost messmate was discovered astride of a lumber pile. He said we looked very pretty as we tossed the caps off the waves, rushing along under reefed canvas. By the way, our sails were brand new bent the day before we left home. They were made by Sawyer, of New York, and were remarked in every port as being the best sitting sails seen on the lake. Coburg is advancing to the dignified title of a summer resort. Many Americans, mostly Southerners, were at the hotels. The Arlington is a good hotel in the distance. At the Dunham House the genial "William" provided everything in a satisfactory manner. A dog-cart was procured, and a drive of seven miles, in which we all went to sleep, took us to Port Hope. The "Sons of England" were celebrating some anniversary on the fair grounds, where we proceeded. One of the crew stole the dog-cart and, with two of Port Hope's fairest daughters, drove into town. The skipper was discovered emerging from St. Lawrence Hall, and was soon under full sail behind the steppers. One train after another bore the crew to Coburg leaving G. D. and the skipper in full possession of dog-cart and young ladies. In the somber hour of midnight two youths might have been seen leisurely walking their horses down the smooth country road which they supposed was leading them into Coburg town. Alas, it measured many a crooked mile ere the lights of the town were discerned. The yacht Cygnet had arrived in port from a cruise to the St. Lawrence.

AUG. 16.—In the morning Mr. Hugh C. Dennis, of the Cygnet, called on board and invited our party to dine at Strathmore, the beautiful country seat of his father-in-law, Judge Clark. After a pleasant drive of a mile along the shores of the lake, we were presented to the captain's family, and as agreeable an afternoon is not often logged. In the early evening a large party assembled on the lawn of the rector's residence with music and brilliant illumination. At 2 o'clock we boarded the yacht and found the wind, which had been ahead all day, had hauled to the westward, and although the sky looked dark and threatening, we prepared to get underway.

AUG. 17.—Daylight we were under full sail rapidly skimming along down the Canadian shore. Sighted Scotch Bonnet at four bells. The wind veered to the southward and freshened to a blow. Two reefs in mainsail put us in shape to stand it. For half an hour it was a question whether we would weather the Bonnet or run for Presque Isle. G. D., who was in the watch below was awakened by a green sea crashing in through the forward deadlight upon his slumbering form. It was a hard struggle to hold up to weather the Bonnet, but we did it, and starting our sheets, with the heavy sea after us and the wind S.W., we knew we were booked for a fast run. Passed Salmon Point at 9:30. Point Peter at 10:10. Passed close to a schooner ashore. Passed South Bay point at 12:30 noon. Such a sail as we were enjoying would not be met with once in years, the wind and sea seemed to have a perfect understanding, for in spite of the heavy rollers and two-reef breeze there was no yawing, no sliding down a sea and fetching up, except on the part of the Major. Kingston, at the mouth of the St Lawrence, was reached at 4 in the afternoon watch. After a stop of half an hour for ice and mail we headed down the river. The wind had now let up considerable, gafftopsail and balloon jib were set. A mile above Wolf Island light we passed the Gracie, Mr. Roy, bound for Belleville. We hauled up and the skipper took the dingy and made a short call aboard the Gracie. Both yachts were in a hurry to reach their destinations before dark. At eight bells we were slowly drifting by Clayton. At 9 o'clock we fired a rocket over the Hub House, having traveled 120 miles since daylight. Took part in a hop in the hotel dining-room.

AUG. 18.—Made sail for Alexander Bay at 10 A. M. As we rounded to under the Crossmon House, a gun from the decks of the steam yacht Sport echoed among the islands and announced our arrival. The Sport is a handsome side-wheeler, and although she was beaten in a match race for $1,000 by the Ranger of Ogdensburg, she is a very fast steamer. The Thousand Island House did not seem as homelike as in former years, as our accommodating landlord, Staples, had gone from the scene of six years' triumph to preside over the destiny of Willard's. At midnight a steamer came alongside and towed us to the Hub House, seven miles, against the swift current. We spoke the watch on the revenue cutter Bibb as we swept along under the Wellesley caravansery.

AUG. 19.—Sail was made in the morning, and boarding the revenue cutter a pleasant hour was spent with her officers. After dinner the guests of the Hub House were invited by the proprietor to board the steam yacht Van Horne for a trip among the islands. The steamer proved too small to accommodate all, so we volunteered the services of our yacht. A large number of ladies and gentlemen were comfortably and cosily stowed. We passed through the narrows and steamed down the Lost Channel. Our hoist of bunting, our white sails snugly furled, the pretty and gaily dressed ladies under the shade of the awnings produced a yachting picture which brought smoke from the guns of the camps and steam from the whistles of passing vessels. Turned the foot of Wells's Island, touched at Alexander Bay for a half hour and then reached the Hub in time for supper. The evening was a grand one on the old St. Lawrence—full moon and perfectly calm.

AUG. 20.—At 9 o'clock a number of our friends came on board, and in tow of the Van Horne, we reached Clayton in a few minutes. A rain set in and for the first time on the cruise our Cape Anns were donned. Made fast at the railroad dock long enough to ice up and hoist our canvas. The wind dead ahead. At 10:30, when opposite Clayton, the wind increased, compelling a single reef all round, and fifteen minutes later a second. The rain ceased, the wind blew strong and puffy W. by S. We were soon down to solid sailing and took the north side of Carleton Island. Arrived at Cape Vincent at 3 P. M. Too much sea for us to undertake to cross Ontario that night. Barometer falling, told us that the morrow would be a continuation of the blow. Took the steamer Maud and visited Carleton Island, where the Salvation Army of Kingston, Ont., were picnicing. The steamer Island Belle ran alongside of the island on her down trip. J. B. D. and the skipper shouted to their friends that they would be up on the first boat in the morning, and steamed back to the Hub.

AUG. 21.—On return to the cape, the skipper found his first mate saying good-bye, an important law suit requiring him to leave at once. A pleasant hotel we found the Rathbun; its guests were mostly New Yorkers.

AUG. 22.—Early in the morning we made sail and beat out into the rough waters of Ontario, where we found the wind S. W. Lunched on deck as we cleared the head of Grenadier Island and stood for the Ducks. The wind was a little more westerly, and knocked us off to Yorkshire. We were making good time and getting the best of a schooner which was making for the False Ducks. At one bell in the afternoon watch, while asleep forward, I was awakened by the yacht's sudden lighting up from sailing on her side. Looking about, I found we were passing through the passage between the Ducks and Yorkshire. The narrow channel, the deep clear water, and the inviting shores almost induced us to come to, but as we were short of time, we slipped along past, and stood on for the south shore. The wind hauled to its customary evening berth from the southward. As the Galloo beacon was lighted, we were about five miles due south, on the starboard tack. Put about soon after and stood to the westward. A faint coloring on the horizon now and then told us that a storm was coming our way. The breeze freshened, the moon threw a light which enabled us to see to set gafftopsail and soon after jibtopsail, as we saw it was to be a race for the north shore. Every point was strained to work out from under the clouds as we flew along S. W. by S. The lightning danced into and out of the water, but not a halyard was slacked. We awaited a peal of thunder before preparations were to commence for a squall. The scene was grand and appalling, the lake smooth, and to the eastward sparkling in the moonlight. The westward was shrouded in inky darkness, except as flash upon flash, with scarce a second intervening, darted in every direction. It seemed as though the engines of the Nautilus (Jules Verne) were at work. The water showed no ripple from the breeze which was sending us along seven or eight knots. There was no sleep in the hour as they passed by. Galloo light was dropped, and once, in a quick glance between the flashes of lightning, we thought we caught Oswego light. When about twelve miles from the American shore we suddenly ran into a close and stifling atmosphere. The breeze died without a last breath, and that deadness in the atmosphere which preludes a coming burst, caused rattling of sheaves and double gaskets around canvas. Everything was made snug; not a square inch of cloth was shown to the elements save the head of the staysail to pay her off before it. Oilskins were tightly buttoned, pipes filled, and we stood ready and eager for the fray. The roar of the water told us it was close. With a distinct sound like escaping steam, it passed to the northward of us and swept toward the St. Lawrence. The suction caused the wind to languidly follow. All sail was spread once more and at 6 A. M., Aug. 23, we swung to our own buoy opposite the club house, having spent sixteen days on the cruise and viewing the country around the shores of Lake Ontario and down the St. Lawrence River. Air line about 500 miles. Our crew separated, after the photographic man had taken an impression of our weatherbeaten countenances, with many regrets, and so terminated a successful cruise that will live in memory long after our yachting days are over. K. G.

NUMBER THIRTEEN.—The thirteenth cutter building this season has been turned out by Wallin & Gorman for Dr. E. G. Loring of this city. The model was furnished by Keating, of Marblehead, and is an improved Carmita, being somewhat narrower and deeper. The builders have made a splendid job all through, and we expect many similar boats will be the consequence. She is what we would call a "sensible boat" in her elements, being safe, roomy and smart, fit for any kind of work. We will soon publish complete plans and specifications. This cutter is 25ft. 10in. over all, 20ft. 10in. water line. 7ft. 9in. beam, draft 4ft., least freeboard 20in. Ballast on keel 1,500lbs., ballast cast to fit floors inside 2,000lbs. Rigged as a cutter, sails of 10oz. double bighted duck. Two shrouds a side and housing topmast. Mainsail 18ft. 6in. on foot, 14ft. luff, 12ft. head and 25ft. 6in. leech. Mast steps 8ft. 6in. from stem, large foresail 18ft. luff, 11ft. foot, 18ft. leech, lugging 8ft. about the mast. Large jib 22ft. 6in. luff, 12ft. foot, 16ft. leech. Bowsprit 10ft. outboard, mast 19ft., sheet to hounds, topmast 10ft. above cap. Cabin 8ft. long, with 4ft. 8in. headroom under a 12in. house, cockpit 6x3ft. Steers with tiller; plumb stem and bowsprit parallel to water line.

QUAKER CITY Y. C.—*Editor Forest and Stream:* The following officers were elected for the year 1884, at the annual meeting of the Quaker City Y. C., of Philadelphia, held Wednesday evening, Feb. 13, at the club house, foot of Market street, Camden, N. J.: Commodore, William H. Vallette; Vice-Commodore, J. Aimer Dittrich; Rear-Commodore, John Hanigan; President, William J. Thorman; Treasurer, Samuel P. Wright; Secretary, Samuel B. S. Barth; Assistant Secretary, William S. Hoffman; Measurer, Rufus G. Wilkins; Board of Trustees—Samuel A. Wood, David C. Walker, A. F. Bancroft, Charles W. Lyon. Regatta Committee—A. F. Bancroft, Lawrence Coleman, David C. Walker, Benjamin F. Murphy, Charles W. Lyon. The thirty-three yachts, comprising the fleet, are classified as follows: First class, cabin sloops over 38ft. Second class, cabin sloops between 32ft. and 38ft. Third class, cabin sloops between 27ft. and 32ft. Fourth class, open yachts between 24ft. and 27ft. Fifth class, open yachts between 20ft. and 24ft. All measurements are on the waterline.—MARLIN.

BUILDING IN BOSTON.—Wood Bros., of East Boston, have finished two steam launches for high speed—one 50ft., the other 55ft. long—for Boston owners. Steam launching is becoming popular in the East, and is being pursued on the English plan by gentlemen living along the coast during the summer months. Same builders have also completed a yacht on the Caprice's lines for a New York owner. She has, however, more weight on the keel—1,228 pounds in all. Keel, stem and post of oak, hackmatack knees, and oak floors for frame, planked with 1in. cedar; deck of bright white pine; cockpit and companion in mahogany. Steers with a wheel. The cuddy forward is 6ft. long with a berth on each side, and air tanks under cockpit to prevent sinking. The lines of the Caprice were published in our issue for Oct. 4. This new boat will be quite a revelation to New Yorkers, and ought to squander local craft in a blow and in light airs.

FOOLISH COURSE.—When the *Herald* questions the truth of a scrub trial last fall, of which there were many witnesses, it is simply allowing itself to be used as a catspaw to persons interested in covering up the facts. We will take care that the truth is not obscured by the one-sided "inspired" denials of the *Herald*. It is a matter of common report that Aneto thrashed the Gleam out of Larchmont harbor in an impromptu trial on a breezy day last fall. If this be denied over any responsible name, witnesses enough will be forth coming. The *Herald* should not permit the wool to be pulled over its eyes in such fashion.

NEW YARD.—Henry Piepgrasshas added to his yard a complete plant for building iron and steel vessels. This includes a 25 H. P. engine and boiler, planers, sheers, punches, and bending furnaces for sheets and angles, all under good shedding. Work on some new contracts is likely soon to begin. He has been getting out complete lots of iron fittings for new yachts in his blacksmith shop from the best brands of iron, all worked up under personal supervision, so that he will be prepared for anything that may come along. Figures have been given for a number of large cutters, but so far no papers have been signed.

EARLY SPRING.—Don't wait till spring is upon us and then wish you had fitted out sooner. Now is the time to overhaul. All live New York yachtsmen ought to fly colors by April 1 for an early turn outside, and perhaps a spring "dash" to the warmer latitudes of Hampton Roads and the Chesapeake. Who will make his number first off the Hygeia?

ATLANTIC Y. C.—Makes a good showing this year with 199 members and 92 yachts, thus putting the club third on the list among New York organizations. Annual match set for June 10. Second and third prizes are to be offered.

NEW DESIGNS.—Mr. G. L. Watson, of Glasgow, has furnished a design for a 20-ton racing cutter to Senator McPherson, of New Jersey, and a 7-ton cutter for others of this city.

NAMOUNA.—This steamer, now flagship of the N. Y. Y. C., is receiving new decks at Day, Summers & Co., Southampton.

GITANA.—Mr. Weld's schooner arrived off Gibraltar Jan. 19, eight days from Madeira, and sailed Jan. 24 for Malaga.

OUTSIDE WEIGHT.—Dr. Henry Griswold will put about 1,000lbs. outside ballast on his little 20ft. sloop this spring.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

H., Pittsburgh, Pa.—Turk is by Rajah and out of Brenda.

A. H. P., Wilkesbarre, Pa.—For cricket goods apply to Peck & Snyder, Nassau street, New York.

MERGUS, East Wareham, Mass.—The bird you describe was undoubtedly a pine grosbeak (*Pinicola enucleator*). See answer to H. L. P.

E. E. A.—Send your name to Dr. C. A. Neidé, Secretary A. C. A., Schuylerville, N. Y., with $1 initiation fee and $1 for dues for this year, 1884.

J. R. H., Watsontown, Pa.—Red Rival was by imported Ranger (Barton's Larry—Lill II.) and out of Rose (Rufus—Duchess) Duchess was a Gordon.

READER.—The French yachting journal *Le Yacht* is published weekly at 50 Saint Lazare, Paris, $5 post-paid. Send post-office order or get through International News Co., Beekman street, New York.

S. B., Circleville, O.—For worm and fly-fishing get Scott's "Fishing in American Waters;" price $3. We can furnish it. For answer to other question see Kennel department. For instructions in canoe building read the series of papers which we are now publishing in our canoe columns.

J. F. D., Seville, O.—The *Tribune* account of the bear and cub was a canard, and was wholly without foundation in fact. We cannot say from personal knowledge that the half-grown cub remains with the mother bear through the winter. The books say that it is left to look out for itself at the age of six months or thereabouts.

W. L. C., Boston, Mass.—The ferret muzzle was described on page 292 of Volume XVII. The directions there given are: "Take a piece of coarse waxed-end, about two feet long. Pass it through the mouth directly back of the fangs. Pass it down under the lower jaw, and tie with a close knot. Now carry it back up through the mouth and across; then up over the upper jaw in form of figure 8, and tie firmly. Carry the two ends up the forehead back of the ears and tie again. Next carry the ends down the two sides of the neck and tie again firmly. The muzzle is now complete. There is no cumbersome weight to carry, nor any pain; and when the animal is let loose, if he has been kept properly, he will go to work with a rim. When the hunt is over remove the muzzle with a knife."

W. O. A.—As near as we know, the sustained speed with normal pressure of steam yacht Yosemite is 12½ knots. Namouna 13½ knots, Atalanta and Stranger 12 to 12¾, Rhada 13. On a spurt they may have done 1 to 1½ knots more. Higher speeds are doubtful and due to tide and wind. For land miles multiply by 6,000 and divide by 5,280. The Herreshoff launch No. 100 was capable of steaming faster than any of the foregoing yachts. Probably 16 knots on a spurt and 14 for a long pull.

H. L. P., Stockbridge, Mass.—A small flock of birds (a sample I send by mail with this letter) appears in our village almost every winter. There appear to be various opinions of the kind. The male birds are beautiful, marked with crimson neck or dark red color. Will you inform me of their species? Ans. The bird is the pine grosbeak (*Pinicola enucleator*), a northern species which occurs pretty regularly in New England in severe winter weather. For very full accounts of this bird, see FOREST AND STREAM Vol. XIX., pp. 264, 284, 323, and elsewhere.

INFORMATION WANTED.

BRASSEUR LAKE, Me.—A correspondent wishes to know about the fishing and hotel accommodations at Brasseur Lake, in Maine.

J. M., Philadelphia, wishes to know of game locality in Georgia or Tennessee where he can settle, raise fruit and shoot game.

Canoeing.

FIXTURES.

Winter Camp-fire.—Wednesday, March 13, 8 P. M., No. 23 East Fourteenth street, Room 16.

Secretaries of canoe clubs are requested to send to FOREST AND STREAM their addresses, with name, membership, signals, etc., of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to FOREST AND STREAM their addresses, with logs of cruises, maps and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.



ST. LAWLENCE CANOE CLUB.

CANTON, St. Lawrence County, N. Y.—Organized December, 1883. Commodore, J. H. Rushton; Vice Commodore, M. D. Packard; Secretary and Treasurer, L. P. Hale; Measurer, J. W. Rushton. Eleven active members.

LARGE OR SMALL CANOES.

Editor Forest and Stream:

I have been reading Mr. Neilson's letter on "Large vs. Small Canoes," and partial reply to mine. I am glad to hear the opinions of different canoeists regarding their particular craft, and as I believe Mr. Neilson has had a good deal of experience and hails from a city where large canoes are in vogue, he is as fit as any to speak of their merits.

Now, in my last letter, you pitched into me roundly. I am glad of it, and hope all who wish to will do the same, for, perhaps, a discussion will bring out the respective merits of the different types, and will throw some light upon the methods conformed to by men who use different craft. I think both you and Mr. N. misjudged my letter. Perhaps some of it might be obviated by a more careful reading. You say that "the fears of our correspondent that racing machines will displace the craft now in use are entirely groundless." I have no fears that they will displace the craft now in use. I said I thought they would hurt canoeing, and I do, for many men who used to have small canoes and cruise in them seem now to pay more attention to beating their neighbors, and many points which were quite important to general cruising were given over because they were detrimental to high speed.

Now, by general cruising I mean cruising on rivers, lakes and rapids as well as on the open ocean and bays, and where one may be so placed that he will have to ride out a heavy sea or, perhaps, a storm; and, again, where he may find some insurmountable obstacle around which he will have to carry his canoe alone; such things often happen in real general cruising. Again you say, "there is hardly any limit to what can be done in a 27in. canoe, but that it is safe and dry in rough water, or suitable for coast work is yet to be proven." I have proven it perfectly satisfactorily to myself, and I have tried to be as broad and unbigoted in my canoeing opinions as possible.

You also say that the small canoes were not intended for open water; perhaps they were not originally, but I had mine built mainly for that kind of cruising, and it has risen in my estimation above my most sanguine expectations. I cannot compare it with the Princess and Pearls as a rough water boat, for I have never seen either of those types at sea. Perhaps they are faster under sail, so is a large yacht faster than a small one. Mr. Neilson says I mentioned the Stella Maris as a compromise type; I did not mean to, I said that I believed in a compromise type, and then cited what I had done in my little Stella Maris, only 27in. beam, meaning that it was under the compromise, which I think is about 14x30.

Mr. N. also says that I am unfortunate in my reference to the cruise of the Maria Theresa, as Mr. Bishop used oars most of the time. I do not exactly understand what he means by that, for I never said anything about paddling; and in regard to those long cruises, I said most of our long cruises had been made in smaller boats, and cited that of the Maria Theresa. I have also read both of Mr. Bishop's books, though some time ago, and know perfectly well why he made his change. Mr. N. says he can get his canoe in and out of the boat house alone. But getting a canoe in and out of a boat house is a very different thing from hauling on a rocky shore. I should like to ask Mr. N. if he has done much cruising in the Boreas on tide water, and if he knows how hard it is to land a canoe on seaweed-covered rocks at low tide, with a heavy sea running? In cruising anywhere from Labrador to Cape Cod, one is liable to have to land in bad places, or else lay to over night in perhaps a heavy fog or storm. I have come nearer getting drowned that way than any other, when it would have taken but a little more weight to have pulled me off as my boat slid back on the receding wave.

I say these things as Mr. Neilson did, at the risk of being thought egotistical, but, nevertheless, shall put them as they are. Now in my last letter some may have thought me sarcastical in regard to my questions concerning rigging, but they were asked in all sincerity, with the pure object of being enlightened. I never have used a lug so I cannot tell much about it. I did not write to defend the lateen, but the small canoe. I am perfectly willing to show the faults in my canoe and rig as well as the merits, the only fault I can find with the boat is its low vertical coaming, over which every swash will break. The faults in the sails are more, the worst one is that the mainsail cannot be lowered when running free, yet they are so simple and handy to stow that I cannot help liking them: I think I shall take Mr. N.'s advice and have a lug mainsail made of about 45 or 50ft. area.

The plans of all I have seen have seemed to be rather complicated, but that of the Boreas seems quite simple by description.

I shall try to be at the meet next summer, but I don't think his proposition is exactly fair for I am quite sure I can beat him with the conditions reversed, and any boat with a heavy wind and sea under sail ought to beat one under paddle going to windward and returning. However, I thank him for the invitation. WIDGEON.

[Many canoeists who have used them differ from "Widgeon" in his assertion that a canoe of 27in. with the proportion usually given them, are either dry, safe or comfortable in rough water, added to which, they will not carry the weight of stores, etc., needed in open-water cruises. That many long cruises have been made in small

canoes is due to the fact that all of the early canoes, from the published descriptions of which the first canoes in this country were built, were of 26 to 27in. beam. Since the introduction of the 14x30 canoes, they have largely displaced the smaller ones for cruising, as is shown by Dr. Neidé's Aurora, 15x31, Captain Kendall's Solid Comfort, 16x36, Mr. Gardner's canoe, 14x31, Mr. Eckman's, 14x30, all of which have lately been down the Mississippi, and many other cruising boats. The idea that one boat can do well all varieties of work has been long since rejected by canoeists, and it is admitted that several varieties are desirable, broadly speaking, a 14x27 canoe for river work, a 14x30 for general cruising, and the Pearl type for open waters. If "Widgeon" will describe a boat that can paddle easily against a head wind and heavy sea, can be portaged or carried on the back by a man of ordinary strength, and will go to windward under sail in a heavy sea, he will solve the question that has so long vexed canoeists. The assertion that "many points which were quite important to general cruising were given over because they were detrimental to speed" is very indefinite. Will "Widgeon" mention some of those which have been sacrificed in the leading boats of the last three seasons?]

AMATEUR CANOE BUILDING.

Seventh Paper.

TOOLS AND APPARATUS.

THE excellence of amateur work depends not, as many imagine, on the number of tools at hand, but on the care and perseverance devoted to it. The best work may be done with very few tools; but, on the other side, it can be done much more quickly with a larger number.

If the amateur desires to build but one boat, at as small an outlay for tools as possible, he will find the following sufficient:

Panel saw, 16in., 8 teeth to the inch	$1 00
Rip saw, 28in., 5 teeth to the inch	2 00
Compass saw, 12in	40
Jack plane, double iron	1 00
Smoothing plane, double iron	85
Thumb plane	25
Claw hammer	75
Riveting hammer	40
Cutting pliers, Stubbs's or Hall's	85c. to 1 25
Small screwdriver	50
Three gimlets, 1-16, ⅛, ¼in	50
Three brad awls	25
Six-inch try-square	35
Spokeshave	50
Marking gauge	10
Chisels, ⅛, ½, 1in	75
Two foot rule	25
Gauges, ⅛–1in., inside bevel	50
Oilstone	1 00
Compasses, 5in	40
Four iron clamps, 4in	2 00
Chalk line and scratch awl	25
	$15 25

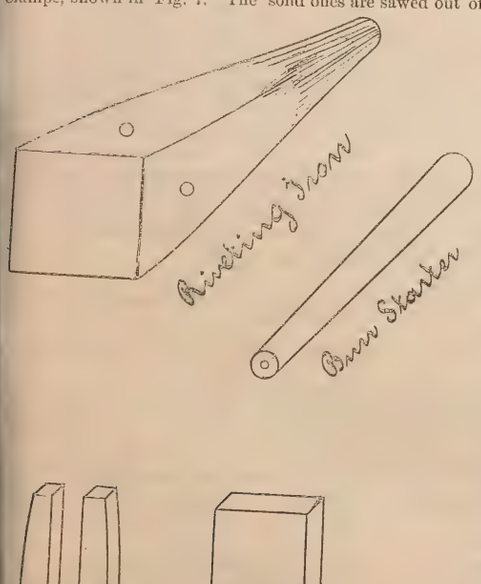
The above are about the prices of the best quality tools, cheap ones not being worth buying, and with them any kind of small boat can be built, but the addition of the following tools will save some time and trouble:

Eight-inch ratchet brace	$1 85
Center and German bits, various sizes	1 50
Countersink	25
Rabbet plane	65
Bead plane, one-quarter inch	50
Draw knife, nine-inch wide blade	1 50
Screwdriver, ten-inch	65
Twenty-six-inch hand saw (Instead of sixteen-inch panel saw)	1 75
Eight-inch back saw (Instead of sixteen-inch panel saw)	1 10

These will be all that are needed, except a few files, and two or three drills to fit the brace, for the brasswork, such as the stemband, but there are some others that are very useful, though by no means indispensable, as follows:

Two-foot steel square.
Bench axe.
Expansion bit, seven-eighths to three-inch.
Level.
Convex spokeshave, for oars and paddles.
Mortise gauge.
Adze, for larger boats.
Small hand-drill stock with drills.
Two or three round sole planes for spars.

Besides these tools there will be needed a small block of iron called a "set," used to hold against the head of a nail in riveting, a "burr starter," which is a piece of iron or brass rod ⅜in. in diameter and 3in. long, with a small hole in one end, used to drive the burrs on to the nails, and some wooden clamps, shown in Fig. 7. The solid ones are sawed out of



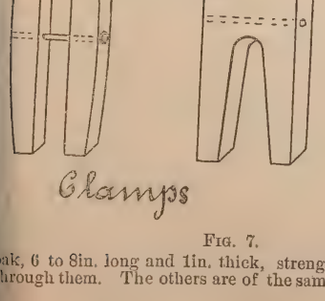


FIG. 7.

oak, 6 to 8in. long and 1in. thick, strengthened by a rivet through them. The others are of the same size, but in two pieces, joined by a bolt or rivet. In use a wedge is driven in the back, closing the other ends of the jaws.

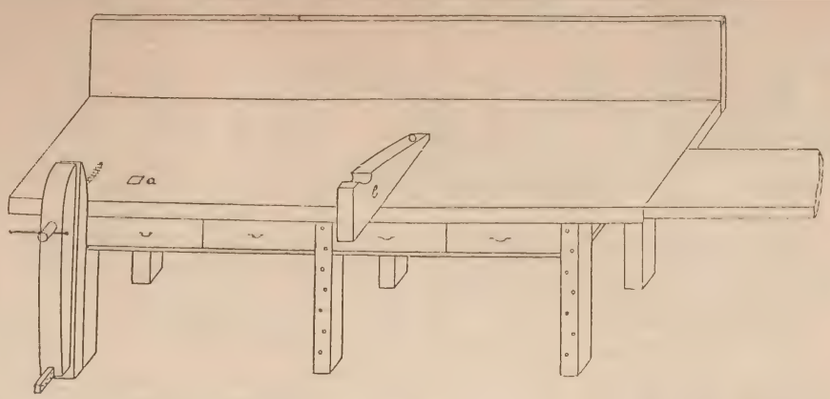


FIG. 8.



FIG. 9.

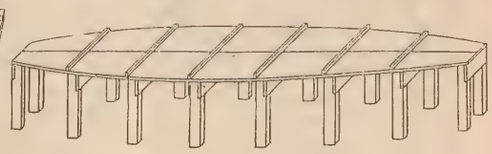


FIG. 10.

A work bench of some kind must be had, the simplest form being a plank 2in. thick, 10in. wide, and, if possible, several feet longer than the intended boat, so as to allow room for a vise on one end, as well as space to plane up long boards. This plank should be securely fastened along a wall, 2ft. 8in. above the floor and with its outer edge 20in. from the wall, the space at the back being filled in with 1in. boards, making a bench 20in. wide, the top being level and smooth, as the material to be planed on it will be very thin. A vise of some kind must be placed near the left hand end, an iron one being the best, but the common wooden one will answer, and is much cheaper.

Fig. 8 shows a permanent bench fastened to the wall. The top is 3in. thick, of oak, and should be 24in. wide, and at least 10ft. long, a piece of 2in. plank being fastened at the right hand end by way of an extension for planing long stuff. A series of ¾in. holes about 3in. apart are bored in each leg, a peg being inserted in one of them to support long boards, in planing the edges. A bench hook (*a*) is placed near the vise; the bracket (*b*) is cut out of 2in. stuff and is bolted to the bench, being used to support spars, paddles and similar pieces, one end being held in the vise, and the other resting on the bracket.

Drawers are provided under the bench for tools, nails, screws, etc. At the back of the bench an upright board 12in. wide, carries a rack for the chisels, gouges, gimlets and small tools, above it, on the wall, the saws, draw-knife, spokeshave, brace, etc., are hung, a rack for the small planes, and another for sandpaper is fastened, also small boxes for such nails and screws as are most frequently required.

Two saw horses or benches are also necessary, the tops being 3in. thick, 6in. wide and 3ft. long, and the legs 2ft. long. Two pins of hard wood 1in. in diameter are driven tightly into holes about 1½in. apart in one of the benches. When not in use they are driven down flush with the top, but in slitting long boards, they are driven up and the board wedged between them.

Another useful piece of furniture is a stool about 1ft. x 18in. on top and 18in. high, one-half of the top being a seat and the other half, the right hand side, making a tray to hold nails, screws, hammer, pliers, and other small tools used in fastening the plank, thus avoiding the necessity of stooping over the work, and also keeping the tools off the floor.

A framework of some description is always necessary to support the boat or vessel in building. If a ship or yacht, the keel is laid on blocks a short distance apart, but in boat work, the "stocks," as they are called, are usually a plank set on edge, at such a height above the floor as will bring the boat in a convenient position (Fig. 9). The piece (*a*) is a common pine or spruce board, 1in. thick, 8 or 10in. wide and 13ft. long, the upper edge being cut to the rocker of the keel, as taken from the drawing. This board is supported on three legs and securely braced in all directions, the top being 20in. from the floor, so as to give room to work on the garboards.

Another style of stocks is shown in Fig. 10, a table being built about 13ft. long and 30in. wide, somewhat like a canoe in breadth; the top, which is 20in. from the floor, is perfectly level. A line is drawn down the center, while across the board, battens, 1in. wide and 1½in. deep, are nailed, 2ft. apart, to each of which a mould is screwed, the boat, of course, being built keel upward.

This method of building (similar to that employed for shell boats) is the easiest and best, but involves more labor in the construction of the table or stocks; however, if several boats are to be built, it will pay to make a strong level table, as when once a set of moulds are made and each fitted to the screw-holes in its respective crosspiece, they may be set in place in a few minutes with every certainty that they are correctly placed, and that they must remain so, while the table makes a convenient place to lay tools.

Finally a steam box of some kind is necessary, its size depending on the work to be done. Usually all the steaming required for a canoe is the timbers, perhaps ⅜ or 7/16in. thick, which may be done with care in a trough of boiling water, but if anything larger is to be bent, a kettle, holding a couple of pails of water, should be arranged over a stove, or roughly bricked in if out of doors, a top of 2in. plank being fitted closely to it with a pipe leading from the top to the steam-box, which is of 1½ or even 1in. boards, and may be 3x6in. inside and 7ft. long, supported on trestles or legs near the kettle, and fitted on one end with a hinged door to close tightly, or the end may be closed with a bundle of rags.

AMSTERDAM C. C.—*Editor Forest and Stream:* The ice has gone out of the Mohawk River, and a view of open water once more has revived the Amsterdam C. C., and they wish to claim a club flag. A pointed burgee, 10×15in., white ground with a blue maltese cross. The club trusts to have their members at the Newburgh meet.—C. H. WARRING (Canoe La Polka).

THE LOG BOOK.

V.—DOWN THE MISSISSIPPI.

[*Continued from page 56.*]

ABOUT 10 o'clock the fog disappeared, and we started out to see what the chances were for getting off, and finding the chute about 200yds. wide, with quite a current, and no skiff in sight, we concluded that it was "raft" or swim. We didn't exactly like the idea of swimming in that cold water and carrying our clothes besides, so after calling to some negroes who happened to come along on the bank, and learning from them that there were no skiffs on that side of the river nearer than two and a half miles, we decided that we needed a raft in our business, and started about making it.

There were quite a number of trees and saplings which had been left on the bar in high water, and we picked out a log about 1ft. in diameter and 20ft. long, and two willow saplings 9in. in diameter, besides some smaller stuff for braces, and carried them down to the water. The big log was partially rotten, but it had to go. We put the big log in the middle, the willow saplings on either side, and the smaller saplings inside of them, and bound them all together with willow poles spiked down laterally and obliquely. She worked first rate, being quite buoyant; but you had to straddle the whole business, and throw all your weight on the two large saplings, for if you stepped on the rotton log it would let you through into the drink, as we didn't have nails enough to make it fast.

I mounted the old craft and started her off, and after a few minutes' paddling lafided her on the opposite side of the river. It was a great satisfaction to be able to get to "dry land" once more, and I stepped out for the nearest landing on the "double quick." We had spent nearly all our money at Vicksburg, but had a sufficient amount of provisions to last us to Baton Rouge, where a supply of funds awaited us. I had therefore to make a bargain with the negroes whereby we were to pay them in camp truck for taking us and our tent, etc., down the river to Ellis's Cliff, about five miles from our bar.

They borrowed a skiff from the storekeeper, and we started for the bar, which was soon reached, and after loading our goods we set out for the "Cliffs," landing at nightfall. On the way down we were very much amused by the talk and actions of the two specimens of "nigger" which constituted the crew. Their rowing in particular was most ludicrous, and reminded me very forcibly of the little mechanical rowers which we see in the toy shops. We camped at the landing that night, and the next day learned that the steamer Ed. Richardson would be along about 2 A. M. Sunday.

In the afternoon we learned that our boat had been picked up about ten miles down the river, and carried back into the country about one-fourth of a mile, so B. started out to walk down and look for it. As he could not get back in time to catch the steamer I got all our things together and put them in shape for shipping, and bunked that night in the hut of an old negro fisherman, and got aboard the steamer all right. Being absolutely "dead broke" I had to make arrangements for our transportation to New Orleans, "standing them off" until we could reach our funds. B. came aboard when we reached his landing, and reported "no boat," so I guess that she's "up a hollow stump."

We had a very pleasant time on board the Ed. Richardson, and I must confess that it was very agreeable to think that one was not dependent upon his own exertions for either meals or lodging. Captain Campbell, who, by the way, commanded the R. E. Lee in her famous race with the Natchez, took a great deal of interest in our cruise, and expressed himself as being very sorry that we had been unable to finish it; but whenever I sat down to the table and filled up with a square meal, stowing away such quantities of grub that the waiters seemed to wonder where it went to, I wasn't so very sorry, you know, as I wanted folks to think. We reached New Orleans Monday afternoon at 1:30, having had to lay up Sunday morning from the time I got on until about 9 o'clock, and all Sunday night on account of dense fog. From about Baton Rouge to New Orleans, 130 miles, the whole river is navigable, and steamers can make a landing anywhere. The canoeist will therefore be compelled to take the bank for his camping ground, and trust to luck for dry wood.

The country along here presents the appearance of one large village, as it is built up the whole distance to New Orleans, the houses being at no time perhaps more than a quarter of a mile apart, and most of the time about 100 yards. It is called the Sugar Coast, and is quite a surprise to any one coming from the upper river, as we did. We stayed in New Orleans a week, taking in most of the town, and arrived in Chicago Dec. 2, just eleven weeks from the day of starting on the cruise. I had intended to come back by steamer to St. Louis, reviewing the old scenes, but my brother was ill, and the family telegraphed me to return at once, so I was unable to carry out my intentions. At Cairo, however, I saw that the point where we had camped had eight feet of water on it, and the old scow was gone, as was also our ancient friend.

From my experience on this trip I don't think that I want to take as long a one again under similar circumstances. A cruise of a month or six weeks is as long as the thing continues to be thoroughly enjoyable, especially when you have camp to pitch, grub to cook, etc. Above all, a person wants company. Two persons in one boat cease very soon to be entertaining to each other, and such a cruise should be made by at least three, and they ought each to have a boat. Even two persons in separate canoes could have a good time, as the races which they could have would enliven proceedings and chase away the "blues"; but no more "one boat for two" for me. There was an article in the *Canoeist* last spring to the same effect, and that article recurred to my mind several times on our cruise. J. W. KEOGH.

CANOE OR SNEAKBOX.

Editor Forest and Stream:

In reply to "A. H. A.'s" question as to whether he should procure a "canoe or sneakbox," I would say, let him get a canoe first, and then, if he is not satisfied with it he can readily exchange it for the heavy, unwieldy, hard-rowing and slow to windward sneakbox.

As to the durability of the canoe, both as to hard knocks and as a sleeping apartment, let me say that, on my recent cruise from Lake George, N. Y., to Pensacola, Fla., I believe my canoe had the roughest kind of usage. Heavily laden, she was portaged for 70 miles by rail, and many more in a springless wagon over rough roads; was jumped over dams, tracked over the stony bed of the Alleghany River, banged against snags on the Mississippi, and dashed on the hard sand beaches of the Gulf of Mexico by the powerful force of the surf.

I used her as a sleeping apartment for more than five months, simply pulling her out on the shore, using a little care to see that she rested on an even keel, blocked her bilges with a stick or two of drift wood and with her forward and after compartments filled with stores and duffel, her decks loaded with the contents of the cockpit, I stretched myself at full length and took the usual "roll over" during

the night. Yet this canoe, Rushton-built, Princess model, 15ft. by 31 inches, built of white and red cedar, never leaked a drop during the entire voyage of nearly 4,000 miles, except through a small hole, which had been punched through the centerboard case by a too strong yank on the lever in raising the board.

As to whether she "warped and got out of shape," may be judged from the fact that, a couple of weeks ago, she was stripped of her deck in order to make some changes in it, and to put in a new plank which had been split when she was thrown on a rock in Lake Champlain last September.

Critically measured, she was found to have retained her original shape, notwithstanding the fact that contact with rocks had pulled many nails out of her bilges when running rapids. I do not write this to "blow the horn of the builder," but to give "A. H. A." a little practical information. CHAS. A. NEIDÉ (Canoe Aurora)

PITTSBURGH C. C.—*Editor Forest and Stream:* I have to report that at the annual meeting of the Pittsburgh C. C., held Febr ary 11, officers were elected as follows: Captain, Mr. Geo. Harton Singer; Lieutenant, Mr. George A. Howe, and Purser, Mr. Reade W. Bailey. The duties of the lieutenant were made to include the providing of transportation and supplies when on cruises (it is the practice of our club to take an annual cruise in a body). The club burgee was changed to the following: A pointed burgee, 12×18in., blue ground gold border, 1in. wide all around, and an oak leaf in gold in center. The club is in a prosperous condition and expects to receive several new members and canoes before the opening of the season. The undersigned was out on the flood in the Monongahela on the 6th, being, I believe, the first canoe of this club in the water this year, and paddled through some novel places for any water craft.—KATRINA.

POT LUCK FROM EXCHANGES.

A picture by one of the old Chinese masters, now on exhibition at Tokio, establishes the fact that reels were used by Chinese anglers more than 800 years ago.

An honest old Pennsylvania farmer had a tree on his premises he wanted cut down, but being weak in his back, and having a dull ax, he hit upon the following plan. Knowing the passion among his neighbors for 'coon hunting, he made a 'coon's foot out of a potato, and proceeded to imprint numerous tracks in the snow to and up the tree. When all ready he informed his neighbors that the tree must be filled with 'coons, pointing to the external evidence made with his 'coon's foot. The bait took, and in a short time half a dozen fellows with sharp axes, were chopping at the base of the tree, each taking their regular turn. The party also brought dogs and shotguns, and were in ecstacies over the anticipated haul of fat 'coons. The tree finally fell, but nary 'coon was seen to "drap."—*Germantown Telegraph.*

A Missouri farmer found that a flock of wild turkeys were in the habit of visiting his corn, stored in an old building in a field. So he fixed a long string to the door and left it open. Stationing himself in a hidden position some distance away, he waited patiently for the evening call. Soon they came along and entered the house; the door was pulled shut, and thirteen fine turkeys rewarded his vigil.

Several proprietors are anxious to introduce grouse into the Shetland Islands, and are devising means to render such a step practicable. The chief barrier in the way is the enormous number of ravens and such birds, and until something has been done to check their growth it will be useless to attempt to make Shetland a field for sport. The engagement of a number of trappers to help to kill off the existing scourges is proposed.

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5.	Dysentary, Griping, Billious Colic,..	.25
6.	Cholera Morbus, Vomiting,.....	.25
7.	Coughs, Cold, Bronchitis.....	.25
8.	Neuralgia, Toothache, Faceache,....	.25
9.	Headaches, Sick Headaches, Vertigo	.25
10.	Dyspepsia, Billious Stomach,..	.25
11.	Suppressed or Painful Periods,....	.25
12.	Whites, too Profuse Periods,.....	.25
13.	Croup, Cough, Difficult Breathing,..	.25
14.	Salt Rheum, Erysipelas, Eruptions,	.25
15.	Rheumatism, Rheumatic Pains....	.25
16.	Fever and Ague, Chill, Fever, Agues	.50
17.	Piles, Blind or Bleeding..... ..	.50
19.	Catarrh, acute or chronic; influenza	.50
20.	Whooping Cough, violent coughs...	.50
24.	General Debility, Physical Weakness	.50
27.	Kidney Disease.....	.50
28.	Nervous Debility,.....	1.00
30.	Urinary Weakness, Wetting the bed	.50
32.	Disease of the Heart, Palpitation.	1.00

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Having been the pioneers in the manufacture and introduction of Section Bamboo Rods, we have always taken great pride in securing and perfecting every improvement in order to maintain our position as the makers of the very best rods. Knowing not only theoretically, but also by long experience, that a properly made round rod is the only absolutely perfect rod, we have invariably refused, and still do refuse, to put our name on any but our "Best" round section rods. Our prices for these round rods average only about 40 per cent. more than the prices asked by any other makers, while the rods are widely known to be *incomparably superior*. While no hexagonal or any angular) rod can be perfect, we long believed that with proper work anship and material a *really good* angular rod could be made. Being much easier and cheaper to make than round rods, we hoped to be able to offer to those anglers who can not afford to pay the price of our "Best" round rods, a hexagonal rod that would be good and serviceable at a moderate price. We are more than satisfied with the success which has attended our efforts, for we are now able to furnish a hexagonal rod that is really worth having, and at a price which is only a trifle in advance of that asked by other makers.

Orders received from persons residing in cities in which the dealers keep a full line of our goods will not be filled at any price.

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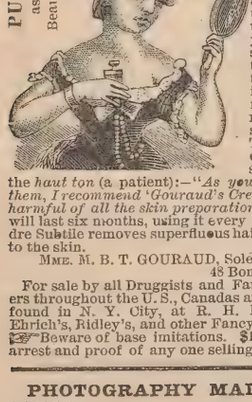
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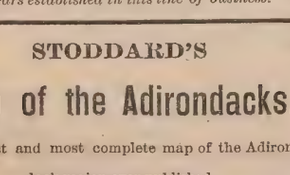
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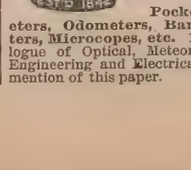
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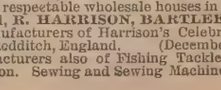
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FOOD FOR QUAIL IN CONFINEMENT.

AT this time of the year, when many of our readers are, no doubt, purchasing live quail for turning out in spring, the question of their treatment comes up. Usually the most important point to be considered is that of their food. Often the poor little things have made a long journey without eating or drinking, and when they reach their destination are in a deplorable condition of starvation and weakness. At such a time they should not be too liberally fed, and only enough grain should be given them to take the edge off their appetite.

The best food for quail in confinement of which we have any knowledge is what is commonly known at the feed stores as "screenings." This consists of the light weight grains of wheat or rye with other smaller grains, and the seeds of the plants which may have grown in the field with the crop. The chief recommendation of this food is that there is a great deal of variety to it, and that it is composed of the seeds which the quail eat in a state of nature. A diet wholly of wheat or cracked corn, even though the birds may for a time appear to thrive upon it, is not so good for them as one in which there is more change. A man would soon cease to enjoy his meals if they always consisted of beef or mutton, and in like manner the quail need change of diet. An essential to the well-being of these or any other gallinaceous or grain-feeding birds is plenty of gravel with which to triturate what they eat. Unless they have this, the food is very imperfectly digested, the birds ill-nourished and unable to withstand the diseases which are sure to follow the failure to assimilate what passes into the gizzard. It is not enough to supply them with earth. This is good for them in one way, for they will roll and bathe in it, and it keeps them free from the attack of insects, but it will not take the place of coarse sand or gravel. This they must have. Common building sand, if a little fine gravel be mingled with it, is very good; but the ordinary white sand of the sea beach, such as is used for scouring, is too fine for the purpose.

As might be supposed, the birds will do best when they have a constant change of food. A few heads of lettuce or some leaves of spinach thrown to them, twice a week during the winter, will do much to keep them in good condition, and to make them well and strong at the time for turning them loose from their prisons in spring. If they are confined in a warm room, a handful of canary seed sowed in some moist earth, and protected until it has had time to sprout and send up shoots an inch high, will be eagerly eaten by them, and the exercise of scratching among the dirt will prove very beneficial.

We have sometimes fed the birds a little finely chopped beef, which they devoured with relish, but this is perhaps pampering them a little too highly.

It is well worth the while of any one who is keeping quails over the winter to devote a little time and thought to the question of his birds' appetites, for on this may turn the whole success or failure of his attempt at stocking his grounds.

REGULAR ARMY RIFLE IMPROVEMENT.

BY General Orders No. 21 from the headquarters of the army, Lieut.-Gen. Sheridan makes known the results of the army rifle practice for the season of 1883. The returns are instructive and encouraging, and with the start already made and the records made it is pretty certain that drill in ball firing has been placed on a substantial basis in the regular army. The progress made may perhaps be more readily appreciated by the comparison of the number of marksmen qualified in each of the recent shooting seasons, during which period there has been little change in the aggregate army roll. In 1880, 122 marksmen were qualified; in 1881, 612; in 1882, 1,737, and in 1883 the number on final classification ran up to 4,834, or nearly 25 per cent. of the total firing force. Of this last number 3,333 are in the infantry arm of the service, 898 in the cavalry, 479 in the artillery, and the remainder in the engineer battalion and on the general staff. In the several departments, Dakota leads with 1,655 of these tested experts; also leads in percentage to the strength of the command, rising to thirty-five in the hundred. The other department returns showed: Missouri 909, Platte 654, East 466, California 304, Texas 285, Columbia 258 and Arizona 221. Among the army posts Fort Sisseton holds the front place with a figure merit reaching 95.70, followed by Fort Bennett with 91.80 and Fort Sill with 91.55.

The figure of merit of the several organizations has been made up, but in many cases the regiments are so scattered among the various forts that the figure of merit suffers through the inability of all the members to take proper range practice. The 24th Infantry ranks No. 1, with a figure of merit of 79.52; the 11th Infantry is second, with 72.40; the 18th Infantry is third, with 61.43; the 3d Infantry next, with 61.04; the 17th Infantry next, with 57.72; the 1st Artillery is sixth on the list with 56.62.

In individual scores the showing is a very fine one, and among the leaders there is a close crowding up to the highest possible. There were nine members in the army who, in the course of the season, made 94 or upward in qualifying for the marksman's badge. Their names and scores are:

Name and Rank.	200 yds.	300 yds.	600 yds.	Av. pr. ct.
1. Private Eskete, A, 3d Art.	94	92	100	95.33
2. Lieut. Partello, B, 5th Inf	96	90	100	95.33
3. Sergt. Dougherty, M, 1st Cav.	96	92	98	95.33
4. 1st Sergt. Hickey, D, 21st Inf	96	96	94	95.33
5. 1st Sergt. Murphy, I, 1st Cav.	94	92	98	94.67
6. Lieut. Brant, K, 1st Inf.	92	92	98	94.00
7. Capt. Blunt, Ord. Dept.	92	94	96	94.00
8. Capt. Carr, I, 1st Cav.	96	90	96	94.00
9. Lieut. Anderson, M, 4th Art.	96	92	94	94.00

RIFLES AS MORTARS.—J. H. Brown, maker of the Brown standard rifle, has been busying himself in the invention of a rear sight which converts the ordinary army rifle into a mortar, so that by its use a shower of bullets may be sent over a hill, wood or other intervening obstruction, directly upon the heads of an advancing foe, or from an outlying position within a fortification where the enemy may be massed. Such a fire, it is well known, is of a most demoralizing sort, and if it can be brought within controllable limits, will be a most valuable mode of attack.

A NATIONAL ASSOCIATION.—It is proposed to form a national trap-shooting association, which shall exercise control over tournaments, adopt shooting rules, provide championship medals, act as a board of arbitration, and in general serve the trap-shooting interests of the country. There is no doubt that such an union would be advantageous.

FOOLISH DOG TALK.

THE anti-dog talk indulged in by some of the agricultural papers, and often by newspapers, in the columns devoted to agriculture, must disgust a majority of readers; for mankind, to its credit be it said, loves dogs and dislikes such abuse of its friends.

The silliness of a deal of this talk is immense. Take for instance this which the New York *Tribune* quotes, with the commendation of being "sensible" from its Chicago namesake. "One important charge made against them [the dogs] would be that they help men, who should be in better business, to kill birds which if permitted to live would keep down the number of insects injurious to food crops. It may be no fault of the dog that he is thus brought into the business of increasing the cost of living, but it certainly is the fault of the industrious and honest workers, who are ever called upon to pay the cost of the necessities and the pleasures of the idle and the vicious." As if trapping and netting were not more destructive of game birds than the legitimate shooting of them over setters and spaniels; and as if all who take pleasure with dog and gun were either idle or vicious or both. The farmer who so recreates himself amid his many days of toil with now and then a happy one in woods and fields will not relish being placed therefor in these classes more than will the hard-worked professional man whose only play spell in all the year is in the few days when he takes the field.

Further on it is said, "observant flock owners * * * declare that the shepherd dog, that embodiment of canine intelligence, is not a profitable investment on the farm even in caring for sheep. * * * An average boy of ten can do all that the shepherd dog can do, and much more." That is, we suppose, he can keep all day on foot, without food from morning till night, herding a large flock of sheep, can bunch them in an open field, drive in all stragglers, catch any sheep pointed out to him, and so on to the last of the things which a well-trained shepherd dog is expected to do, and "much more." Now, if it is true that "an average boy of ten" can perform all these duties, to say nothing of what may be included in the "much more," there are very few people aware of the vast amount of unused valuable material lying idle in the country. But it is not true, as "observant flock owners" know, and this dog-hater knew when he wrote this "sensible talk about the dog nuisance." And besides being untrue, it is sheer nonsense, as is almost all that is written and said by those who are urging a war of extermination against the dog. It is as senseless to demand the killing of all dogs because some dogs are bad or worthless, as it would be to ask that all men should suffer death or imprisonment because many of them are knaves and good-for-nothings.

But we need not be greatly alarmed for the dogs, for though this writer declares that "when the whole subject has been thoroughly sifted, there is to be found in favor of the dogs little more than a misdirected and mawkish sentiment, which leads otherwise sensible people into the filthy habit of fondling flea-bitten and carrion-loving beasts." This "mawkish sentiment" is so deep-rooted and so active, that the time is far in the future when the preachers of the dog crusade will get much of a following.

More truth and sense than is contained in what we have quoted, is the saying of a more appreciative writer, that "the best part of a man is the dog that is in him." Therefore, beware of him who hates dogs.

FISHCULTURE.—A very able article on fishculture is contributed to our columns by Mr. Charles W. Smiley, of the United States Fish Commission. It presents the case of fishculture in the best and fairest light that we have yet seen. The infant industry has suffered from enthusiastic friends who have claimed that an acre of water will produce more than an acre of land, etc., and who have raised hopes of tons of food fish from the planting of a few fry in some stream. They have proved their position by figures, such as can be found in the older fishcultural books, and have not taken into consideration the many other forces operating against the fishculturist. Mr. Smiley has covered the whole ground in an exceedingly short space, and condensed as much information in his article as some men put in a volume.

"WOODCRAFT." This is the title of a book on camping out and kindred topics. The author is "Nessmuk." Who is better fitted to write such a book? It will be published in March, and will bear the imprint of the FOREST AND STREAM publishers. Unless we err greatly, "Woodcraft" will add to the well-deserved fame of its author as a writer on woods themes.

THE WOLF CRY IN MAINE.

THE Maine Fish and Game Commissioners have handsomely checkmated the cry of wolves in that State. Some fifty years ago these animals were numerous and terribly ravenous in the many sparsely settled districts of New England, and the farmers found it impossible to raise sheep, and even calves and pigs were frequently destroyed. Instances were numerous where strong men were attacked and overpowered by the packs of wolves. A war of extermination was waged against them by the farmers and settlers. The State paid a heavy bounty for their destruction, and the wolves have been among the departed for thirty-five years at least.

Curiously enough there are old settlers in Maine who retain the theory that wolves follow deer. They claim that there were no deer at the time of the wolves—"the wolves killed them all off"—but that since the extermination of the wolves the deer have gone on increasing. The poachers and crust hunters have taken up the cry. "Protect the deer and the wolves will follow," they said last winter when further legislation was proposed. Now they have actually started story after story of wolves seen and heard. "They have followed down from the Canadian forests after your protected deer," they say. "Now the poor farmers' sheep will all be killed." This is all very well, to create a sentiment among the farmers in the back towns against the protection of the deer by law. But the cry is the sheerest nonsense in the world, and has not a particle of foundation in fact.

The poachers and crust hunters forget that the deer never were so numerous in Maine as some twenty years ago, when their hides used to be brought into Bangor in hayrack loads —an actual fact, a hayrack on a sled, loaded with deer skins, drove into Bangor—all killed by crusting and driving the poor creatures into their yards, where, confined by the deep snow, the deer could not escape. They forget that the wolves did not follow a plenty of deer then. Indeed the State about that time reduced the bounty, or took it off altogether, because there were no wolves to kill.

But the answer to the wolf cry by the Fish and Game Commissioners of that State is excellent. They have offered an extra bounty of $5 for every wolf scalp, in addition to that which would be allowed by the town in which the creature was killed. They might safely make it $25, for there are no wolves in Maine. A single howl, louder than that of the poachers themselves, would raise an army of hunters who would scour the woods till the wolf was destroyed. It can clearly be established that there is not a shadow of danger to the farmers' sheep from wolves, and if it could be as clearly shown that a few wolves would follow an increase of deer, there would be fun ahead for the boys in hunting them.

The Sportsman Tourist.

IN THE LAND OF THE PHARAOHS.

I AM not about to write an essay upon Egypt, or a description of the old cities of the Land of the Pharaohs, for we want to hear about the shooting, about the game on the shores of old Nile, and those of us who want to learn all about Egypt, will find plenty of descriptions, good, bad and indifferent, in thousands of books, all the way between Mark Twain's and Thackeray's, to the illustrious companions of all travelers, Murray's or Baedeker's handbooks.

Cairo was behind us, the Pyramids had been passed, and three of us had hired one of the dahabeahs or boats, which carry travelers up to the second cataracts. Fancy a long, shallow boat, with two short masts, carrying an enormous triangular sail, with benches in front for the rowers, swarthy fellows, twelve in number, the laziest hard-working men I have ever seen. We were racing against another boat, and the proud Stars and Stripes we were flying at our stern were forging ahead of a Union Jack that was doing its very best to win. Our rowers were working in their peculiar way, which they use when they want to make good time, first crouching forward and bringing well back the blades of their huge oars, then dipping in the water, then a pull, as they rose erect in the boat, and at the end of the stroke they would thump down on their benches, to renew once more that laborious procedure.

The broad river stretched far away before us, the landscape bright and clear, the setting sun streamed golden and crimson rays upon the mid-day water, that sparkled into a broad sheet of fire and diamonds, to reach like a road paved with jewels the horizon where the fiery orb was going down. Away on both sides the shores were to be seen, green reeds and water plants near the edge, stately palms and date trees on the land which was covered with rice fields. A fellah was driving an extraordinary team composed of a forty-inch donkey and an eight-foot camel; a couple of women standing in the water and filling their water jars were looking at us. Far away some indistinct ruins were boldly standing against the horizon. The stately columns that had seen the Pharaohs were still rising, challenging proudly the efforts of old Time to lower their heads. Now, indeed, were we in Egypt, now we felt far away from home, as the light was disappearing from the heavens, soon to make room for the silver crescent of the waning moon, and for the bright stars that glistened from on high. As it was getting dark, we neared shore and made fast for the night, and after discussing our pipes and our Bass's ale we went to sleep, and I, for one, began dreaming about Rhamses the Great, and the great river, the Father of Crocodiles and Hippopotami, and about being arrested for shooting a sacred cat, or led to execution for desiring a steak from the holy old ox, Apis.

I had just finished an extraordinary vision, in which, regardless of chronical accuracy, Amenophis the Third, the ever-truthful, was quaffing Bass's ale with King Cheops, the mighty slayer of nations; in which Sethos the First was playing cards with Herodotus, and in which a band of Hyksos were dancing with a bevy of beautiful Almehs, when I awoke, for the Reïs, or Captain, was thumping at my cabin door, saying: "Yes, yes, breakfast," and a lot of Arab besides, totally incomprehensible; however, I understood that morning rations were to be served out, and soon I was up and doing justice to grub.

We had passed Toora, we had stopped one night at Bedreshayn, from which place we had visited Sakkarah; we had sailed, we had been rowed, we had been towed along from the shore. Shells had been loaded, the guns (dear old companions) had tenderly been nursed and greased; a few pigeons had been killed on shore, the little '73 Winchester had cracked on the river and had succeeded in very thoroughly frightening sundry ducks and sedate old pelicans, but no real game had been shot, and we were never so green as to think we could find crocodiles to order; in fact, they are hardly ever seen below the first cataract. On the way to Benisooef and Minieh, as we were sitting on deck one day, we saw, far off, a dozen or so of old pelicans flying down the river toward us; a scamper in the cabin for the guns! out again! and they near us. When within about sixty yards of us, my old friend Mr. B. blazes away—a miss, though he swears he hit him hard; "—— hard, I tell you, sir," says he. Whang! and my old pin-fire rings and one bird goes down; another shot, but they are too far away. One of the crew took the little boat and made for the bird, but pelican is only winged, and by and by we all laugh to see the man try and catch the big bird, while the pelican turns around and viciously strikes with his long bill. The rest of the crew join in the general laugh, but by dint of striking at the bird with an oar the man gets him at last and brings him back in triumph. Our dragoman informed us that he could show us some good places for sand grouse, and many times the little boat would take us ashore, and the ring of chilled shot once again would whizz through the air and many a pretty shot and a ludicrous miss would remind us of happy hunting grounds near home.

Many fine bags of the plump birds did we bring back to the dahabeah, and our cook would serve us delicate dishes and make us think that life was perhaps better worth living up the old Nile than anywhere else.

Many beautiful birds we shot on our way up—the snow-white paddy birds, a good many ducks, pigeons, abundance of all kinds; and one of our party had been so astonished by having a fox rise at his feet that he forgot he held his old trusty Sure Death, and let him go unharmed.

By this time we reached Golosaneh, where we were visited by a holy Sheykh, who blessed the whole boat and all that therein was—for a very moderate consideration.

When arrived at Minieh we put in a lot of new provisions, at least the dragoman did, and we went about, and after we had seen all the squalor, and dirt, and misery, and disease that was good for us, we went on board again, and pretty soon we were on our way once more, bound for Siout.

On the way our Reïs, who had watched with great interest whenever the Winchester was fired, and who had admired the way in which the little .44 bullet skipped on the water, hundreds and hundreds of yards away, but who had seemed to despise the way in which the ducks I fired at never seemed to mind it much, was made more respectful by a little fancy shooting of a very mild description. Hitting tin cans on the wing (tin cans grow in all countries, dear readers) I frequently managed to do, and when, after a little more practice, I managed generally to break beer bottles previously thrown overboard and fifty or sixty yards off, his fancy was visibly tickled, and the writer, proud of having somebody to admire his prowess, bestowed upon him a present of good tobacco. It is a pity, however, that this story of sport should degenerate into tin-can shooting, so let us on with our journey.

Our boat was forging ahead, poling and rowing, and sailing and being tugged, and shooting was to be had to our hearts's content. One morning a good shot from the rifle would get us a fine cormorant, another day the 10-bore of the party bagged two big wild geese, one or two heron skins we had preserved. The sand grouse were plenty; the fellahs had no objection to our killing their pigeons. One day a fine old sacred hawk was bagged by Mr. B., and many lovely skins were in our collection, beautiful, fast-flying, blue and green bee-eaters, while paddy birds, water wagtails, the black and white kingfisher, the queer looking, gravely strutting hoepoe, ducks, a few snipe and many more that I forget, were brought to bag never killing just for killing's sake, but enough for the table, and to get pretty skins.

Beautiful ruins without number are passed on the way; many are our excursions on shore, and a fine time is always the order of the day.

We passed under the great cliffs, and by the winding turn in the river, at Gebel Aboofayda, we saw the tombs cut in the stone, the openings into the cliffs, all those works rather of giants than of men, and in time, after stranding on sandbanks a few times and having our crew hop out in the water and all getting their backs under the side of the dahabeah and shoving us off, we reached Siout, where we stopped to make bread for the sailors. I could tell you lots about the place, and many other places, but I am trying to make a long story short, and as I only traveled as a young sportsman, more interested in ducks than in ruins, and as my description would be sunk into insignificance by the side of so many entertaining and ably-written volumes, I must just go on with the journey and interlard a little shooting where I can.

Well, at Girgeh we stopped a while, and old Mr. B. was struck with a bright idea. "Let's have a pigeon shoot," said he. We hurrahed and went to work. Pigeons were only a few pence apiece, and with two old segar boxes and two strings we made traps, the sailors were enthusiastic trappers and excellent retrievers, and the writer must say that, although the youngest of the party, he did not pay for the sheep which the loser had to buy for the crew, a way of putting it fully in accordance with his reputation for modesty.

We passed the sugar factories at Farshoot, we saw the holy old chap, Sheykh Something or-other, who had sat on his haunches for fifty years, depending upon charity to feed him, as he never, during that time, has raised his hands to his mouth. I would not speak disrespectfully of that saint, for he deserves richly one eminent title, the proud name of "champion dirty man of the world."

The day after we saw a crocodile, at least we thought it was an old log, but the Reïs and dragoman swore it was a crocodile, and of course it was our duty to believe them; but as the wind was blowing well we could not stop to give him a hunt. Well, at last we got to Denderah. Many fine ruins we saw there, the wonderful temple and hosts of others, and here two fine running shots, in the evening, as we were walking toward the river, put two Winchester bullets through our first jackals. From here we went on to Karnak and Longsor, and after inspecting the grand ruins there, we proceeded to Esneh, where we baked once more for the sailors. We did some shooting here for a short while, and sailed off again for Assouan, which we reached in due time.

Now the cataracts—the first—were reached, and Nubia was extending far away, Egypt lay behind us. Arrangements were made with the Sheykh of the Cataract, and after sharp bargaining we had it all arranged that for £12 we were to be hauled up next day. Well, I suppose everybody has read about going up the cataract; how the dahabeahs are hauled up with ropes, hundreds of men hauling up one rapid into one pool, and from this pool over another rapid, and so on, tugging like mad, shouting and yelling until you are at the top, and you think that they have earned their money. We soon got to Philæ; here we tarried a short while, and we would go for walks along the shore, and at the crack of the breechloaders fine birds would be brought to bag, and great was our amusement when some of the Nubians, seeing us shoot and open the guns to withdraw the shells, would exclaim regretfully that the "Englees" had broken his gun, and wonder ever after at its being mended so easily again. The country beyond Philæ becomes wilder than ever; water fowl abound; here and there a few buffaloes wallow in the mud; at night the jackal howls and dogs bark. Go a little further, and late in the evening a wonderful silence reigns supreme, interrupted by the cry of some water bird, or some dog away off, or some one of the unexplained noises heard in all solitudes.

Next day, as we were going up the river, Mr. B., who was watching for crocodiles, saw one on the sand. Quickly we got in the small boat, rowed carefully and silently around a sand-point. At last we reached fairly near the monster; a sharp *ping!* "Oh, good shot, Mr. B."; it is a hundred and fifty yards at least. I take the rifle, pump in another cartridge, and another bullet hits the brute, struggling to reach the water, and after considerable slashing about of his tail the crocodile dies. Who says that a rifle ball will glance off a crocodile? I am persuaded it will not. This one was thirteen feet long.

After this we went on our journey, bound for Aboo-Simbel. On the way we had another shot at a crocodile, but he was missed, and soon he wriggled into the muddy water in safety. Here we found a good many ducks, hoepoes and other birds, plenty of material for good sport and good eating, and one day, as I killed a sand grouse with one barrel, a fine fox jumped out from the reeds near a little irrigating stream, and my second barrel of No. 4 shot crippled old reynard, whom I captured after a little run.

When Aboo-Simbel was reached, we stayed a short while, for must we not see the great temple, and the remains of the glorious reign of King Sesostris, but I often would let ruin hunting alone, for were not the shores teeming with quail, beautiful little game birds, half the size of our Bob White, but strong flyers, often in large bevies, and no mean addition to the table, *crede experto*. I felt sorry I had no dog, for, although I could kill all the game I wanted, how much happier I would have felt in blending the pleasure of shooting with that of watching a steady pointer, or a good well-trained setter, at work.

When we had enough of Sesostris the Great, we sailed on to Wady Halfeh, and soon we saw the cataract. This was our turning point. Many another fine day's sport did we enjoy on our way back to Cairo, and many times, since we returned home once more, have I thought of the snug little cabins on the dahabeah, and the many good shots we fired in the Land of the Pharaohs. G. V. S.

New York.

"LIKE THE BEAR THAT TREED JIMMY O'BRIEN."

Scene—*Rear office of Briggs's drug store.* Time—10 *P. M. Cold winter's night.* Present—*Briggs, Professor Adams, Goodwin, Dr. King, H. P. U., et al. Briggs has just finished telling one of his hunting adventures.*

H. P. U. (loquitur)—"That grouse of yours was like the bear that treed Jimmy O'Brien."

Goodwin—"By the way, I've heard you use that expression several times. What does it mean?"

H. P. U.—"Why, it's a by-word among the 'boys' out in the San Juan."

Briggs—"Yes, but what's the story?"

H. P. U.—"Didn't I ever tell it to you?"

Owner—"No! Let's have it!"

H. P. U.—"All right; here goes."

ONE day, when we were up at the cabin in Arastra Gulch, Jimmy O'Brien stopped a few moments with us, on his way over to Elk Park, whither he was going to work out an assessment on a mine belonging to him. He was on foot, driving before him his favorite burro (Mexican jackass) Mike, laden with tents, blankets, "grub," cooking outfit, pick, shovel, and other impedimenta. Jimmy and Mike were well known in that country, for they were inseparable. It would have been hard to tell which thought the most of the other. Mike would follow Jimmy about like a dog, while Jimmy never passed his four-footed friend without stopping to scratch his rough head, and give him a bit of old biscuit or some such dainty. "The Irish Twins," "The Two Dromios," "Damon and Pythias," "Romeo and Juliet," "Beauty and the Beast," "Pyramus and Thisbe," "A Pair of Jacks," "Both Bowers"—these were some of the nicknames the couple had received. But neither biped nor quadruped cared—their strange friendship only grew the stronger. The former, singular as it may appear from his name, was an Irishman,

"Long, lank and brown as the ribbed sea-sand,"

with a merry twinkle in his eye, and a shrewd, quizzical smile that betokened "lashins of fun" in his make-up. In the golden days of '49 he had deserted from an American man-of-war at San Francisco, and had passed the last thirty years of his life in gold digging in California, bear hunting with old "Grizzly" Adams in the Sierras, silver mining in Nevada, and in leading a wild and adventurous life generally from the Columbia to the Gila, and from the Golden Gate to the headwaters of the Mississippi. Not knowing what fear was, he had sense enough to know when "discretion was the better part of valor." He was now about sixty, tough and weather-beaten, but still strong and active, one of the jolliest companions possible to find, and one who, to use the expressive Western phrase, "would do to tie to" in times of trouble or danger.

He stayed with us that day only long enough to "corral a hunk of grub," and then pushed on over the dividing ridge into Elk Park.

Next day, after having wasted the better part of the morning in a vain attempt to find a band of mountain sheep, which "used" on the peaks at the head of the gulch, I found myself, about noon, looking down on Jimmy's tent in the Park below. As it was but little out of a direct line

homeward, I decided that I might as well drop in on the old man and get a cold biscuit to stay my hunger till I reached the cabin. I took it for granted he would be at work in the tunnel, some five hundred yards up the mountain side, but, much to my surprise, when I pulled aside the tent-flap I saw him inside, rolled up in his blanket, fast asleep. Fearing he might be sick—for a nap in daylight was a rare occurrence with him—I shook him, and asked him if anything was the matter. The first reply was a grunt, the next a growl, then a request "not to bother," till, finally, when I had shaken him fully awake (for I had begun to be seriously afraid that his unwonted somnolency was the stupor of severe illness) I drew out of him the fact that he was well enough, but "mizherable shlapy." Why he should be so sleepy in the middle of the day puzzled me, till he intimated that he'd been up all the night before. The explanation surprised me as much as the fact, and, suspecting from his curt speech and evasive replies some mystery, I plied him with questions, till, finally, sitting up and filling his pipe, he satisfied my curiosity.

He had arrived there safely the evening before, selected his camp ground, pitched his tent, and turned Mike out to graze. Then, hearing some spruce grouse calling, he had started out to secure a few for supper and breakfast. Leaving his rifle behind, as he did not expect to see any large game, he took only his long-barreled .38-caliber Smith & Wesson revolver, with which he could pick off a grouse's head in the top of the tallest spruce. Having shot four or five, he started for camp, it having, by this time, become quite dusk, for darkness comes, here in these hills, almost as suddenly as in the tropics. On turning the corner of some fallen rocks, at the lower end of the little glade in whose upper point his tent was pitched, he came suddenly upon a huge grizzly, busy, as well as he could see in the gathering darkness, in digging up wild parsnip roots for his supper. Before he had time to dodge back under cover of the rocks, the bear had seen and started for him. I will let him tell the rest of the story in his own words.

"Divil a little time had I to be thinkin', for it wan't twinty yarruds he wor frum me whin I first see him, but I knew 'twor no use thryin' to run, an' as fur fightin', me .38 wadn't be a flay-bite to the likes av him. As luck wad have it, right forninst me was a majium-sized shpruce, an' oop that I wint like a wayzel, hopin' that av I didn't shtop to discuss the matter wid 'im, he'd be afther re-*cog*-nizing me civility, an' pass on, an' lave me. Not he! Oop he cooms to the fut of the three, shnuffs around it, roobs the dirthy head av 'im agin it, luks up at mesilf, perched jist beyant his rache, goes off, cooms back, goes through the same manayvers, an' afther a while, findin' he cudn't deludher me into anny kind of a dishcushin wid 'im, falls to faydin' agin. 'Twas so darruk, I cud only jist see the big black carcass av 'im, wandherin' around like a naygur's shpook in a cimmytairy, but 'twasn't mesilf that wor cravin' anny nayrer inshpection av 'im. I wor aizy enough wher I wor for the prisint, barrin' that a six-inch limb ain't quite so comfortable a sate as a pile of blankets, and that 'twud have bin more gratifyin' like to me shtummuck, av I'd had a could pratie or two alang wid me. 'Howiver,' thinks I to mesilf, 'whin he's through atin', he'll go aff quiet an' dacint like, an' the ould man'll git back to camp in time to git a good shquare male for himsilf yit.' But, divil claw the oogly hide av 'im, phwat does he do, when he'd got hiz own dirthy shtummuck full, but coom back to the three, walk round it wanst or twicet, and thin lie down about tin yarruds from the fut av it.

"'Ah ha!' sez I, 'tis that ye're up to, is it? Goin' to shtarve me out, are ye? Will, will, av I kape whisht, may-be ye'll be taking a gintale afther-dinner nap, afther a while, an' thin I'll deludher ye, an' slip down off the three onbeknownst to ye, an' av I can git back to camp an' git hould of ould Betsey, I'll be afther poompin the could lead into the ongrateful carcass of ye, till yez are as ded as Paddy Burns's pig, and then yez'll have rayson to regrit that ye caused a dacint man to make a shpec*tack*le av himself, shquattin' oop a three in this style, like a haythin moonkey on a limb.' So afther a bit, whin I thought the fine shupper he'd been atin had put him to shlape, I begins to lit mesilf down aizy, but afore I'd shlipped down a fut, oop gits the murtherin' blaggard, an' shtarts towards me. 'Twas wonderful how quick I changed me mind, an' concluded 'twasn't so very uncomfortable in the three afther all. 'Twas only playin' 'possum he waz, or maybe I'd been too precipitous like, so, whin he lay down agin, I made up me mind I'd give 'im plenty of time this time, afore I thryed 'im agin. So I waited an' waited, till my whole back was that sore wid the limbs a cuttin' into it, that I cudn't shtand it no longer, so I repayted the exshperiment, but 'twas not the laste use in the worruld, he was at the fut av the three agin, afore I'd shlid down a yarrud. So I makes up me mind to 'accipt the invitayble,' as I hear ye say wanst, an' so I reshoomed me original position, trustin' that, when daylight came, and he saw how lane an' tough I waz, he'd abandon the sayge an' layve me in payce. So there I sits asthraddle av that limb all that blissid night, till the ligs av me was so cramped they had no faylins lift, an' the teeth av me was broke, be raison av me jaws chatterin' so wid the could, an' I was that shtiff wid the frosht I was afraid I'd shnap in two like an ishickle, an' I was gittin' so hungry I could almost ate me boots; an' was thinkin' sayriously of takin' an early breakfast on could grouse. Will, whin I was almosht ready to dhrop aff me perch wid fatigue, an' hunger, an' could, it began to lighten a little in the ayste, an pretty soon 'twas light enough for me to see the forrum of me oogler jailer, plainly, lyin' close to the fut av the three." Here he paused, re-lit his pipe, which had gone out in the heat of his narration, and puffed away quietly with the air of one who has just finished a good story.

"Well, how did you get away?"

"On me ligs, av coorse."

"Did the bear leave you, when day came?"

"Not a bit av it."

"You don't mean to say you came down the tree and walked off, while the bear stood and looked at you?"

"Av coorse not."

"You certainly didn't kill him?"

"Wid a .38? Har-r-dly!"

"Well, how *did* you do it?"

"Will yez shware, by the blissid bones of the howly St. Pathrick, that yez'll nivir till, av I disclose to you the saycret av me escape?"

"What secret can there be about it?"

"Nivir you moind; not anither worrud do yez get from Jimmy O'Brien, till ye promise yez'll niver say a worrud to the byes, concarnin' the houl thransaction."

"Well, well, all right; drive on."

"Will, thin, 'twas no bear at all, at all, but that divil's naygur of a burro, Micky!"

Natural History.

PROTECT THE SMALL BIRDS.

Editor Forest and Stream:

For several years I have watched the decrease in numbers of our singing birds, and have wondered what our energetic collectors will find to prey upon a hundred years hence.

An interesting account of a day's birds' nesting in your issue of Jan. 31, has attracted my attention, and I think illustrates the mania now raging among ornithologists for the possession of immense series of birds' eggs and skins. I quote a few sentences from the above mentioned article: "We have already taken six eggs from this nest (that of *Ardea virescens*) four on the 7th day of May, two more on May 25, and to-day, June 4, we find three more. The nest we carefully leave, expecting to get a dozen more eggs from it at least, and then add both nest and bird to our collection." Again, "We take the first, containing four as pretty eggs as ever gladdened the eye of an oölogist, and then another and another, until our arms are full. Riding ashore we deposit our treasures, and wading in, we collect more, until want of carrying space cries hold! enough!" It seems to me that such wholesale collecting cannot but eventually seriously diminish the number of our birds.

I see no necessity for killing the birds during nesting time, save for the purpose of absolute identification, for if killed during migration or before nesting time, it allows time for the mate to remate and rear a brood before the season is too far advanced. It seems to me that the protection of our insect-eating friends is a serious necessity, and a line should be drawn somewhere to limit the inroads made upon them. Of course the number of birds sacrificed for scientific purposes is small compared with the slaughter for millinery purposes, which is assuming vast proportions. The beautiful cedar bird (*Ampelis cedrorum*), formerly abundant in the vicinity of Boston, has become comparatively rare. The Baltimore oriole (*Icterus galbula*), whose gorgeous plumage contrasts so beautifully with the rich green of the elms in our suburbs, has of late visibly decreased in numbers. No mansion now is considered fashionably furnished if not possessed of several owls usually mounted in horrible attitudes upon a half moon or with wings painfully distended high over the back. This robs the farmer of his best mouser.

While visiting the Museum of Comparative Zoölogy, at Cambridge, one afternoon, I heard a young lady remark while examining the birds, "What a horrid shame it is to kill these poor little dears." Glancing at her dainty hat I beheld thereto attached a bird most wonderfully constructed and composed of portions of at least two or three lovely denizens of the tropics. I thought at the time that there was a chance for missionary work among the fair sex. If the ladies could be induced to take interest in the matter and refuse to wear birds or feathers it would be an immense step in the right direction.

The State of Maine has made vigorous movements toward the protection of insectivorous birds. In Massachusetts it is proposed to put into the hands of the fish and game protective associations the matter of licenses and to impose a bond so heavy as to confine the permit to responsible parties. That this plan may succeed is the devout prayer of MERLIN.

WINTER BIRD NOTES.

THE signs of the birds seem to point to an early spring; and now that this season is at hand we hope that collectors and observers all over the country will give us the benefit of their notes, and will tell us of the arrival of the birds. If this were done systematically the amount of valuable information accumulated would be very great. We shall hope to hear from many of our readers, and shall publish from week to week the observations which are sent in.

Hornellsville, N. Y., Feb. 3.—Kingfishers, blackbirds and meadow larks have been here all the winter. Cannot well understand how they can live, as it has been a severe winter. Ice sixteen inches thick in the river, snow two feet deep on the level, good sleighing since Dec. 18, and the temperature often 20° below zero. Bluejays, many of them are seen around the farmhouses. I saw two large owls trying to catch English sparrows one evening last week, right in the outskirts of the city. On Saturday, Jan. 26, I saw about a dozen robins, which we all think here is a very strange circumstance, as Friday night at 11 o'clock it was 23° below. On Saturday and Sunday it was quite cold, but the robins were singing. Have seen none since the 28th. Heavy rains and thawing to-day.—J. OTIS FELLOWS.

Washington, Litchfield County, Conn., Feb. 4.—A robin was noticed at this place on the morning of the 3d inst. Is it not rather early for them in New England, even in this southern locality? Pine grosbeaks are abundant here.—J. D. G.

Ithaca, N. Y., Feb. 5.—On the 2d of February a man, living near a spring brook, saw a bird on the bank, which he thought was a woodcock. He killed it, and it proved to be an English snipe. When he fired only one bird was in sight, but at the report of his gun eleven more rose and flew. Most of them have been killed since. I also saw the same evening a robin. We have had an unusually severe winter. The ground has been covered with snow from six to ten inches deep, since the 25th of December, and cold all the time, which makes the occurrence something unusual.—W. H. W. [The occurrence of snipe near Ithaca at this season is quite unusual, though not without precedent. As we have frequently remarked, the cold does not appear to be always the moving cause of the southward journeying of snipe and woodcock. So long as the feeding grounds of these birds remain open a few of them will remain with us and brave even the severest weather.]

Perth Amboy, N. J., Feb. 15.—St. Valentine's Day was signalized here by a thunder shower, during which a tree toad chirruped merrily. And when it was over, a bluebird, on the top of the old pear tree, gave us a snatch of a spring song, while the mercury touched 62°. To-day it indicated but 27°, and the toad and bluebird—where are they? Two immense flocks of bluebirds were also seen, flying southwest. Could they have foreseen the cold wave?—J. L. K.

Ferrisburgh, Vt., Feb. 14.—We are just at the tail end of a big thaw which has nearly spoiled the sleighing and set the brooks a-roaring. A few crows have been hanging about here all winter in spite of deep snow and severe cold, an unusual thing for them to do in these parts. I think I told you of the grosbeaks being here.—R. E. R.

Irvington, N. J.—While walking in the woods on Jan. 20 I was surprised to hear what sounded like a robin, and while looking for it another one flew into a tree near by. I have seen them here in New Jersey in the latter part of February, but never in midwinter. The thermometer registered 15°, and the earth was covered with six inches of snow, yet the bird was in no way affected by it. I have known them to be so benumbed with the same degree of cold as to be easily caught in the hand. Like the late breeding of squirrels, it's another sign of a mild winter.—F. H. B.

New York, Jan. 13.—While out the other day in New Jersey on a snow-shoe tramp for the purpose of feeding quail, we came across a flock of a dozen wild pigeons. It is very unusual to see them at this time of the year, and during so severe a storm.—W. HOLBERTON.

Manton, R. I., Jan. 21.—A friend and myself went out without guns the other day and found the remains of two coveys of quail within a half-mile, seven birds in one and five in the other. They seemed strong and in good feed ground. On our trip I saw quite a large flock of robins and about a dozen pine grosbeaks and some gray linnets. Taking the weather as we have had it so far this winter, I thought it strange to see so many robins; they all looked fat and strong. They have been seen a number of times this winter in cedar trees near my house. We have a good lot of partridges (ruffed grouse) left over, but gunners are hunting them every day that the weather will allow them to get out, and they go some very bad days at that. The law is wrong to allow them to kill partridge up to the first of February.—T. M. ALDRICH.

Barrie, Ont., Feb. 7.—In your last number for January I read an article on late snipe, a Wilson snipe that was shot on Dec. 23, 1883, at Cleveland, O. Allow me to tell you about a Wilson snipe shot here on Jan. 23, 1884, by a Mr. Vair on his stream, Barrie, Ontario, and where we have three feet of snow and the thermometer 36 degrees below zero. A more perfect bird I never saw; it was in good plumage and as fat as butter. I may still say it was in such good condition that we have decided to have it put up by our taxidermist, Mr. Wright.—S. D. BEATTY.

FORESTS AND FLOODS.

FOR many years thereafter the flood in the Ohio River of 1832 was called by the settlers along its banks the "great flood." Its like was unknown to the oldest inhabitant. It was fifteen years till another comparable with it occurred, and the flood of 1847 was not as high as that of 1832. But within the last three years there have been two surpassing that of fifty-two years ago—the one now on being the most destructive of all. And yet the news gives no reason to believe that the water discharged from the clouds this year equals the discharges of 1832 and 1847. In 1832 the rains continued in torrents for several weeks; this year for not more than half or a third of that time. There is an apparent mystery in this which will set millions of people to thinking, more especially those who inhabit the banks and rich "bottoms" of that most beautiful river, and whose property is in peril of periodical destruction from these rapidly increasing occurrences.

The Ohio in its length—1,000 miles—is a river of the third class for America, and of the second class compared with European rivers. After the Missouri it is the chief tributary of the Mississippi, discharging more water than either the Arkansas or the Red River, though not as long as either of these. It is formed by the Alleghany and Monongahela, both rising in the Alleghany Mountains, and fed by snows till as late as the middle of May. Below the junction of these two mountain streams, which is at Pittsburgh, the principal affluents of the Ohio are the Scioto, Kanawha, Big and Little Miami, Kentucky, Wabash, Cumberland, and Tennessee. These affluents drain three-fourths of the State of Ohio, more than half of Indiana and Kentucky, nearly all of Tennessee and West Virginia, and, including the Alleghany and Monongahela, half of Pennsylvania and a considerable part of Virginia. The area of drainage into the Ohio can hardly be less than 100,000 square miles, and of this at least six-sevenths, probably nine-tenths, was sixty years ago covered by dense forest. The original prairie lands of the Ohio were insignificant. Forest was the prevailing quality of the land along the Scioto, the two Miamis, all through Kentucky, Tennessee, Western Pennsylvania, and Virginia, and Indiana from the old National Road southward was covered by beech, walnut, poplar, and oak, with but here and there a small "clearing." The rain that fell upon these forests sunk into a thick stratum of leaves, the deposit of ages, and was there retained for weeks after it fell, finding its way slowly into creeks and rivers, which accordingly rose slowly. Within the present generation the whole region from the Little Miami to far west of Indianapolis and thence south to the Ohio was comparatively a swamp from the beginning of the spring rains till as late as the middle of June. The rule, with some modification, extended to the whole area drained by the Ohio. Now all is changed, It is safe to say that four-fifths of the primeval forests that covered the Ohio valley as far back as 1820 have been cut away—for railway ties, fences, fuel, lumber, and timber for houses and barns—converted, so to speak, into railways, farms, villages and towns. These are, to be sure, not inconsiderable compensations for the losses by floods, but they are the cause of them all the same. We search in vain for any other cause. The Ohio is not filled up in its bed, as are the Sacramento and San Joaquin, by detritus. It is navigable now from its head to its mouth by boats of as deep a draft as plied upon it thirty years ago. Its banks are as high as ever and as far apart. It is as capable of carrying as much water now as when the Indians hunted in its woods. The difference is that it is now called on to discharge in a week the same quantity of water that it formerly received in a month or six weeks. The leafy forest reservoirs are cut away. When an eight or ten inch rain fell half a century ago, more than half of it was held back from the rivulets and rivers by these reservoirs. Now all goes at once, and if the rivers cannot contain the influx, of course their banks are overflowed, and farms, villages, and towns swept away.

This is the common-sense explanation of the mystery. The compensation of the flood calamities is found in the exchange of the primitive unproductive forests for farms, orchards, meadows, flocks, and herds, and the other concomitants of the thing we name "progress." The partial remedy against these wholesale destructions by flood lies in the restoration of the denuded forests as far as is consistent with that cultivation of the soil which the increasing population of the country demands. It is a remedy which might be more practically and profitably enforced in the valleys of the Sacramento and San Joaquin than in the States drained by the Ohio. Tree culture in our valleys, while

contributing toward the prevention of sudden overflows of the rivers, would not curtail the area of profitable agricultural production, for an acre of well-shaded land is worth more for pasture than for grain, and we are shorter of beef, if the butchers may be believed, than we are ever likely to be of bread.—*San Francisco Chronicle.*

Game Bag and Gun.

WOODCOCK COVERS NEAR NEW YORK.

THIRTY years ago last summer, within one hundred yards of where I am now writing, I killed my first woodcock. Although but a short time had elapsed since I had been allowed to carry a gun, I had already created sad havoc among the various birds with which the salt marshes in this vicinity at that time abounded. But the killing of this first woodcock started a new era in my shooting career; and though two years at least elapsed before I was able to kill more than an occasional bird, the most of my spare time while they were in season was spent in their pursuit; and the quantity of fine shot I scattered about the swamps and springholes was simply incredible. Well do I remember the disgust with which a city cousin followed me on one of these probationary hunts, through mud and brush the greater portion of the day, returning at night with empty powder flask and shot pouch, and one solitary woodcock. This one, however, had fallen to my gun, and I at least was satisfied.

This constant practice, backed by a love for the sport that no amount of poor luck or hard work could dampen, began at length to have its effect, and I would occasionally bring in quite a respectable bag. When one summer afternoon after a hunt with Tilman Holly, the acknowledged crack shot of the time in this section, when I had killed my full share of the birds, my reputation as a fair shot was firmly established, for to hold one's own in the brush with Holly at that time, was a feat few cared to try; and most of those who did try failed to perform.

Holly, though growing old, is still a good shot; and only three years ago last November I met him very early one frosty morning in what is locally known as Bussing's Sprouts, a large tract of splendid fall woodcock ground, about one mile east of Woodlawn Station. He informed me that birds were plenty, and that he had already killed seven. Hunting together we killed eleven more, making a bag of eighteen woodcock in a forenoon, and that too within one mile of the northern boundary of New York city.

When I first began to shoot, probably not more than eight or ten hunted over setters or pointers within a half dozen miles of this place. The first whom I remember to have seen following the dogs in the field was Joseph Thwaites, then keeper of a hotel known as the Sportsman's Inn. As a boy I never passed this place without stopping to admire the sign, on which were painted two dogs on a point and a sportsman in the act of shooting. Thwaites had a habit, and a very good one, of cocking his gun as it went up to his shoulder, and was the only sportsman I have ever met who did it. He died a few years since, when he was past seventy, and only a few months before I met him in the Sprouts mentioned above, working his dogs with as much ardor and zest as a lad upon his first hunt

Another of the old-time shooters was Malachi Briggs, now living near Williamsbridge. Though showing unmistakable signs of advancing age, he is still hale and hearty, and may be often seen during the shooting season, with his old pointer, searching all the best spots (and no sportsman knows them better) for any stray woodcock that the Wards, Weeks, Peter Briggs, and the host of other shooters who dwell in that vicinity may have happened to leave.

About half way between the town of East Chester and Thwaite's, which was near the town of West Farms, on the road leading to New York city, was the Drovers' Inn, long since burned down. This was a favorite resort of woodcock shooters from the city; and these were almost invariably under the guidance of Solomon Hesdra, a barber doing business in Spring street. "Sol," as he was almost always called, was an inveterate hunter, a good shot, and a great lover of the dog; and my first lesson in dog lore came from him. In later days he followed his vocation in the village of Mount Vernon in this town. Every Monday morning during the shooting season the shop was left in care of an apprentice, and with Shot, his setter, following at his heels, Sol. would wend his way to the swamps. On more than one of these occasions I have enjoyed a hunt with him, and many a valuable hint in regard to my favorite sport has he given me. Like Thwaite, he hunted almost up to the time of his death. Many of the city readers of FOREST AND STREAM will remember Sol. and his quaint, genial way.

Taking the village of East Chester as a center, there was probably more good woodcock cover within a circle of five miles at the time of which I am writing than could be found within the same area anywhere within thirty miles of New York city. About eighteen years ago most of the covers in the towns of East Chester, West Chester, and Pelham were cleared off and the grounds exposed for sale, as a regular mania for land speculation arose about that time. Some of the covers were drained and destroyed forever; but some of the best of them, especially in the town of West Chester, are fast growing up; and if left alone will soon furnish good sport again. Last season I killed a few birds on this ground, where the growth had been the quickest. In the town of Pelham, the village of Pelham Manor occupies a tract of land that a few years ago furnished splendid shooting. A small portion of cover is still left along the railroad on each side of the station; and I killed eight woodcock there one morning last November.

By far the best piece of ground that remains intact in this section lies west of the New York, New Haven and Hartford Railroad between New Rochelle and Larchmont. Here, one year ago last August, I made the best bag I have ever made, killing sixteen birds. This is a larger number of birds than any one man should shoot in a day where cover is scarce and shooters plenty; and I have blamed myself many times for it since. I have held, of late years, that a bag of three or four brace should satisfy any sportsman or pair of sportsmen; and I would hail a law to that effect for this county with pleasure. Last season my largest bag was nine, though I killed a large number in the course of the season. I have perhaps been dry and tedious in giving details and describing localities, but one object in writing this was to show to sportsmen in the city who so often write to FOREST AND STREAM for information in regard to shooting grounds within one hundred miles of the city, that a fair day's sport can often be had much nearer than that by those who know where to go and how to shoot after they get there. I have given a slight sketch of such of the old time sportsmen I was most intimately acquainted with. The younger ones I will not attempt to name individually, as it would take too much space, but they are thickly scattered all over the country, and setters and pointers are as plenty as false points and flushes at a field trial.

I am well aware that I have departed from the usual style in writing upon the subject of summer shooting and I have often been amused at the way so many writers of the day have in dealing with the subject, the birds called callow fledgelings and their inability to fly and take care of themselves conclusively shown on paper. I should be sorry to see the season open in July, but candor compels me to say that during the many years I hunted them when it did open at that time, I never but once saw a bird unable to fly, and that was undoubtedly the offspring of a bird whose first nest had been broken up. By the first of August the birds are well scattered and hard to find. Even in the days when there was plenty of cover, it was a rare thing to get a large bag of birds in August. During the twenty-seven years that I suppose I may, without egotism, claim to have been a fair shot, the most birds I ever killed straight in the summer was seven, while I did the same thing on fall birds twice last season alone. But when I speak of killing consecutive birds I mean shooting at every bird pointed, walking in to the right or left of your dog and flushing it yourself, and when it rises, the little open spot you had your eye on and was quite sure it would fly through will probably be in an entirely different direction from the one it will really take as it whistles up under your feet. You will turn to see a buff and brown streak disappear amid a cluster of shaking alder leaves. When you can on the instant throw up your gun close enough to those quivering leaves to kill the bird flying behind them twice out of five times, you will be doing better shooting, in my opinion than to bring down four out of five as they rise over the tops of the leafless sprouts in the fall. That I am not alone of this opinion, I know, as I have never met a first-class snap shot who questioned the justice of it. Two years ago it was my good fortune to make the acquaintance of a No. 1 shot, fit to hold his own in any company; one of those so seldom met who seem to be to the "manner born," he, too, had imbibed the idea that an August woodcock was very easy killed, but a few outings in the dense covers of this section convinced him of his mistake. I have another splendid shot in my mind, a young lawyer from the city, who for seven years has never failed but once to be on hand the first day of August, and then he came on the second. I fancy I can see his quiet incredulous smile should any one suggest to him that an August woodcock was an easy bird to bring to bag. J. H. D.

EAST CHESTER, N. Y.

My observations of the woodcock are perhaps new to some of your many readers. I live near New York, and all my shooting is in a circle of twenty miles around the city, and I get as much pleasure out of one single woodcock as many sportsmen (who live in more favorable country grounds) get out of a dozen. I look for them on the hillsides, in swamps and oak brush, in briers, blackberry bushes, cedars and ledges along streams. I have found them in open woods, cornfields, meadows and grass lots, and in fact every place where the soil is soft, no matter whether wet or dry: The common notion of sportsmen is that the woodcock get their food only by boring, but they will turn over fallen leaves and pick up from the ground, as well as bore. I have killed a woodcock with a green caterpillar in his bill, two and a half inches long, which he must have picked up from the surface. When I go to my favorite places, which are generally thick and difficult to shoot in, the dog will crawl right up to within a few feet of the birds, and leave his point when I command him. Woodcock will stay in one place all summer and fall, as long as there is anything to eat; and will shift ground as soon as the place gets too dry or otherwise unfavorable for food, but will return after rain, and they will not leave until driven away by very hard frost or snow. The flight of northern birds may be on or not, the birds which are bred here will stay until they can feed no longer. Some of these birds I killed on Thanksgiving Day, and am positive they were the same birds I had seen during the summer, because one had a crippled leg which he had hanging down, and the other was in a very small secluded spot not more than thirty yards square, where I had seen him very often before. Traveling woodcock, if disturbed in daytime, will leave the place in the evening, and not return even if the condition for food is favorable. I killed last season about forty woodcock, a few every week, which I think was very good for being so close to the city. DOMESTIC.

BROOKLYN.

MASSACHUSETTS NOTES.

THE season of sport in field and bush closed in our State on Jan. 1, with the exception of fur and wildfowl, who must court shy of the gun until a later date.

The season as a whole has not been very satisfactory to most of our sportsmen. From early in the summer a very severe drought prevailed until about the middle of autumn, much to the disgust and perplexity of many of us, who, during August, turned our steps toward favorite grounds hoping to bag a few woodcock. Such outings, as a rule, were made with discomfort, faces streaming with perspiration, the ground dry and parched from drought, and few or no birds to reward us. Some of the old veterans, whose heads are sprinkled with the silvery threads of many winters, wended their way to moist corners of cornfields, shady old orchards beneath whose leafy retreats it was always moist and cool, or to some partially exposed overflow near pond or stream. In such places these old wiseacres often obtained good sport, to my knowledge making some splendid bags, and exciting the envy of many among their fellow sportsmen.

The flight shooting in autumn was of the poorest, very few birds stopping at all, and the bags very light and unsatisfactory; but, however, the boys managed to secure a few woodcock to sandwich in with the very good bags of ruffed grouse obtained by most of them throughout the season.

The opening of last spring bolstered up our drooping spirits with promises of good ruffed grouse shooting in the fall. The birds hatched out early and broods of goodly numbers were located in every direction, and when the season opened on Sept. 1 they were found, in numbers sufficient to satisfy, in nearly every swamp and alder run known for miles around us. But during the month last referred to no very great bags were secured in this vicinity, while during the latter part of the season, when autumn's golden garb of sunset hues had settled over the forest, this grandest bird of them all, steeped to his eyes in woodcraft, rises from behind us, and with rapidly beating pinions shapes his course to some distant covert, while the pathway of his arrowy flight is marked by falling needles from the pines. When his course is marked, we follow to his hidden retreat among the scrub on the hillside or into the depths of some almost inaccessible swamp. He rises from beneath our very feet, and with roar of wing makes a break for liberty. Then, when fortunate enough to cut him down in his flight, what pleasure steals over our delighted senses as we hear the telltale thud upon the ground and are guided to the fallen patriarch by the quickened wings beating out his death roll. It is with love mingled with sorrow that we raise him from among the leaves and stroke his glossy plumes. Scores of from fifty down to smaller figures have been made by our sportsmen for the entire season. Quail have been quite plentiful, and goodly bags of these gamy little birds have fallen to the guns of this locality. There were many birds left over at the close of the season, and if given a chance to care for themselves without any assistance from the netter, all looks very favorable for good shooting next October.

We have here in Lowell two large and powerful gun clubs, who, with the assistance of some other gentlemen, act as a powerful influence to promote the protection of fish and game. The methods pursued by them will compare favorably with those of other organizations throughout our State. On pleasant days, when it is suitable for a tall hat to be out, you will find them at their club grounds one day each week, earnestly at work shooting at glass balls and clay saucers. When not thus occupied, I presume they are earnestly wrestling with some other means of game protection. There are here with us a number of men who are the owners of forests, and it is well known that they use them, too.

Some prominent glass-ball smashers were detected during July, a month before the close season expires, hunting and killing woodcock. Gentlemen well known for years as leading citizens of this place were detected hunting woodcock out of season. When discovered and approached by others, they with more than ordinary celerity concealed their guns in the bushes behind a large tree, and were very busy giving the dogs a little harmless exercise. One other sportsman (?) has the worst case of all to answer for. He was out killing woodcock one day, and, when returning home for the night, confessed (to parties whom he chanced to meet) that he had five ruffed grouse killed by him that day in his bag along with his woodcock, and this early in the month of August, a whole month before the open season on ruffed grouse.

D. E. A.

LOWELL, Mass.

WILD TURKEY STORIES.

I.

IT happened in old Kentucky, before the late family troubles. It was midwinter. The La Belle Riviere, which ran past the front gate of Longview, my beautiful home, was bound in plates of ice; the winter had been long and cold—excessively cold for that latitude. The snow had been falling for two days, and the ground was wrapped in a mantle of white over one foot in thickness.

Sunday morning broke clear, sharp and frosty. The household had settled down to a peaceful day's reading. I was deeply interested in one of "Graham's Magazines" when Allen, the colored man who had charge of the horses, came into the room, hat in hand, almost out of breath, with the astounding revelation that "thare's a big gang of turkey back of the barn." Down went my book, on went my boots, and I was in the hall picking out a gun from half a dozen that stood in the corner. Among the rest was an extra fine double gun, 16-gauge, 7¼ pounds, furnished with a sling, the property of a guest, Captain Thursby, who had crossed the plains several times to California and back; and this gun had been specially made to shoot ball and buck, and had cost him over three hundred dollars. The captain told me to take his gun, which was then loaded for deer or turkey. So, picking it up, I hurried out to the barn, where I saw the gang in full flight for the woods, half a mile distant. The sight warmed me up, and I hurried after them. Reaching the beech woods I saw them quietly scratching among the trees, some two hundred yards distant. In my endeavors to steal up to them they saw me and took wing, flew but a short distance and alighted. I followed, they running through the snow, I slowly gaining on them.

About one mile back from the river and running parallel with it was a narrow, deep slough, some two miles long; the water in winter ten or twelve feet deep, the banks close enough for a large tree to span the water, and the darkies had thrown large trees across for foot logs, to serve as bridges in their 'coon hunts. One large poplar tree thus used was fully ten feet above the water.

The turkeys were making for the hills and crossed the slough not far from this tree. I tried the ice; it would not bear my weight. I hurried for the poplar tree, mounted up on it, and, stooping, started across, keeping my eyes on the flock close by on the further bank. The footing was slippery, but I never gave it a thought. When half way across one of the gang came right for the treetop, not having noticed me on my high perch. I raised my gun, took aim, fired; and the next moment my head struck the ice ten feet below where I stood, and I went to the bottom head first, gun and all. How I got out from that ice-bound water is a mystery to this day. All I do know is that I got home as they were sitting down to supper, completely exhausted, my clothing frozen hard as a board. Did I kill the turkey? Yes; and next day the boys fished up the gun and brought home the turkey. This was my first and last Sunday hunt.

CAPE ROCK.

CAPE GIRARDEAU, Mo.

II.

I have been shooting and fishing for a great many years, my first jaunt being before I donned knickerbockers, but I never knew what shooting was until in the fall of '71 I joined my regiment then serving in Northern Texas, that hunter's paradise, where at that time was to be found almost every kind of game, both bird and animal. How I look back now from the cold bleak country about Boston and think of the days past at Fort Richardson, then on the extreme frontier, and sigh for the flesh pots that at that time I did not know how to appreciate. It seemed to me that every kind of shooting was to be had, and no one was able to tell what it would be the next moment. You might be "loaded for bar" and find quail, or you might be loaded for quail and meet a noble red man who required your attention, the latter game, however, all men were prepared for there at that time. I never hap-

pened to meet a "red," although once in a very badly prepared state I met an enormous panther that scared me nearly as much as would an Indian. I was hunting for gray squirrels and came across his majesty very unexpectedly. He was as badly scared as I, so by mutual agreement we each went off in opposite directions. He was a magnificent animal, and I thought then he was about the size of a full-grown Norman horse. He may have been a shade smaller.

The finest sport to my mind was hunting the wild turkey. I don't mean going into the roost at night and killing the poor birds without giving them a chance; that kind of turkey shooting is mere slaughter, entirely unworthy the name of sport. I have shot in the roost, but only when I wanted meat. In the fall of '72, the General commanding the Department was coming to Fort Richardson on a tour of inspection; and Gen. Mackenzie wished to give him a game dinner. To that end he suggested to Col. Buel (now dead) that he had better take a hunt and see if he could get some turkeys and game. It was arranged that Buel and myself should take such a trip. I picked out about a dozen soldiers who were good hunters. We drove about eighteen miles, went into camp, and as soon as we had a little lunch and a cup of coffee, all hands except the camp guard started out, and that night we had quite a nice showing of turkeys, all hands making their suppers upon turkey livers.

Sunrise the next morning found all up and ready for work. I proposed to give my attention to ducks and did not feel that it was incumbent upon me to start quite so early. This may sound paradoxical to duck shooters who turn out before the night is half over and sit in a cold blind two or three weary hours waiting for the ducks to begin flying. The shooting there was different. The stream was small and full of ducks and our method was to slip up to the bank above the stream, flush the ducks and then give them both barrels, pick up the dead, drop back from the river and repeat a little lower down or higher up. The time of day had no influence upon the shooting. However, I did not go for ducks, I went for bear and killed the largest white-tailed deer I ever saw, and this not two hundred and fifty yards from our camp. I took him to camp and then, too much elated to hunt for ducks, I started for turkeys. In the meantime one of the soldiers had killed another deer.

The second night our stock of game was much increased. It was determined then that at 11 the next morning we would break camp and go in to the post. Early in the morning every one was out to get just one more shot. At 11 all hands were in; camp was broken, and as happy a lot of men as you ever saw took the road for the post. When we left on Monday morning General Mackenzie had said to us that he would want every bit of game we brought in, and that we should send it all to his quarters. Knowing there had been no frost, and that we would be unable to shoot in the roost, he thought we would not succeed in getting more than eight or ten turkeys; and other game he did not count upon at all. Being good soldiers, always obeying orders, we sent the wagons to the General's quarters and unloaded upon his front porch the two deer, a number of ducks and prairie chickens and one hundred and seventy-four wild turkeys. He did not keep all the game. Every man, woman and child in that post had a turkey dinner next day.

We did not keep any record of the game other than the turkeys, we killed between 3 o'clock on Monday afternoon and 11 o'clock Wednesday morning one hundred and eighty-one wild turkeys, and not one was killed in the roost, they were all killed on the ground, and then only after the hardest work. SAXET.

SQUIRRELS AND RIFLE SHOOTING.

Editor Forest and Stream:

Noticing the communications in your recent issues relative to the breeding of squirrels, etc., I am constrained to send a few "egotistical" notes. My boyhood days were mostly spent in Northern Ohio, on the "Reserve," which down to 30 or 35 years ago was a wonderful region for small game, as many of your gray-headed readers can testify. And some of the game was not so very small either. I remember during the winter of 1852-3 shooting two very fine deer one day within fifteen miles of Cleveland, and within a mile of the C. C. & C. R. R. (with a plain hunting rifle, 90 to the pound, round bullet), both deer being on a "dead run" when shot. From the time I was large enough to load a rifle my entire pastime was this fascinating practice. I have killed thirty squirrels (black and gray) in half a day. I supposed all old squirrel hunters were aware that these rodents bred twice each year. I have shot numbers of young ones—not fully grown—in September.

I occasionally receive letters from young men, even yet in their 'teens (whose parents, grandparents or other old friends I knew while I was yet young), inquiring for rifle shooting points, hunting, etc. It affords me much pleasure to reply to these young men, although sometimes done at the expense of time, which I can ill afford, but I honor them for choosing a pastime so inexpensive and healthful, instead of lounging around villages and drinking or smoking resorts, though I fear some of them have acquired the filthy tobacco habit. In this connection I wish to write them a brief, secular homily.

Whenever the opportunity has presented itself I have always tried titles with the best marksmen I have met, and have never been beaten in "string" shooting, the only accurate test of marksmanship. The most proficient competitor I ever met was a Methodist Episcopal clergyman of the Troy (N. Y.) Conference, the late Chaplain Barber of the Berdan Sharpshooters. I well remember one warm winter day while our army was in winter quarters in front of Fredericksburg, our regiment being in camp near Stoneman's Switch, that the chaplain and myself practiced continuously the entire day, stopping only for dinner. We tried five and ten shot strings, mostly the latter. During the forenoon I steadily beat him about two inches on a ten-shot string. Just before dinner he desired to try a five-shot string with my rifle. The result showed that my string measured but five-eighth of an inch less than his. After dinner he expressed a desire to use my rifle for the afternoon, which I cheerfully granted. Leaving his own rifle at quarters we fired alternate shots with my own till darkness prevented. Our strings all ran less than an inch apart, and the last one was but three-eighths of an inch, I having beaten him but that much in ten shots. As we were returning to quarters he remarked: "Captain, I think you have the best rifle in the country, and with such a rifle a man who has never used intoxicating drinks or tobacco in any form is not readily beaten in a day of steady practice."

In conclusion, I wish to say to young men that with my nervous, sanguine temperament I could never have attained the proficiency in steady marksmanship which I did but for my abstemious habits.

When I commenced this article I intended giving the boys some points on squirrel shooting with a rifle, but my article is already so long that I will defer those "points" until another time. MILTON P. PEIRCE.

PHILADELPHIA, Pa.

NEW YORK GAME PROTECTORS.

Editor Forest and Stream:

Some one asked in FOREST AND STREAM that we have a report (for publication) from the game protectors, that the tax payers can see what has been accomplished in the way of enforcing the law and for the protection of game. I frequently shoot ducks on the Hudson River. Last fall (1883) I noticed that the law was violated every day (or evening) by persons shooting after sunset, and while the ducks were on their feeding grounds for the night. I wrote to a gentleman in Hudson who is intersted in the protection of game, and he said that he had already called the game protector's attention to this fact. I have never heard of any arrests, and know that the shooting continued, and if I am credibly informed, the report of the guns of violators could be plainly heard at the residence of the game protector. I noticed in a Hudson paper that he had arrested a poor old man at Newburgh for catching a bass of less than one-half pound weight, and that he was away from home when wanted at Greenwood Lake (and by the way the Greenwood Lake business is a puzzle to me as well as many others). Now what has our game protector accomplished; I say our game protector, as he is the man we look to here. TAX PAYER.

ALBANY, N. Y.

From the current report of the Commissioners we take the following extracts bearing on this subject:

"By the act, Chapter 317, Laws of 1883, an increase in the number of State game and fish protectors was provided, and the force were, for the purpose of securing official accountability, placed under the 'supervision and direction' of the Commissioners of Fisheries. As provided by law, the Commissioners proceeded in July last to divide the territory of the State into thirteen protection districts, that being the number of protectors the Governor had decided to appoint. The appointments were made July 20, and as soon as the protectors had become legally qualified, the Commissioners issued to them a general order, stating that they had been 'placed under the supervision and direction of the Commissioners, and would be required, at the close of each calendar month, to report in detail their proceedings to them.'" Accompanying this order was a code of instructions.

As the Commissioners reside much distances apart as to forbid, without great expense and inconvenience, stated or frequent board meetings, and as their business with the protectors is of such a nature as generally to require prompt action, it was deemed necessary to place the management of the details of this department under one active head. The duty has been accordingly intrusted to Commissioner Sherman, secretary of the board, whose central location was most favorable to the purpose. He receives the reports of the protectors, and has charge of the general correspondence and records. Each Commissioner, however, is given the full authority of the board to issue such special directions to any protector as the exigencies may call for. The system has been found to work smoothly and efficiently. The protectors responded with alacrity to their instructions, and have been without exception active and efficient in the discharge of their duties. They have all, as directed, made reconnoissances of the territory in their respective charge, and established working relations with the district attorneys, sheriffs, and other officers, with whom they are to act in the execution of the laws, and with the game protective societies and individuals in their districts interested in the observance of the game laws. The monthly reports of the protectors, which have been made in all cases with commendable promptitude, show an amount of practical work done, which fully meets the expectation of the Commissioners. The practice they have followed, of making frequent visits to suspected places, has done much to stop illegal acts, and their prompt action in seizing and destroying contraband devices, and bringing to justice habitual offenders, has exerted a wholesome influence in places hitherto noted for defiance of law. The Commissioners feel justified in saying that under the present system more has been accomplished in the last three months in securing the observance of the game laws than has ever been done in the State before, and they have faith to believe that the continuance of the same vigilance will in a year's time secure for the game laws an observance as general as it was formerly an exception. As an example of the work done, it may be stated that the reports of the protectors show that upward of an hundred nets and other unlawful contrivances for the capture of fish, of the value of more than five thousand dollars, have been removed and destroyed within the last three months, and that many waters in which for a generation netting had been habitual, are now free from all wholesale fish-destroying influence. More than twenty indictments have been found for hunting deer out of season, and a large number of suits have been brought to a successful issue for minor offenses. These examples will have the tendency to keep old offenders in wholesome fear, and to check the spirit of disregard that has grown up, by long tolerance, of the game law. That provision of the law which authorizes the Commissioners to detail our protectors, in special cases, to duty outside their assigned districts, has proved of great usefulness. It has enabled the Commissioners to fortify weak places by rendering to local protectors necessary aid and support at points where defiance and resistance were to be apprehended. It has been found useful, too, in a class of detective work which could not be well performed by a protector whose person was well known in his district. Some inconvenience has occurred from the inadequate allowance made by law, for the traveling expenses of the protectors. This is at the rate of twenty dollars and a fraction per month, and no payment in excess of this sum is made by the Comptroller in any monthly account of disbursements, unless there should be a corresponding underdraft the previous month. This allowance may be exhausted in a single trip which the protector may be called on to make into a distant portion of his district, or, as may happen on the order of a Commissioner, into some other district; and thus the officer would be crippled in his ability to make other important trips of duty. The protectors can ill afford to pay expenses of travel out of their salaries, and in some cases it is a hardship to them to advance the means for such purposes, even when certain of reimbursement. There should be a larger allowance for travel in the line of duty; or, what perhaps would be as well, there might be a sum appropriated for use, in the discretion of the Commissioners, in cases where the standing allowance was insufficient.

DEFECTS OF THE LAW.

The Commissioners deem this a suitable occasion to call the attention of the Legislature to the defects in the present code of game laws. On this subject, they reiterate the sentiments expressed in a communication to the Governor Dec. 15, 1880. These laws have been so amended, supplemented and, as it were, polished up, that they have become confused, vague, contradictory and puzzling even to minds accustomed to legal interpretation. Special and local provisions and exceptions have been so interwoven in the text, that close and analytical study is necessary to elucidate that which should have been expressed in terms plain to all. The last material revision of these laws was made in 1879. To illustrate some of the absurdities that have crept in, the following instance is given: In a clause respecting brook trout, the former term "caught or taken" was changed to "killed." This change has rendered nugatory one of the most important provisions. The pretext for the amendment was that in a law dealing with game, terms used by "sportsmen" should be applied. In their parlance, a trout "taken" is a trout "killed," though he may be at that time flopping in the basket. "Pot-hunters" catch fish; "sportsmen" kill them. But when suits have been brought against persons for taking trout out of season, from public waters to stock private ponds, the defense has been successfully set up that the trout were not "killed," but taken alive. The poacher here gets the benefit of the literal construction of the word, while the law is defeated by the use of technical terms. This shows the absurdity of using artificial terms where natural ones would serve a better purpose. In the making of laws which everybody is expected to obey, such terms only should be used as plainly express the intent. It is unfortunate that the efforts made in the Legislature the last two years to improve the law by recodification and the correction of unwise provisions, failed, through the inability of those professedly working to the same end to agree in some minor points. The bill of the last session, known as the "Townsend bill," is, in the judgment of the Commissioners, the best considered in its provisions of any lately presented. It embodies the views of experienced and conservative sportsmen and fishermen, and its provisions would not be difficult to enforce. The "Grady bill," so called, was good in form, but had some objectionable provisions. If the good points of the two bills could be combined in one, following the general arrangement of the Grady bill, a law might be perfected which would be just in its provisions, easy of interpretation and certain in execution.

HOUNDING DEER.

The stoppage, through legal prohibition, of the old practice of "crusting" as it is called—that is of hunting deer on the snow crust when escape is impossible and a club is as potent a weapon as the best firearm—has resulted in a large increase of deer in the country known as the "Northern Wilderness." Much has been done by public officers, and by the efforts of societies and individuals the last few years, to prevent the unlawful killing of deer by this and other destructive modes, but there are still infractions which the game protectors and all others interested must use their utmost energy to prevent. But the danger now which threatens the deer is not so much from unlawful as from lawful practices. The pursuit of deer by hounds is now permitted from the 15th of August to the 1st of November, a period of two and a half months. During this time in the present year, the Commissioners estimate from the best data they have been able to obtain, three thousand deer were slain in the wilderness region. Never before did the woods so resound with the baying of dogs and the report of firearms. Every accessible position had its party of hunters, with their guides and dogs, and the unfortunate deer were driven from ridge to water and from swamp to hill to escape to-day a fate that was sure to come to-morrow. The number of hunters has become legion, and if the increase is to go on as it has done since the deer again began to appear in plenty, it will not be many years before the race is exterminated in this State. The object of the protection of deer in certain seasons and from destructive modes of hunting, is, or should be, that they may be hunted to the extent that they may be profitably used for food by those who go to the wilderness for health or relaxation; and that they may be of similar use to those whose occupations confine them to woods life, or whose homes are on the frontier where are no other means of obtaining fresh animal food. It never could have been contemplated by any wise law maker that they were to be spared in the winter that their slaughter in mere wantonness or to supply distant markets might be the more certainly effected at other seasons. One case has come to the knowledge of the Commissioners, which is doubtless the type of many, where a person, calling himself a "sportsman" from New York, camped on a stream much frequented by deer, with four guides and a pack of hounds, and in ten days' time the party had killed upward of twenty deer. The forequarters were fed to the dogs or left to rot on the river's bank. Of the saddles, one-half were given to the guides as part compensation for their services, and the remainder were shipped to the distant city. From every avenue out of the forest, east, west, north and south, came streaming out of the forest in October saddles and carcasses of deer, so that at many points the market was fairly glutted. All this, it is to be remembered, was done within the letter of the law. If there is no other way by which this wanton and inexcusable waste can be stopped, then should hunting with hounds be prohibited altogether. Those who still defend the hounding system admit that the abuses are great and alarming. They suggest that a shortening of the season, or the limitation by law of the number that one hunter or a party may kill, will serve to abate the evil. Others think that a limitation of the season or of the shipments to market will supply the remedy; but those who have looked at the subject in all its bearings, and in the light of impartial judgment hold that the only cure is to apply the axe at the root and prohibit hounding altogether. Next to hounding, the practice of floating is most destructive to the deer. The floating season is practically in the summer months, when the deer resort to the water to escape the flies and to crop the succulent food which grows there at that season. Floating drives them from these resorts, and as the deer are at this time suckling their young, the mischief done by the disturbance is only exceeded by that of the killing. Floating is the mode usually preferred by the tyros in hunting; and it is the only one which gives promise of success to the unskilled. The number of deer fatally wounded by it, and which escape from the hunter only to become food for the wolves, ravens and small beasts of prey is larger than by

any other mode. It is believed by the most conservative hunters that if no other mode of hunting were permitted than stalking, or still-hunting as it is called, the deer would lose that wildness which it is contended makes the aid of dogs necessary in their pursuit; and that their capture for all reasonable purposes would not be as difficult as at present to the patient hunter, while for consumption the flesh would be much more wholesome.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

I am again tempted to "put in my oar," merely to reiterate my former inquiries upon the subject of the practical performance of our modern breechloading shotgun.

One gentleman from Texas gives us an entertaining sketch of how, after the trial of numerous guns that proved unsatisfactory, he finally selected an 8-gauge, 14 pounds weight, etc. And then tells us, somewhat with an air of triumph, how he could cut down a single duck, going down wind, at a distance of 90 yards, which, of course, his comrades, to their great chagrin and mortification, could not do, using lighter guns. Eastern sportsman are not entirely unacquainted with big-guns, had some experience with them myself in my younger days, during a tour on the Chesapeake waters, with the duck shooters of Havre de Grace and others of that ilk. I have seen single duck guns used there of 4-gauge, carrying 5 ounces of shot or upward, to say nothing of that unlawful terror, the swivel or punt gun, which had, of course, to be staunchly attached to a swivel and block in the bow of their gunning skiffs. I have not been there for some years, but I believe some of the market shooters still sneak out with these unlawful weapons. Of course, these larger guns have their uses in lake, bay, coast and river shooting; they tell a murderous tale on the vast flocks of waterfowl that congregate there. The necessarily larger circle covered by the shot, the larger and increased proportion of the number of pellets within the given space, give them that advantage over the gun of smaller caliber. Laying aside this advantage, the fowling piece or gun of ordinary caliber will kill its single duck or bird at quite as long range as its big brother, for, be it remembered, all things else being equal, we are shooting pellets of shot at our game, that individually are of the same size and weight in both guns, the large gun, however, having the advantage of shooting so vastly many more of them.

I do not believe any shotgun, no matter what its caliber, could or would kill its single birds statedly at 90 yards range. Not even a ten-inch columbiad, loaded with a barrel of shot, would do it.

Now, if it be true, as suggested by a Boston correspondent, that an eminent wildfowl shooter of that locality refuses to use breechloaders, for the reason asserted that they possess less range and shooting power than muzzleloaders; then we are driven into a still greater dilemma. I know not whether this suggestion be true. It was one of the subjects of my first inquiries through your columns.

I may have something to say in the future with respect to estimation of distances in the field.

Many sportsmen can give the result of their experiences touching the above, and thus enlighten more than one in the

BACKWOODS.

West Virginia.

Editor Forest and Stream:

In your issue of the 7th inst., "Buckeye" wishes information in regard to 10 and 12-bore shotguns. If he lived in a game country like this he would be able to make choice between the two bores. Experience would demonstrate that for small game, quail, squirrels, ducks, etc., and occasionally deer, the 12-bore would suit him best, as it will throw small shot closer, and with much less powder than the 10-bore, and at the same time ought to (and will, if it is a well made gun) do good work with buckshot that chamber well at the muzzle. Most of our hunters here kill deer with 12-bore guns, but the 10-bore is better for exclusive use among deer, turkey and ducks, because it will burn more powder and kill at longer ranges. RED WING.

Glencoe, Fla.

Editor Forest and Stream:

I have shot a pair of teal at 80 yards, measured distance. One had a wing broken, the other had two shot through the body, the shot going through to the shin on the opposite side. Charge 3½ drams Hazard FG powder, 178 ounces soft No. 5 shot. My gun is a 12-gauge, choked to 14 at the muzzle, 30-inch barrels, 8½ pounds. GREEN WING.

Freestone, California.

Mr. H. E. White writes to the Sacramento (Cal.) *Bee:*

"We are really pleased to observe that there is a growing tendency among American sportsmen to discard the great, lumbering guns that have been and still are so generally in use, for lighter weights and smaller gauges. Those who are well fixed financially can of course afford to keep two or more guns—say a 10-gauge for wildfowl shooting exclusively, and a 12, 16 or 20 gauge for small game. But men of moderate means, who can afford to keep but one gun, and who have to use that one for all kinds of shooting, from doves, quail and snipe to ducks and geese, will find a good 12-gauge large enough. The writer has never owned, but has used, guns larger than 12-gauge, and has found the latter abundantly able to hold its own alongside of its bigger brother at all kinds of game; and when it comes to an all-day tramp over the hills in quest of quail, or a heavy tramp through the soft mud of a snipe marsh, these big guns become intolerable burdens. They require heavier charges to do the equal execution with the 12-gauges, and thus in a year's shooting the owner is out considerably on ammunition. For many years past the 12-gauge has been the largest in general use among English sportsmen, the greater number using even smaller and lighter weapons. Nearly all the big guns made in England are shipped to America, where, up to the present time, they have been in demand. We know that many persons have bought and used heavy, large-gauge guns simply because they have regarded them as the more effective weapons for trap-shooting. But the day of general pigeon shooting is passing away, as the supply of birds for that purpose is yearly diminishing. The young find such ready sale in the markets that breeders and trappers find it to their advantage to sell the squabs, and old birds are becoming too high-priced to allow most shooters to indulge in the sport of trap-shooting. Therefore, the keeping of a heavy gun merely for the purpose of pigeon shooting, is going to be a losing business in the future. In the accounts published of a recent pigeon match at Chicago, we noticed that 12 and 16-gauge guns were used by several persons, and some of the best scores made last season about San Francisco were credited to even 20-gauge guns. The late George Gilbert, of this city—than whom few more thorough sportsmen ever lived—always used a little Pape gun weighing but six pounds, and the writer has seen him cut down snipe at full fifty yards with charges of 2½ drams of powder and less than one ounce of shot. That little gun could, in Gilbert's hands, be relied upon to bring down a duck at from fifty to sixty yards, and this is as much as the average 10-gauge will do. We learn that several Eastern clubs have barred the use of any gun larger than the 12-bore in their matches, and we believe that several Chicago clubs have done, or are thinking of doing, the same thing. There is already one club in California that does not permit the use of anything larger than a 12-gauge—that at Folsom, in this county. Some of the American gunmakers, noting the tendency toward smaller and lighter guns, are preparing to meet the demand for the latter, and one company, the Parker, especially, is encouraging that tendency by turning out guns adapted to the new order of things. The change from heavy to light guns must necessarily be gradual, as those who have the former cannot afford to sacrifice them; but we apprehend that most of the new guns purchased in the future will be of the lighter kind."

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

The article by Mr. T. S. Van Dyke, which has been running through your last three numbers, contains much with which I can heartily concur, especially his advocacy of a decent powder charge, and his contempt for "the unmanly fear of a little recoil."

But I must take exception to his closing paragraph, which, I think, is certainly calculated to mislead the superficial reader. He says: "There is but one possible way to give a ball weight without cutting down the velocity and that is by widening it."

Now, if he had said "initial velocity," thiswould have been all right. But as I have before pointed out, that grand desideratum, a flat trajectory, depends on a high mean velocity, and only incidentally on a high initial velocity, which of itself is very apt to be delusive, as a high mean velocity is by no means certain to result from a high initial velocity.

The mean velocity is in a great measure dependent on the ability of the projectile to overcome the atmospheric resistance. Now the atmospheric resistance due to the form of the projectile may be represented by the expression $\frac{d^2}{w}$ in which d is the diameter of the projectile and w in its weight.

As Mr. Van Dyke proposes to increase the weight by increasing the diameter, it will be seen that nothing is gained, as one increases in the same ratio as the other.

The atmospheric resistance can only be diminished in one of two ways: Either by decreasing the caliber, the weight remaining constant; or by increasing the weight, the caliber remaining unchanged. That is by increasing the length in either case.

This increase of length is attended with a decrease of initial velocity, but up to a certain point with an increase of mean velocity, while the steadiness of flight and penetration are always improved. The longer the range the heavier will be the bullet that will give the flattest trajectory, and this is more marked at extreme ranges than at moderate ones.

Thus in the instructive long-range experiments made by Capt. Greer at Sandy Hook in 1879, a 500-grain bullet with an initial velocity of 1,220 f. s. was thrown 2,500 yards with a mean velocity of 663 f. s., while the service 405-grain bullet with an initial velocity of 1,326 f. s. gave a mean velocity of but 423 f. s. The 500-grain bullet was thrown 3,650 yards, while the extreme range obtainable from the service bullet was 2,950 yards.

I know that this long-range work has no direct bearing on the hunting rifle, but I wish to show that a bullet that will give the flattest curve at one range will give a higher curve than a heavier bullet at a longer range.

Having fixed the range at which we wish to obtain the flattest trajectory, it is simply a matter of calculation as to what weight of bullet will give the best results with a fixed caliber.

To illustrate—As I shall have occasion to refer to this gun further on, let us suppose that we have fixed on a .50-caliber rifle with a powder charge of five drams or 138 grains. On this assumption I have calculated the weights and other data of the bullets giving the flattest trajectory at the respective ranges.

The results are shown in the following table in which the weights of the bullets are given to the nearest 10 grains. It may be well to add that if we increase the powder charge, the weight of the bullet corresponding to the flattest curve will also be increased, but not in the same ratio.

TABLE I.

Range, Yards.	Weight of bullet, grains.	Time of flight, sec.	Initial velocity, f. s.	Remaining velocity. At end of range.	Remaining velocity. At 400yds.
100	330	0.171	1989	1502	922
200	350	0.388	1931	1249	941
300	390	0.647	1865	1075	963
400	430	0.947	1803	981	981

The last column is added to show what the remaining velocity would be in each case, if the flight were continued up to 400 yards, and is only given for the sake of comparison.

By common consent 200 yards seems to be the range fixed upon for which the flattest trajectory is required.

Therefore, if the flattest trajectory were the only object to be gained we would accept the 350-grain bullet as being the most effective.

But there are other conditions to be fulfilled even more important than a flat curve. These are:

First—Accuracy.

Second—Energy.

Both of these conditions are obtained by the same means *i. e.*, by increasing the weight of the projectile. Thus we are obliged to sacrifice trajectory to a certain extent dependent on the use to which the rifle is to be put, the extremes being the hunting rifle shooting the round ball, and the long-range rifle shooting an elongated projectile of from 3 to 4 calibers in length.

The conflicting claims of accuracy and energy on the one hand and a flat trajectory on the other are well shown in the London *Field* trials of express rifles, from which the statistics at the close of Mr. Van Dyke's letter are drawn. He only tells half the story, however.

Let me tell it all and I think I can do so most clearly by the use of another table showing the performance of each gun at 150 yards. In this table the Jeffries gun is the one to which he refers.

TABLE II.

Trajectories calculated for the London *Field* by Maj. McClintock for 150 yards range, to which I have added trajectories for 200 yards.

Gun.	Accuracy of string of 10 shots	Energy, foot pounds	Initial velocity	Remain'g velocity	Time of flight sec.	Highest p'nt of curve, inches.
150 YARDS.						
Holland .50-138-444	29.00	1939	1784	1382	0.287	3.977
Jeffries .50-138-342	41.24	1490	1946	1402*	0.273	3.611
200 YARDS.						
Holland	.....	1577	1784	1265	0.402	7.530
Jeffries	.....	1178	1946	1245	0.390	7.422

*I make this only 1387 f. s., this would alter the table slightly to the disadvantage of the Jeffries gun.

A comparison of these results will show that Jeffries sacrifices everything to a flat trajectory, with the result that he was badly beaten in the prime essentials—accuracy and energy—while the gain in flatness of curve was considerably less than the diameter of the bullet.

If the range were much increased, the flight of the light bullet would be so wild as to be utterly valueless (if, indeed, it is not so already), while the 444-grain bullet should do fair work up to 400 yards.

These results emphasize my previous statement: that the most successful gun is not the one that will give the highest initial velocity, or even the flattest trajectory.

I see that I omitted to state in my last letter that if the .45-caliber gun is properly chambered for the 2.6-inch shell, the short cartridge can still be used with perfect success.

JAMES DUANE.

Feb. 16, 1884.

Editor Forest and Stream:

Some little time ago I suggested to Mr. Duane—who has devoted considerable time to experimenting with rifles to test the flatness of their trajectory—that difference in friction of the bullet might be the cause of a certain bullet making an extra flat curve. He answered with the theory that increased friction would give a bullet higher speed, as it would move slower through the barrel and give the powder more time for thorough combustion, thus giving greater force to the bullet. That greater force would be evolved from a certain charge of powder by increasing the friction on the bullet, there is little doubt, but it would take more force to drive the tighter bullet from the rifle at the same speed as the one with less friction would go, thus giving no advantage from the tight bullet, even granting that extra force enough would be gained to give the same speed. I contend that an increase of thirty pounds of friction on a bullet (and I have seen cases where it was nearer fifty pounds) will lessen the speed of the bullet as much as 100 grains of lead added to its weight, and to get the best results one needs to be as careful of the fit of the bullet as he would of the powder charge. Rifles of the same caliber vary considerably in the size of bore and depth of rifling, and patched bullets are made with thin, medium, and thick patches, thus you can get the same weight of bullet of three different sizes. I have found them to vary about .002 of an inch in diameter from each other, the thin patched bullet you can easily push through the barrel with a wiping rod, medium takes considerable force, and with the thick patch you cannot push it through without using other means than a wiping rod in your hands.

My experience teaches me to give more elevation when using thicker patched bullets than I find sufficient for reaching the target when shooting a bullet that will just take the rifling. The proper thickness of patch to use is one that will make your bullet fill the bore of the rifle, and the powder will expand the bullet sufficient to fill the grooves. I am speaking altogether of the hollow-butt, paper-patched bullet for breechloaders.

Had I the opportunity, should take pleasure in testing the three different patches in a rifle of proper size bore to use the thin patched bullet and report the results; by using the screens a very satisfactory test could be given them.

The proper hunting bullet, to my mind, is one equal to about 2½ round bullets of same caliber, say for a .40-caliber a bullet ¾ of an inch long, with the forward end the same shape as a round ball, same caliber; this would give about 225 grains, varying according to shape of the butt, and the amount of tin used, this bullet would be plenty heavy enough for all hunting distances to give accuracy; the shape of forward end would give greatest shock possible for its caliber, and almost any penetration desired could be obtained by hardening the bullet and using plenty of powder. Of course if the bullet was hardened much more than 1 part tin to 19 lead, the bullet would need to be enough larger at the butt to nearly fill the grooves without depending on the effect of explosion of the powder to expand it. This bullet would, I think, give greater satisfaction for hunting purposes than any to be found in the market to-day of as small caliber. With a 1-16 of an inch hole in the tip it would become an expanding bullet. A. B. DODGE.

Editor Forest and Stream:

I have been much interested in the .40-90 hunting rifle articles which have appeared in the FOREST AND STREAM. I think .40-90 will do, but leave that 500-grain bullet out for me; that belongs with the long-range rifle. Do not use too much lead in the hunting rifle. Use a heavy charge of smart powder, and harden the bullet to suit the powder. Bullets of the same hardness will not suit all kinds of powder charges, both slow and quick, light and heavy. Have some standard charge and grade of powder and bullet, and don't vary from it. If it works well to-day, it will to-morrow, and so on. Mark your sights for the different distances plain; don't scratch it on with a pin; you never can find it in a hurry. Have a system for every part, then follow it, and you will be rewarded.

What is a rifle good for if it has not power, and a large amount of it? Who wants the bow and arrow to hunt with in these days of electricity? Give us a short, light rifle

made of the best metal, of good proportions and well balanced; one that you can put up to your shoulder and feel that it belongs there. A double .40 of 7½ pounds' weight, with a powder charge of 90 grains of smart powder, makes quite a convenient plaything on fair-sized game, with but little weight to carry. Why carry eight or ten pounds of metal to shoot a .32-bullet and a few grains of powder?

Keep this hunting-rifle pot boiling till it gets simmered down to a light, powerful rifle, and don't forget to harden the bullet to suit your powder charge, bearing in mind that a long, heavy bullet upsets more with the same charge of powder than a short, light bullet, and the long, heavy bullet should be made of harder metal than the short, light bullet.

A. G. M.

WORCESTER, Mass.

Editor Forest and Stream:

I see in your paper of Jan. 3 that Peabody-Martini shows up the old style of rim and center fire cartridges with the ball smaller at butt to go into the shell, and then close the shell on to the ball. He is right in saying they are an abomination. Now, won't the manufacturers of breechloading rifles get out a new class of cartridges of .22, .25, .28, .32, .35 and .38, strong and long enough to hold twice the powder with a ball longer and straight so as to fit in shell without closing in at all? This would secure greater accuracy, longer range and flatter trajectory, which is quite necessary for a hunting or sporting rifle. Now, I hope every one interested in small-bore rifles will lend a hand and see if this thing cannot be brought about, and place the hunting rifle far ahead of where it is now. B.

BELLOWS FALLS, Vt.

Editor Forest and Stream:

In my own experience with a hunting rifle, ninety-nine one-hundreths of all of the misses have been occasioned by lack of flatness of trajectory. Almost any one of the guns in the market shoot with sufficient accuracy, provided only your judgment of distances is correct, and the necessity for making a calculation every time you shoot is to my mind the chief objection to all of the repeaters in the market, except, perhaps, the Winchester express. It is difficult to see how a .40-90-500 cartridge will improve the matter in that respect. It is true you will get with such a cartridge excellent penetration, but that does not necessarily mean a proportionately large amount of killing power, for after a ball has passed through the vitals of an animal its subsequent career is of very little importance to anybody. A large hole there is of much more value than a small one through the skin on the opposite side. For that reason a .45 government shell loaded as suggested by "Big Ingin," has always seemed to me to give most satisfactory results.

The 85 grains of powder and 300 grains of lead give a fairly flat trajectory and a penetration sufficient if placed anywhere except in the haunches, to reach the seat of life in any animal that the bulk of your readers will ever see. The gun out of which to shoot it is almost as hard to select as to reach a decision upon the cartridge and caliber. Repeaters are not without objections, and many men will not use them under any circumstances. On the other hand, in a tight corner, with a wounded bear within a few feet of you, the time which you have at your disposal to fish out a cartridge from your pocket or belt and stick it into your singleloader seems wonderfully short.

Personally, I compromised between the two systems by obtaining a Baker three-barrel, and so far have never had any reason to repent of the choice. The rifle is as accurate as any ordinary hunting arm, while the two 10-bore shot barrels loaded with a solid ball furnish an amount of offensive and defensive material at short range, very reassuring to the holder of it. Mine is somewhat heavily choked so that a 12-bore ball is as large as it is safe to use, but this, with five drams of powder back of it, strikes anywhere inside of the danger range with tremendous force. The accuracy of this round ball beyond fifty or sixty yards is nothing to be proud of, but inside of that distance it is good enough to answer every purpose, and you are in very little danger personally from any animal until he gets at least as near as that. For the more extended ranges you have the rifle barrel ready at your hands, and as efficient as any other. The gun will weigh inside of ten pounds, is well balanced and has no more chance of getting out of order and failing you when most wanted than an ordinary shotgun.

Probably the gun now made is not as good as the one some enterprising genius will eventually put on the market, but it seems to me that something constructed upon similar principles will be the coming gun. Any one who has seen no tougher an animal than a deer run half a mile with a .40-caliber ball clear through his body must realize that no ball of small bore can fill the bill unless it chances to reach exactly the right spot. I had the makers construct for me, to special order, 28-inch barrel, 10 or 12-bore for the shot and .45-caliber government shell. THREE-BARREL.

Editor Forest and Stream:

Has your correspondent, Mr. W. J. Dixon, ever given the Lyman patent rear sight a fair trial? If he has, and has one "for sale cheap," he can dispose of it readily by writing to me. If he has not, then before tying to plain open sights, let him try one.

I cannot think that any hunter, unless prejudiced against all "new-fangled" things, would fail to appreciate the Lyman, if once tried.

I know from experience that sight on a moving object can be caught quicker and easier with it than with open sights, for, after a little use, all you have to do is to put your front sight on the target in the right place, the eye finding the aperture in the disc without any voluntary effort. Another point in its favor is that it is readily adjusted for elevation. This of course amounts to but little at the ordinary hunting distances, but one frequently risks a long shot at game rather than to have no shot. With this sight your only mistake can be in estimating the distance, for a little practice on the range over known distances will give you correct readings on the graduated stem.

I agree with "Moro" in his opinion of the usefulness of a .25-caliber rifle for those who hunt small game, but not in thinking a ramrod should be under the barrel. I can see no use for it, as it will make the rifle heavier, clumsier, and give the user more trouble in keeping clean. I don't believe that "Moro" or any one else would ever wish to load a rifle of this size from the muzzle, for if one is brought out that equals in shooting qualities the best .22-caliber barrels of today, no fault can be found with its accuracy, and it is certainly not more convenient to load from the muzzle. In cleaning, I claim that a metal rod should never be used if one admires the polished grooves and bands as I do. In theory a brass rod will not injure them, but in practice one can.

A rod of wood (lancewood) is best, can be so jointed as to bring no metallic surface in contact with the barrel, and is easy enough to carry in the pocket. MAX.

HOPEDALE, Mass.

I would like very much to ask through the FOREST AND STREAM if any one has tried a Colt's .45-caliber 260-grain ball in the government cartridge in any rifle? Would not the Colt's 260 and the Smith & Wesson .41 revolver ball give in the government cartridge a proportion of 1 to 3?

CLARENCE J. NORTON.

MORANTOWN, Kan.

Editor Forest and Stream:

Why is the breech mechanism of rifles not made in the same way as that of shotguns. Shotguns are certainly more convenient to manipulate, and with few exceptions, there is very little difference in the manner of connecting the barrels. The latest development of the shotgun would perhaps be very desirable in a rifle. F. H. B.

NEW JERSEY.

[Rifles require greater strength at the breech than could be secured by shotgun breech mechanism.]

Editor Forest and Stream:

Without discussing the advantages of a breechloader, I don't believe any system of rifles has equalled the one-ounce round ball of the muzzleloader either for accuracy or bone-crushing power. It has frequently happened that the hunter's life depended on planting his ball in an exact center. As he would raise the rifle to his face, his mental comment was: "God bless the old gun, she has never failed me heretofore, and will not now." FORTY-NINER.

Editor Forest and Stream:

Should not the variety of game to which a rifle may be readily adapted largely constitute its merits for sporting purposes? Whether repeating or single, my own choice would be the gun with which I could kill anything, from a grizzly down to a squirrel, and with which I could use the amount of powder and lead desirable for each purpose. Such a combination seems quite possible to me. Cannot the .40-90 be made to use, with accuracy, not only a 500-grain bullet, were it ever desirable, but one of 300 grains, or less, giving the necessary low trajectory of the express, and also a ball—I mean a round bullet—with either large or small charge of powder, the light charge to be used in shooting off the heads of such small game as it is often very desirable to have in camp? Of course accuracy in all cases may be regarded as indispensable, but particularly with the light charge should it be such that missing the head of a squirrel or grouse could not be attributed to the gun. In using the smaller amount of powder, would it do to push the round bullet down the shell to the powder, or should the space above the powder be filled, in a measure, with some kind of wadding, or a tube of wood or other material be placed in the bottom of the shell? The sights for such a gun would need to be readily adjustable to suit the various charges; but after all it might be found that the sight required for the 300-grain bullet would answer also for the round bullet with reduced charge of powder; in which case not more than one variation of the sight would be necessary. As the sights of a hunting rifle are an important item, it would be interesting in connection with other considerations to have them discussed and definitely described. If the above requirements for a rifle are attainable, and with them is combined a construction affording the greatest facility for changing from one cartridge to another, a construction which is safe, simple, symmetrical and handy, is it not very nearly the hunter's ideal? J. G. D.

Editor Forest and Stream:

As far as the rifle is concerned a man must be very hard to satisfy who cannot be suited with one of the many excellent guns now in the market. It is simply a matter of taste, they are every one good, whether single shot or magazine. I have had a good deal of experience with both kinds, and I have no further need for a magazine gun. That is only my idea, many others of my acquaintance think just the opposite. Still, this discussion is not upon the guns but upon the ammunition. More powder is called for, I agree with every man who has expressed his views. I shoot a .40-60-270 cartridge now with great satisfaction, but I am going to have my gun bored for a .40-100-270 cartridge. I think .40-caliber as near right as it can be fixed for all game with the one exception of the grizzly bear; when you hunt him you want a Gatling machine gun, or what is better—don't hunt him. A 270-grain bullet is efficient, and will give sufficient shock if properly placed for all practical purposes. SAXET.

GAME IN IDAHO.

Editor Forest and Stream:

Noticing that you receive very few communications from Idaho, I take the liberty to send you a few notes from letters received from a friend located in that Territory near Rocky Bar. He writes: "You hint that you may take a 'hunt that is a hunt' in the near future. Can't you come out into these mountains? I will furnish you with camp outfit, etc., and guarantee you great sport. Deer and grouse never were as plenty in these parts. Caused no doubt by the stampede into the Wood River country, driving the game into the mountains east of us. There are no mines in a section of the country about thirty miles square to the eastward, and the game is very thick. Eight miles from here several two-year-old cattle have been killed by a bear. This 'old cuss' is known as a bald-faced grizzly, and tracks are found ten by sixteen inches. Is that the kind of game you want?

"Two of the boys went from camp on a little hunt before Christmas, as we needed some fresh meat. They killed nine deer, and got them within sixteen miles of camp. They were unable to pack them in and had to leave the deer, sledge, etc., on account of the snow being so deep (four feet). I sent word to the ranchmen on Boise River to help themselves, so the game will not be wasted. One party on Big Camas killed seventy-five deer. The boys say they were in droves of one hundred or more. Since the Indian hostilities they have increased rapidly; but I think the railroad passing down on the sage plains will have a tendency to check their assembling.

"I only wish you could be here in October or November and have some sport—it would beat your fishing trips to Northern Michigan. If you wanted fish, however, we could accommodate you. Two to three pound trout are very plenty in the streams below us. Come and get some."

PRAIRIE DOG.

A HINT ON ETIQUETTE.

Editor Forest and Stream:

Although January was a cold month, taken altogether, yet there were not over two or three bitter cold days in any one week; and after every heavy snow there would be a warm rain which would wash off several inches of the snow, and in that way the partridges (*Ortyx virginianus*) were not deprived of food to any damaging extent; and none of the cold snaps lasted long enough to freeze any of the game.

Partridges were more abundant last fall in Virginia than for several seasons previously, but I apprehend none of the young shots will ever see them in such numbers as they used to be before the war, or as they were from '65 to '72. Hares (not rabbits) were very plentiful last fall. Turkeys have been raising in our mountains for several years, and now and then I hear of the shooting of one or two. If ever a huntsman kills one, the fact is sure to be announced in the local papers.

A majority of the land-holders, who are not huntsmen themselves, look upon a huntsman as a nuisance; and so very few of them care anything for the protection of game. And sometimes Northern gentlemen will come to Virginia and partake of a gentleman's hospitality for a week or fortnight, and send every bird they kill to the North by express. We think it is the correct thing for a gentleman to offer to the lady of the house as many birds as she may pick out during his stay under her roof. OLD HARE.

ALBEMARLE COUNTY, Virginia, February, 1884.

FOOLISH AND DANGEROUS.—The Springfield *Republican* reports: "An event of considerable interest occurred in the chemical department of Amherst College Saturday. Once in three years the experiment is made of condensing carbonic dioxide. So difficult and dangerous is the undertaking by this process that it is forbidden by law in all countries except the United States, and probably Amherst is the only college where it is undertaken. Two iron cylinders are used, one the generator, the other the receiver. They resemble howitzers, fitted with strong iron bands and peculiar valves. Bicarbonate of soda and sulphuric acid are placed in the generator in such a way as not to mingle until the cylinder is securely closed. The union of the substances generates carbonic acid gas with terrific pressure (being about a ton to every four square inches), and this passes into the receiver, which is packed in ice and salt. The process is repeated twelve times, until the gas in the receiver is forced by pressure and cold into liquid form. When this is allowed to flow out it evaporates so rapidly that it forms a solid, snow-like mass, having the surprising temperature of 140 degrees below zero. Mercury poured upon it freezes instantly, and the effect of touching it is about the same as handling a red hot coal. The great danger in the experiment arises from the tremendous pressure—and thus the liability of a bursting cylinder. The experiment Saturday, which was in charge of Instructor Pond and the senior chemistry division, was of great interest to the entire college.

REVOLVERS FOR GAME SHOOTING.—My experience with revolvers has been very much like "W. F. C.'s," but I am of the opinion that the remedy lies not in making them with different sights, but in placing enough metal in them. I believe that good shooting could be done with a .22-caliber revolver of the same size, shape and weight of the .32-caliber S. & W. as now made, and it could be sighted full on the object fired at. I have owned many revolvers of most approved makes, but never yet saw the rabbit that had any just cause to be "skeered" of me as long as he could keep fifteen paces from me.—MAX.

A correspondent, "E. B. B.," writing from Vail, Iowa, says: My experience in pistol shooting is very similar to that of "W. F. C." I found one make of pistols among the dozens I have tried that shot accurately without resighting. It is a small single-shot, .22-caliber, called Remington's vest pocket pistol. I have made some remarkable shots with them. I remember on one occasion when two of the boys were shooting at a postal card with a navy revolver. The card was pinned on a wide board, distance seventy yards; they were missing the board when I came up; so thinking I could do no less, I took a shot with my Remington, striking the card very close to the center. I was invited to shoot again, but declined.

WINTER NOTES FROM TENNESSEE.—Grand View, Tenn., Feb. 8.—The Sunny South for once has experienced a cold wave. January has been unusually cold and raw. Snow fell about six inches deep, and remained some ten days, which made it a little rough on quail; but I believe they came through all right. I have a small spring branch bordering one side of my wood lot, which is close to the house, and along this branch is a thicket of small brush, also a rank growth of weeds, many of which are seed-bearing. Into this the quail gathered in quite large numbers, where they were completely protected from the storm. My wood lot covers about ten acres, and in it are hatched some half dozen or more broods every summer. The weather is warm and springlike now, and at this present writing I can see a flock of more than twenty quail among the hens, within six rods of my door. Our house cat would no more catch a quail than it would one of our chickens, neither would it disturb the small birds which my wife fed during the snow-storm last month. However, I would not vouch for the honesty of any house cat if it was far from home, or short of food. The bluebirds and robins are plenty now; the former remains here through the year, but the latter is seldom seen here during the summer.—ANTLER.

A BEAR HUNTING DEVICE.—Elk Rapids, Mich.—*Editor Forest and Stream:* Mr. J. B. Squibob, a veteran bear slayer of Elk Rapids, Mich., has recently devised (in conjunction with Dr. E. C. C. Kellogg) a combination-gun-lather-and-sticking-plaster, for capturing bears dead or alive. The gun, a double-barreled breech-and-muzzle-loader, is baited, set and hung up in a tree. Then the trunk of the tree is greased with the slippery mixture and the sticky stuff is spread around on the ground. If the bear succeeds in climbing the tree the gun is discharged and bruin drops dead. If he slips down the trunk, he must stick fast in the patent sticking. Mr. Squibob claims to have known Major Verity, of Adironda, who sometimes writes to you. The bear device will, it is hoped, be put on the market next season.—MOSS BACK.

OSWEGO, N. Y.—A large number of whistlers are wintering in the Oswego River, near Battle Island. Some of the members of the Leatherstocking Club have been paying considerable attention to them; O. S. Osterhout, the president, bagged fifteen one afternoon recently.—DAN.

THE HAMMERLESS IN DEMAND.—*Editor Forest and Stream:* A year ago, if any one had told me that at this time I would want a hammerless shotgun I should have smilingly responded "I guess not." At that time I considered a gun without external hammers a good deal like a cow without horns; somewhat of a freak. But opinions change, and after having hammers slip from cold thumbs while cocking in the field, spoiling one or two canvas cases by the chafing of hammers, barking one's knuckles on hammers, getting whistle cord and watch chain snarled up with the same, and last but not least, seeing a man killed by slipping the butt of his gun off from a door step and striking the hammers, thereby discharging the piece into his breast, I have come to the conclusion that the best place for the hammers is inside of the gun.—DORKIN.

MAINE INDICTMENTS.—Indictments were found by the Grand Jury, February term, against Jeremiah Lynch, having partridges in his possession in close time; George Trafton, Frank Gould and John Spearing, attempting to kill salmon by dynamite; George Trafton, Frank Gould, John Spearing, Clarence Peavey and Frank Cram, of Sherman, fishing with net in waters not tide waters; J. T. Richards, having trout in his possession in close time; James Dunn, killing deer; Joseph Gillespie and Lovell Weymouth, hunting deer with dogs; Benjamin York, killing caribou; Charles Spearing, hunting deer with dogs.

CATAWISSA, Pa., Feb. 16.—A number of our sportsmen here have been very active during the past severe winter in caring for the quail in this vicinity. They have also succeeded in getting some of our farmers to take an interest in the welfare of the birds. They have now about one hundred quail which they have brought through safely by giving them protection from the deep snows, and providing feed for them. These gentlemen certainly deserve great credit for what they have done.—E.

FRANKFORD GUN CLUB.—A new club has been organized in Frankford, Philadelphia, to be known as the "Frankford Gun Club." Object: Improvement in wing-shooting. The officers are: President, Henry Winnemore; Vice-President, Henry Longhead; Secretary, R. H. Mellor; Field Captain, Alonzo Tolbert. Secretary's address, R. H. MELLOR, 309 E. Orthodox street, Frankford, Philadelphia, Pa.

GOOD GROUND.—Long Island, Feb. 23.—There are plenty of ducks in Shinnecock Bay; it is estimated to be one hundred thousand by natives. All redheads and broadbills, and still coming by the thousands daily.—WILLIAM N. LANE.

MICHIGAN.—Escanaba.—A few deer are wintering about here, but there are as many wolves as deer. No one kills the wolves, as there is no bounty on them. This, I think, is a great mistake.—A. F. Y.

QUAIL IN IOWA.—Vail, Feb. 18.—We are having very little snow in this vicinity so far this winter, and the quail are doing nicely.—E. B. B.

Sea and River Fishing.

PRIVATE PONDS OUT OF SEASON.

IN New Hampshire the question has been set at rest whether an owner of a private pond, not communicating with public waters, may take fish from it out of season. In that State he may. In the suit of the State against Roberts the indictment was set aside.

The Court said: "The right to have migratory fish pass in their accustomed course up and down rivers and streams is a public right, which may be regulated and protected by the Legislature, and so far as the waters of this State are common passage ways for fish, they are of a public character and subject to legislative control. The taking and killing of certain kinds of fish and game at certain seasons of the year tend to the destruction of the privilege by the destruction consequent upon the unrestrained exercise of the right. This is regarded as injurious to the community, and therefore it is within the authority of the Legislature to impose restrictions and limitations upon the time and manner of taking fish and game considered valuable as articles of food or merchandise. For this purpose fish and game laws are enacted. The power to enact such laws was exercised previous to the adoption of the constitution, and it has been so long used, and so beneficially for the public, that it ought not now to be called in question. But while the Legislature has power to regulate and limit the time and manner of taking fish in waters which are public breeding places or passage ways for fish, it has not assumed to interfere with the privileges of the owners of private ponds having no communication through which fish are accustomed to pass to other waters. Such ponds, whether natural or artificial, are regarded as private property, and the owners may take fish therefrom whenever they choose without restraint from any legislative enactment, since the exercise of this right in no way interferes with the rights of others. The Legislature protects the owners of such ponds in the enjoyment of their privileges, and they are expressly excepted from the statutory restrictions by the third section of the act upon which the indictment in this case is founded. The defendant is in possession, claiming the ownership of North Pond. There is no suggestion that the public have any rights in its waters other than as a breeding-place for the supply of fish to other streams, or a channel for their passage. If, as the defendant claims, the trout are within his control, and there is no communication through which they can pass from the pond to other waters, the indictment cannot be maintained. If, as is claimed in behalf of the State, there is free communication through which trout pass from the pond to the streams leading into it and to the Ammonoosuc River, the indictment can be maintained upon proof of those facts."

I am not aware that this point has been settled in the State of New York. Query: If the owner of a pond, the source of stream, keep wire across the outlet so no fish can pass out, has he the control and possession spoken of in the foregoing decision, which will allow him to catch fish out of season? I think I know one thing that will result from such a wire dam, and that is that, if a trout stream and trout pond, the fish not being able to run up from the stream into the pond to spawn, the fish in the latter will first grow very large from over-feeding, and will then steadily diminish in numbers from not being reinforced annually in the natural way from the stream.

"There is that scattereth and yet increaseth, and there is that withholdeth more than is meet, but it tendeth to poverty."

A very nice point has been suggested by Mr. Roe, of Roe & Macklin, of this city, whether the placing of fish from a public hatchery in any part of a stream would not give a public right of fishery in all parts of that stream, no matter if a long piece of it were privately owned and preserved, because the fish would spread from the part where they are put in; and that New Hampshire decision would seem indirectly to sustain this view. For myself, I do not think the right of the distant owner could be so affected without his knowledge and consent. Mr. Roe is a famous lawyer, however, and a good disciple, who annually makes a pilgrimage to the Neversink. GEO. W. VAN SICLEN.

NEW YORK, Feb. 11, 1884.

A PENNSYLVANIA CASE.

Editor Forest and Stream:

In a letter to your journal from this city, under date of Jan. 21, the writer refers to large bunches of quail, grouse and rabbits as being exposed for sale in our market, which he says were evidently killed after Jan. 1, in which case it would be a violation of the law. The letter also refers to the Lycoming Sportsmen's Association, and asks whether the city has any game wardens. The organization still exists, and its object is (or was) for the more rigid enforcement of the game and fish laws in this locality. It is in a healthy condition and numbers upward of one hundred members. An executive committee is elected each year, and it is the duty of each member of this committee to report any violation of the law that they may see, or that may be reported to them, and prosecute the offenders if the case is strong enough to warrant it. Each member of this committee may properly be called a game warden. Until within the past year our club has manifested considerable interest in the enforcement of the game and fish laws and the protection of game and fish. The cases prosecuted by us were from an honest standpoint, and the spirit is still in us to continue the work; but in the last undertaking we were so decidedly "sat down upon" that our members have become discouraged, and at present are not as active as they otherwise would have been. The case in question will define our position.

We arrested parties for seining, which we thought was contrary to the act of Assembly, which reads: "No person shall draw a drag net or seine in any of the waters of this commonwealth." The waters in which the seine was drawn was a mill-pond which is fed by a canal, and the canal by the Susquehanna River, and the fish have free access to all the waters named. The defense was, that the mill-pond was private property, and the defendants had permission from a part owner to seine. Our view of the case was that the pond was not owned in its entirety by the party granting the permission, and the fact of the fish not being confined made them common property, and the law had therefore been violated. The case was heard by an alderman, both sides being represented by counsel, and a judgment given in our favor, the alderman basing his decision on a decision of the Supreme Court in a parallel case, which is as follows:

Pennsylvania State Reports (12 Norris, p. 458, etc.)—"If the waters of a pond cover a large surface of land, and one whose lands are covered by a part only of the water, places fish therein for the purpose of propagation, it does not thereby became a private pond. To bring it within the act of 1876, the whole pond must be so far private property as to confine therein the fish with which it is stocked; the ownership of a part only of the land covered by the water is not sufficient to give to the whole water the distinctive character of private, the pond must be treated as an entirety, either the whole or none is private."

The case was appealed. At the term of court in which it was to be tried, the judge, in his charge to the Grand Jury, alluded to it, and his remarks were in substance about as follows: "The defendants had just as much right to seine and take fish from that pond under the circumstances as a farmer would have to take his cattle from the pasture field." Upon the strength of these remarks, we presume, the Grand Jury ignored the bill of indictment, and the costs, amounting to some $75, were put upon the prosecutors. We were somewhat surprised to find our labor disposed of in this manner, for we took the precaution to consult several of our most prominent attorneys before commencing the action, and they all said our case was a very plain one. When this seining was done quite a number of black bass were caught, and we could have brought another action under the same law, but our protection not being assured, we concluded to give the matter the go by.

The quail, grouse and rabbits referred to were exposed for sale right in front of the entrance to our club room, and many of our members spoke about the law in the matter, but none seemed to have any inclination to make an investigation for the reason of our failure in what appeared to be a plain case. I very much doubt whether a single piece of the game was killed in this locality, or in this State, but rather think it was the production of other States, and in that case I do not believe the laws of Pennsylvania would be affected.

A MEMBER OF THE LYCOMING SPORTSMEN'S CLUB.
WILLIAMSPORT, Pa., Feb. 13, 1884.

THE BEST COLOR FOR LEADERS.

Editor Forest and Stream:

Nothing has appeared of late in the FOREST AND STREAM which I appreciated more highly than Mr. Wells's article on the "Best Color for Leaders." And now, in furtherance of the idea of "looking at the leader from beneath the water," I have an idea which I can't better illustrate than by giving a bit of experience. Near us we have a stream in which the fish—trout—are scarce and wild. They are exceedingly suspicious of any kind of tackle. Is not such water the very place to test my tackle? I had repeatedly cast the most tempting flies, with a mist-colored leader, without effect. A soliloquy followed: "That leader is not natural to the water nor to the every-day life of the fish." I adjourned to a neighboring meadow and cut three or four long, leafy timothy stalks, which I very loosely whipped on my leader. There was no casting, but simply letting the line float with the current over the most likely places. Complete success was my reward.

Mr. Wells's article bothers me in one particular. "The best trout, etc., can't pull one pound on a flexible rod," and the big, muscular man, only 1¼ pounds. According to that, if we were to hook a "real live elephant," he would only strain the tackle to the extent of about 9.006 pounds. Is there a strain of only a pound, or a little more, on the line when a salmon leads a skiff all over a little lake? There may be a clear explanation, but I am fearfully in the fog.

FORTY-NINER.

The communication of "Forty-Niner" having been referred to Mr. Wells, that gentleman has favored us with the following comments upon it:

Editor Forest and Stream:

The communication of "Forty-Niner" has been received, and read as requested.

In regard to the first paragraph, it is to be wished that all anglers would follow this most excellent example and print any unusual experience. You have provided a column for that express purpose, and it is a great pity it is not more used. After a while some enthusiast would collate, compare and publish these scattered facts, and a decided advance in the art would result.

To me this paragraph is second in interest to no angling intelligence I have met for a long time. It tends strongly to confirm an idea forced on me by my own investigations, but in regard to which, from dislike to hasty conclusions drawn from insufficient data, I had decided to say nothing until the weather permitted the test of further experiment.

I am inclined to believe that more important than fishing up or down stream, more important than wearing brilliant or sober-tinted clothing, more important than wading rather than fishing from the bank, more important than a dry or a wet fly, more important than being yourself visible or concealed, more important, indeed, than any of the dozen different cautions of the books, is it to have your leader absolutely invisible, or, if that is impossible, then at least that it present to the trout no unusual or unfamiliar appearance.

That, in or on smooth water, the leaders in present use fill neither of these conditions, unless my experiments deceive me, I cannot doubt. Whether it is possible to make a leader which will always comply with either of them is another question. Certainly the first step toward supplying a want is to recognize its existence. "Forty-Niner's" leader, prepared as described, did comply with one of these conditions, and the "complete success" which attended its use is very instructive "to all who are willing to be admonished."

The statement that "the best trout, etc., can't pull one pound on a flexible rod" seems to stagger Mr. "Forty-Niner." It would not be difficult to answer, on theoretical grounds, the objections he so considerately suggests, rather than asserts. But no theory has the convincing power of direct experiment. Let him try it for himself.

If he will take a single-handed flexible rod, run the line through the rings and about three feet beyond the tip, tie a loop in the end of the line, hook a spring balance into that loop, get a friend to hold the spring balance down close to the floor and follow up with it the natural bend the rod will assume and the direction of the line, always holding the balance close to the floor; and if he will at the same time take the rod in one hand, with the butt clear of the body, and put on all the strain he possibly can, when his friend reads off the indications of the spring balance, he will then be in position to compare the strain he has exerted with the severest pull a trout has ever imposed on him; and then he can and will draw his own conclusions as to the truth or falsity of that statement. HENRY P. WELLS.

NEW YORK CITY, Feb. 25.

[Page 70, fourth paragraph from end of Mr. Wells's article, for "us" read we.]

THE STATE IN SCHUYLKILL.

IN his "Chronicle of the Compleat Angler," Mr. Thomas Satchell writes as follows of the famous Philadelphia Angling Club:

He was preceded, in 1830, by an anonymous author, whose work has become a rarity, even in its birthplace, while only one or two copies have found their way to our shores. It is entitled "An Authentic Historical Memoir of the Schuylkill Fishing Company, of the State of Schuylkill, from its establishment on that romantic stream, near Philadelphia, in the year 1732 to the present time. By a Member."* We lay no claim to literary value in relation to this tract, but as it has the signal merit of giving us an insight into what angling life in America was a century and a half ago, it cannot fail to be of interest to all Waltonians. We have, therefore, not to excuse a brief digression on its behalf.

In that year of grace, 1732, Philadelphia was the center of an infant colony, a colony struggling up, indeed, into strength and stability, but with a world of work on all hands, still left to be achieved, ere the rough, primitive forms of the settlement could be mellowed into order and harmony. Toil and turmoil must, therefore, have been the order of the day, and leisure and recreation mere remote contingencies. From this point of view, it is nothing short of a marvel that, at the date just cited, certain contemplative citizens of the new capital did actually establish this fishing club, or company, and set it going, with a governor at its head, five assembly men, a treasurer, sheriff, eighteen associates and the lugubrious appendage of a "coroner." Several of the projectors of the club had come over with Penn from England, and had been fellow workers with him in his colonial scheme; and it is but reasonable to suppose that an affectionate memory of the old land they had left forever, and of happy youthful days spent, angle in hand, beside its lakes and watercourses, lay at the root of their proceeding. If so, they must have been met by many points of divergence. Instead of wending to their sport through the grassy English meadows of "auld lang syne," their path lay through the uncleared wilderness, which, at the period in question, overshadowed the very walls of the town, and from that center stretched out west, north and south, in limitless expansion. Instead of speckled trout and silver grayling, they had to fill their creek with lumbering "catfish," or at best, with "white perch." And instead of partaking, when their sport was over, of smoking sirloin, or venison pastry, flanked with creamy ale, or sack-posset, they were regaled on "rock and gray squirrel," with a thin accompaniment of lemonade. "Punch and pipes," and occasionally a "barbacued pig," are the only English-sounding adjuncts of their repasts. It is but fair to add, however, that the club grew proud of their white perch in the course of time, and that some American anglers of the present day laud it above the trout.†

Having obtained the grant of about an acre of land on a

*"An Authentic Historical Memoir of the Schuylkill Fishing Company of the State in Schuylkill, from its establishment on that romantic stream, near Philadelphia, in the year 1732 to the present time. By a Member [William Milner, Junr.].

"If you look to its *antiquity*, it is most ancient,—
If to its *dignity*, most honourable,—
If to its *jurisdiction*, it is most extensive.

Philadelphia: Judah Dobson. 1830."
Collation: pp. viii. 127. ii.

†It is the small white bass, or *Lebrax pallidus* of De Kay.

wooded rise above the stream, they took possession of it, styled it magniloquently "The State in Schuylkill," and erected on it a wooden tenement (the "Castle") for their periodical meetings and festive gatherings. Here they are said to have passed a treaty with the chiefs of the Leni-Lenape, or Delaware Indians, who granted to them and their descendants for ever the right and privilege to hunt the woods and fish the waters of the Schuylkill.

The early records of the company are, unfortunately, but few and incomplete. Pen-craft is not among the primal growths of a colony, and the mantle of our Izaak seems to have been far from falling on any one of the fraternity, and certainly not on him who, a century after its foundation, compiled the memoir in question. For we are compelled to avow of this "member," that though parcel facetious, parcel flowery, parcel bacchanalian, he is *passim* illiterate and feeble. His orthography halts, his syntax has a frequent analogy with that of "Shrewsbury Barker," cook and piscator, who he refers to as "T. Barker, *Esquire*." This is a disappointing fact; for, in skillful hands, the theme might have been woven into a very charming chronicle, rich in quaint glimpses of early colonial life, and presenting the angler's sport to us in startling and unfamiliar aspects.

When the War of Independence broke out, several of the Schuylkill fishermen took up arms in the good cause, with honor to themselves and their association, but returned (such as were spared), when the strife was at an end, to their pensive pastime and their beloved white perch with undiminished ardor. There must have been grand talks under the castle walnut trees, in the long summer twilights, when these glorious absentees came back to their haunts, and unusual must have been the demand for "punch and pipes," while they "fought their battles o'er again," for the benefit of their less favored gossips. One need not be Fine-ear to catch, even now, the rattle of the assault, the thunder of the climax, and Schuylkill murmuring in the pauses, among its rocks and rapids.

In the ninetieth year of its existence our company had to draw its stakes and move further afield. A dam, built across the stream in their immediate neighborhood, frustrated the sport by keeping the fish from their feeding grounds.

Another site having been selected, the castle was pulled to pieces, packed in a boat, and conveyed, with all the company's heirlooms and household gods, its "mammoth punch bowl," its "Mandarin hats," its "great pewter plates," "Governor Morris's frying pan," and "the banner of the Stripes and Stars," to its new destination. There foundations of stone were laid for it, and the "Hall of Congress" soon reared its head once more with renovated splendor. We say this from the Schuylkillian point of view, for a sketch of the building, figuring as a frontispiece, we took at first, we confess, to be a "little Bethel." A description, however, underneath set us right. The carpenter who executed this wooden exodus received, we are told, a vote of thanks and the liberty of the State for a year.

It was in their new location in 1825 that one of the most exciting incidents of their history occurred, in the shape of a visit from the famous General la Fayette, then on a tour through the provinces of America; while, in 1787, the company had received the still greater honor of a visit from General Washington, but no record of that interesting ceremony has been preserved.

It will have been seen from the foregoing that sport in the Schuylkill possessed but little variety; catfish and white perch seem, indeed, to have formed the staple of it, though shad, sturgeon and drumfish were sometimes taken. The latter (*Pogonias cromis*) having been recommended as a substitute for rockfish, was experimented on by the company; but, though "richly dressed in the lobster style," it turned out "as tough as a drumhead," and was eschewed thenceforth. On a solitary occasion a trout was captured ("on a lay-out line, by Mr. Benjamin Scull") that measured fifteen inches. Mr. Scull was dubbed "the prince of fishermen" in consequence, and the event was marked with a white stone, but found no parallel.

Here our retrospection of this curious book may terminate. A hundred and fifty-one years, as we have said, have elapsed since the Association was founded; modern improvements have greatly altered the character of the river, blasted its rocks, changed its levels, and converted it from a brawling impetuous torrent, into a purling and peaceable stream, but still the Schuylkill Company lives and prospers (Dr. Bethune is our sponsor for this assertion), and still above the words rises the glittering vane of its Hall of Congress. Remembering, then, that this American Angling Association is the oldest in the world—that the Walton and Cotton Club is infantine compared with it—that, as its motto declares—

"If we look to its antiquity, it is most ancient;
If to its dignity, it is most honorable;"

we may well doff our hats to it, in a passing but reverent greeting, *Salve, Magister!*

[An illustrated sketch of "The State in Schuylkill" was recently printed in the *Century Magazine*.]

BIG STURGEON.—I have several times read of sturgeon weighing one hundred pounds and called big. "Verax," in a recent issue of FOREST AND STREAM, tells us about boating eleven sturgeon in a yawlboat. We (on the Delaware) call a five hundred-pound sturgeon a big one. "Verax" landed his fish over the bow. We boat ours over the stern. We catch them with a net and raise the net where the fish is. We raise it in the same way you would a crab line, and as soon as his head comes up, hook him back of the fin or about three inches back of the eye. After being hooked, the net is taken off of his head and another hook is driven into him in the same way, his head is raised on the stern, and by a quick jerk and with a pull he is landed in the boat. Will "Verax" please tell us what the sturgeon were doing on the lines? Were they hooked? And what kind of a hook was it? What do they bait with? And why he did not boat them with the line they were fast to without the use of a gaff hook? I ask this for information, never having heard of a sturgeon being caught in that way.—CLAYTON VON CULIN. [See account of taking a sturgeon on a line in the note on "Smelt Fishing."]

THE VETERANS CALLED ON.—*Editor Forest and Stream:* I am very much pleased with the practical hints in the Fishing Department of the last two numbers of FOREST AND STREAM, for I am a year-old infant in the trouting way, and must use the experience of others until I can accumulate a little of my own. I indorse "Couples's" remarks in the last number, and hope to see the Fishing column as practical as Gun and Canoe columns are. Can't some of the old hands help us along a little? We will be respectful and thankful. —F. M. C.

A KINGFISHER LOST HIS DINNER.—Chatham, N. Y.—I had been fishing down stream (casting my flies with quite good results for me, having twelve or fifteen nice trout in my basket) when a look at the sun warned me to retrace my steps in order to have the twilight fishing in a few favorite places. I thought I would make just one more cast in a little pool, shaded by a low willow, a few rods below the bridge on which I was standing. As I cleared the fence I heard the shrill screech of the kingfisher, and a moment later he darted like an arrow from a limb of the willow into the pool. For a few seconds it seemed as if he had gone to stay (and I wish he had and taken the rest of his tribe with him, especially those who infest our trout streams). He soon, however, came to the surface, and for a little time it was hard to tell which would have the best of it, the bird or the trout. The bird, however, soon cleared his wings from the water and rose from the brook with nearly a four-ounce trout in his murderous beak. My first impulse was to get square with the kingfisher for spoiling my cast in that pool, and for spearing the trout which I anticipated taking in an honorable and legitimate way a few moments later on my red hackle. So, waiting till he was clear of the brook, then throwing up my arms gave a yell which, in order to answer, the bird was obliged to open his beak, and out dropped the trout on the bank, which I leisurely proceeded to place with the others, which had been procured with more labor, but with the enjoyment which can only be felt by the angler with an eight or ten-ounce rod in hand and a good-sized trout tugging away at the end of thirty-five or forty feet of line.—DEL.

SMALL FLIES.—Roslyn, L. I., Feb. 18.—When only a boy, I passed some months of my life among the hills of Craven, Yorkshire, England. It was then and there that I was taught fly-fishing for trout by my grandfather, and my present reason for dropping you this line is that last evening while examining my fishing tackle I chanced upon one of the English flies, and material for leaders such as I then used. Inclosed herewith you will find them, and will see that the leader is of a single fine horse hair, while the fly is no more than one-third the size of those used by most of my trouting friends here. The specimens I send have been in my possession some thirty years, and are still equal to capturing a good-sized fish. I have used both flies and leaders precisely like those inclosed on my trout pond here, and find that the fish will rise to such fine tackle on a bright summer day when they will pay no attenton to the coarse American trouting outfits. Our American rods and reels cannot be excelled in delicacy, why then do we fish with clotheslines? Of course it needs a gentle hand to take a three-pound trout on a single horse hair, but then 'tis true sport, and I, for one, think that cod fishing should be confined to the smack and her crew.—THOMAS CLAPHAM. [We will try the little midge this spring. Thanks.]

SMELT FISHING.—Saco, Me., Feb. 18.—There are eighteen smelt shanties on the ice near this city, larger than the tents at Belfast, with boarded roof and sides, and furnished with stove, lamps and bunks, so the fisherman can sleep when the smelts do not bite. The fishing is done wholly at night. It is not a paying business, as there are weeks at a time when but very few are taken, and, when biting the best, five or six dozen is considered a large catch for one night. Last Tuesday night J. W. McCorrison caught a sturgeon on his smelt line that measured 3 feet 8 inches. It was hooked close to and just in front of the mouth, and drawn to the surface with the line, then by the use of a gaff it was landed on the shanty floor. The next night McCorrison caught on the same line a sucker, measuring 19 inches, and it is claimed here that it is the first fish of the kind ever taken through the ice.—W. F. CUMMINGS.

Fishculture.

HOW TO COOK CARP.

Editor Forest and Stream:

In your issue of Dec. 6 I notice some remarks as to the qualities and how to cook carp. Below please find a few receipts translated from a German cook-book. As a general rule the pond carp is not considered good to eat during the summer months, May, June, July, August (during and after spawning), but at all other times it is a most excellent table fish.

Receipt No. 1.

Clean a carp of about five pounds well, and split and cut it into convenient pieces. Take three tablespoonfuls salt, half a dozen kernels black pepper, same of allspice and cloves, a few cardamones, four laurel leaves, a medium-sized onion, some celery and a sliced carrot, and a quart of water (or enough to cover the carp); let these boil together fifteen minutes, put in the carp, scale side down, head pieces first, middle pieces next, tail pieces on top, and let boil fifteen minutes longer; add one-half pound butter in small pieces and a gill of red wine, or in place of wine pour one-half gill warm vinegar over the pieces of carp before putting them into the pot, and add it to the boiling. Boil fifteen minutes longer; take out the pieces and serve with browned butter and slices of lemon.

Receipt No. 2.

Clean and split a five-pound carp and rub two tablespoonsful salt well into both sides and let stand two hours in a covered dish. Take some spices and herbs as in No. 1, and boil thoroughly with one pint water, one pint red wine, one-half pint beer, one-half pint vinegar, some lemon peel, bread crust, and one ounce sugar. After this has well boiled, cut the carp in convenient pieces, put into the pot and boil till only about half the sauce is left, serve as before.

Receipt No. 3.

Clean a good sized carp carefully by opening it as little as possible, cut off fins and tail; make a number of crosscuts on one side, rub the fish well with two tablespoonsful salt, let it stand covered for some hours, then dry it with a towel. Make a filling of four ounces tallow or fresh fat pork, four yolks of eggs, some wheat bread slightly softened with water, three sardelles, some capers, mace, salt, pepper; lemon peel, onion, and the liver of the carp (but be sure that the gall is first carefully removed) all chopped very fine, fill the carp and sew up the opening. Put it into a baking dish with the cut side up with one pint wine, one-half pint vinegar, one-quarter pound butter, spices and herbs as in No. 1, and a few slices of lemon, bake quickly for three-quarter hours and baste frequently. Don't turn the fish while baking.

Receipt No. 4.

Take carp of one to two pounds, scale and clean well, rub inside and out with plenty of salt, let stand an hour or two, wipe dry with a towel, roll in well-beaten eggs and bread crumbs or meal and bake in plenty of butter till nicely brown.

Receipt No. 5.

Boil carp as in No. 1, place the pieces in a bowl with a few slices of lemon, add to the sauce one-half pint vinegar and boil same till only enough left to cover the carp in the bowl. Pour the sauce over the carp through a sieve and let it cool thoroughly.

I tried receipt No. 1 on bass and found them excellent.

C. C.

WEBSTER, MASS., Dec. 10, 1883.

WHAT FISHCULTURE HAS FIRST TO ACCOMPLISH.

BY CHAS. W. SMILEY.

A GENERAL impression prevails that fishculture proposes to immediately fill our streams with fish, to such an extent that the supply will be practically inexhaustible. In order to show that this is a very extravagant expectation, attention is called to the following facts:

Any tract of country needs to be but sparsely populated in order that its inhabitants may soon exhaust it of desirable food fishes. The native powers of the fish for reproduction and growth are not sufficient to withstand the inroads of man, when added, to any considerable extent, to the natural enemies with which they are surrounded. Very early in the history of the United States, its leading rivers were mostly depopulated of the best fish. A hundred years ago nearly all the streams of New York which emptied into the Great Lakes were visited annually by salmon in such enormous quantities that their numbers seem to us incredible. There are most authentic accounts which point to the water being fairly alive with them in many places, when seeking the upper waters of these streams for the purpose of spawning. It is well known also that the Connecticut, Hudson and Susquehanna rivers were at that early time visited by vast schools of shad, and the former, at least, by considerable quantities of salmon. Such a population as the Atlantic States contained seventy years ago was sufficient to exhaust these rivers of the more valuable food fishes, and before artificial fishculture was undertaken many streams had remained in this exhausted condition for a considerable length of time.

The first and great task of fishculture, therefore, is not so much to increase the number of edible fishes in any given stream as to withstand the enormous forces which are at work to produce their entire annihilation. As illustrative of this, the presence of shad in the Potomac River may be cited. For some years prior to the war of 1861-65, the shad fisheries of the Potomac had been practically exhausted. They had reached so low a limit that it was very unprofitable to fish the stream, and its barrenness helped to deter men from fishing; but the occupation of the banks of the river by hostile forces for the period of nearly four years made fishing practically impossible, and gave nature an opportunity to restore the fisheries. As a consequence, at the close of the war it was found that the river had been restocked to such an extent that the yield for a few years was very large indeed. The presence of large numbers of fish, however, called out the fishermen, and there was a steady decline, annually, in the yield, and, had it not been for artificial propagation, there would not be shad enough remaining in the river at present to warrant any fisherman in using a hundred-fathom seine. Fishculture, however, was brought in as a restorative. Each year since 1875 the United States Fish Commission has hatched and deposited from one million to ten millions, the numbers increasing annually. The principal result, however, has been to prevent annihilation rather than to cause considerable increase in the fisheries. The number of shad received at the Washington market annually for the past five years were as follows:

1879	311,585
1880	329,799
1881	321,368
1882	350,292
1883	284,474

In spite of the best efforts possible during these years the catch has declined. That for 1883 is smaller than might reasonably have been expected, because the temperatures of the river happened to be unusually low during the spawning season, and there is good reason to believe that many fish were diverted to other tributaries of the Chesapeake which would legitimately have come into the Potomac as a fruit of fishculture on that river.

The fish of our rivers have not only to contend with enemies within their water, such as a great variety of carnivorous fishes; the destruction of their eggs by numerous forms of aquatic animals; the injuries of abnormal temperature and sudden changes thereof, and the damage produced by sawdust, sewage, and other filth introduced into the rivers; but the agressive character of our citizens has told against the food fishes in increasing ratio annually. The increase of population produces a corresponding increase in the demand for these fishes, but the numerous facilities which modern inventions have brought to the aid of the fisherman in the way of wholesale appliances for capturing this kind of food complicate the question exceedingly. If fishing with rude appliances a hundred years ago was sufficient to exhaust a river of shad, what may be said of the ingenious traps and the miles of netting operated by horse power with which fish are met to-day? To successfully run the gauntlet of a series of nets, but a few rods or miles apart upon a considerable portion of the length of the river, and to elude the fisherman even on a flood-tide at midnight, has become practically impossible. Fishculture thus has all the natural disadvantages of a hundred years ago to contend with, and has the accumulated ingenuity of nineteen centuries to circumvent, in order even to maintain a decent supply of food fishes.

A striking example of the task of fishculture may be found at the Great Lakes. He would indeed be rash who would call upon the half-developed science of fishculture under existing circumstances to materially increase the supply of food fishes in the Great Lakes. Its mission is rather to try and keep the supply up to three-fourths, two-thirds, or even one-half of what these lakes formerly yielded. In 1871 there were 281 pound-nets being used in Lake Michigan, and 481 gill-nets. These appliances were sufficient to cause a continual decrease in the number of fish contained in these enormous bodies of water, and, fishculture aside, were sufficient to practically exterminate the fish in forty years. But in 1879 the 281 pound-nets had been replaced by 476 pounds-nets, and the 450 gill-nets by 24,599 gill-nets. Steam tugs devoted to fishing, scarcely used in 1871, numbered thirty in that lake in 1879. Furthermore, the larger fish of the lake having been caught, it became necessary to decrease the size of mesh of the nets, and to lengthen the nets, so that without doubt there have been for several years nets enough in use on Lake Michigan to reach entirely around the lake. Fishculture aside, and without any additional efficiency in apparatus, it is only a question of some ten years when the whitefish and trout fisheries will be entirely exhausted.

Fishculture is practically a science of the past fifteen years. It has not yet reached a stage of efficiency which can cope with any such state of affairs as present themselves on these Great Lakes. Even if five millions of dollars and fifty men are placed at the service of the State Fish Commissioners in the interest of fishculture, what are these in the contest with 50,000,000 of people demanding food, and millions upon millions of capital naturally drawn upon to supply their need. The fruits of fishculture, like bread thrown upon the water, must return after many days. It must wait the coming of the young fish to maturity before results are apparent. The fishermen, however, reap the fruit of their labors on the same day, if at all, and thus know the degree of success they are attaining at any hour. With them it is largely a question of muscle; they put down their nets and haul up their fish. With fishculture it is a serious question of scientific knowledge. It

has not professed to yet know many of the needed facts with referenc to the embryonic life of fishes, suitable temperatures of water, how to secure proper forms and kinds of food, etc. These are questions which must be solved by careful and continued study, and, while the past ten years have been all spent in this respect, there yet remains an enormous deal to be learned. It is as if all agricultural implements, all knowledge of seeds, soils, climate, and treatment of vegetables were blotted out of existence, and we had in ten or fifteen years to bring the science of agriculture from nothingness up to where it could supply the wants of 50,000,000, while but fifty or a hundred people were engaged in the effort and all the remainder of the 50,000,000 were arraigned practically in hostility to their efforts.

That, however, this citation of some of the difficulties of fishculture may not discourage any one from the enormous undertaking, I will close with citing one of the most remarkable of the successes thus far attained. The salmon canneries of the Sacramento River annually increased in number until by 1870 the entire run of salmon was being caught and utilized. The greatest natural capacity of the river under these circumstances may be considered to have been reached in 1875 when the yield to the canneries was 5,096,781 pounds. The first possible fruits of fishculture were in 1876, when the young of 1873 may be supposed to have returned. The United States hatchery was established in the latter year at Baird, Shasta county, Cal., and a half a million young released in 1873 and again in 1874. In 1875 the number was increased to 850,000, in 1876 to 1,500,000, and during each of the years 1877, 1878, 1879, 1880, 1881, two million young fry were placed in this river. From an annual catch of 5,000,000 pounds the river has come up to the annual catch of over 9,500,000 pounds, which figure has been maintained during the past four years. The figures were:

1880	10,837,000 pounds.
1881	9,600,000 "
1882	9,605,000 "
1883	9,586,000 "

Allowing the three years which it takes for salmon to come to maturity and enter the river for spawning purposes, the increase in yield to the canneries for ten years has been almost exactly proportionate to the increase in the disposition of fry. Taking into consideration the cost of hatching two million of salmon annually, and the value of the increase of 4,500,000 pounds, it will be seen that there is a very large per cent. of profit in artificial fishculture, when conducted under circumstances as favorable as these.

As illustrative of what present apparatus worked by skilled fishermen at the instance of very thickly settled regions will do, I will cite the Farmington River in Connecticut. Artificial hatching was carried on there for several years previous to 1879. That year it was discontinued. The catch was affected as follows:

1881, catch of shad	11,505
1882, catch of shad	3,800
1883, catch of shad	1,155

Bearing in mind that three years are required, the effect will be observable. In 1879 the Connecticut Commissioners prophesied just what has occurred there. In 1881 hatching was resumed, and a consequent increase in catch for 1884 is predicted.

United States Fish Commission, Feb. 20, 1884.

THE U. S. COMMISSION IN MICHIGAN.

At the Northville and Alpena stations of the United States Fish Commission in Michigan there was laid in a round hundred millions of whitefish eggs last fall. Of these there have been shipped twelve millions to different States and foreign countries. It is expected that from 70,000,000 to 75,000,000 will be hatched and the fry planted in the great lakes.

Brook trout have yielded over 250,000 eggs during the last three months of the past year from the Northville ponds. These have all been disposed of—200,000 to the different States and 25,000 to Germany.

Lake trout, from Lake Huron, furnished nearly 300,000 eggs during November and December; 100,000 of these were sent to Germany and 25,000 to the central station at Washington. The remainder will be hatched and distributed from Northville.

Rainbow trout reared at Northville have developed into spawners, and it is probable that in a few years they will spawn at the same season as the brook trout. This last season they began spawning on Dec. 19, several days before the last brook trout eggs were taken, and the rest will finish before the first of March. Up to Feb. 1, 50,000 eggs were taken.

At Alpena the McDonald jars work better for whitefish than at Northville, because there is a greater head of water and five jars can be operated in a series. The ponds at Northville contain from 250 to 300 young whitefish from five to eight inches in length. They were hatched there last year, and have been fed on chopped liver, the same as young trout.

From a small consignment of eggs of the German trout received last spring from Mr. Fred Mather there are now some 800 fish in one pond. The loss since batching has been slight, but they are smaller than either the brook or the rainbow trout of the same age.

New Publications.

SOME BOOKS.

Camping in the Alleghanies. A new edition of Dr. Thad S. Up de Graff's book familiarly known as "Bodines." It is a very pleasantly written relation of the actual experience of the author and a friend in their annual June camps on the Lycoming Creek in Pennsylvania. The purpose of the chapters is to show what can be done in the way of camping out in localities which are easily accessible. We commend "Bodines" to the perusal of Forest and Stream readers. (J. B. Lippincott & Co.). *Gwenn, A Wave on the Breton Coast.* This new novel, by Blanche Willis Howard, is quite out of the "ordinary run" of fiction. It is an admirable story, well told. (J. R. Osgood & Co.). *Erring, Yet Noble.* Mr. Isaac G. Reed, Jr.'s novel or romance, or harum-scarum what-you-will, which bears the foregoing title, is trash. (T. B. Peterson & Bros.). *Health in the Household, or Hygienic Cookery.* By Susanna W. Dodds, M.D. Dr. Dodds has written a very sensible book considering the subject. A man or woman who sets out to reform the dietetic principles and customs of a nation is apt to display more or less crankiness; Dr. Dodds is in this respect no better nor worse than nine out of every ten food writers. (Fowler & Wells). *Garden and Farm Topics,* by Peter Henderson, is intended to give practical and concise information on a great variety of subjects indicated by the title page. Whatever Mr. Henderson writes on plant life is certain to be sensible, and helpful to those who are less experienced than he. (Peter Henderson & Co.). *The Language of the Hand,* by Henry Frith and Ed. Heron Allen. A dose of yellow-covered literature disguised in a very respectable cloth binding. It sets forth the mysteries of palmistry or chiromancy, which is the art of reading by the hand the past, the present and the future. A firm around the corner in Ann street are reputed to have made a fortune by their sales of dream books, and it may be that there is some demand for such preposterous nonsense as this book on hand-reading. (George Routledge & Sons).

Five to Ten Dollars a Year for all ordinary employments secures $1,000 insurance with $5 weekly indemnity in the Travelers, of Hartford, Conn. Paid accident policy holders $864,000 in 1883.—*Adv.*

A young couple in Oconee county lately married devoted their honeymoon week to sport and killed 120 rabbits. They have salted down the meat and will save buying bacon next summer. This sort of beginning is bound to win in a long run.—*Atlanta (Ga.) Constitution, Feb. 13.*

The Kennel.

FIXTURES.

BENCH SHOWS.

March 4, 5, 6 and 7.—Cincinnati Bench Show, Melodian Hall. Entries close Feb. 25. Charles Lincoln, Superintendent, care of B. Kittredge & Co., Cincinnati, Ohio.

March 12, 13 and 14.—New Haven Kennel Club's First Annual Bench Show, Second Regiment Armory. Edward S. Porter, Secretary, Box 657 New Haven, Conn. Entries close March 1.

March 18 to 21.—Washington Bench Show, Masonic Hall, Washington, D. C. Chas. Lincoln, Superintendent.

March 26, 27 and 28.—The Dominion Kennel Club's Second Annual Bench Show, Horticultural Gardens. Charles Lincoln, Superintendent. C. Greville Harston, Secretary, Toronto, Canada.

April 3, 4 and 5.—The Cleveland Bench Show Association's Second Bench Show. Charles Lincoln, Superintendent. C. M. Munhall, Secretary, Cleveland, Ohio.

May 6, 7, 8 and 9.—The Westminster Kennel Club's Eighth Annual Bench Show, Madison Square Garden. Entries close April 21. Chas. Lincoln, Superintendent. R. C. Cornell, Secretary, 54 William street, New York.

A. K. R.

The American Kennel Register, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **869.** Volume I., bound in cloth, sent postpaid, $1.50.

BEAGLES FOR FOX HUNTING.

Editor Forest and Stream:

In your last issue, "Bugle," in his article on the above subject, puts the query: "And how would the beagle do for fox hunting? Is he too slow?"

In answer, I would say that the beagle will hunt any kind of game that the larger hounds will follow, and with equal zest and staunchness; but hare and rabbits are his legitimate quarry, and for this pursuit he has been bred and perfected.

I am a believer in the symmetry of sport, if I may use the expression, and think the dog should be matched in size to the game, and although a foxhound will run rabbits well and true, it is about as appropriate to use him for that purpose as it would be to pit a mastiff to kill rats.

The beagle would be too slow to hunt foxes where the hunters ride to hounds, but judging from the locality your correspondent hails from, the foxes are shot on runways before the dogs, and for this style of hunting the beagle is fully up to the requirements. I would suggest the English beagle of 14 or 15 inches as about the most useful size.

To show that beagles take kindly to fox hunting, I will state a case that came under my observation several years ago, in Cecil county, Maryland. On a bright, crisp October morning, while out partridge shooting, a fox was roused in a briery thicket in which the setters were working; running out into an adjoining clearing, he sprang on a stump and sat gazing at the dogs.

Sheltered behind a worm fence about seven yards distant, the mark was so tempting that I could not resist, so gave him both barrels, the shells being charged with No. 8 of course no damage was done other than a wild fright. While I stood watching him flying down the valley and across an "old field," the farm boys who were out rabbit hunting joined me with their four beagles. We laid them on the trail which they hit off at once, running breast high, and going at a clinking pace in full cry. While yet in sight a blue mottled puppy ten months old, who had never hunted or seen a fox in his life, forged ahead, took the trail, and made the running, and with the pup on the lead they passed out of sight heading for the Bohemia River, about a mile away.

The boys followed and in about three hours came back with the game little pack. For over two hours the little hounds had harried reynard up and down the river bank among rushes, and cattails, briers and brambles, with never a check, affording numerous chances for a killing shot, but as vulpecide is a heinous crime in the eyes of a Southern fox hunter, the boys with commendable fortitude restrained the impulse, and whipping off the dogs, returned to hunt the "old har" through the devious mazes of a Maryland branch. Rusticus.

Philadelphia, Pa.

EXPERIENCE WITH DOGS.

Editor Forest and Stream:

The first dog I ever owned was four weeks old when "Training vs. Breaking" appeared in your paper. When five weeks old I had taught him to-ho, and when eleven months old he surprised many who "poohed" at the rules as laid down by "Shadow."

I have treated this dog as I would a child; have talked to him, and he understands the English language as well as any animal can; and that is not a little.

I have many newspaper clippings about the intelligence of this dog, and I do not claim to have any better dog than many, but have used him differently. When the city clock strikes 12 o'clock he will be found beside me with one of my overshoes in his mouth, and on my taking it he will, without anything being said, get the other. He has been trained for field work by myself, solely from the reading of the ten chapters of "Training vs. Breaking," and he does some thirty to forty tricks which are not laid down in any book. No whip nor check cord have been used; I never owned either and never shall. In teaching a child would it be necessary to use a whip to teach them their A B C? Neither is it a necessity to have the butt of a dog-whip extending out of your pocket while training your dog pupil.

I cannot agree with "Hunt" about teaching a dog to retrieve under the whip. A friend of mine having a valuable setter, placed him in a trainer's hands to be taught to retrieve. In the course of a few weeks my friend was informed that this pup would never be a retriever, as the trainer said he had tried force and the whip. My friend went and got his pup, and a more disgusted being you would not like to see. I told him that I could teach the pup to retrieve in one week, and a faint smile flitted across his face, and he told me to go ahead. Well, here was a nice pickle. When you would throw anything the pup would run away as soon as he could, and in the house he would get into a corner about as quickly as any dog could. When he brought up he would be on his back with his feet pawing air. This was some of the whip retrieving.

The first two days were used up in trying to gain the confidence of this timid creature. I began by rolling a small towel into a ball and putting carefully in his mouth. He would spit it out as fast as I would let him. At the end of the third day he would hold it a very short time, then going ahead of him a few feet and saying "fetch," he would bring it.

Now for throwing it. Here goes; and away goes the youthful canine in another direction. After getting him back, not using any harshness, he began to think he was not going to be thrashed.

The fifth day he was not fed. I chained him to my desk, and the towel was where he could reach it; his food was not, but he could see it. He would reach for it with his paws and try to gather it in. Before this, after he had held the towel in his mouth and not spit it out I always gave him something to eat.

He began to think that some of the food, which was so near, yet so far, was needful. I would say "fetch," and at last the word did not strike terror to his young mind. About 3 P. M. on this day, on looking around, I saw he had the towel in his mouth, and on saying "fetch," it was brought. Then he was unchained and a little food was given him. On throwing out the usual article, he scampered and brought it in good form. More food. It was thrown thirty times and brought all right. I had one more day to fill my contract. On showing him a quail more of the funny retrieving takes place; but on further investigation he found no whipping, and before night he would bring the quail all right, and to-day he is as good a retriever as there is in town.

Use common sense more and the whip less. I think if you were to take your children for a ride or to some friend's house you would not ornament yourself with the rod; neither is it any more sensible to go forth with a dog whip. A child which will mind in the house will out doors, and just so with a dog that has been treated as a dog should be.

Many persons will scout the idea of a hunting dog doing tricks (some do too many), but I claim that the more you educate your dog the more pleasure you can have with him. It certainly does no harm for a man to know something outside of his profession; the better informed he is the better results from his labors. Just so with a dog. As for honesty, they are far ahead of some of the human family. I can shut my dog in a room with a good roast and tell him that it is not for him, and if he touches it I will give to any charitable institution a barrel of clay-pigeons.

"Shadow" has done more good toward elevating the dog's culture than any other writer living. He advocates firmness, usual tone of voice, no kicks, no clubs, no whips, no yelling. Speed "Training vs. Breaking" for the benefit of this now much-abused animal.

How much more pleasant it is to see your dog wagging his tail every time you look at him than to see that useful member bent under his body, and he in the shape of a half moon through fear. Flick Flick.

Hartford, Conn., Feb. 18.

LICE ON DOGS.

We have recently received several communications requesting information as to a sure method for ridding dogs of lice. Almost all of the various remedies that are recommended for their extermination will have the desired effect provided they are properly applied. None of them will accomplish the purpose unless so applied. We have repeatedly stated that "eternal vigilance is the price of liberty from fleas." This axiom is especially applicable when seeking to circumvent the bloodthirsty *lus.* The main difficulty in getting rid of these troublesome pests is owing to a want of care in applying the remedy. The louse is very prolific and matures at a very early age, and as none of the various remedies will destroy the vitality of the egg, no matter how thorough has been the war of extermination, a day or two will see their ranks again full. It is necessary, therefore, in order to make a sure job of it, that the work be thoroughly done in the first place and thoroughly repeated at least once a week until "the last aimed for expires." Persian insect powder, when rightly used, answers the purpose very well and is perhaps the most cleanly and least troublesome method in cold weather, but as the powder only stupefies and does not kill the insect, it is necessary to follow its application with the fine comb, of course destroying by fire every captive. To apply the powder, place the animal upon a large sheet of strong paper, and with an insect gun or common pepper box thoroughly dust the powder into every portion of his coat, following this with a vigorous shampooing until every insect receives its share. Most of them will at once vacate the premises and fall upon the paper. Those that remain must be found with the comb and all thrown in the fire. This should be repeated every three or four days, until the parasites all disappear. A decoction from quassia wood will also destroy lice. Take two or three ounces of the chips and tie them up in a muslin bag. Suspend them in a pail of water, stirring occasionally. After two hours the decoction is ready for use. Apply it freely, with plenty of soap, and rinse off with clear water. Strong tobacco water, applied in the same manner, may be used with good results, although it is apt to make the animal sick. Whale oil, freely used, is also sure death to lice. This should be thoroughly washed out of the coat within a few minutes after using on account of cleanliness. There are many other remedies that will accomplish the purpose, but those mentioned will be found amply sufficient. Mercurial preparations of all kinds are never to be used for this purpose, as bad results are almost sure to follow. Neither can kerosene be recommended, for the same reason. It is absolutely necessary that the kennel and bedding be attended to or all of your labor will be in vain. A good coat of whitewash put on hot, taking care to fill all the cracks, will render your kennel almost insect proof. The bedding should be changed often. Cedar shavings make the best bed, although those of pine will do very well. The bedding of dogs who sleep in the house should be frequently scalded out in strong soap suds, and after rinsing in clean water, hung in the sun until perfectly dry. By closely observing the above rules any one can soon rid his kennel of both fleas and lice.

A WASHINGTON'S BIRTHDAY RUN.

Since the Rose Tree Hunt was organized, no better or more exciting run has ever taken place than the one enjoyed by this organization and its friends on Washington's Birthday. Fully fifty huntsmen were present at the meet, including those from other clubs, and the number of hounds collected amounted to over two score. This was to be the opening and the great hunt of the season, and it will certainly prove to be such. Reynard was plucky, although bagged, and made a good run of over fifteen miles, and at one time almost outwitted his four-footed pursuers.

At 7 o'clock on the 22d, the hunters were astir, and the red coats of the Rose Tree Club could be observed mingled with the more sombre blue of the West Chester Hunt. Prominent among the number could be seen the veterans H. E. Danbrier and G. W. Eachus, eager for the start. Carroll Smyth on Rosinante, was all expectation. Edward Beale, astride of Firefly, was easily recognized. Old Pandora, as anxious as her rider, carried Dr. Huidekoper, Miss Morns rode Minnie, and Ringgold Lardner handled Orderly. Little Eddy Carpenter crossed his pony Dandy, and Walter Biddle hoped for much from his hunter. W. K. Corliss was master for the day's hunt.

Chester, Media and Shila, members of the Rose Tree Hunt, were also at the meet, started, and kept well up; of these could be seen R. S. Sturgis, H. Hatfield, Geo. E. Darlington, W. Wayne, W. Sharpliss, J. Darlington, S. L. Levy, L. K. Lodge, G. M. Lewis, J. E. Carpenter, Dr. Biddle and C. B. Wright.

Good mounts represented the West Chester Club. Mr. J. Skaner, the noted master of an excellent pack from that place, was present, also H. C. Meredith, Dr. Everhardt, Mr. Mercer, Jos. James, G. A. Mercer, T. Hoopes, Jesse S. Hinton, Passmore Hoopes, B. D. Evans, J. H. Mercer, Davis Taylor, John Gheen, C. W. Lee, F. Wallerton, E. Gatchell, R. Eby, Sheriff W. Baker, W. C. James and John Hannum.

Mortonville was represented by Charles Yedder, B. Young, J. Ortlip and G. Faddius. The Phœnixville Fox Hunter's Club was to have furnished several participants, but only one presented himself, John Yeager, a host in himself, a good and fearless rider.

Ed. Worth, James Slayford and G. S. Leiper came from Chester, Pa., the latter having with him twelve of his noted hounds, prominent among which was Charmer; Ellwood Powell, of Springfield, had sixteen, and these joined with the

noted Rose Tree kennel, swelled the pack to almost forty hounds.

Reynard was let loose from his bag by Rogers, of the Rose Tree Inn, in the woods below the house, and at once seemed to know he must attend to business. The pack were cast off, and directly through Ottey's woods they went, and at first seemed to be at fault. The mellow voice of an "old-time" hound soon evidenced that the trail was found, and the whole pack harked to him, and the chase began. Away toward Crane Creek went the hounds and riders. Reynard had chosen the stream valley as his course, and from the top of the hill the huntsmen could see the dogs plainly, following the trail, and down the declivity all hurried, eager to be as near as possible to the fun.

Westward down the shores of Crane Creek sped reynard, the pack sticking close and pressing him hard. Behind came the riders in full sight, "his craftiness" showing no disposition to select another path but that of the creek valley until the Bodine farm was passed and the West Chester pike near Lamb Tavern was reached. Here it was seen the pack was at fault, and it was a little time before the scent was caught again. The fox had crossed the creek, seeking thus to baffle his pursuers, and not until the hounds had themselves swam the stream was the trail taken up. Corliss, of the field, coming up, cleared the creek first, followed by Miss Morris, Eachus, Beale and Smith. On the eastern side of the creek the riding became very rough, and a half mile of rocky boulders impeding the pack had to be overcome, followed by a high fence which extended to the water's edge. Over it went Rosinante without effort, Eachus following on his gallant steed, then Miss Morris and Minnie. Taylor, of West Chester, essayed the leap, but failed, and falling heavily, bruised himself on the rocky bottom. Up again before many of his followers had come up with him he was mounted and with the field once more. At Justie's farm, reynard, pushed to desperation, made for the barn up on the hill and tried to hole in the hay, but the pack caught up with him and he gave up the ghost. Mr. Eachus, closely following, dismounted in time to save the brush, and proclaimed himself first at the death. Next came Miss Morris and Carrol Smyth abreast, then Ed. Beale and Ringgold Lardner, hard pressed by Walter Biddle. The balance of the field followed straggling. After a ride of four or five miles the Rose Tree was reached, and all, delighted with the day's sport, sat down to a substantial dinner.

HOMO.

PHILADELPHIA.

THE KENNEL HOSPITAL.

VI.—INFLAMMATION.

THE frequent occurrence of inflammation as an accompaniment of disease or injury renders any rational consideration of its appearance and effects in different parts of the body impossible until we have first attempted to explain what it is. Unfortunately, this entails perhaps a dryer and more technical chapter than ordinary readers will care for, but I cannot see my way to omit it without fostering the notion that doctoring dogs requires less knowledge than doctoring other animals.

"Inflammation," says Barlow, "in its various forms and localities is the most frequent condition of disease and the most common cause of death among domestic animals. As a term, it is one with which we become early familar, and certain sensations and appearances denoting its existence are well known to us all. It is a process with which for ages past theory has taken the utmost freedom." Erroneous theories have given rise to irrational medical surgical practice, and even now in canine practice it is too commonly believed that the only appropriate remedies are those which reduce the vital powers.

Inflammation has now been demonstrated to be a process of perverted nutrition, not a mere burning or consuming, as the term (*inflammo*, to burn) would imply, nor merely an increased determination of blood to a part, attended by heat, pain, redness and swelling.

In order to understand this process of perverted nutrition, we must shortly say how healthy nutrition is performed. The mass of the animal body consists of substances known as flesh, bones, nerves, skin, etc., which we call tissues. In consequence of waste sustained in the performance of their functions, they are in need of continuous repair. In health blood is always circulating through minute vessels in the smallest interstices of the tissues. Through the coats of these vessels fluids can pass to and fro. Thus nutritive material for the repair of the tissues is supplied at the same time that the waste, resulting from their action, is removed. It is this process by which the circulating blood preserves the balance of waste and repair in the tissues that constitutes nutrition. These are three factors in the process—the tissue, the blood vessel, and the circulating blood. All three must be healthy, and each must perform its proper part or healthy nutrition is impossible.

Blood is propelled by the heart through large vessels (arteries), which divide and subdivide until they appear as tubes of most minute or hair-like fineness, called capillaries. From capillaries alone all nutrition takes place. Their walls consist of a thin transparent membrane so delicate as to permit exudation through it of the nutritive fluids from the blood. Seen under a microscope blood is not a uniform red fluid, but is shown to consist of a colorless fluid (*liquor sanguinis*) in which float solid particles (corpuscles or globules), some white, but most red. Seen flowing through the capillaries the *liquor sanguinis* passes along in contact with the walls of the vessel, while the corpuscles keep in the center of the stream. The flow is constant and steady, the corpuscles never becoming crowded or passing through the coats of the vessel, and the *liquor sanguinis* only transuding in a degree suitable to the exact requirements of the nutrition of the part.

Under a microscope the circulation in the wing of a bat, or better still, the web of a frog's foot can be seen distinctly. By irritating the part we can induce the process of inflammation, and watch its various stages. On the application of an irritant, the capillary vessel contracts so that its caliber is lessened and the motion of the blood within increased in rapidity. This condition soon gives place to another, in which the vessel is seen distended, and the flow of blood within is retarded; the inflammatory process has commenced, and the stage reached is active congestion. The distended capillary loses its contractile power; the blood globules become crowded together, and forced against the walls of the vessel, while the current of blood is almost arrested, and the quantity of fluid transuded is increased. This is passive congestion. A stage further the distension of the vessel increases; the blood within it becomes stagnant; exudation of *liquor sanguinis* through the coats takes place in abnormal quantities; the blood globules escape, and the coats of the vessel give way, allowing blood to escape into the surrounding tissues. This is acute inflammation.

These same changes that we can see going on in the blood vessels of the transparent web of a frog's foot, occur in every inflamed part. Not one capillary, but many are implicated, and the circulation is disturbed all around the effected part. It must be noticed that inflammation is not a definite, limited condition, but a process passing through certain stages, each of which differs somewhat in kind; all of which, however, exist together in and around an inflamed part, and none of which are compatible with healthy nutrition. In a small pimple we have a good illustration of a simple circumscribed inflammation. In its center there is stagnation of blood and exudation of *liquor sanguinis*, outside of this an area in which dilatation of the capillaries, and a retarded current through them is the great feature; beyond this another area of dilated capillaries, in which, however, the flow of blood is still active.

Keeping to our illustration of the inflammatory process—a pimple, we notice certain conditions which are common to nearly all inflammations. We find swelling, redness, heat and pain—changes which, from the most remote times, have been recognized as the symptoms of inflammation. Some interpretation of their cause and nature may be conveniently offered here.

Swelling.—The amount of swelling in an inflamed part, depends upon the quantity of *liquor sanguinis* exuded from the vessels. Swelling is greatest in inflammations of soft and elastic organs. It is not of itself a correct criterion of the gravity of the condition, being hardly perceptible in some serious inflammations, and very great in some comparatively trivial cases. Swelling often exists without inflammation, as in cases of dropsy, and in those not uncommon cases of swelling of the dog's foot from an improperly applied bandage round the upper part of the limb. As a rule, the swelling of inflammation is resilient, as, if pressed by the finger, it yields, but immediately the pressure is removed resumes its original form. The swelling caused by non-inflammatory exudations behaves differently, it pits on pressure with the finger like dough—the impression of the finger remaining for some time after pressure is removed. Swelling when it accompanies inflammation of an external organ is seldom dangerous; but when it effects the tongue, nose, or throat, it may cause serious mischief, or even death, by blocking up the passages for air or food.

Redness.—The increased redness of an inflamed part is due to the enlargement of the blood vessels, and consequently the amount of redness depends upon the number of vessels in a part. The changes in color of diseased portions of a dog's body are not very apparent, especially those covered by a dark coat. In all animals, however, it may be noticed on the membranes of the nose, mouth, and eyes. In light-colored dogs the redness of an inflamed skin is very evident, but it must not be thought that all redness is due to inflammation. What is called "red mange," and that more common redness of white-haired dogs, which is simply due to excessive use of strong alkaline soaps, depends upon an enlargement of blood vessels, but not a real inflammatory condition. The vessels are enlarged, but only to the stage we described as active congestion.

Heat.—That the temperature of an inflamed part is raised there is no doubt, but the sensation of heat felt by the patient is quite out of proportion to what really exists. The extra heat is simply due to the extra amount of blood in the part. The blood of an inflamed part is not hotter than that at the heart or in the center of the body. The extremities of an animal being furthest from the center of circulation are always colder than other parts of the body, consequently when inflamed they show a relatively greater amount of increased heat. An inflamed foot or ear gives an impression of increased heat to the touch much greater than a similar inflammation of the trunk.

Pain.—The pain of inflammation depends greatly upon the tension or pressure upon the nerves of the part by swelling. In soft or elastic organs, where the inflammatory swelling is not confined, pain is comparatively slight, as in diseases of the liver, or in some injuries to muscle. In parts where little soft tissue exists, and where bone and ligaments surround it, great pain accompanies even limited inflammatory actions. Examples of this are seen in inflammation of the claws, the ear, and the teeth. Inflammation may exist without pain—*e. g.*, as the result of injury to a paralyzed limb. Pain may exist without inflammation, as in some nervous affections, and in spasm or cramp.

The importance of an inflammation depends upon its extent and degree, but still more upon the kind of structure in which it occurs. It is at all times, and in all places, a destructive process, interfering with the nutrition of the affected tissues, which are only repaired on its cessation. It is not a process of excited action in a part, but of perverted action. Its evils are most apparent in organs endowed with special functions, such functions being always checked, perverted or even entirely arrested. Inflammation of the nose, eye, or ear is accompanied by more or less impairment of the senses of smelling, seeing, or hearing. When the inflammatory process takes place in any of these organs most immediately concerned in the maintenance of life, such as the brain, lungs, or heart, it is always dangerous, owing to the effect upon their functions.

Although the pathologist tells us that the essential conditions of inflammation are always the same—viz., perverted nutrition in a part, the practical surgeon takes cognizance of many variations, if not varieties, of the process, dependent upon the seat of the disease, the stage to which it rises, and the probable results and complications.—*William Hunting in Land and Water.*

WORKING THE DOGS ON WOODCOCK.

I HAVE spent two pleasant days hunting woodcock with one of your correspondents, whose *non de plume* is "Vitus," and we have made remarkable bags for this section. One or two of your correspondents in their replies to "Vitus" stated that if he had had experience in the field and did not refer so much to books, he would know more of the Gordon and their good qualities. I will say this much for the benefit of those correspondents, that if either one of them could travel over our woodcock grounds with him for one day, he would feel perfectly satisfied with his walking and shooting, and with the good actions of his dogs, if not with his opinions on the Gordon. As for his walking, he can tire a mule; he is a good shot, and his dog Echo is the best in this section for snipe, woodcock or partridge. But back to the point. At half past 5 A. M. we started for the swamp, "Vitus" with Echo, and I with my dropper Spot. Reaching the swamp both dogs were cast off, Echo to the left, Spot to the right. Soon I heard "Vitus's" gun. He had flushed a cock and made a clean miss. The bird lit close to me, I flushed, and scored a splendid miss also. The laugh which I had over "Vitus" was now turned. I then passed to the left of V. and Spot made a good point, but before I could call up V., up jumped two birds; I made a right and left, and brought both birds to bag, which were retrieved by Echo.

We then took down a bunch of canes, V. on the right and I on the left. Echo drops on point and V. calls me to come up; I took a good position and told him to flush, which he did. He scored a miss with his right barrel, but brought the bird to bag with the left. We then passed on for the space of about fifty yards when both dogs dropped on point; this was a beautiful sight, Echo a little behind Spot, the two making a perfect picture. V. told me to flush. I did so, and up jumped four birds; I bagged two and V. one and passed on. Down came Echo. V. flushed and I brought the bird to bag. About twenty yards further; and down again came Echo. V. flushed and I bagged again. This gave me six to his two, which looked as if I were going to have the best of the old man.

We then started for the next run in the swamp. On arriving Spot began to draw; the bird flushed, I fired and missed, and V. bagged. Down came Echo. V. called, but being some distance from him I did not hear him; he came after me, and when we got back to where the dog was on point, we found him at a down charge with his head to one side on the bird; he had stood so long that he had got tired, and had dropped to charge. V. flushed and brought the bird to bag. We passed on and Spot dropped to point, and as the place was open I started to flush without calling V., when up jumped a covey of partridges, of which I bagged one; we did not follow them up, however, as we were bent on woodcock. On swept the dogs; down dropped Spot. I jumped and bagged a cock, and passed on to the next run. These runs are springy sloughs which run from the high land down to the swamp, and with us are the best points for woodcock. Echo dropped to point. V. flushed, and up jumped another covey of partridges; V. bagged two. Echo dropped again; V. flushed and I bagged. Once again Echo drops; V. flushes and I bag.

At the next run we found the birds very wild. There were several parties in the swamp, and though they killed but few, they chased the others so much that they would flush at the approach of a dog, which made it hard work for both man and dog. Still, however, we kept up courage and banged away, determined to make the best bag of the season, which we finally did. I thought at first that I would leave the old man behind, but at the close of the day when we counted our game he had bird for bird, in all twenty-eight woodcock and six partridges. This is considered an extraordinary bag for this section for two guns, ten or twelve being considered excellent.

The second day we started for the same swamp, and, like the first day, I got the better of "Vitus" at the start, but he soon caught up, and in the end was in the lead. This time we bagged twenty-three woodcock, two partridges and a snipe, making in the two days in all fifty-seven woodcock flushed and fifty-one bagged.

The first day two were killed by V. which could not be found, and which must have been caught in the brush, as it was very thick. It seems to me that this was pretty fair shooting, fifty-three out of fifty-seven, especially since "Vitus" has so little experience in the field." Your correspondents and lovers of the Gordon would have us believe that he shoots the most of his birds out of books, but I think he will do in the field.

BALDIA.

SAVANNAH, Ga.

FOREST AND STREAM DOG PICTURES.—We have issued a new series of pictures of winning dogs at field trials. The ready sale which these pictures have had show that sportsmen very generally are anxious to learn something about how these winning dogs look. We cannot all of us visit the trials held at points far distant from our homes, and if we could do this, we should still be unable by looking a few times at a dog to carry away with us a complete and permanent mental picture of the best animals. Any one who has ever tried to form an idea of the appearance of some breed of dog that he has never seen, from a written description, knows that this is something that cannot be done. The books imagine a standard and then describe it, but a man who had never seen the strain spoken of could learn nothing from the description. A picture is first needed. The engravings which we have published include twenty-six of the most celebrated pointers and setters of the day, and they cannot fail to be of value to all interested in these dogs. They are the work of several of our best artists, and they are striking and life-like. In our advertising columns will be found a list of the animals portrayed.

WASHINGTON SHOW.—Cincinnati, O., Feb. 23.—*Editor Forest and Stream:* I am glad to say to you, that the Masonic Hall, in Washington, has been secured for the second annual bench show, to be given on the 18th, 19th, 20th and 21st of March next. Entries close on March 10. The prize lists will be sent out as early as possible, and a number of them mailed to you, so that parties desirous of obtaining them can get them at your office, or by addressing me at Washington, D. C. The show will undoubtedly be a good one, judging from the numerous inquiries I have received, wanting to know if a bench show would be given this year, and as you know every one wants to go to the capital city of the nation, so the bench show will afford the sportsmen and lovers of dogs a good opportunity. The judges so far appointed are Hon. John. S. Wise and Major Taylor, for English setters and pointers; Mr. James Mortimer, for non-sporting dogs; for Gordon and Irish setters, not decided on; for spaniels, beagles and foxhounds, not decided on.—CHAS. LINCOLN, Superintendent.

SHALL ST. LOUIS HAVE A SHOW?—St. Louis, Mo., Feb. 24.—*Editor Forest and Stream:* I want to find out, as far as possible, what the "dog men" think of having us give a grand bench show in St. Louis, in April, say the 15th. The St. Louis Gun Club will give it if sufficiently encouraged by dog owners, to look for a good number of entries. May I ask them, through the medium of this notice, to write to me what they think of it, and what number of entries they will be likely to make if we offer an attractive prize list in cash and specials, and I will announce at once if the show will be given. The shows already announced are Cincinnati, March 4; New Haven, March 12; Washington, March 18; Toronto, March 25; Cleveland, April 4; New York, May 6. I see no reason why we can't slip in with ours between Cleveland and New York, and catch the best dogs in the country, as they are then supposed to be in show form. Gentlemen, let me hear from you at once.—JOHN W. MUNSON (317 Chestnut street).

NEW ENGLAND KENNEL.—There is a movement on foot in this city to organize a New England Kennel Club for the importation and breeding of thoroughbred dogs for sporting and domestic purposes. Several well known gentlemen of this city and vicinity with this purpose in view met at the Parker House on Friday, and after discussing the subject appointed a committee to take the matter under consideration, with instructions to report at a meeting to be announced for some day during the present week at the same hotel. The programme proposed embraces the establishment of a large kennel, something after that of the old Harvard kennel of Cambridge. It appears that during the past few years many of the best strains of breeding dogs have been removed from this section of the country, among them the celebrated Dash and mate, which have gone to the Nesbeth kennels in Iowa.—*Boston Herald, Feb. 24.*

NEW HAVEN SHOW.—*Editor Forest and Stream:* The first thing I noticed on receiving the New Haven Kennel Club's schedule for their first annual, to be held the 12th, 13th and 14th of next March, was the total absence of cash prizes. That is a grave mistake. Medals, with the majority of exhibitors, especially those from afar, do not give the satisfaction that is obtained by giving cash prizes. This system of awards keep away a good many people who otherwise would exhibit. People do not feel like paying $2 to enter their dogs, and, if lucky enough to win first prize, receive nothing but a silver medal. I see that the bull-terriers are well provided for, but the bulldogs do not fare so well; the sexes are not even divided. I am astonished at this, as there have been so many good bulldogs imported this fall.—BULLDOG.

CINCINNATI SHOW.—Cincinnati, O., Feb. 23.—*Editor Forest and Stream:* Messrs. W. B. Shattuc and A. A. Bennett have consented to act as board of arbitration for this show, in case any protests should be made from the judges' decisions. I am requested to state that the judges will be instructed to make due allowance for want of coat and feather, from any cause they may think justifiable.—CHAS. LINCOLN, Superintendent.

TORONTO DOG SHOW.—It is possible that a trial of collies may be held in connection with the Toronto Bench Show, if suitable grounds can be obtained for it. A large number of special prizes will be given in the different classes, among them the Dominion Club offers a $75 cup for best six dogs of any breed, owned and breed in the Dominion; and there will be a $25 cup for best setter in show.

NEW HAVEN BENCH SHOW.—New Haven, Conn.—*Editor Forest and Stream:* Will you be kind enough to announce in this week's issue that classes will be formed for greyhounds and collies, for dogs, bitches, champions and puppies, and also for other breeds where the division is necessary. There will be many specials.—E. S. PORTER, Secretary, N. H. K. C.

SANTA CRUZ, Cal., boasts a litter of eight Gordon setter pups with no ears.

NEWARK DOG THIEVES.—Dog thieves are on the rampage in Newark, as usual. The last case reported is that of a pure liver-colored setter dog. Sam, white spot on chest, white toe on left fore and right hind legs, also white nails on other feet, not noticeable except when dog's feet are washed. Reward for information leading to recovery. All communications will be considered strictly private, by F. Satterthwaite (2 West Park street, Newark, N. J.).

POINTERS AND SETTERS.—Attention is called to the advertisement of pointers and setters for sale by Mr. F. Satterthwaite, published in another column. Mr. Satterthwaite knows what a good dog is, and we presume those he advertises are worth inspecting.

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, or breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Sam, Jr. By Mr. E. G. Babcock, New Britain, Ct., for dark liver, white markings, cocker spaniel, whelped Dec. 6, 1883, by Col. Stubbs out of Diamond.

Fancy. By Mr. E. G. Babcock, New Britain, Ct., for dark liver, white breast, cocker spaniel bitch, whelped Aug. 10, 1883, by Quand out of Piper.

Modesty. By Mr. John W. Munson, St. Louis, Mo., for liver and white pointer bitch, 2 years old, by Croxteth out of Trinket.

Brimstone, Madstone, Touchstone, Luckystone and Clingstone. By the Westminster Kennel Club, for liver and white pointers, one dog and four bitches, whelped Aug. 24, 1883, by Tory out of Moonstone. Imported in utero.

Queen Dido. By Dr. S. H. Greene, Newmarket, N. H., for black spaniel bitch, whelped Dec. 15, 1883, by Obo II. (A.K.R. 432) out of Rubie (A.K.R 734).

Floss II. By Mr. L. C. Andrus, Malone, N. Y., for liver and white cocker spaniel bitch, whelped July 20, 1883, by Handy (Racer—Ruth) out of Nellie Cohern (Sport—Curley).

Vixen. By Mr. F. L. Stebbins, Geneva, N. Y., for liver and white cocker spaniel bitch, whelped April 20, 1883, by Dick (Ringold—Dot) out of Little Flirt (Snip—Frolic).

NAMES CHANGED.

☞ *See instructions at head of this column.*

Jessie to Lady Bub. Black cocker spaniel bitch, whelped March 12, 1880, by imported Bub (A.K.R. 131) out of imported Jennie, owned by Mr. Herman F. Schellhass, Brooklyn, N. Y.

BRED.

☞ *See instructions at head of this column.*

Modesty—Bang. Mr. John W. Munson's (St. Louis, Mo.,) liver and white pointer bitch Modesty to imported Bang (champion Bang—Luna), Jan. 12 and 14.

Polly—Bang Bang. Mr. W. Tallman's bitch Polly (Beaufort———) to the Westminster Kennel Club's pointer Bang Bang, Feb. 15.

Rue—Bang Bang. Mr. Bayard Thayer's bitch Rue (Snapshot—Ruby) to the Westminster Kennel Club's pointer Bang Bang, Feb. 18.

Lotta—Sensation. Mr. A. B Conger's bitch Lotta (Faust—Clarg) to the Westminster Kennel Club's pointer Sensation.

Fly—Croxteth. Mr. Fullerton's pointer bitch Fly to Mr. A. E. Godeffroy's Croxteth, Jan. 15.

Folly—Croxteth. Mr Walker's pointer bitch Folly to Mr. A. E. Godeffroy's Croxteth, Feb. 14.

Daisy—Glencho. Mr. G. Hills's (Hudson, N.Y.) red Irish setter bitch Daisy (Chief—Tilley) to Glencho (Elcho—Noreen), Jan. 31.

Lady Bub—Benedict's Boy. Mr. Herman F. Schellhass's (Brooklyn, N. Y.) black cocker spaniel bitch Lady Bub (A.K.R. —) to his Benedict's Boy (A.K.R. 130), Feb. 10.

WHELPS.

☞ *See instructions at head of this column.*

Lofty. Mr. J. P. Willey's (Salmon Falls, N. H.) cocker spaniel bitch Lofty (A.K.R. 431), Feb. 13, four (one dog), by Obo II. (A.K.R. 432); all black.

SALES.

☞ *See instructions at head of this column.*

Beauchief. Collie dog, whelped April 25, 1883 (Gyp—Buttercup), by Mr. Arthur L. Kelley, Lawrence, Mass., to Miss Ida F. Warren, Leicester, Mass.

Elcho—Meg whelp. Red Irish setter bitch, whelped July 21, 1883, by Elcho (Charlie—Nell) out of Meg (Elcho—Rose), by Mr. Benj. F. Clark, Manchester, N. H., to Mr. Frank Prendergast, Boston, Mass.

Don Juan. White, black and ticked English setter dog, whelped April 16, 1883 (champion Dash III.—Katydid), by Mr. E. H. Fisher, Jr., New Bedford, Mass., to Mr. F. C. Snow, Dover, N. H.

Gem. Mulberry fawn mastiff dog (A.K.R. 12), by Mr. Wm. Wade, Pittsburgh, Pa., to Mr. C. F. Wilson, Palmyra, O.

Jessie. Black cocker spaniel bitch, whelped March 12, 1880, by imported Bub (A.K.R. 131) out of imported Jennie (champion Brush, E.K.C.S.B. 7,371—champion Rhea, E.K.C.S.B. 2,223), by Mr. D. C. Frank, Tremont, N. Y., to Mr. Herman F. Schellhass, Brooklyn, N. Y.

Rose. Red Irish setter bitch, whelped Aug. 22, 1883, by Glencho out of Colleen Bawn (A.K.R. 507), by Mr. Chas. R. Squire, Troy, N. Y., to Mr. John H. Nesbitt, W st Troy, N. Y.

Drouse. Liver and white and liver ticked English pointer dog, whelped Oct. 30, 1883, by Beacher out of Vinnie II. (A.K.R. 466), by Mr. Mr. Charles R. Squire, Troy, N. Y., to Mr. John H. Nesbitt, West Troy, N. Y.

Modesty. Red Irish setter bitch, whelped Sept. 10, 1882, by Scout (Plunket—Carrie) out of Grace (Hill—Donna), by Mr. A. W. Pearson, Huntington, N. Y., to Mr. P. Mahony, Brooklyn, N. Y.

Nellie. Black and tan foxhound bitch, by Mr. D. C. Paulding, White Plains, N. Y., to Mr. C. H. Kent, Monticello, N. Y.

Baronet—Rita Croxteth who. Pointers, whelped Dec. 22, 1883 (champion Baronet—champion Rita Croxteth), by Mr. Geo. S. Tucker, Peterborough, N. H., a liver and white bitch and lemon and white dog to Mr. Geo. L. V. Tyler, West Newton, Mass.

PRESENTATIONS.

☞ *See instructions at head of this column.*

Bessie Case. Black, white and tan setter bitch, by Fritz (Roderick—Norna) out of Duff (Carlowitz—Rose), by Mr. John W. Munson, St. Louis, Mo., to Mr. Geo. A. Castleman, same place.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

F. M. L., Summit Station, O.—1. About March 1. 2. Write to the manufacturers.

R. W. M., Alexandria, Va.—We know nothing of the new English rifle referred to.

B., Toledo, O.—For some hints on care of quail in confinement see editorial columns.

New Subscriber, New Hampshire.—A 12-bore will do for your shooting. See page 86 of this issue.

L. B., Jr., Boston.—For government charts, apply to I. Thaxter & Son, No. 125 State street, in your city.

W. D. D., Ottawa.—For information respecting English hurdle racing, consult some of the horse papers.

J. M. H., Brooklyn.—You can get areca nut of druggists, or send to the firms which advertise it in our columns.

B. H.—For instructions in trapping consult Gibson's "Complete American Trapper," price $1. We can supply it.

Lone Angler.—1. The index to Vol. XXI. will probably be printed next week. 2 The rod is worth the price asked for it.

W. H., New York.—Address of Secretary New Jersey Fish and Game Protective Society is Wm. L. Force, Plainfield, N. J.

Brooklynite.—1. The .20 long will carry further than the .22 short. 2. Clean the gunstock thoroughly, apply sweet oil and rub it briskly.

Hunting Horn.—Have lost your address or would send the issue containing directions how to make a hunting horn. It was the paper of April 19, 1883.

L. L. B., Washington Ter.—Coues's "Fur-Bearing Animals" relates to those of this country; Van Dyke's "Still-Hunter" gives directions for deer hunting in America. Mr. Van Dyke lives in California. Dealers in wild animals are Chas. Reiche & Bro., Chatham street, New York.

C. A. R., Pittsburgh, Pa.—The best material for a canoe deck is mahogany or Spanish cedar ¼in. thick, as it will stand both sun and water without checking.

G. C. B., North Granville, N. Y.—How far will a .32-caliber rifle, using long cartridges, shoot with accuracy? Ans. Excellent work may be relied on at 100 yards.

W. R., Philadelphia.—The charges you name are not excessive. As to difference of recoil, that is something that would be determined only by actual comparative test.

W. F. K., Tioga County, N. Y.—We can send you the digest of New York game laws compiled under direction of the Commissioners of Fisheries. Price twenty-five cents.

W. G. V., Ballardvale, Mass.—1. You can shoot squirrels, rabbits and quail with your 16-bore gun. 2. Dr. Carver is the champion wing-shot of the world, so far as there is any such championship.

N. W., Hudson Centre, N. H.—1. Would parties trapping be responsible for damage done to dogs caught in traps? 2. Is there any difference in the shooting qualities of Damascus, or laminated steel? Ans. 1. No. 2. No.

W. E. M., Massachusetts.—1. We have refused the advertisement of the gun dealers named, because we do not consider them reliable. 2. Minks and muskrats are found on salt marshes as well as on fresh water streams.

W. F., Greece, N. Y.—We have never been able to learn anything thing more about the "anti-bow" machine than was printed in our issue of Oct. 4, 1883. Perhaps that item should have gone among the "Camp-Fire Flickerings."

J. B. D., North Granville, N. Y.—Give me dimensions of a regulation Creedmoor target reduced for a gallery. Ans. Write to Dennison & Co., New York, or to J. S. Conlin, Broadway and Thirty-first street, New York, for sample targets.

S. C., Troy, New York.—For the articles on left-eyed shooting see issues of Sept. 29 and Oct. 6, 1881. As to the use of one eye or two eyes in shooting, there is a wide diversity of opinion. Some of the crack shots shut one eye, others keep both open.

G. H. H., Maine.—There is little difference between the shooting of a 28-inch barrel and that of a 30-inch barrel. The latter will burn a little more powder than the former; and some say that the extra length is of service in aiming, though we have not found it so.

W. E. C., Menlo, Iowa.—There is no special hunter's map of Michigan that we know of. Any standard map will probably answer your purpose. You might find what you want in the numerous railroad guide book maps that are published by the Michigan railroads.

T. L., Philadelphia.—Guns are usually targeted at 30in. circle, 40yds. These targets are easily prepared, or you may obtain them already printed at the gun stores. A modified chokebore will probably give you the best satisfaction on the game and clay-pigeons.

W. N. L., Good Ground, Long Island.—They are netting ducks by the hundreds here. Is there no way to stop it? Ans. Netting ducks is against the law. You may stop it by informing the game protector of your district, Geo. A. Whittaker, Southampton, and calling on him to prosecute the guilty parties.

J. J. T., Mansfield, Ohio.—If you cut the gun off back of the "pocket" it will not shoot so closely as it does now; but you do not state length of barrel, so we cannot advise you. Try varying proportions of powder and shot charges. You may in this way alter the shooting to a satisfactory result.

Buckeye, Ohio.—What is the difference between the muzzle diameter of a 10-gauge full choke and a 12-gauge cylinder bore? Ans. It depends upon the degree and style of choke. If both were cylinder bores, the difference would be that between .775in. for the 10-gauge and .729in. for the 12-gauge, or .046in.

W. A. R., New Haven, Conn.—The Fish Commissioners of Massachusetts are: E. A. Brackett, Winchester; E. H. Lathrop, Springfield, and F. W. Putnam, Cambridge. New Hampshire: G. W. Riddle, Manchester; Luther Hayes, South Milton; E. B. Hodge, Plymouth. Maine: E. M. Stilwell, Bangor; H. O. Stanley, Dixfield. Connecticut: Dr. W. M. Hudson, Hartford; R. G. Pike, Middletown.

Ned, Allegany, N. Y.—1. What is the regular price for mounting deer heads upon black walnut shields? 2. Who publishes a reliable hardware trade journal in New York. Ans. 1. There is no regular price. Much depends on the length of neck and other matters. Eight dollars for a short-necked head and twelve for a long is about the figure. 2. Try the *Iron Age*, David Williams, publisher, Chambers street, New York.

J. H., Guilford, Me.—Dr. Coues's book on the "Fur-Bearing Animals" treats of the natural history of the subject. Gibson's book (mentioned elsewhere in this column) tells how to trap. We know of no book treating specially of fur buying. If you want to keep posted, in fur prices communicate with the commission firms, as Wm. Macnaughtan's Sons, New York, who, we believe, are successors of the great fur millionaire, John Jacob Astor.

Sport, Brooklyn.—1. Bird lime is made as follows: Boil down linseed oil of the best quality until it becomes thick and glutinous. Boil in earthen pot, in open air, for two or three hours, and be sure that the cover of the pot fits tightly, so that the oil will not catch fire. When boiled, set away in tin vessels with tight fitting covers. To use it: Select small, dry sticks, as thick as a straw and eight inches long. Sharpen the edges, smear them with the lime, and fasten the sticks into grooves cut in a stake stuck into the ground. Place a "call bird" as a lure. When the birds alight upon the sticks they pull them out from the main stake, and when flying the wings, coming in contact with the lime, are pinioned to the sides. 2. We will receive two-cent stamps for the dog pictures.

H. F. S., Brooklyn.—For trapping book see answer to B. H. For hunting rifle and its use you cannot do better than to look through the files of the Forest and Stream for hints on target shooting especially, see review of Farrow's book in our issue of March 22, 1883, or buy the book itself ($1). There are a number of good books on the shotgun, adapted to your purpose, among them Bogardus's "Field, Cover and Trap Shooting" ($2). "Wing-Shooting," by "Chipmunk" (50 cents). For a book on camping out we advise you to wait until the publication of "Woodcraft," by our well-known contributor "Nessmuk." It will be ready in about a month. Perhaps the work best adapted to meet your needs is Hallock's "Sportsman's Gazetteer" ($3), which treats of game, guns, rifles, etc.

W. H. A., Canada.—The maximum weights of different members of the deer family are given by Judge Caton as follows: Moose, more than 1,200lbs. Elk, or wapiti deer, exceeding 1,000lbs. Woodland caribou, 400lbs. (probably more, though record of none heavier known to author). Mule deer, 250lbs.; average much lower. Columbia black-tailed deer (rare specimens), 150lbs; average much lower. Common deer (*Cervus virginianus*), largest of which author has authentic record, killed in Michigan, weighed before dressing 246lbs.; "average weight may be set down as not more than one hundred pounds. The guesses of hunters often give much larger weights." Generally larger on Northern than Southern ranges. Mexican deer (which author says is but a variety of *C. virginianus*) is much smaller than his Northern brother. Barren ground caribou, or Arctic reindeer, 150lbs. (average much lower). Acapulco deer (specimens in possession of author), 30 to 40lbs.

Tanner.—For tanning, Mr. Gibson in his "Complete American Trapper" recommends the following: "For tanning with the hair on, the skin should first be cleaned, every particle of loose fat or flesh being removed, and the useless parts cut away. When this is done, it should be soaked for an hour or two in warm water. The following mixture should then be prepared: Take equal parts of borax, saltpetre and sulphate of soda, and with them mix water sufficient to produce the consistency of thin batter. This preparation should be painted thickly on the flesh side of the skin, after which these sides should be doubled together and the pelt left in an airy place. A second mixture should next be prepared. This should consist of two parts sal soda, three parts borax, four parts castile or other hard soap, all to be melted together over a slow fire. At the end of twenty-four hours after the application of the first mixture, the second should be applied in a similar manner, and the fur again left for the same length of time. Next make a mixture equal parts of salt and alum, dissolved in warm water and thickened with coarse flour to the consistency of thin paste. Spread this thickly over the skin and allow it to dry, after which it should be scraped off with the bowl of a spoon. The skin should be tightly stretched during the operation, in order to prevent too great shrinkage. A single application of the last named dressing is generally sufficient for small skins; but a second or third treatment may be resorted to if required, to make the skin soft and pliable, after which it should be finished off with sand-paper and pumice stone. A skin may be thus dressed as soft as velvet, and the alum and salt will set the hair securely."

INFORMATION WANTED.

F. M. P. (of New York) wants to know of desirable quail locality in Virginia, in season.

W. H. R. (of Boston) and five companions wish to go fishing in a yacht in July, two weeks, expenses not to exceed $50 for the entire party; and they want to know where they shall go.

"Lone Angler" wishes to know of a place to spend the spring and summer in the western part of Maine or in New Hampshire, away from the railroads, where the woods are well preserved, with good fly-fishing and fair accommodations.

Rifle and Trap Shooting.

FIXTURES.

First International Clay-Pigeon Tournament, at Chicago, Ill., May 26 to 31. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

ARMY PRACTICE IN 1884.

Lieutenant-General Sheridan is determined that the modern idea of long-range military practice shall be introduced into the regular army, and besides he has given the whole subject of army practice an overhauling, in preparation for the work of 1884. He directs in a recent order that wherever necessary ranges can be obtained, marksmen will be advanced in regular target practice to distances of 800, 900 and 1,000yds., using service rifles and service ammunition.

The grade of sharp shooter is established. To enter this class the following percentages will be required: 88 per cent. at 200, 300 and 600yds. each, and 76 per cent. at 800, 900 and 1,000yds. each. Division and department commanders in their discretion will extend to sharpshooters such privileges as interests of the service will permit.

In view of the greater amount of ammunition now authorized, and the increased skill attained under systematic training in rifle firing, requirements heretofore adopted are raised. Hereafter the best three scores made (each having the required percentage) will determine annual classifications. In calculating the figure of merit all company officers and regimental staff will be included; sharpshooters will each be given a multiplier of 200. Besides those now excluded from consideration, all who desert or are transferred or discharged during the first month, and all who are prevented by sickness from firing during the whole practice season, will also be disregarded. Medical certificates will be required to accompany exceptions claimed on account of sickness.

When supplied, the following insignia will be worn to indicate skill in marksmanship. Marksmen qualifying during the current year will always wear one pair of marksman's buttons. Those qualifying for the second time may wear two pairs. After qualifying three times (not necessarily in consecutive years), a marksman's pin will be worn on the left breast. Those wearing marksman's pins will not wear more than the single pair of marksman's buttons, indicating renewed qualification during the year. A sharpshooter will be indicated by a small bronze cross worn below the opening of the coat collar while he continues to qualify annually in that class. The cross and the pin will be the property of the winners, and they may be worn upon the breast after ceasing to qualify in the corresponding classes. They will be issued and sold according to present regulations concerning marksmen's buttons.

When, through no fault of his own (either through detached service or sickness through the shooting season), a marksman or a sharpshooter has no opportunity to qualify the next succeeding year, he may continue to wear the insignia of his class for another year. Certificates for marksmen and sharpshooters will be supplied by the Adjutant-General of the army, and will be issued from department headquarters, with qualifying scores entered upon them, to those entitled to receive them.

Hereafter, all duly qualified marksmen in the army will be considered eligible for selection to attend annual department competitions; but whenever any marksman has been three times member of a department team or has won any three of the authorized prize medals, he will be announced in general orders from these headquarters as belonging to a distinguished class no longer eligible to compete for these honors without special permission from the commanding general of the army.

Post commanders will send only enlisted men to represent companies at contests for places upon department teams, but department commanders may select (upon recommendations by post commanders) two commissioned officers from each regiment in the commands, to compete. Staff officers may be allowed to enter department competitions in the discretion of department commanders.

At all annual competitions for prizes and places upon teams, distances will remain as heretofore, but the total of the two days' score of the three fired will determine composition of teams. Preliminary practice will not exceed five days for department contests or three days for division and army competitions. Individual skirmish matches will always be held at these meetings, and scores will be carefully recorded and announced. This very important kind of target practice will not be neglected. A medal will be awarded to the skirmisher making the best individual score at each of the annual competitions for department, division and army prizes.

DOMINION RIFLE ASSOCIATION.

Ottawa, Feb. 13.—The annual meeting of the Dominion Rifle Association was held this morning in the Railway Committee room of the House of Commons. There was a large attendance. The annual report of the association was submitted in printed form and accepted as read. This report speaks of the sending to England of the Wimbledon team last year under Lieutenant-Colonel Otter. The Kolapore Cup was lost by the team by eighteen points, the competition having been with the Martini-Henri rifle, to the use of which Canadians were not accustomed. One hundred Martini-Henri rifles has been secured on loan from the Home Government through intervention of Lieutenant Colonel Otter, and would be given out to the Provincial Associations to be used by the members. Among the prizes offered at the last meeting of the association was "The British Challenge Shield," which was presented through the Marquis of Lorne by the auxiliary forces of Great Britain. The changes in the ownership of part of the grounds on which the ranges at Ottawa are make it necessary, in the opinion of the Council, to throw the butt back 100 yards, so that all firing points may be brought within ground leased by the Government.

The question of funds was touched upon, the Council reporting that there there was no certainty of income, and therefore no basis on which can be determined the amount that may be prudently offered in the prize list. The cost of working the annual meeting is about $3,500. The balance of the Government grant over the expenses of the Wimbledon team is only $2,250, and this is all that can be depended upon with any degree of certainty.

In view of these facts the Council feel much anxiety as to the general future of the association, but trust that the Government may be induced to restore the grant to its original sum of $10,000, and thus render possible the continuance of the work in which they are engaged, as they believe, with no slight benefit to the militia force of the country.

Lord Lansdowne, responding to a vote of welcome, said: Mr. President and gentlemen—It is a source of the greatest satisfaction to me to know that your members were anxious that I should succeed to the place in this association which was occupied by my predecessor, Lord Lorne. I regard it as a recognition of the fact that this association is doing a work not only of great material interest from the point of view of the Dominion, but of great imperial importance as well. I wish I could say that I felt that I could bring to the performance of these duties something of Lord Lorne's ability to perform them. Lord Lorne was not only a generous and consistent supporter of the association, he was not only a strenuous advocate of its claims upon all occasions, but he was a practiced and experienced rifleman, thoroughly conversant with all matters of business with which you are concerned, and able to bring to your council a great deal of practical thoughtfulness and sagacity. My own acquaintance with rifle shooting goes back to, I am afraid, a rather distant date. I was one of the school boys who shot in the first Eton eleven at Wimbledon the first year that the prize was given there; and I am ashamed to say that after that my military ardor somewhat evaporated, and will require a good deal of resuscitation now. I am very glad to see, sir, from the report which lies upon the table that I am called to the office of patron at a moment when, upon the whole, the position and prospects of the association are such as to give us cause for congratulation. I believe it is taking more and more hold upon the people of the Dominion, and I have no fear that during my connection with it it will continue to hold its own. But there is one respect, and I think one only, in which, perhaps, the position of the association is not quite so satisfactory as we all of us desire, and that is the paragraph in the report which touches upon the delicate and important question of finances. Now, as to that, we know, of course, that the income of the association is derived partly from private sources and partly from the support which the Dominion Government has thought fit to extend to it. As to those private sources of income, it seems to me that our efforts should be directed mainly to this, to secure for the association from as many quarters as possible not so much a very large measure of support as a constant source of income. (Applause). If we could prevail upon our friends to give us not a very magnificent subvention upon one or two occasions, but to promise us for a term of years such an amount of assistance as will give us something like an assured income, I think we should stand upon a financial basis more solid than that which we occupy at the present time. With regard to the other source of income, namely, that which we derive from the kind assistance of the government, I observe that the report expresses the highest hope that the subvention may be somewhat increased. I can only say this, that the moment being one in which I observe there is in the air a good

deal of mention of what is spoken of as "better terms," if the association is not very extravagant in its proposals under that head we should be very much gratified if it should be within the power of the government to meet those very moderate requirements. (Applause).

The new president, Hon. Mr Kirkpatrick, made the pleasing announcement that his Excellency, the Governor-General, had contributed $500 to the funds of the association. The announcement was received with applause.

The following gentlemen were elected vice-presidents:

For Ottawa, Lieut.-Col. Allen Gilmour, Ottawa; for Quebec, Lieut.-Col. Ouimet, Montreal; New Brunswick, Lieut.-Col. Hon. A. E. Botsford, Sackville; for Nova Scotia, Lieut.-Col. A. K. Mackinlay, Halifax; for Manitoba, Hon. M. A. Girard, Winnipeg; for British Columbia, Hon. W. J. Macdonald, Victoria; for Prince Edward Island; Hon. R. H. Haythorne, Charlottetown.

The election of some members of the council brought the meeting to a close.

The new council met this afternoon at 3 o'clock, and the following members of the staff were appointed: Chairman of the Council, Lieut.-Col. Hon. M. R. Masson, of Terrebonne. Executive Committee of Council: Major Tilton, Lieut.-Cols. Panet, Ross Bacon and White, Ottawa; D. P. Fraser, Montreal; Lieut. Macnachtan, Cobourg; Lieut.-Col. Macdonald, Ottawa; Capt. Mason, Hamilton; Major Blaicklock, Montreal; Lieut.-Col. Worsley, Kingston; Lieut.-Col. Gibson, Hamilton. Capt. Perley, Secretary; Capt. Costin, Ottawa, Treasurer. Finance Committee: Major Tilton, Lieut.-Col. Ross, Ottawa; Capt. Perley.

The council is composed as follows:

Ontario—Col. Gzowski, Major Mason, Lieut.-Col. Macdonald, Lieut. Macnachtan, Lieut.-Col. Otter, Lieut. Gourdeau, Lieut. Col. White, Lieut.-Col. Panet, Lieut.-Col. Williams, Lieut.-Col. Bacon, Lieut.-Col. Vance, Graveley, Lieut.-Col. Gibson, Capt. Casey, and Major Macpherson.

Quebec—Major Blaiklock, Lieut.-Col. D. T. Fraser, Capt. Prevost, Capt. Hood, Capt. Baifour, Lieut.-Col. Masson, Lieut.-Col. McEachern, Major E. Bond, Mr. Hall, M. P., and Lieut.-Col. Worsley.

New Brunswick—Major Tilton, Capt. Perley, Lieut.-Col. Beer, Capt. Toller, Hon. John Boyd, and Josiah Wood, M. P.

Nova Scotia—Maj.-Gen. Laurie, Mr. Stairs, M. P., D. B. Woodworth, M. P., Lieut.-Col. Bradley, Lieut.-Col. Bremner, and W. Macdonald, M. P.

Manitoba—Lieut.-Col. Scott, Hon. Mr. Royal, Lieut.-Col. Macdonald, and A. W. Ross, M. P.

British Columbia—Hon. Mr. Nelson, D. E. C. Baker, M. P., Hon. Dr. McInnis, and Lieut. Col. Ross.

Prince Edward Island—Major Dogherty, Capt. D. Stewart, Capt. Brecken, M. P., and Surgeon Malloch.

RANGE AND GALLERY.

BOSTON, Feb. 22.—Walnut Hill Rifle Range was crowded to-day by devotees of the rifle, all anxious to improve the beautiful weather. While the conditions were particularly pleasant for outdoor sports generally, the riflemen complained of a troublesome wind. A feature of the shoot was the presence of many gentlemen shooting military rifles, and rolling up excellent scores therewith. The best records of the day are appended:

Creedmoor Prize Match.

G F Ellsworth	5555554554—48	W Kirkwood	5454434445—42
A Matthews	5455554555—48	W J Meadows (mil)	4455443451—42
E J Cram	4454555455—46	E Partridge	0445443434—35
J B Thomas	5454555454—46	F R Blake (mil)	2334334444—34
J L Brackett	4544455554—45	F S Hall (mil)	3344432343—33
W Gardner	4544454554—44	E P Dow (mil)	4433242103—29
J L Fowle (mil)	5444554444—43		

Creedmoor Practice Match.

D Kirkwood	4555555555—49	A W Webb	4545554444—44
J B Fellows	4545555454—46	W L Coon	4444444543—40
C B Edwards	4444545545—45	J E Darmoddy (mil)	4443345344—39
H Mortimer	4554544454—45	W H Morton	5533444434—39
F Wallace	5455544454—45	F C Shepard (mil)	4443444443—39
H Cushing	4554555453—45	F W Fowle (mil)	4344454343—38
Samuel Merrill	4545544545—44	R S Winsby (mil)	3444444433—37

Rest Match.

R Reed	10	9	0	10	10	9	8	10	10	9—91
T Everett	9	10	10	9	10	10	10	10	7	9—94
W Gardner	10	9	8	10	8	8	7	10	10	10—90
R Davis	10	8	9	9	10	6	10	8	10	8—88
A Law	7	7	9	10	8	10	9	7	9	10—86
J Hurd	5	8	10	9	9	10	9	10	9	6—86

Combination Match—Decimal Target.

C E Berry	9	5	9	7	9	10	8	8	6	5—76
W Gardner	5	9	8	6	6	7	8	8	8	7—72
A J Look	9	8	7	8	9	8	6	7	5	5—72

Combination Match—Creedmoor Target.

C E Berry	4	5	4	5	5	4	5	5	4	5—46
R Davis	5	4	5	5	4	5	5	4	4	5—46
A J Look	4	4	4	4	5	5	5	5	5	5—44

Victory Medal Match.

C E Berry	10	4	9	5	9	8	6	10	9	6—88
G F Elsworth	10	7	9	10	7	10	4	7	8	6—78
E J Cram	9	6	8	3	4	6	9	10	9	8—77
A J Look	6	8	6	10	9	7	7	6	9	7—75

WORCESTER, Mass., Feb. 22.—There was the regular field day at the Pine Grove Range of the Worcester Rifle Association; by reason of the wind which was had the scores were not as large as on some former occasions. The prize winners and their scores were as follows: The first event was the Creedmoor match, each man had five scores of seven shots with a possible 175.

A C White	32	32	33	34	31—	162
S edman Clark	31	33	32	21	32—158+3=161	
M N Joyce	31	31	29	33	32—155+3=158	
A L Rice	31	31	31	30	30—152+6=158	
J N Freemon	31	30	30	31	30—152+6=158	
C A Allen	29	29	30	31	29—148+3=151	

The next was the American Decimal Match with 5 scores, 9 shots, and a possible 350.

A C White	60	58	56	61	62—	297
C A Allen	58	53	54	64	56—285+10=295	
M N Joyce	59	57	48	50	54—268+10=278	
M Fergusson	43	41	42	36	54—216+15=231	

The third event was the American Decimal Rest Match, with 5 scores, 7 shots, and a possible 350.

J L Thomas	55	61	57	61	64—298	
Jo n Jay	56	52	60	63	65—295	

NEW BEDFORD, Mass., Feb. 22.—In a 200yds. rifle match to-day, between teams of the New Bedford City Guards, Company E, 1st Regiment, and the Cunningham Rifles, of Brockton, Company I, 1st Regiment, the former won by four points. The score stood, in a possible 100:

New Bedford City Guards.		Cunningham Rifles.	
Sergt Greene	58	Sergt Battles	57
Sergt Howland	62	Private Wadsworth	51
Sergt Pope	56	Private Tilton	70
Corp Daniil	49	Private Tribou	53
Private Barnum	62	Private Packard	58
Private Paine	61	Private Winslow	58
Private Jennings	56	Private Potter	58
	404		400

NORRISTOWN, Pa.—Match shot on Washington's Birthday, weather conditions favorable, although a moderate breeze was blowing across the range almost at right angles, and making it very difficult for some of the marksmen to keep on the target. The distance was 100yds. The majority of the marksmen shot lying on their backs, no artificial rest being allowed. A. B. Parker was very unfortunate, his rifle breaking in the first match. E. A. Leopold won first prize in every match, as the following summary will show. Each marksmen fired five shots in each match, and each shot was measured from the center of the bullet hole to the center of the bullseye. The total distance of the five shots being the shooters' string, and the shortest string to win:

First Match.—E. A. Leopold 7.01 inches, J. S. Pennypacker 11.04 inches, Mr. Johnson 23.01 inches.

Second Match.—E. A. Leopold 3.69 inches, J. S. Pennypacker 11.41 inches, Mr. Johnson 18.51 inches.

Third Match.—E. A. Leopold 4.48 inches, J. S. Pennypacker, 10.06 inches.

Fourth Match.—E. A. Leopold 5.06 inches, J. S. Pennypacker, 6.41 inches.

Mr. Leopold used a Maynard Creedmoor rifle, and put 10 out of 20 shots in a four-inch bullseye. Mr. Pennypacker used a Winchester repeating rifle 45-50, with peep and globe sights and spirit level, and was given an allowance of half an inch per shot in the second match, and one inch per shot in the third. Mr. Johnson used a muzzleloader with peep and globe sights and hair trigger, and received an allowance of one inch per shot in the second match, and one and one-half inches per shot in the third match. The shooting of the winner in the second and third matches is said to be the best on record for this style of shooting in this section of the State.

SPRINGFIELD.—The Springfield Rod and Gun Rifle Club went down to Collinsville, Conn., yesterday to shoot the first of a series of team matches with the Canton Club, and came off victors by a score of 495 to 480. The teams consisted of five men each, and the conditions of the match were ten shots each on the Massachusetts target with a possible record of 120. The Canton Club are said to have been surprised to find Assistant Manager Farrow of the Bullard Arms Company pitted against them, not knowing that that remarkable shot had taken up his home in this city. The boys were treated very handsomely by the Collinsville people, being met at the depot by a committee and escorted to the Valley House, where a first-rate dinner was provided for both clubs. The next match will be shot about Fast Day. The score:

The Springfield Club.

M W Bull	7	10	9	12	9	10	10	9	9	10—95
H K Cooley	10	12	10	10	10	11	9	9	11	8—100
J A Wilson	8	10	10	8	12	8	11	9	10	9—95
A L Eames	12	11	10	10	9	5	12	8	11	10—98
W M Farrow	11	11	10	9	12	12	12	10	10	10—107

The Canton Club.

J H Bidwell	7	9	12	8	10	9	10	10	10	9—94
J Lauterstein	10	9	10	8	11	11	11	9	9	8—96
S J Lyon	8	12	8	9	10	12	7	9	11	10—96
J D Andrews	9	9	10	10	9	12	12	11	9	8—99
C B Hull	11	7	9	11	10	9	10	10	9	9—95

Mr. Farrow shot one of the new Bullard repeating rifles. They were very bountifully entertained with a substantial lunch, and a very fine dinner.—MRS. W. MILTON FARROW.

ZETTLER'S GALLERY.—Ten shots per man, possible 120. Capt. Fitz's Side—T. Fitz, 116; A. Lober, 116; D. Miller, 112; H. Oehl, 114; C. Judson, 117; H. Holges, 116; T. C. Noone, 111; total, 802. Capt. Zettler's Side—B. Zettler, 114; M. Dorrier, 117; C. Zettler, 114; J. T. Norris, 108; J. Levy, 114; J. H. Brown, 116; V. Steinbach, 116; total, 799.

Regular shoot. Feb. 19, 12 ring target. 10 shots per man, possible 120: A. Lober, 116; C. Judson, 116; D. Miller, 110; T. C. Noone, 105; M. Dorrier, 117; M. Ensler, 113; P. Fenning, 114; H. Holges, 113; V. Steinbach, 116; C. G. Zettler, 113; B. Zettler, 109; H. Oehl, 114. N. D. Ward, 103; H. Puckhaber, 99.—N. D. WARD, Secretary.

GARDNER, Mass., Feb. 20.—The Brattleboro Rifle Club of Brattleboro, Vt., are expected here soon, when a match will be shot with the Gardner Club at Hackmatack Range. At the last meet at the range the attendance was light. The American decimal target was used; distance, 200yds.; shooting off hand. Out of a possible 100 the following is the score:

G F Ellsworth	9	8	9	10	9	9	9	10	10	9—92
I N Dodge	9	9	10	7	10	9	6	10	9	7—86
George Fordyce	6	9	10	9	9	9	4	9	9	7—84
D I Newman	9	10	7	6	7	7	9	9	9	10—88
S B Hildreth	8	9	9	9	8	7	9	6	6	9—81
W Lewis	9	6	8	7	10	4	10	8	6	5—73

BROOKLYN, Feb. 20.—The following gentlemen were elected officers of the Brooklyn Amateur Rifle Club for the year 1884: President, C. E. Tayntor; Vice-President, M. B. Hull; Secretary, J. S. Case; Captain, G. Joiner.—J. S. CASE, Secretary.

BULL'S HEAD RIFLE CLUB.—Thursday, Feb. 14.—12-ring target, possible 120; M. Dorrler, 117; A. Lober, 117; G. Zimmermann, 113; C. Rein, 113; H. Gunther, 113; H. Kruger, 112; V. Steinbach, 111; H. Hackmann, 106; H. Zubiller, 102; S. Mehrbach, 100; J. F. Campbell, 99; G. Brueck, 93.

Thursday, Feb. 21, 12 ring target, possible 120: C. Rein 118, A. Lober 117, S. Mehrbach 115, G. Zimmermann 115, M. Dorrier 115, J. F. Schroeder 112, J. F. Campbell 111, J. Schneider 111, G. D. Johnson 105, B. Walters 94.

A QUERY AND SOME FACTS.—Milford, Mass., Feb. 11.—I have a Sharps long-range rifle in perfect order and condition and an extra fine shooter, but have no time nor range for practice, and would like to know from some readers of FOREST AND STREAM what effect it will have to take four inches off the end of the barrel. It is now 34 inches long, and I would like it better for general shooting if it was only 30, but dislike to run the risk of spoiling its shooting by cutting it off. Have any readers ever done this with this kind of rifle, and what was the result? While I am writing of rifles let me say a word about bullets. In moulding some .32-caliber Winchester bullets a short time since, I was troubled to get perfect ones, and as an experiment, I melted with the lead a silver ten cent piece in enough lead to make about two hundred balls, and a handsomer lot of bullets I never saw, except nicely swaged ones, and upon testing them for weight I took some twenty five from the lot hap hazard, and the extreme variation was only one grain by very careful testing. I kept the moulds clean and very hot. Let some one else try this and report. I believe these balls will shoot as accurate as swaged ones. At sixty yards, using a Maynard 24-inch barrel, open sights, Winchester .32 caliber shell, 29 grains Laflin & Rand No 6 powder and this bullet, I fired five shots, and four of them broke into the same holes, much to my surprise, as I had little expected it from moulded bullets.—C. A. S.

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

HISTORY OF THE WORCESTER CLUB.

TEN years ago the present month a few of the more prominent and enthusiastic sportsmen of this city began to agitate the formation of a sportsmen's club. The project met with favor from the very outset, and after being discussed informally for a few days as one and another of the intended parties happened to meet, a preliminary meeting was called at the office of one of our business men, whose whole soul was in the scheme. The meeting was largely attended, and was composed of our prominent business men. The veteran sportsman and honored citizen, John Boyden, Esq., was called to the chair, and well do I remember his characteristic speech on that occasion.

He had been in delicate health for a long time, and it was probably the first evening he had spent away from his home in many months. His whole soul seemed fired anew on meeting the large company of his fellow citizens who had come together to talk of the subject that had been the ruling passion of his life. The formation of a club and what should be its principal objects was fully discussed, a committee on constitution and by-laws was chosen, and a liberal amount subscribed by those present to defray the expense of printing, etc. Success was assured from the beginning, and when on the first Wednesday evening of the following month we met and chose officers and adopted our constitution and by-laws, we were able to present a membership roll of gentlemen that no one need feel ashamed to be identified with. We have, and have always had, a large number of members who never shoot a gun either at the trap or in the field. They are prominent business men who feel a local pride in the organization, and who are quite willing to pay their annual dues for the social privileges which the club affords.

As soon as the club was fairly organized we opened the commodious club room, over the First National Bank. It was a well-furnished and attractive room, supplied with all the sportsmen's papers besides other reading matter, was always comfortable and neatly kept, and open day and evening for the use of the members. But somehow it never seemed to take very well, and it proved a very expensive luxury. After keeping it open three or four years it was decided that the money expended could be better enjoyed in some other way, and the room was given up and the furniture sold at auction. Since then the club has held quarterly meetings at the Bay State House.

Ours has always been a live club. While we have never been unmindful of the all important matter of game protection, we have also provided plenty of amusement for the members. When our club was scarcely a month old we held our first field day, using the old gyro pigeon. We purchased several traps and a large stock of the tin birds, but after using them a few times the members grew tired of them, and we were glad to sell our stock at a large discount to a young club in a neighboring town. We had not secured permanent shooting grounds when we made arrangements for our first pigeon-shooting tournament, which was held at Barber's Crossing. This shoot was a grand success and was followed by another, which was held on the Full Moon Trotting Park, and this closed our first year's out-of-door festivities.

As spring opened and we commenced our second year we secured permanent shooting grounds on the Harrington place near Jordan Pond, and erected thereon a club house and pigeon coops at an expense of over three hundred dollars. Here we enjoyed many a pleasant field day till finally compelled by State legislation to cease pigeon shooting.

Next we gave our attention to glass balls, using the old Bogardus ball and straight away trap. Then came the Card rotary which had a long run, but after a while it was considered too easy, and one of our members, Mr. C. B. Holden, invented a trap which came into general use in New England and which I think has never been excelled for glass ball shooting. The members of our club have shot a great many team matches, a large majority of which they have won. The first of these matches was a series of three with the Marlboro Club. The first meeting was in Marlboro, and when the Worcesters walked to the score they had never before seen a ball thrown from a rotary trap. We lost this race but won the next two. Afterward we generally met the Marlboros in a friendly contest once a year as long as that club existed. We challenged the New Haven Gun Club and met them in that city, the match resulting in a tie. The return match was shot in Springfield and won by the Worcesters. When the State Glass Ball Association was formed ours was one of the first clubs to move in the matter. Previous to the last annual tournament the State Association has each year offered two champion badges for glass ball shooting, one for teams of five men, the other for the individual championship, these badges to be held by the winners through the year provided they were able to defend them successfully, each being subject to challenge once a month. The Worcester Club turned in both these badges last year.

The Ligowsky Clay-Pigeon Company forwarded a beautiful badge for the individual championship to be contested for at the last annual tournament, and the association provided a very handsome team badge for the clay-pigeon championship. The Worcesters won the team clay-pigeon badge, and the Ligowsky badge was won by H. W. Eager, of Marlboro, who is a member of the Worcester Club, and who defended his trophy on our grounds. He met five contestants, and finally lost it to Mr. Negus, of Fall River. Our vice-president, Mr. W. S. Perry, went after it recently and brought it home.

Both the team and individual glass-ball badges had been gathered in, and Mr. Perry's victory made the list complete, and for a few days the whole four adorned the show-case of Comrade Shepard, the local dealer in sportsmen's supplies. Last Thursday Mr. Holden lost the individual glass-ball badge to B. Moses, of Springfield, with the close score of 45 to 46 in a fifty-ball race. Mr. Perry is to make an effort to reclaim it on Saturday, March 1, but it would be rather remarkable if the whole four should again be held by one club. Mr. Perry has shot many notable matches for money, both at live birds and glass balls. Among those most worthy of mention are the matches he shot with Mr. W. H. Sheldon, of Providence, R. I. The first was for $100 a side, 100 birds per man, and was shot in Providence in a pouring rain storm, and won by Sheldon. Mr. Perry felt his defeat keenly, and offered to make another match for $250 a side, to be shot on neutral grounds. His proposition was accepted, and the match was shot on the grounds of the Tremont Club at Readville. A large and interested audience was present, among whom were Captain Bogardus and Ira Paine. It proved to be a great race and created much comment in shooting circles. Perry won the match with the wonderful score of 95, tieing Captain Bogardus for the best record under same rules. Sheldon also shot a splendid race, scoring 87 birds. It was claimed by Sheldon's friends that Perry had out-shot himself, and had no licence to beat Sheldon, and announced themselves ready to back their man for another race for the same amount. The proposition was accepted and the third match was shot in Providence and won by Perry by one bird.

About five years ago we were compelled to look for new shooting grounds. We secured a beautiful spot near Coal Mine Brook, on the shores of Lake Quinsigamond. Our old club house was moved to the new grounds, and for a time did good service, but the club began to feel the need of better quarters, and the past season a large two-story house has been erected, with dining hall and all the appointments necessary for comfort. I think it is safe to say we now have as good accommodations for trap-shooting as any club in New England.

Our next annual meeting, which is also our tenth anniversary, occurs on the first Wednesday in March. Just what the club will do to celebrate the event has not been decided. That the uninterrupted harmony and good feeling which has prevailed throughout these entire ten years may be ours in the years to come is the sincere wish of E. SPRAGUE KNOWLES.

WORCESTER, Mass., Feb. 14, 1884.

[The above sketch of the Worcester Club is very entertaining reading. We should be pleased to publish like sketches of the history of other clubs].

A NATIONAL ASSOCIATION.

Editor Forest and Stream:

A national association; such as it is proposed to organize at Chicago next May, might establish a uniform code of rules to govern all contests of shooting throughout the country, and it might institute a series of annual tournaments.

I heartily approve of the formation of such an association, and deem it advisable and necessary, not only for the objects above named, but for many others which will naturally come before it. Certainly the yearly fixing of the date and place of the annual tournament, and the care of all arrangements for the same, would be a part of its duties.

Also, I should wish that it be endowed with a great prerogative, to wit, that it be constituted a board of appeal and final arbitration concerning all matters of dispute between clubs (who sign its articles), as also between such clubs and any member thereof who may deem himself to have suffered wrong by any decision of said club.

It would also be within the province of such an association to provide a badge for the Flight Championship of America, and make regulations for the winning and holding of the same, thereby giving us a championship with a paternity.

All these things would properly come before the meetings of such a body, and I feel safe in promising that our little club from Exeter, N. H., will be represented there, and will cheerfully sign and abide by all rules and regulations which the wisdom of the convention shall declare just and equal.

J. WILLIAMS (of Exeter Sportsman's Club).

EXETER, New Hampshire.

THE CLAY-PIGEON TOURNAMENT.

Editor Forest and Stream:

The following clubs have thus far remitted $1.00 initial entrance fee, Championship match, First International Clay-Pigeon Tournament, May 20, 1884. The numbers indicate the respective order of choice as to time in being called to the score; the list will be published periodically as additional entries are made:

1. Aug. 17, 1883, Tallahassee Gun Club, Tallahassee, Fla.
2. Sept. 4, 1883, Cincinnati Independent Shooting Club, Cincinnati.
3. Oct. 19, 1883, Vicksburg Gun Club, Vicksburg, Miss.
4. Nov. 3, 1883, Exeter Sportsmen's Club, Exeter, N. H.
5. Dec. 15, 1883, Lincoln Sportsmen's Club, Lincoln, Neb.
6. Dec. 26, 1883, Niagara Gun Club, Niagara Falls, N. Y.
7. Dec. 26, 1883, Narragansett Gun Club, Providence, R. I.
8. Jan. 13, 1884, Oshkosh Shooting Club, Oshkosh, Wis.
9. Jan. 14, 1884, Medfield Sportsmen's Club, Medfield, Mass.
10. Jan. 30, 1884, Cleveland Gun Club, Cleveland, O.
11. Feb. ', 1884, Worcester Sportsmen's Club, Worcester, Mass.
12. Feb. 13, 1884, Capital City Gun Club, Washington, D. C.
13. Feb. 15, 1884, Peoria Shooting Club, Peoria, Ill.

CINCINNATI, O., Feb. 23. LIGOWSKY C.P. Co.

SIZE OF SHOT FOR CLAY-PIGEONS.—Waterloo, Iowa.—*Editor Forest and Stream:* In a recent issue, you requested some of your readers to give their experience with clay-pigeons, with a view of determining the size of shot most suitable for the demolition of those targets. I had used No. 9 soft shot in shooting glass balls with excellent results; and when I was invited to attend my first clay-pigeon match last spring, having never seen a clay bird and supposing them no harder to break than a ball, I loaded my shells with No. 9. I found the bird much easier to cover than I expected, but the "tailers" and a number that went quartering away failed to respond; and at last I went out and picked up several and invariably found shot marks on them. I was using a full choke 12-bore gun, 4 drams power, and 1¼ ounces shot. I immediately made up my mind that No. 9 shot was not the thing, and at the next match used No. 8 soft, and although I was more successful than in the previous match, I picked up several missed birds with lead on them. I next tried No. 7 chilled shot, and it "simply paralyzed" them. I have used that size since, and consider it the proper one, but if a man's gun makes a better pattern with No. 6, I would advise him to use that size. I have seen clays with the marks of as high as seven pellets on them, No. 8 shot, that were not even chipped. A clay-pigeon looks like a good-sized target, but the flat surface presented is very small, and when it is skimming through the air, swiftly rotating, unless the pellet hits it squarely, it is very apt to glance off, and glancing pellets won't do the business. I don't believe any better substitute for the live bird exists than the clay pigeon, and practice with them better fits the sportsman for the field.—J. C. H.

NEWTON, Mass.—On the grounds of the Newton Rifle Association at Newtonville Friday, there was a clay-pigeon match between teams of three from the Newton and Wellesley clubs, which was won by the former by one bird. There was also a free-to-all match, three prizes being offered, in which the following scores were made:

W O Edmands	1110111—6	1011111—6	1111111—7—19
M L Pratt	1111011—6	1110111—6	1011111—6—18
E B Towne, Jr	1011111—6	1111000—5	0110111—5—16
Geo Linder	1111011—6	1101101—5	0101111—5—16
J E Hills	1100100—3	1011001—4	1111111—7—14
Dwight Boyden	0110101—4	1110001—4	0101111—5—13
D S Short	1001110—4	0101001—4	0101101—4—12
G L Bullens	0011100—3	0100101—3	0110011—4—10
E B Hitchcock	0010110—3	1110110—5	0001100—2—10

NEW BEDFORD, Mass., Feb 22.—The New Bedford Gun Club shot to-day for the Pierce medal, 10 balls and 10 pigeons each. The score: Andrew Butts 16, Herbert P. Bryant 15, Philip D. Slocum 15, John B. Hussey 13, George R. Stetson 8. Butts has won six times in the last seven contests for the medal, which is to be given to the member of the club winning it the most times in one year.

WORCESTER, Mass., Feb. 21.—To-day was the regular field day of the Worcester Sportsmen's Club, at Coal Mine Brook range. Among those present were D. A. Dickey, J. Nichols and J. C. Field, of Boston; G. G. Tidsbury, J. H. Cole and J. Fluff, of Ashland; C. H. DeRochmont, of Newburyport; B. Gardner, of Albany, N. Y., and John E. Long, Detroit, Mich. The first event was a challenge match at clay pigeons, for the individual badge of the Massachusetts Association.

held by W. S. Perry, of this city, his opponent was D. A. Dickey, of Boston. The judges were C. D. DeRochmont, of Boston, and Major L. G. White, of Worcester, with G. G. Tidsbury, of Ashland, as referee. Each man shot at 50 pigeons, by the rules of the Massachusetts Association, in strings of five each. The following is the score:

Perry.....1111111111111111111101111111111111111111111—45
Dickey.....1111010001001111111101100000011111101101011001—31

After a lunch there was shooting by members and visitors, but no records were given, although there were ten events, shooting for sweepstakes.

MICHIGAN GUN CLUB.—Detroit, Feb. 23.—The recently organized Michigan Gun Club and Game Protective Society had their first regular trap shoot upon Washington's Birthday—Feb. 22. The weather was most disagreeable. A snowstorm raged during the afternoon, and the wind blew fiercely. Notwithstanding the unfortunate weather a large number participated in the shoot, and it would seem that trap-shooting in Detroit will soon, as of yore, become popular. The scores would have been, under a different condition of the elements, far better:

Thomas Wood's Side.

	Glass Balls.	Clay-Pigeons.	Gless Balls.	Double Clay-Pig'ns.
Thos Wood	0 1 0 1 1—3	1 1 0 1 1—4	0 0 1 1 0—2	11 00 11—4
W Schweikart	1 0 1 1 1—4	1 1 1 0 0—3	1 0 1 1 1—4	00 00 00—0
E A Davis	0 1 1 1 1—4	1 0 1 1 1—4	0 1 1 1 1—4	01 00 10—2
H S Worcester	0 1 0 1 1—3	1 1 1 0 1—4	0 0 0 1 1—2	01 11 10—4
Liman Blakely	1 0 0 0 0—1	0 1 0 1 0—2	0 1 0 1 0—2	10 00 11—3
A O S Havens	0 1 0 1 0—2	1 0 1 0 0—2	0 1 0 0 0—1	11 11 02—6
Geo Larkins	0 0 1 1 1—3	0 1 0 0 0—1	1 1 1 1 0—4	11 01 10—4
LH Hilsendegen	0 0 0 0 0—0	0 0 1 0 1—2	1 0 0 1 1—3	10 10 01—3
D Robinet	0 1 1 0 0—2	0 0 1 1 1—3	1 1 0 0 0—2	00 01 11—3
J Jardine	0 0 0 1 0—1	0 0 1 0 0—1	1 1 1 1 1—5	11 11 12—7
	23	26	29	36

W. H. Chudleigh's Side.

W H Chudleigh	1 1 1 1 0—4	1 0 1 1 1—4	0 1 0 1 0—2	10 11 00—3
Jas Winters	1 0 1 0 1—3	1 1 0 1 1—4	1 1 1 0 0—3	11 00 10—3
L A Wilcox	1 0 0 0 1—2	0 0 0 0 0—0	0 0 0 0 0—0	00 00 10—1
J E Patterson	1 1 0 0 1—3	0 1 1 0 1—3	0 0 0 1 1—2	11 01 11—5
Dr D G Stuart	1 0 1 0 1—3	1 1 1 1 1—5	0 1 1 1 1—4	01 00 11—3
C M Havens	1 0 0 0 1—2	0 0 0 0 1—1	0 0 0 0 0—0	01 00 01—2
John Wansch	1 1 0 0 0—2	0 1 0 0 1—2	1 1 0 0 1—3	00 01 11—3
I A Reaume	1 1 0 1 0—3	0 0 0 0 1—1	0 0 0 1 1—2	01 11 01—4
G Hilsendegen	0 0 1 0 0—1	0 0 1 1 1—3	0 1 1 0 0—2	11 01 10—4
W C Donaldson	1 1 1 1 1—5	0 1 1 1 0—3	1 1 1 1 1—5	00 11 10—3
	27	26	22	35

DELTA.

PROVIDENCE, Feb. 21.—At the regular weekly contest of the Narragansett Gun Club, the following scores were made:

Club Shoot, 10 pair Clay-Pigeons. 15yds. rise.

G W Cary	10	10	11	10	11	11	11	10	11	11—16
L M Eddy	10	10	11	10	11	11	11	10	11	11—16
E W Tinker	10	10	11	11	11	10	10	11	11	11—15
H S Palmer	11	01	10	10	11	01	11	11	11	10—14
C M Potter	10	11	10	00	00	11	01	01	10	10—10
W Campbell	10	01	10	10	11	11	00	00	10	01—10
G T Anthony	00	10	10	11	10	10	01	10	10	10—10
J F Hartwell	01	00	11	01	00	10	01	00	00	01— 7
C C Gray	10	01	00	00	00	10	00	10	00	01— 5

Ties—Cary, 10 11—3; Eddy, 00 01—1.

State badge match, 25 singles, 15yds. rise; five traps, 5yds. apart, fourth notch.

E W Tinker	1101111111111111111111110—23
G W Cary	1111111111111111111111100—23
H L Palmer	0011011111111111111111111—22
E S Luther	1011011111011111111110111—21
W H Sheldon	1100111101111111111101110—20
C F Baldwin	1011011111111011110010111—18
G T Anthony	1011111111010101111101100—18
C C Gray	1000111101111001011111111—18
W Campbell	1111101111111111101010—18
C M Sheldon	1111011100110101111100111—17
L M Eddy	0101100111001110111111011—17
B F George	0011110010011010101001100—12
C B Potter	1100100101011101100001000—11
F Curtis	1000010111000010010000101— 9

Tie, Tinker 11111, Cary 11101. Mr. Tinker wins.

St. Valentine's Day was observed in a fitting manner at the grounds of the Narragansett Gun Club, there being three events—first, the club badge match at pairs of doubles (clay-pigeons); second, a postponed match for the Ligowsky State badge, and the third, the regular weekly shoot for the last named badge, the two last shoots being at twenty-five single clay-pigeons from five traps. The weather was cloudy and dark, with a heavy wind, and the scores as a consequence rather below the average. The following is the score:

Club Badge Match.

E W Tinker	11	00	11	10	10	01	10	01	01	11—12
C C Gray	00	10	00	10	00	00	00	01	01	00— 5
L M Eddy	10	01	11	10	00	10	11	11	11	11—14
G T Anthony	01	11	10	10	01	11	11	01	10	10—13
C B Potter	00	00	10	00	11	11	10	10	10	10— 8
E S Luther	10	11	10	01	10	01	10	00	01	11—11

L. M. Eddy won badge first time.

Ligowsky State Badge.

E W Tinker	1001011111010011111111111—19
W H Sheldon	1000111100010111111 w
C B Potter	0011101011010101111111001—16
E S Luther	1001011101100011101 w
Mathewson	0011001101110011010101101—14
E Pratt	1001100000010011 w

E. W. Tinker won State badge.

Ligowsky State Badge (postponed match.)

G T Anthony	1111111111011111101000111—20
E W Tinker	1111011100111111111111111—22
W H Sheldon	11111110001w
L M Eddy	1001101111111100101111110—18
C B Potter	1010110111001111111011111—19
E S Luther	1011110111010111111111111—22
C C Gray	0000101000001010010300011l— 8
Mathewson	0101011101110010100111111—16

Tie—Tinker, 10100; Luther, 10000. E. W. Tinker wins badge for fourth time.—W. H. S.

EAST PROVIDENCE, R. I., Feb. 19.—On Tuesday there was quite a company at the grounds of the Watchemoket Gun Club, Riverside being well represented, and quite a delegation being also present from the Narragansett Gun Club. The day, though cloudy, was quite favorable for shooting. For the clay-pigeon silver cup the following was the score, best out of twenty: ten single rises and five doubles; singles, 15yds. rise; doubles, 12yds.:

E W Tinker	1	0	1	1	1	1	1	1	1	1	1	0	1	1	0—16
Isaiah Barney	1	1	1	0	1	1	0	0	1	1	0	1	1	0	1—16
E S Luther	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1—17
L S Winchester	0	0	1	1	1	0	0	0	1	1	withdrawn.				
Smith Shaw	1	0	1	1	1	1	1	1	1	1	withdrawn.				
John Case	0	0	0	1	1	withdrawn.									

The temporary possession of the cup was awarded to E. S. Luther. For the glass ball cup the following was the score, best out of twenty; 18yds. rise, from a Holden rotary trap:

George Barney	1	0	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1—17
E S Luther	0	1	withdrawn.																	
Isaiah Barney	0	0	1	1	0	0	0	1	1	0	1	0	1	1	1	0	1	0	1	0—10
L S Winchester	1	0	0	1	1	1	1	0	1	0	withdrawn.									
Smith Shaw	1	0	1	0	1	1	0	0	0	0	withdrawn.									
John Case	0	1	0	0	1	withdrawn.														

The cup was awarded to George Barney for the second time.

MALDEN GUN CLUB SHOOT.—On Feb. 23 several members met at Wellington to contest for the first and second class solid gold medals for the fourth time. The rain storm during the shoot was very heavy, but nothing daunted, the clay-pigeon annihilators peppered the featherless birds as well as they were able in so inclement weather:

First Class.

T C Field	1110110111101110111—16
J Buffum	1111010000100101110—13
F Loring	1010111110010010110—12

Second Class.

A F Adams	0111101101101111001—14
J Nicholls	0111100111101001110—13
E J Brown	0111001010101011010—10

There are twelve contests for the Club's medals, which begun in January and end in June. The regular badge days are the second and fourth Saturdays of each month, showing that four contests have already taken place and will run through the ensuing months in *seriatim* until the fourth Saturday in June, when the fortunate Nimrods who are then declared winners the greatest number of times can proudly wear them as their own *ad captandum*.

Those who have already won in the contests for the first-class medal are: T. C. Field 2, J. Buffum 1, F. Loring 1. Second class: A. F. Adams 3, E. J. Brown 1. After the contests, and in the pouring rain, the shooters began to merrily bang away at the motherless birds, as they were gracefully propelled from Ligowsky's admirable trap, like a beautiful and festive quail as she swiftly cleaves the air, and then suddenly drops on *terra firma* to hide from the gunner's luckless aim, crying out to her mates "more wet! more wet!" After a comparatively enjoyable time in wet clothes the sportsmen took train for home, to meet again on Malden Gun Club's spacious grounds the next tournament day, March 1, when it is expected that a goodly number of clay-pigeon slayers will be present to enjoy the interesting programme of events.—T. C. F.

LEATHERSTOCKING CLUB.—Oswego, N. Y.—At a recent glass ball shoot on the fort ground, the boys had a pleasant time. Some fine scores were made. Mr. Ed. Plank walked to the front in good shape, and accomplished the difficult feat of smashing 28 balls straight (thrown from a Card revolving trap) with his new 12-gauge gun. The members of our Leatherstocking Club are wide awake this season, and the prospects are that they will make it interesting for the glass balls and pigeons.—DAN.

BRIDGEPORT, Feb. 14.—Scores of second shoot for champion clay-pigeon badge of Connecticut, shot at Bridgeport, Feb. 13, in a heavy fog. Some of the time we could not see the trapper. Next shoot takes place at Wallingford, March 12, as they won this time:

Bridgeport.

David Smith	1110101010101010100110011—16
E Laugdon	1111111110100011101101101—18
R C Toucey	1001011111111111011111011—20
H Nichols	1101110101110011111101111—19—73

Wallingford.

J B Brogden	1111111011110111001101101—19
A J Goodrich	0111111011111101111010111—21
J A Hall	1100111110011101111010110—18
A Ives	0111000111111011110101111—18—76

Meriden.

G A Strong	1010011001100111101110011—14
I L Baker	0111111011100010111111111—19
E Birdsey	1110011101101101011111100—15
J F Ives	1111011010111111001001O—17—65

New Haven.

E A Polsom	1111111011111111111111111—24
R T Smith	1010001000110111011100100—12
T J Beers	0111011110111110000001111—16
Frank Smith	0110011101010110110111110—16—68

Winsted.

V A Blakeslee	1111100110111100011111111—19
I Ferguson	1100101111011101011111101—19
E Peck	0111011101110100111011000—15
A Roberts	1111110100011101100010101—15—68

BOSTON GUN CLUB—Third Tournament at Clay Pigeons, Feb. 20.—Weather conditions of the most unfavorable kind, and prevented the meeting being so well attended as previous tournaments. The third tournament at Wellington, under the auspices of the Boston Gun Club, was held yesterday. Representatives were present from the Brockton, Exeter, Newburyport, Massachusetts, Middlesex, Worcester and Long Island gun clubs, and the shooting, considering the weather conditions, was good. The following are the results:

First sweep (7 clay pigeons, 18yds. rise)—D. Kirkwood won first, C. Henry second, G. W. Crouch and C. H. Gerrish, even, third.

Second sweep—D. Kirkwood and C. Henry first, Gerrish and Crouch second, Allen third.

Third sweep—Henry and Kirkwood first, Crouch second.

Fourth sweep—Henry and Gerrish first, Kirkwood second.

Fifth sweep—(only straight scores counting)—Gerrish took the pot.

Sixth sweep—Gerrish and Henry first, Kirkwood second, Allen third.

Seventh sweep—Henry and Kirkwood first, Gerrish and Emerson second, Sampson third.

Eighth sweep—Crouch first, Gerrish second, Kirkwood third.

Ninth sweep (three pair double birds, 15yds. rise)—Henry first, Gerrish and Emerson second, Allen third.

Tenth sweep (same conditions)—Henry first, Gerrish and Allen second, Emerson third.

Eleventh sweep (5 single birds, 18yds. rise)—Henry and Sampson first, Kirkwood second, Gerrish third.

Twelfth sweep—Sampson and Emerson first, Kirkwood second, Gerrish and Henry third.

Thirteenth sweep—L. E. Johnson first, Gerrish and Emerson second, Kirkwood third.

Fourteenth sweep—Henry, Gerrish and Kirkwood first, Sampson and Emerson second, Johnson and Crouch third.

Fifteenth sweep (5 single birds, 5 traps, 18yds. rise)—Gerrish and Johnson first, Emerson second, Henry third.

Sixteenth sweep—Gerrish first, Sampson and Johnson second, Henry and Crouch third.

Seventeenth sweep (5 single birds, same rise)—Emerson and Gerrish first, Chambers second, Henry third.

Eighteenth sweep—Gerrish, Kirkwood and Henry first, Sampson and Evans second, Nichols and Emerson third.

Nineteenth sweep—Emerson and Henry first, Gerrish and Sampson second, Nichols and Evans third.

Twentieth sweep—Kirkwood first, Sampson and Henry second, Nichols third.

Twenty-first sweep (miss and out, 21 yards rise)—Gerrish and Emerson divided.

Twenty second sweep (same)—Sampson won.

KNOXVILLE GUN CLUB.—For club medal at 15 clay-pigeons, 18yds. rise, fourth notch:

C C Hebbard	1101111111111110—13	Mead	0100001100111110— 7
A H Hebbard	1101011111111101—12	Ross	0001010100111100— 7
Armstrong	1111111010001111—11	Slocum	1010101000101000— 7
Dow	1100011111110010— 9	Wood	1000101001110000— 6
Eldridge	1101000111011110— 9	Kohlhase	0000000111011110— 6
Jenkins	1111001010101010— 9	Misser	1010100000000000— 3
Worsham	1100111010010000— 7		

Election of officers—President, M. G. McClung; Vice-President, S. B. Dow; Secretary and Treasurer, Chas. C. Hebbard. Executive Committee: J. C. Duncan, S. B. Dow, F. W. Armstrong.

Yachting.

FIXTURES.

May 24.—Oswego Y. C., Opening Cruise.
May 24.—Boston Y. C., Opening Cruise.
May 30.—Knickerbocker Y. C., Spring Matches.
May 31.—Boston Y.C., First Match, Connor and Commodore's cups.
June 10.—Atlantic Y. C., Annual Match.
June 12.—New York Y. C., Annual Matches.
June 14.—Hull Y. C., Club Meet.
June 16.—East River Y. C., Annual Matches.
June 28.—Boston Y. C., Ladies' Day.
July 12.—Hull Y. C., Club Meet.
July 12.—Boston Y. C., Second Club Match.
Aug. 9.—Hull Y. C., Club Meet.
Aug. 9.—Boston Y. C., Open Matches, all clubs.
Aug. 23.—Boston Y. C., Third Club Match.
Sept. 13.—Hull Y. C., Club Meet.
Sept. 13.—Boston Y. C., Second Ladies' Day.

THE ENDLESS TOPIC.

Editor Forest and Stream:

I notice in your last edition a letter from "Guest" in relation to the controversy upon the merits of Fortuna vs. Montauk. I was also a guest aboard Montauk in the Goelet cup race, and I wish also to correct a remark of yours which follows "Guest's" communication. You say that the wind shifted during the run in, thus favoring the windward boats, and compelling those to leeward to "pinch." That is a mistake. The wind shifted but once during the entire race and that was within fifteen minutes after the start, from that time it blew strong and steady throughout the day, never varying even half a point. The Montauk's superior position at the finish was due, in a measure, to the stretch she made to windward after rounding the Sow and Pigs Lightship, but it was equally due to the fact that she held on to proper sails only and did not attempt to carry, as Fortuna did, a small maintopmast staysail; it was also due to her superior pointing ability, which is easily seen when it is remembered that about midway, she passed to leeward of the Tidal Wave, and afterward widely winded her, although the Tidal Wave had been fully a mile further up in leaving the vicinity of the outer mark. To sum up that race on the facts, the Montauk beat the Fortuna on even sailing by minutes and 30 seconds on the thrash to windward, and had they been compelled to tack, would have beaten her more.

In regard to sailing "on edge," I wish also to say that the Montauk made, in my opinion, much the best weather of the two; that Fortuna inclined fully two degrees the most and pitched heavily many times, while Montauk was dry as a bone from the foremast aft, the entire day. This can be proven by five well-known yachtsmen, whom I will name if you desire it.

Again, you speak of Montauk's getting "near the capsizing point" vaguely. I don't know when she ever put her scuppers under, and I sailed on her, or in company all last season. The day that Grayling capsized Montauk let sheets fly, simply as a precautionary measure, not from any necessity, as her deck was not wet at any time.

While I am on the subject, I should like to say something on the question of keels vs. boards. Since the first appearance of cutters in this country, the above question has been discussed in every paper, the opinions of a large number of prominent yachtsmen quoted, and yet no satisfactory solution of the problem has been reached even in theory. This latter fact seems to be accountable to the very marked prejudices which have biassed the minds quoted. All have been either pronounced cutter or sloop men, and consequently entirely unable to see anything but the most apparent demerits of the antagonistic craft, and the very obvious merits of their own. I am a marine artist, and in my profession have had to do about equally with both types. I have studied both with equal closeness. I have painted the Bedouin for Commodore Rogers, the Madge for Mr. Loew, and others too numerous to mention here. My interests lie with both classes. I have witnessed all the races sailed in these waters during the past fourteen years, and have narrowly noted the results. I have no bias, no prejudices, and am disposed to speak impartially.

The question as to which is the superior type involves many other issues, and cannot be answered in a breath. Cutter men have spent large sums on their boats, and fitted them with every requisite. In all their races the cutters have shown immense superiority in equipment. Bedouin for instance has two forestaysails, two or three jibs, and at least four jibtopsails. No sloop has more than one of the two first named and never more than two of the last; at least that is the rule, and exceptions are very rare. Bedouin, in addition to her working gafftopsail has a small and a large sprittopsail; the former can be used over the working topsail to advantage on the wind. No sloop has anything like the sort. In a light breeze to windward the cutters can therefore set nearly one-third more sail than the sloops, and every inch of it can be trimmed flat, and made to draw. Their balloon forestaysails, No. 1 jibtopsails, and smaller sprittopsails are an immense advantage at such a time. The unwieldy club topsails or bulky jibtopsails of the sloops are almost back sails in comparison; hence the defeat of Gracie last fall in two races out of three. The sloops must be made to realize all this, and realizing, remedy it by equal expenditure and equipment. Again, the cutters that we have seen here have been about the best that could be built of that type; not so their opponents. We really have but three or four first-class sloops, and they are so in size only.

The Gracie's model is full of faults. Her bows flare so that a heavy swell sets her to leeward every time it hits; her sheer is so great and her stern so low that she carries tons of water on deck in a twelve knot breeze, retarding her progress materially. Fanny is so shallow and so immensely oversparred that a cap full of wind knocks her down to her scuppers. Mischief, ditto, and yet the cutters have not won the greater number of races; but they certainly will, if sloop men do not bestir themselves and build something in which the above noted obvious faults are remedied; and here lies the conclusion of the whole matter to the best of my judgment: A sloop 80ft. long by 20ft. beam, drawing not less than 5ft. of water without her board; having no flaring bows, and very little sheer; with strong bilge below and full equipment of sail aloft, would successfully overthrow every objection raised by cutter men, and fill every want known to their opponents. She would be deep enough and broad enough to carry a heavy racing rig in any kind of weather, and yet could anchor within a reasonable distance off shore in any of our yacht-frequented harbors. She could sail without any other pilot than a competent sailing master. The item of expense in ballasting would be no greater than the average sloop. She would require no awkward cabin house, but like the cutters, be flush-decked and much more roomy. Easy in heavy weather, owing to the depth and beam, fast in light airs owing to lack of weight, she would whip any cutter or sloop, now afloat, over either of the New York Yacht Club's courses, nine times out of ten.

F. BASSFORD.

No. 55 CONCORD STREET, Brooklyn.

[Mr. Bassford is very sanguine. He is very much in error in commending light weight for light airs. Experience has settled beyond any disputing the superior value of weight in light winds, providing the weight is put in proper form and not in a tub. Beyond this Mr. Bassford's conclusions are correct enough. They strike us in this way. To make a sloop a good sloop she should be turned into a cutter. She should have only four beams like the great majority of cutters. She should have the depth and rig and sheer and straight side of a cutter. But in place of a beneficial keel with low weight, Mr. Bassford would adhere to a small centerboard. It would speedily be discovered that low weights on the keel would make an abler boat, whereupon the board would disappear and an out and out cutter of tolerable beam would be the end of the story. To that we are now fast driving in practice. Still further on it would be found that a little more weight, that is displacement, is still a little better in light airs and in a seaway, and to add that weight without making a tub, the four beams would be cut down to four and a half, and the increase in displacement put in depth. In other words, Mr. Bassford would land right aboard another Bedouin, and it seems as though this might be done at once as go through all the steps over again which other people have already been through and which have culminated in the modern cutter. As it is, our correspondent proposes to go about nine-tenths of the whole thing at a bound, and the other tenth may be left to take care of itself, as the subject has been thrashed too bare to enter upon further repetition of what has been so often and extensively discussed in these columns. It is easy to find fault with the Gracie, now that she has been beaten by a cutter, and it is easy to build faster sloops on paper. But it is a very different thing to do it in fact. The Gracie always has been, and for the present still is, the queen of the fleet in America, subject to the Bedouin's permission. The latter holds the Bennett champion cup for single-stickers, won in fair fight in "our weather" and "our waters." No one can say whether she really is a good cutter or not. For all Mr. Bassford knows she may be a very slow one compared to regular racing cutters abroad. But we do know that Gracie tops the heap of the sloops. The cutters as a class in this country labor under immense disadvantage as to numbers from which to choose the best as a representative. One hundred sloops offer a better chance of a lucky hit than two or three cutters. Many of the latter are "compromises" of all sorts, sooner than the first ever designed by their authors, others from amateur hands, and with three exceptions, all sailed by persons new and green to such boats and their ways. Given one hundred Orivas, and is it not morally certain one could be picked from the lot which would be a good deal faster than the only representative in that class? For the one successful Vixen there are a hundred sloops which are comparative failures. Why should you expect so much more, even to the unnatural, the moment you touch upon cutters? Every kind of an abortion called a cutter must be capable of flying, or else the whole type is at once condemned. The reasonable view of it is this: Certain few cutters of unknown reputation have shown themselves about a match for the pick of our sloops. Given equal conditions for selection and it is certain that a good cutter can now be accepted as at least equal to the light drafts on the score of speed. Variations upon beam and depth will offer stiffness with deck and cabin room in excess of what can be had in Gracie's or Fanny's. The cabins are also much cooler. Better performance in light weather is a certainty, and as for draft, it is much of a bugbear at best in large vessels, and in small boats it is too small to be of any account for regular yachting purposes. In point of cost the modern beamy sloop of large displacement is more expensive and has a greater draft than the cutter. As for light displacement centerboard sloops, their day is past and it is no use referring to them in this connection. This is all old ground, and oceans of ink have been split in setting forth both sides of the question. The public has learned to discard light displacement and now the issue is practically reduced to a question of how much or how little beam. We take it that weight, keels and cutter rigs must be deemed already generally adopted and that in the future all good yachts will have those features incorporated, whatever their width may be. As to beam, it can be allowed an open issue, if desired, to be settled by further experience, though we are confident enough what the upshot of the experience will be. Of course we have no reference to makeshifts built to conform to exceptional surroundings or particular objects of limited application as far as the general public is concerned. We may recur to the Montauk's safety at sea later on. The charge that Fortuna heeled two degrees more than Montauk will keep no one awake at night. We have been informed that she was perfectly dry. It is also expected that a narrow boat with dead rise will see-saw more than a flounder bottom. It is one of her good points to lift readily to every thing.]

THE LAKE YACHTING ASSOCIATION.

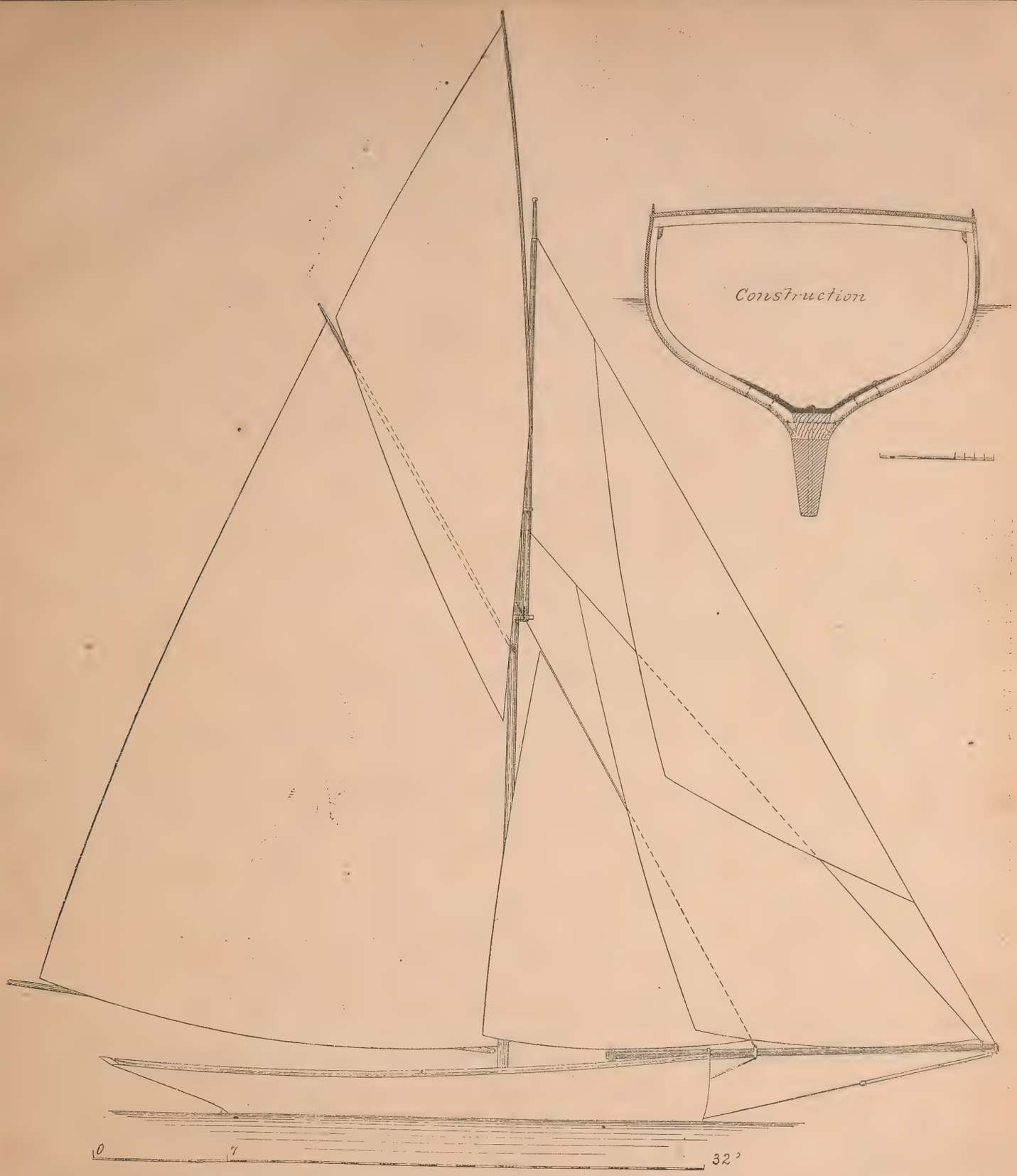
WE learn with pleasure that the move for an association promises well, and permanent organization may soon be expected. The Toronto Y. C. have appointed Messrs. G. H. Duggan, W. H. Parsons, G. G. Evans and W. Dickson a committee to confer with other clubs in Canada and the United States, and a suitable call has been issued. In response the Oswego Y. C. has selected Commodore John T. Mott and Vice-Commodore W. B. Phelps, Jr., to attend the convention. The Bay of Quinte Y. C. has also signified its adhesion to the move, and Kingston and Cobourg are counted upon as well. Other clubs will soon be heard from. The chief objects of the association are enumerated as follows:

1. The confusion at present arising from the many different systems of yacht measurement and time allowance now existing would entirely be obviated by the adoption of a uniform system.

2. The dates of the regattas of the different clubs could be fixed by the executive body of the association in such an order that a yacht would be enabled to attend all the events in succession in the course of an ordinary summer cruise.

3. The establishment of a uniform code of signals might also be agreed upon.

You will confer a favor by bringing the matter before your club as early as possible, and forwarding the official result to the secretary of the Toronto Yacht Club.



THE DAISY.

THE rig of this cutter is of course large to keep pace with the bulk to be driven. The disposition of the area, however, is such that the mainsail, especially the boom, is kept within the control of two hands. The weight of the mast is well aft, and topmast can quickly be got rid of by housing or striking altogether for a passage. In respect to smartness the rig is so much ahead of the sloop that no one with half an eye for beauty would hesitate in his choice. The cutter is par excellence the rig of the world for speed and handiness combined, and it is only a question of time before it will displace the old Dutch river rig of the "shaluppe" altogether. It is fast becoming popular, and the Daisy's sail plan will give an idea of the ruling cut abroad, as her sails are from the loft of Ratsey & Lapthorn, of West Cowes.

SPARS.

Mast from end L.W.L.	10ft. 6in.
Rake of mast	0
Mast from deck to hounds	23ft. 6in.
Masthead	5ft. 6in.
Topmast, cap to shoulder	14ft.
Bowsprit outboard	15ft.
Bowsprit housing	5ft.
Forestay boomkin outboard	2ft. 6in.
Mainboom, over all	26ft.
Maingaff, over all	20ft. 9in.
Trysail gaff	9ft.
Spinnaker boom	30ft. 4in.
First topsail yard	23ft. 6in.
Second topsail yard	17ft. 6in.
Jackyard	15ft. 6in.

SAILS.

The outfit consists of the following: One mainsail, two sizes working foresails and one balloon foresail, three shifting jibs, one jack yard (club) topsail, one jibtopsail, two sizes yardtopsails, one jib-headed topsail, one spinnaker, one trysail; a total of fourteen sails with bags and covers for all. The dimensions of the rig illustrated herewith (mainsail, No 1 jib, large working foresail and No. 1 yardtopsail) are as follows:

Mainsail on luff	21ft.
Mainsail on foot	24ft. 3in.
Mainsail on leach	37ft. 3in.
Mainsail on head	19ft. 8in.
Roach to loose foot	16in.
Foresail on foot	14ft.
Foresail on luff	23ft.
Foresail on leach	20ft. 4in.
Roach to foot	8in.
Jib on foot	15ft.
Jib on luff	31ft. 9in.
Jib on leach	24ft.
Roach to foot	8in.
Area mainsail	542sq. ft.
Area foresail	145sq. ft.
Area jib	175sq. ft.
Area three lower sails	862sq. ft.
Ratio to square of loadline	1.38
Area per sq. ft. wet surface	2.69sq. ft.
Area per long ton of displacement	108.7sq. ft.
Center lower sails from end L.W.L.	13ft. 6in.
Center lateral resistance from L.W.L.	13ft. 11in.

The construction of the Daisy is shown by the section through midships. She has teak topsides and plank sheer and oak frame. All deadwood is through-bolted with copper and the hull through-fastened with copper. The metal floors are bolted through frame and bottom plank, and the frame heels are boxed in and through-fastened to the keel. Stem and post of British oak, sided 4¼in.; main keel, English elm, 8in. moulded; deadwood of oak; frame spaced 21in. apart between centers, sided 2in., moulded 2½ at heel and 2¼ at head, doubled throughout; floors of composition on every frame, the throat taking bolts of lead keel; beams of oak, sided and moulded, 3×2½in. Clamp of red pine, 3½×1¼in. Rudder stock of oak, blade of pine. Deck has covering board of teak, 4½×1⅛in.; planking of pine, 1½×2⅜in., caulked and payed with marine glue. Outside plank of teak, four strakes; garboards of elm, 1½in. thick. Bulwarks of teak and deck fittings of same. Fastenings of yellow metal and copper. Bolts of lead keel, 1¼in. diameter, driven from inside and screwed up from below, and countersunk and plugged. Bridght pine cabin. No paint, except the black of the sides and gold bead.

The cabin is very spacious considering the room taken up by the cockpit. The floor measures 3ft. 4in. between sofas, the latter being 6½ft. long by 26in. wide, with sideboards and pantry at forward end of 2ft. front. The cabin is entered from doors without a sliding companion, the space being occupied instead by a hatch 3½ft. by 2ft. Headroom is 5ft. and 6ft. under hatch. Forecastle is bulk bulkheaded off from cabin and entered by a sliding door. Has 2ft. 4in. floor, a berth on one side and w. c., sail rack, etc., on the other. A circular hatch 16in. diameter gives access from deck. The cockpit is 7ft. long and 2ft. 6in. deep. The yacht steers with a tiller of iron wrapped with hide. She is equipped in the very best and most complete manner. The chief articles being a Berthon folding dingy, a yawl boat of long flat floor, having great buoyancy and fine construction with considerable carrying capacity; water tank and brass-hooped deck breaker, box compass, floating compass with brass binnacle, barometer, clock, side lights, anchor and deck lights, flare-ups, red and green signal lamps, fog-horn, triangle to take place of bell, sea anchor, life belts, patent towing log, buffers for main sheet and anchor, fenders, mops, handlead, code signals in bag, brass rudder head cap, gratings for cockpit, also cushions, stove and belongings, pump, anchors with chain, kedge and two hawsers, swing table in cabin and the usual supply of the pantry and small stores.

RACING IN ENGLAND.

THE London *Field* has an editorial on the decline of racing and the paucity of entries, which the *Field* refers to some extent to the predominating type of racing cutter. In this we think the *Field* entirely mistaken. Lack of entries are due to the onesided measurement rule which handicaps beamy boats with a fictitious tonnage. Introduce a rule which treats such yachts as fair as the narrow racers of the day, and the entries will fill fast enough. The modern racing yacht is not the *cause* of the decline, but simply the effect of the Y. R. A. rule. Abolish a faulty rule and install one which does not bear upon any style, and the modern racers will quickly disappear if they fail to show themselves as fast as other forms. The *Field* attributes to modern racers the sins of the Y. R. A. tonnage rule, which is apt to mislead the hasty reader. The rule is to blame for small entries, and not the yachts it fosters.

HO, FOR THE HYGEIA!

WHO is going? Who will make up the fleet? Who will commission the first and load up with stores for a long and short hitch down the coast in southeasterly weather for "The Roads" and Norfolk town? A jollier cruise with three or four early birds for company could not be proposed. It is a nice little 250 miles down the coast, with the Delaware Breakwater half way and sundry harbors for refuge between. A taste of the briny, with a green one aboard now and then, and thousands of miles of sweep to the sea. A bold dash for little shavers, and something up brag about drifting into the Sound in midsummer zephyrs later on: "When we were on the passage down to Cape May." "As we squared away up the Roads and rounded-to off the Highjigger pier." "We took in the town, and a live, bustling port and a grand yachting harbor we found Norfolk to be." Shades of Farragut, but that would be great sport, indeed! It would be yachting in earnest, yachting as it ought to be. Manly work, athletic in its kind. Work for the head as well in the arts of seamanship and navigation. Work to be proud of, and no sickly infant's play. The real article and not its tinsel imitation. And Norfolk, with its gallant, hospitable society, growing shipping, its lines of steamers, coastwise and European, two live daily newspapers, its continental railroads, its ship yard, machine shops, compresses and big hotels, its clean, well-paved streets and blocks upon blocks of neat little villas, the Navy Yard, the U. S. Hospital, the old fort, the reminiscences of a few unpleasant years happily dimming in the flight of time, and Newport News, close by, with its docks and great depots, and Hampton School and the sunny Hygeia, with its swarm of guests from all parts, and big Fort Monroe, the Rip Raps, the River James; yes, and the luscious oysters and succulent clams, the early fruit and vegetable market, and all the great expanse of the noble and picturesque Chesapeake Sea stretching far away to the northward, inviting, enticing in its depth, beautiful bays, reaches and broad rivers—ah! what a yachting paradise there is but a short run to the southward, did yachtsmen hereabouts but know it and, knowing it, had they the grit, the old Norse spirit, the veritable love for salt water for salt water's sake we would fain do our best to inoculate into their lethargic and shrinking constitutions!

Ho, for the Roads! Who will clear for an early spring passage?

CONCERNING SAILS.

Editor Forest and Stream:

We notice an article on sails in last issue, giving a reason for putting heavy duck on yachts on account of the advantage gained in light airs. We believe that many of our yachts use too light canvas in their lower sails, but we do not think it is a detriment in light breezes, especially in our wide, light displacement, hard bilged yachts, which are so sensitive in a seaway that they slat the wind out of their lower sails, and nothing but the light sails aloft keep the lower ones steady. Without them the booms would swing in amidships with every roll to windward.

Now in regard to the sailing of cutters, there is no doubt they do sail fast, in light or heavy weather, but it is chiefly in light weather in comparison with our boats that they will distance them most readily. There are many reasons for this. One is that their sails stand at the proper angle, and simply because they obey the laws of gravity; it is impossible for them to swing in, if there be any wind at all, as the cutter's mast is plumb, or stayed a little forward of plumb also for the reason that the cutter, being narrow, must be sensitive to careen a plank or two before she feels the immense leverage of her lead keel. The weight of boom, gaff and sail is enough to do this. There are of course many other things which might be mentioned as contributing to speed outside of the sails.

We will try to get at the reason for cutters having heavier lower sails than yachts of similar size of different shape and arrangements in this country. Mainsails of cutters are extended by a powerful purchase at the clew, and the material has to be strong enough to stand it, otherwise it would pull out of shape and give in the center, therefore a bag, and as a consequence form an imperfect plane to scale to windward with. Sails have to be extended on the spars as well as hoisted taut, to be effective by the wind. This, we claim, is the chief advantage in a hose-footed sail. You extend it as well as hoist it taut, therefore get a rigid surface to let the breeze slip by the leach, without hills and hollows to retard it; but whether loose or laced to boom, in order to get the most good out of your sail, it ought to be hauled out taut on boom and gaff before sailing, if you desire speed to windward; and a sail should be made properly to admit severe hauling on head and foot as well as hoisting to a taut luff. There is a pet theory among a great many sailmakers—and they have influenced a great many yachtsmen—to haul out sails "hand taut," but hoist it, sway on it, get it up on the throat and peak. But be careful not to haul taut on head or foot, as you will spoil the shape of your sail. This is all very true if the sails are made so as to pull out of shape when hauled out. But sails should be cut to stand a smart pull on head and foot, and both should be come up with after sailing, especially in damp weather, if you wish to preserve the correct shape. Otherwise you will have a "dog's ear" at clew and earing in time and an unsightly sail.

We would not have the readers of your bright paper infer that we believe in heavy balloon sails, used for light breezes and running before the wind, and which have to be set and taken in quickly. But they should be made of light, *close* material. We favor light sails for light breezes, while heavy lower sails are an obvious necessity for all kinds of weather, heavy and light.

It is a well-known fact that topsails and staysail, in light weather, with a bobble of a sea on, keep the heavier lower sails and also the craft under them steady. Too little regard is paid to getting a perfect sail; and a great many yachtsmen do not know how to treat a sail. They appreciate and know more about this on the other side of the pond, but, presumably, time will work wonders on this side, when yachtsmen will learn to take more than a superficial look at things.

A good fit of canvas is of vital importance for speed or working to windward, and ought to receive the consideration of yacht owners just as much as the hull. JOHN H. McMANUS & SON.

BOSTON.

[We might add that ballooners are necessarily made light because set flying on light sticks with light staying, and that such sails can be kept as flat as desired by a pull on tack or sheet, whereas the lower sails once bent are more permanent in their sit, and not under such ready correction. Staying masts and topmasts with a pitch over the bows likewise offers a chance to cut sails with a broad head. As the head is the driving part of a sail in light winds, a broad flat stretch for the airs to operate upon is more effective than the quick, sack-like belly of a narrow sail.]

AN EASY ONE.

Editor Forest and Stream:

If it takes a schooner nearly 100ft. long on water line six weeks swinging at her moorings before venturing upon the tremendous undertaking of a three days' passage to Bermuda, how many days will she be cruising in one year? CURIOUS.

[Twenty-six days.]

WHY?—Why wait until the stereotyped June 1 before going into commission? Some of the best sailing of the year is to be had in April and early May. Cold, is it? Perhaps, and then it may not be as cold in April as we have known it in June. Suppose it is. Just what you want with a little exercise to keep comfortably warm. The dawdler whose conception of yachting amounts to sunning himself in the cockpit, fretting when "he shall get there," so as to go ashore to the hotel, does not take kindly to work of any kind, and might freeze stiff in an April cruise, while the active man with a physique and some brains would be in high glee at the prospects, and add years to his life, and multiply energies for the flight of existence. It is time we took our customs from others than the old hens and dawdlers of a past age, who have so long been a hampering weight upon the development of American yachts and yachting. Who cares whether this or that ancient hulk fits out his flounder-bottom schooner or dugout of a steamer or not? Are all hands to be subject to his dictum that the season shall not open before June, and no one but a lunatic should yacht after the first of October? Bounce the lubbers over the side, and let us have a new dispensation better suited to the times. Commission from the time the ice is out of the river until the ice makes again in winter. That is, or ought to be, the season. Your old hen hugs a stove months after the yachtsman should be afloat, and the effeminate drifter shivers and shudders at the notion of a northerly blow a few degrees lower than the zephyrs of broiling midsummer. Nice lot to ordain the models and customs of American yachting.

A LITTLE WONDER.—It takes three dimensions to make space. If any one doubts it, let him visit the shop of Wallin & Gorman, foot of Fifty-sixth street, South Brooklyn, and climb up the side of a bold little cutter they have nearly finished. Though only 20ft. 10in. load-line and but 7ft. 9in. beam extreme, she has more stowage than any flatiron 12 to 15ft. across deck. Reason, 4ft. draft and 3 5 tons displacement. This cutter will make a splendid cruiser and owing to peculiarities in her rig can be sailed by a single hand without trouble. She is intended for coast work. Of course tastes may differ as to her lines and this of that trifle, but taken as a whole, she is a century ahead of the New York light displacement trap. We ought to have a thousand such yachts right here in these waters. For the Sound, the lower Bay, for circumnavigating Long Island and for varying the monotony of smooth-water work with an occasional bold voyage to Block Island and the East by the outside route, for cruising, for fishing, for river or sea, and for permanent life on board throughout the season, in short, for all legitimate yachting purposes such a yacht is pre-eminently adapted. Safe, roomy, handy, buoyant, yet able with a mind of her own in lumpy water, we commend this or similar boats to all in search of sport upon small tonnage in a thoroughly efficient form. We find so much worthy of praise in this little cutter that we will give full illustrations next week.

A STANDARD SPECIMEN.—The handsomest, roomiest, best planned and finest job of the season is the cutter Merlin, now in frame at Lennox's yard, foot of Thirty-fifth street, South Brooklyn. She is being put up by Daniel Bernard and has figured in these columns as "number twelve." Take a look at her before planked if you want to find out what an A1 vessel of her size should be like. Take another when fittings are up and decks laid if you care to know what can be accomplished on limited dimensions. In such craft we revel and delight.

GOOD OUT OF EVIL.—In short, the long, narrow and deep-bodied yachts of the present day are immeasurably more capable sea boats than the shorter and broader yachts of thirty years ago, and it is often a matter of congratulation that the exigencies of the tonnage rule forced yacht builders into producing such an excellent model. Indeed, it is pretty certain that the good qualities of the now fashionable type of yacht would never have been discovered had it not been for yacht racing under the old tonnage rule.—*Dixon Kemp in Shipping World.*

THE LOWELL CUTTER.—The little cutter building by Williams & Stevens, of Lowell, Mass., is similar to the Fendeur illustrated in this paper. It is said that she looks very taking in frame. The topsides are rounded home more, and the lines filled a little in the ends. All who have seen her express surprise at the amount of room inside. The keel drops 4in. below garboards. Floors of iron, timbers 6in. between centers, moulded 7⅛ heel, 1¼ at head, sided 1¼in. Heavy duck sails of No. 6, double bighted. Intended for work about the coast.

NEW SCHOONER.—To avoid misapprehension we may say that the new schooner contemplated by Mr. Wm. F. Weld, to replace the Gitana, will, of course, be a keel vessel. Mr. Weld is well satisfied with the Gitana but desires a larger vessel for an extended cruise around the globe. Mr. Weld writes: "I consider the Gitana a splendid yacht for the North Atlantic and West Indies, but not quite large enough for longer cruises. I prefer a deep draft."

VOLANTE.—This well-known cutter has been sold to Mr. C. K. Cobb, of Boston, through Messrs. Burgess. She is now at Port Jefferson. Volante was designed by Mr. Robert Center as a comfortable cruiser, and has shown fair speed, although that was not the main object of her existence. She has the honor of being one of the earliest representatives of the reform in American yachting, having been launched in 1877.

WASHINGTON Y. C.—The club will open the season early with accessions to the roll. Inquiries have reached us for small cruisers of the Ganet type and several such additions are in prospect. Washington ought to have a fleet of small handy yachts of good depth and displacement for the Potomac and Chesapeake. Charles G. Godfrey has been elected commodore.

AMERICAN Y. C.—The steam yacht club has acquired Charles Island, off Milford, Conn., for club purposes. Area thirty acres. Three-story structure will be erected, with rooms for members and general accommodations. Milford Harbor is two hours by rail from New York, and has excellent facilities for laying up and overhauling of yachts.

THE DEATH OF MR. BARROWS.—We learn with regret the untimely decease of Mr. Barrows, of the firm of Hubbe & Barrows, yacht agents. Mr. Barrows died suddenly Wednesday, Feb. 21, after a short illness of three days. As an upright and earnest worker in his profession he was justly esteemed by all with whom he came in contact.

FIXED BALLAST CAT.—Schmidt & Pannic, Staten Island, have built a catboat for Mr. C. J. Peck, of Chicago. Counterstern, 23ft. deck, 21ft. 6in. water line, 9ft beam and 3ft. deep. Ballast 2,600lbs. lead, cast to fit, and galvanized iron air tanks to float her in case of capsizing. Mast 31ft., boom 25ft., gaff 16ft., hoist 23ft.

LEAD KEEL.—The new cutter building by Smith, at South Boston, for Mr. Weld, of the Hera sloop, has a heavy lead keel, and the frame is steam bent. Such facts denote the rapid progress we are making in construction. Ballast as low as it can be got, stout backbone, and light, but well fastened topsides.

THE NEW RIG.—Mr. George Mathews, Jr., Knickerbocker Y. C., is building a 36-ft. centerboard yacht to be rigged as a cutter, with standing jibstay. Mast 23ft., deck to head: topmast, 23ft.; boom, 31ft.; long gaff of 22ft.; bowsprit outboard, 15ft.; lower sail area, 1,051 sq. ft.

PAINT FOR TARPAULINS.—Gum amber 16oz., melt in boiling linseed oil, half a pint, add genuine asphaltum and rosin, 3oz Mix well over fire, remove to open air, and slowly add one pint of oil of turpentine, slightly warm. Will not crack and gives the canvas a black gloss.

MONTAUK.—This schooner, after weeks of preparation and waiting, finally got away for Bermuda, Thursday morning last. There are some people ready to start after her in a five ton cutter upon ten minutes notice, time to fill up with bread and cheese. But then tastes will differ.

NEW RIGS.—The cutters Kelpie and Rondina will receive rigs from McManus & Son, on the English plan. Drags, or sea anchors, are also being supplied as an article of equipment to many Eastern yachts. These anchors were illustrated in our issue for March 24, 1881.

FINE CUTTER.—The Boston *Herald* says: "Dr Whitney's new cutter at Lawley & Son's yard, South Boston, is in frame. Her lines are graceful, and carry the conviction that the boat will be fast and weatherly."

GLEAM'S DEFEAT.—We have on file some letters detailing the defeat of the Gleam by the little cruiser Aneto in a fresh breeze last fall, out of Larchmont harbor. These letters are open to inspection.

BOUND TO COME TO IT.—The old time Julia is once more being altered into a schooner at City Island. She will have a quarterdeck and no cockpit. Flush deck seems to be the order of the day at last.

HARLEM Y. C.—Has leased Oak Point, on the East River above Port Norris, and will build a club house this spring. Ninety-five members and thirty boats.

ANSWERS.—A number of inquiries remain unanswered for lack of proper address. Our columns are too crowded to reply through the paper.

ILEEN.—This cutter sailed from Savannah, Feb. 20, bound for Havana with a roving commission.

FORTUNA.—This schooner made Port Royal, Jamaica, Feb. 12, with Havana as her next destination.

RANGER.—This schooner arrived off St. Augustine, Fla., Feb. 15.

Canoeing.

FIXTURES.

Winter Camp-fire.—Wednesday, March 12, 8 P. M., No. 23 East Fourteenth street, Kit Kat Club Room. Subject—Tents and Camp Outfits.

Secretaries of canoe clubs are requested to send to FOREST AND STREAM their addresses, with name, membership, signals, etc., of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to FOREST AND STREAM their addresses, with lists of cruises, maps and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.

HARTFORD C. C.

Editor Forest and Stream:

The Hartford C. C. is yet alive, and it apprised Hartford of that fact most thoroughly last evening by an entertainment which did more for canoeing here than has been done since the club was organized.

The camp scene "brought down the house," and Commodore Jones deserves the credit of making it the picture that it was. After the entertainment our commodore entertained the members in a very pleasant way, and when we broke up, the vote was that the venture had been a grand success.

It is our wish to attend the A. C. A. meet this year in force, and although not a cruising club but a club of cruisers, we hope to make many friends, and have the grand time we are promised by our friends of the S. C. C. H. C. C.

HARTFORD, Conn., Feb. 19, 1884.

SPRINGFIELD C. C.

Editor Forest and Stream:

The annual meeting of the Springfield C. C. was held Thursday evening, Feb. 14, and the following officers were elected: Frank D. Foot, Commodore; M. B. L. Bradford, Vice-Commodore; C. M. Shedd, Secretary and Treasurer. Executive Committe, F. D. Foot, Geo. C. Barney, W. F. Callender. We also elected four new members to the club. They are Mr. A. L. Spooner, Mr. Harry Chapin, Mr. A. L. Fennessey and Mr. Geo. Leonard, making twenty-six active members. The treasurer was instructed to buy two open canoes to be known as club canoes. The ice has gone out of our river, and last Friday when the ice was gone on the east side of the river, Commodore Nickerson paddled and sailed a mile or so and was very much surprised to see an iceboat coming down the river on the west side. We look for an early season here and know we shall have a lively canoeing summer.

C. M. SHEDD, Secretary S.C.C.

The canoe men have quietly, as is their way, put on foot a scheme for enlarging the membership and usefulness of their organization. They voted at their recent annual meeting to have the constitution of the club changed so as to admit associate members, and to buy at least two canoes for the common use of such members. Canoeing has been steadily growing in favor in the city, and the club have taken this action in recognition of the fact that several men, though not sufficiently fascinated by the sport to invest in a canoe for their sole use, are willing to pay $10 or $15 a year for the privilege of paddling in a "club canoe." The club has now twenty-six active members, all of them canoe owners, and is a happy and united organization, and does not by any means propose, even if associate members are taken in, to intrust its welfare to any but genuine canoemen, as the "associates" are not to be allowed a voice or vote in the business meetings. The club is well fixed financially, and has a model canoe house on a river having all the charms that a canoeist can ask for or find in this country. The canoe, like womankind, has many friends and admirers who cannot see their way to personal proprietorship, and the club will do well to adopt and educate them. This matter will be decided finally at a meeting of the club shortly to be held.—*Exchange.*

CANOE VERSUS SNEAKBOX.

Editor Forest and Stream:

I must take exceptions to "Seneca's" opinion as to the seaworthiness of the canoe, when he says the sneakbox "will live in a gale of wind that the heaviest ballasted Pearl would not dare to face." I have been informed by pretty reliable authority that during the month of August, the Thousand Islands region, about Clayton particularly, is frequently visited by very heavy northwesterly gales that kick up a raging boiling sea. Now, if "Seneca" will bring his sneakbox to that region in August next, I will meet him there, and when one of these gales is on the rampage I will sail him a race of five miles to windward and return, and will not use "a heavily ballasted Pearl either." CHAS. A. NEIDÉ.

THE GALLEY FIRE.

A FEW HINTS ON CAMPING.

CANOE BEDS AND LAMPS.

WHEN the skipper of the Boreas goes below at his usual hour for turning in, he finds the berth in his stateroom made up with an air bed, or rather cushion, and a pillow of the same nature; on these he sleeps the sleep of the good and tired canoeist.

After two weeks' use at Stony Lake, he considers such a bed simply perfection. Hair cushions are good and soft, but when compared with the ease of air beds, are hard and unyielding. The skipper is still on the sunny side of forty, but years of sleeping on hair mattresses and springs, have incapacitated him for reclining on the soft side of planks or a few thicknesses of blankets. He requires something to fit his rather sharp bones, and the air bed just fills the bill.

The cushion is 24in. wide by 46in in length, the pillow is about 10×15. To make up the berth at night, the cushioned seat on which the captain sits while sailing or paddling is put across the Boreas just touching the aft end of centerboard box. On this is placed the pillow about half inflated. The cushion is now inflated to about the same extent and put close up against the pillow with the nozzle at top. When lying full length the valve can be unscrewed and air allowed to escape until everything is comfortable. It is best when half full. It then adjusts itself to every motion of the body. Nothing easier and more restful can be imagined.

In the morning the cushion is collapsed into a very small bundle, and the pillow is used as a life preserver during the day. The cost cannot be given, as it was a present from a friend who had it made to order in England. Less than a minute will inflate it for use. The skipper intends having a cover of drill made and put on to protect it from wear and tear as much as possible.

I can thoroughly indorse Mr. Willoughby's remarks as to the *flamme forcé* spirit lamp I have tried a number of different styles, including a regular Rob Roy cuisine, but prefer the above. I have used it for three seasons and like it better every time. Mine is a genuine French one.

Mr. Whitlock has one like mine, and at Stony Lake the Knickerbockers had several of a larger size made in New York. Two firms in Toronto now have them for sale.

Mr. Tyson brought out with him from England a smaller size of the *flamme forcé*, and another style which has two ordinary wicks. It gives a great deal of heat but uses up spirit rapidly. The *flamme forcé* is very economical in this respect.

If one wishes to do much cooking, two lamps will be found convenient. I expect to receive from England shortly a lamp which is, I think, on the principle of the *forcé*, but the flame is adjustable. This should be a great improvement, as one often wishes to keep a dish warm without allowing it to boil. When received and tested I shall give you the results. The name is, I believe, the "Cyprus."

In my first canoe cruise, I cooked, or rather warmed water, with an arrangement called a lamp kettle, devised by a Torontonian. The fuel was kerosene. It was useless for anything but heating water, and wasn't very good at that. The advantages of cooking with spirit are many. The dishes used are always clean, and you can cook afloat.

Granite dishes are best. The extra weight is more than compensated for by ease of cleaning. BOREAS.

SMOKE 'EM OUT.

MANY canoeists will next summer be troubled by mosquitoes and other insect pests. I have never yet seen in print the only certain preventive of their unwelcome attentions. While in camp on the Toledi River in New Brunswick last summer, our lives at night were made miserable by them.

Nothing but "slitheroo," as the author of "Birch and Paddle," etc., called it, afforded any protection. (Slitheroo is a savory concoction of tar, sweet oil, pennyroyal, etc., which when smeared over face, neck, hands etc., makes one look as if he had tumbled head first into a molasses barrel. It has sundry other names, but the constituent and effect are generally the same).

Finally Pete Solace, my Indian guide, said: "You think you like a smudge?"

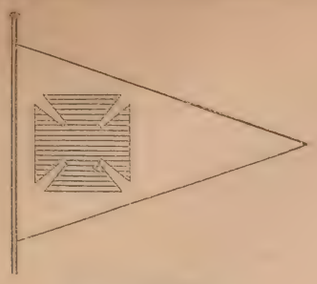
"Think I should," said I, "if it will kill these pests." Pete said no more, but took up his axe and strode off into the brush. I followed him. He finally came upon a fallen cedar, dry, but not rotten.

From the under side of the log, at a place where it lay clear of the ground, he cut strips of bark about six feet long, enough to make a bundle a little larger than I could span with my two hands. A little further on he struck his axe into the base of a young green cedar, cut the bark, raised it with the axe blade, and with a strong pull upward stripped it up to the first limb or more. He then took the white inner bark, and peeling it into long pliable strips, bound the dry bark at intervals of about nine inches into a compact mass.

One end of this ignited in the camp-fire, the whole would burn slowly like a cigar, sending forth a light blue smoke, fragrant and slightly acrid, though not disagreeably so to the eyes. Passed about in the tent for a few minutes all every winged tormentor would vanish; and then laid upon the ground in front, the smoke would drift upward into and about our sleeping place, and we had peace.

A smudge six feet long would smoulder all night. I have often turned out in the morning and found the long trail of ashes on the ground, the remains of the best insect protector ever invented. The smoke did not trouble our eyes, and to the nostrils the fragrant cedar was far from disagreeable. It also made an excellent protector in the canoe at night, when the trout were leaping to our feathered lures, although a pipe full of good Virginia protected me.

I suppose dry hemlock or spruce bark can be used in the same way, although I do not know this to be a fact, and should be glad to learn, for in all parts of the country cedar is not available. SIG.



AMSTERDAM C. C.

SIGNAL, blue maltese cross on white ground. Amsterdam, N. Y. Established 1883.

AMATEUR CANOE BUILDING.

Eighth Paper.

BUILDING.

THE drawing of the boat being completed, the moulds made from it and the bench and stocks being ready as previously described, the first step in the actual work of building, is the shaping of the keel. If the boat has no centerboard trunk, the keel is made of the same siding or thickness as the stem and stern, for its entire length, its depth below the rabbet being taken from the drawing and ¼in., the thickness of the plank, added. The keel may be made 1¼in. deep, the extra depth, if more is required, being made up by a false keel screwed to it, which may be removed for shoal water, as shown in Fig. 11. In selecting

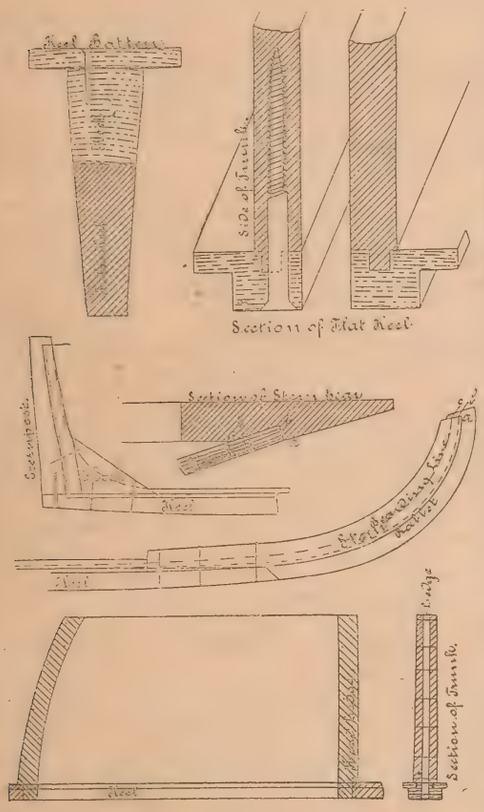


FIG. 11.

the wood for the keel and keel batten, the layers should lie horizontally, as shown.

If for a centerboard, either of the usual form, or one of the patented varieties requiring a trunk, a flat keel must be used as shown in the plate, which represents the cross section of a flat keel and centerboard trunk. The width, for the length of the trunk, will be 3½in. on top, tapering to the size of the stem and stern at its ends, the depth or thickness of the keel being uniform, ⅝in. to 1in. throughout its length.

With the edge keel, a keel batten is necessary as shown in the cross section. This will be ¼in. thick, and 1in. wider than the keel, to which it is nailed, thus overlapping the latter ¼in. on each side, forming a rabbet for the garboards. If the flat keel is used, the rabbet is cut directly on the keel.

The stem is next sawed out from a hackmatack knee, and planed up ⅝ or 1in. thick, for an ordinary canoe, and the fore edge, rabbet and bearding lines marked on it, using the moulds made for each.

The rabbet line of a boat, marked *a* in the drawing, is the line where the outer surface of the skin or planking joins the surface of the stem, stern, and keel; the inner or back rabbet, *b*, shown by the dotted line, is the line along which the inner side of the plank joins the lower edge or ends of the same, and the bearding line, *c*, shown by a broken line, is where the inner surface of the skin joins the deadwoods, keel, stem and stern. The back rabbet is found by squaring in from the rabbet line, a distance equal to the thickness of the plank.

After the rabbet and bearding lines are laid off, the rabbet is cut, a piece of wood ¼in. thick and several inches long being used, applied to the rabbet as the cutting progresses to test its depth and shape. The rabbet is not cut quite to its full depth at present.

The sternpost in most canoes is made of a knee, the rabbet being curved as at the bow (see drawing of the Dot in the FOREST AND STREAM for May 24, 1883), but there is no good reason for so doing, unless the rake of the sternpost is excessive, as is now seldom the case, and a better plan is to make the sternpost of a straight piece, as shown, the rabbet forming a right angle or a little more, at the junction of keel and post. This piece is planed up, the rabbet marked and cut, as in the stem, and fastened to the keel by a 2½in. screw passing up into it, as shown, and further secured by a chock of oak nailed or screwed in the angle.

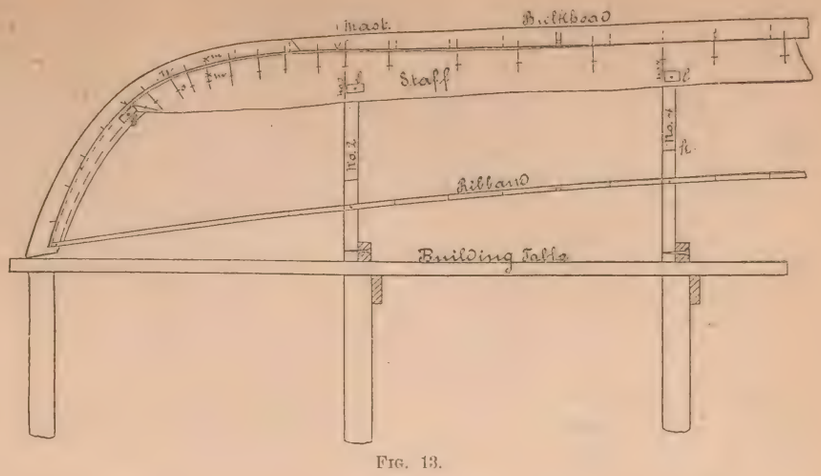


FIG. 13.

To fasten stem and keel together, a scarf is cut of the shape shown in the drawing, about 8in. long, copper nails being driven through the keel and stem, and rivetted over burrs on the top of the former. The keel batten is now nailed on top of keel, butting against the stem forward and the chock aft. The bearding line is drawn in where it has been omitted across the scarf forward and chock aft, and the rabbet trimmed at these points and the frame laid on the large drawing, from which the water line is marked on stem and stern, and the positions of moulds, bulkheads, mast steps, trunk, etc., on both top and bottom of keel.

If a centerboard trunk is required, it must be put in now; being constructed as shown by the sectional views. The head ledges, forming the ends of the trunk, are of oak, 1½in. wide and as thick as the slot or opening, ⅝in. for a thin iron board, and ⅞ to 1in. for a heavy iron or a wooden one. The slot is first cut, 1½in. longer at each end than the required opening, then a groove, ¼in. wide and deep, is ploughed on each side of it for its entire length.

The head ledges are now fitted in place, projecting over the keel ¼in. fore and aft, to allow for caulking, and fastened by a copper rivet through the keel and lower end of each to keep the keel from splitting. The sides of the case, of dry pine, are ⅛in. thick on the lower edges, each of which has a tongue on it to fit the grooves in keel, and ¼in. on upper edges. A thread of cotton lamp wick is laid in the grooves, the inner surface of the sides, as well as their lower edges, the keel and the head ledges are well painted, and they are put in place and driven into the grooves. Before the paint is hard the sides are rivetted to the head ledges with ½in. copper nails, and brass screws 3¼in long, spaced 6in. apart, are put through the keel up into the sides, the holes for them being very carefully bored and countersunk into the keel. If the board is hung on a bolt, the hole for it must now be bored, as it cannot be done later.

The moulds must now be fitted to their places, a small piece being cut out of each to admit that part of the keel and keelson inside of the bearding line, after which, if the boat is to be built with the keel down, the frame is placed in position on the stocks, secured by a few nails driven through the keel into the latter (which will be drawn and the holes plugged when the boat is ready to turn over), the stem and stern are plumbed with a plumb-line and fastened by shores from the floor or roof, the moulds put in position, adjusted by a centerline from stem to stern, and also shored firmly.

If the latter method of building is followed, the moulds are screwed to the table, the frame laid on them, and all firmly shored from floor to ceiling. Now a ribband one-half inch square is nailed along on each side, at the height of the deck, being fastened to the stem, stern and the moulds, and the positions of the bulkheads and ribs are squared up or down on to them.

To prevent any leakage through the scarfs, stopwaters are next put in. These are small plugs of dry pine, the holes for which are bored where the seam or joint crosses the rabbet. They should be bored between the inner and outer rabbet lines, Fig. 12, so as to be covered by the caulking, if in a

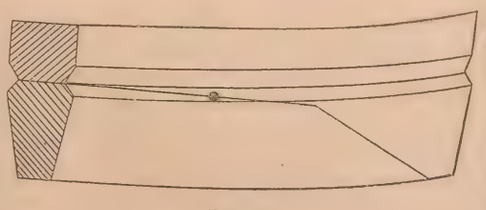


FIG. 12.

large boat, or by the edge of the plank where the seam is not caulked, as in a canoe. This should be done at all scarfs, or where water is liable to follow a seam.

The rabbet is now completed by trimming it out with a sharp chisel, using as a guide, a strip 1x¼in., and long enough to cross at least two moulds. This is held down across the moulds, one end being applied to the rabbet, and the wood cut away until the surface of the strip and the outside of stem and stern coincide.

The positions of the ribs are now laid off, as shown in Fig. 13, which represents the fore end of a canoe, set up on a building table or bench. The distance apart of the ribs will be 5in., with an intermediate rivet through each lap between every pair of timbers. Beginning at station 7 the spaces of 5in. are laid off toward bow and stern to within a foot of each end, and marked on top and bottom of keel so as to be seen from inside or outside when the plank is on, and also squared down on the ribband.

Perhaps the most difficult part of boat building, certainly the most difficult to make plain to a novice, is the planking. In order to obtain both strength and durability, each piece must be put on in such a way that it will bring no strain on any one part, and will not itself be forced into an unnatural shape, to attain which ends, though it may be bent or twisted, it must not be "sprung" edgeways or in the direction of its breadth, or it can never be made to fit properly. Although strakes are sometimes "sprung on" by experienced builders, the amateur should not attempt it, as the chances are that the framework will be pulled out of shape.

Before commencing to plank, the beginner can obtain an idea of how the planks must lie by taking a piece of board as long as the boat, 4 or 5in. wide and ¼in. thick, tacking the middle on moulds 6 and 8 at about the turn of the bilge, and then bending the plank until it lies on all the other moulds, but not forcing it edgeways to or from the keel. The ends of course will come up higher on bow and stern than the middle, and if the piece be laid in a similar manner along the keel they will also be higher. The garboard streak, or that next the keel, will be 4 to 5in. wide in most canoes; then marking off the width desired, 4½in., for instance, on moulds 6 and 8, the board mentioned above, having one straight edge, is laid over the moulds, its straight edge 4½in. from the keel and the ends bent down and tacked to each mould and the stem and stern, and a mark is made where the board crosses, showing the position of the upper edge of the garboard. By upper edge is meant the edge nearest the gunwale, in all cases, whether the boat is built keel up or otherwise. With some models it will be better to vary somewhat from this line, of which the builder must judge for himself, according to the circumstances of the case.

Next, to lay off the upper streak, we will take a width of 3¼in. at amidships, 2in. at bow and 1¾in. at stern, marking off these distances (Fig. 13) from the upper edge of the streak, already marked by a ribband, and putting a similar ribband through these three points, bending it fair and marking where it crosses each mould. There should be six streaks on each side, so there remain still four to be laid off; to do which, the distance from the lower edge of the upper streak to the upper edge of the garboard on bow, stern and each mould is divided into four equal parts, making the planks all the same width on any given mould, though of course the widths on one mould differ from those on another, as the planks taper toward the ends, the girths at bow and stern being much less than amidships.

The planks being laid off, the next operation is to get the shape of the garboard, to do which a "staff" is necessary. This is a piece of board four or five inches wide, one-quarter inch thick, and as long as the boat, several having more or less curvature, being necessary for the different strakes. For accurate work, especially where there is no help at hand, it is best to have two short pieces, each about one foot longer than half the boat's length. One of these pieces is cut roughly to the shape of the forward rabbet and fastened in place with a screw clamp, or a small piece of wood with a nail through it called a hutchock (*e*) Fig. 13. It is then bent carefully over the moulds as far as it will reach, and fastened to each with a hutchock. The staff should be of uniform thickness and quality so as to bend fairly, and is best cut so as to lie in the rabbet, though it need not fit closely. A similar piece is now fitted aft, lapping some two feet over the former, and the two are nailed firmly together, so as to preserve their relative positions when removed from the moulds. As the fitting of the garboard depends mainly on the manner in which the spiling is taken, great care is needed to prevent the staff springing or buckling in applying it.

When it is properly adjusted a series of marks are made with the rule and pencil on the rabbet line on the frame, and also across the staff, about two inches apart where the line is curved, as at the stem, and four inches where it is straighter along the keel. These marks are to insure the compasses being set at the same points in taking the spiling, and in transferring from the staff to the plank afterward, as will be understood later.

Now, with the compasses set to any convenient distance, usually from two to three inches, a circle is first swept on the staff, to reset them by if accidentally changed; then one point is applied to a mark on the rabbet line, as at *n*, and, with the other, a prick mark is made on the same line, at *o* on the staff. The compasses are applied in succession to each of the other points on the rabbet line and marks made on the staff, one line on the stem marked X (*m m*) being called a sirmark, by which the plank is finally adjusted.

THE WINTER CAMP-FIRE.

NO meeting was held on Feb. 19, owing to a misunderstanding in regard to the date, so the subject will be deferred until the next meeting.

THE CHART LOCKER.

V.—INLAND WATERS OF MAINE.

Editor Forest and Stream:

Your correspondent "X.," under "The Chart Locker" head, will get a general idea of the trip between Moosehead and Megantic lakes by reference to my account of the trip, contained in FOREST AND STREAM of Nov. 15 last. I made the trip in a Stranahan canvas boat.

Attean and Spencer rips and Holeb Falls would have to be passed by short portages. As the four miles between Long Pond and Little Brassua Lake is almost a continuation of rapids, with two or three bad pitches, I should prefer to carry the distance by an excellent tote road, which follows the northerly bank of the Moose River. As this road, however, is generally near the river, it could be taken at any point if thought advisable. From this place to the head of canoe navigation there is not much swift water, except at the rips and falls mentioned.

In July a connection could be made with the construction train on the International Railway, at a point on the Moose River about twenty-five miles from Megantic Lake, where I launched my canoe last September. The railway is now built to within seven or eight miles of this point, which is a little below Lowell Falls. I presume that by carrying by these falls a canoe would have no difficulty in getting to Gordon's railway camp. In July there would be excellent trout fishing anywhere along the river.

The Chaudiere River is the outlet of Megantic Lake, and is crossed at the outlet by the International Railway. This is the present terminus of the railway, the other end being at Sherbrooke, sixty-nine miles distant. The Chaudiere can be run to Quebec by exercising a little caution. The upper river is a succession of short stretches of sluggish water with short rapids or chutes between. As the river is full of granite boulders, one should let a canoe down these with a pole, or use a line from the bank.

By running bow on in attempting to make the trip to Quebec a few years ago I came to grief, and had to find my way through the woods to the head of Lake St. Francis. After getting some fifty or sixty miles down the river the country is settled all the way to Quebec. The Quebec Central Railway from Sherbrooke to Quebec crosses the river at St. Joseph, Beauce, and the Grand Trunk Railway from Montreal to Quebec at the Chaudiere Falls, near Quebec.

As there are some bad places in both the Moose and Chaudiere rivers, I should want a companion on such a trip. After leaving Moose Beach supplies can be had at Moose River Village, Pat McKenney's, at the head of Wood Pond, Gordon's Camp and Megantic.

D. THOMAS.

RUSHTON'S CANOES.—We were looking back over some old numbers of the FOREST AND STREAM the other day, and we found that Mr. J. H. Rushton's canoe advertisement has been in this journal for nine years, every issue. The growth of the Canton business has been commensurate with the progress of canoeing in this country. Mr. Rushton, we believe, got into the business by chance. He wanted a canoe for himself, and built it. Then some one of his friends wanted a canoe like it, and Rushton built it for him. By and by the demand for Rushton canoes was so great that it took all his time, and he "set up shop." Now his annual business runs up into the tens of thousands of dollars somewhere. The three points of his success, as we understand them, are: First—Charge a price for goods that will allow of first-class work. Second—Put only good material into the goods and do not scrimp on the work. Third—Advertise in FOREST AND STREAM. We expect to adorn the second page of the cover with Mr. Rushton's advertisement for nine years longer.

WE RECEIVE JUST SUCH LETTERS EVERY WEEK.—Boston, Feb. 8.—*Editor Forest and Stream:* My advertisement in your paper, expiring 14th inst., was put in with the intention of renewing, but I have received so many orders from all parts of the country—from west of the Mississippi to the Gulf of St. Lawrence—that I must make my deliveries before I advertise any further. I can recommend your paper to any one who has good dogs for sale. To be sure, I have wasted some postage stamps in replying to inquiries, but the majority of inquiries have been from parties who mean business and who are prominent men. No doubt you have many such letters as this, but if it is of any service, use it, for you deserve it.—J. A. NICKERSON.

THE St. Gothard tunnel, under the Alps, is 9¼ miles in length. The same distance could be measured by 334,900 of Esterbrook's Commercial Pens extended lengthways.—*Adv.*

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Removes Tan, Pimples, Freckles, Moth Patches and every blemish on beauty, and defies detection. It has stood the test of thirty years, and it is so harmless we taste it to be sure the preparation is properly made. Accept no counterfeit of similar name. The distinguished Dr. L. A. Sayre said to a lady of the *haut ton* (a patient):—"*As you ladies will use them, I recommend 'Gouraud's Cream' as the least harmful of all the skin preparations.*" One bottle will last six months, using it every day. Also Poudre Subtile removes superfluous hair without injury to the skin.

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Signed, R. HARRISON, BARTLEET & CO., Sole manufacturers of Harrison's Celebrated Fish Hooks, Redditch, England. (December, 1882.)

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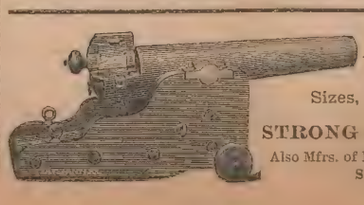
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FOREST AND STREAM.

A WEEKLY JOURNAL OF THE ROD AND GUN.

TERMS, $4 A YEAR. 10 CTS. A COPY. SIX MONTHS, $2.

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CORRESPONDENCE.

THE FOREST AND STREAM is the recognized medium of entertainment, instruction and information between American sportsmen. Communications upon the subjects to which its pages are devoted are respectfully invited. Anonymous communications will not be regarded. No name will be published except with writer's consent. The Editors are not responsible for the views of correspondents.

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Address all communications,

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ANSWERS TO CORRESPONDENTS.

With its compact type and in its permanently enlarged form of twenty-eight pages this journal furnishes each week a larger amount of first-class matter relating to angling, shooting, the kennel, and kindred subjects, than is contained in all other American publications put together.

LAWYERS' FEES VERSUS CHAMPAGNE.

IT IS an old story, repeated year after year. A game protective society is established; and enters with wonderful vim and zeal upon the momentous work of protecting the game. After a little while it gets tired and fizzles out. The active work is left for two or three of the most enthusiastic members. The rest do the talking. And they do a great deal of it. Talk is cheap. We know men who will talk game protection by the hour, day or week. Then they go into the field or the woods and kill all they can. We could name individuals who talk game protection so earnestly at home that they have completely exhausted their feeling on the subject by the time they get a chance at big game out of season.

Game protection talk involves semi-occasional meetings of the society. These in turn call for a copious flow of champagne of approved brands. The champagne is usually accompanied by a flood of genuine eloquence. Denunciations of the work of market shooters and "trout hogs" are followed by suggestions of what some one else, other than the speaker, ought to do about it. Indignation and enthusiasm glow in the breasts of the orators and suffuse their countenances. The fire rages so furiously that by the next morning it will be found to have burned itself out, and the game protector's ardor will then be as cold as the ashes of the cigars he smoked at the meeting.

It is a truth, susceptible of demonstration, that money devoted to paying lawyers' fees for the prosecution of game law breakers will accomplish more for game protection than the same money expended for champagne dinners. A bill of fare is an excellent thing in its way, but there are occasions when a lawyer's brief would be more to the point; post-prandial heated oratory rounds off the dinner, but the cold, convincing logic of a lawyer before a jury of twelve men will do more to discourage the sale of snared game.

SHOTGUN PHILANTHROPY.

IN a flourishing city of Western New York dwells a physician who, by means of a judicious use of printer's ink, is well known beyond the bounds of the Empire State. In addition to the arduous toils of a dispenser (on a wholesale scale) of patent medicines and an author (also on a wholsale scale) of medical works, this gentleman has devoted lavish sums of money to secure the protection of game and to encourage the art of wing-shooting. His ardor as a game protector led him some years ago to present to the New York State Association for the Protection of Fish and Game, of which he was at the time president, an $850 diamond badge, as a prize for the game protector who would under given conditions kill the most pigeons. That plan having doubtless secured the desired result, and game in consequence being abundant, the benevolent physician has set now out to provide the populace with weapons to slay it. He appears in the guise of a cheap shotgun philanthropist. Here is the proposition (though we are obliged to omit the beautiful delineation of the renowned Zulu gun which embellishes the original). It reads:

A GOOD BREECH-LOADING SHOT GUN FOR $4.00,
AND THE MEDICAL ADVISER THROWN IN AS A PRESENT.
Price $8.50 without the Present.

A STRONG, DURABLE AND CLOSE SHOOTER.
12 Gauge, Uses either Metal or Paper Shells.

Having made special arrangements with the manufacturers, we are enabled to sell these guns at the remarkable low figure of $4.00 and give a copy of the Medical Adviser to each purchaser as a present. The gun will be packed and delivered at the express office in Buffalo without charge. We will also furnish, if ordered with gun, 100 good paper shells for 80 cents; and a set of re-loading implements, consisting of rammer with cap-expelling pin and tool for recapping shells, for 50 cents. We guarantee the gun to be a strong and close shooting one. We will send the gun as a premium for a club order for 10 copies of the Medical Adviser, with the money, $15.00, giving also to each member of club a present of any $1.00 article in this circular. Send in your club order.

Thus it may be seen that in the person of this energetic game protector and enthusiastic promoter of wing-shooting has arisen a dealer in cheap guns who has a conscience as well as a possible eye to the main chance. For the paltry sum of four dollars he will outfit you with a "good breech-loading shotgun," and, man of kindly forethought that he is, a "Medical Adviser" to go with it. What a "filling of a long-felt want" it is when one takes the field with such a weapon to have at one's elbow a Medical Adviser with a supply of lint, bandages, and a full and suggestive kit of surgical tools ready for any accident, and who, if you should happen to go off with your gun, might carry to your friends an exact and scientific report of the cause and manner of your taking off. But better than all these, if he were a proper Medical Adviser, when he saw the game start before you and you raising your four-dollar shotgun for the almost inevitable deadly shot, he would stop you with the brief advice, or command perhaps, "Don't shoot!"

But let us read the advertisement over again. Ah, the Medical Adviser is only a book, after all. That is not so well, for though one might carry the volume under his arm, or in his pocket if of convenient size, to get it out and hunt up the chapter on gun-shot wounds after one had a finger or a hand blown off, would be awkward and apt to consume valuable time; and then the appliances to be used in such cases might not be at hand, and one might not be able to treat himself by book, especially if he had lost his head, as sometimes happens to those who shoot four-dollar breech-loading shotguns, and even muzzleloading ones of that extravagant price.

And so, upon the whole, while we duly appreciate the benevolence of this advertiser, we cannot advise our readers to buy his gun, even with the "Medical Adviser thrown in;" in fact we should feel easier in our mind to recommend as a safe investment the buying of the Medical Adviser itself, with the four-dollar breechloading shotgun thrown out.

THE BIRDS, the song birds, the bright-plumaged birds, the birds that chirp about the doorway, the birds that sing in the orchard, and twitter under the eaves of the old barn, the birds that circle in the meadow, the birds that cheer one's spirit by their vivacity and melody—these are the birds that the New England farmers are now devising measures to protect. The cause is a most excellent one, and the farmers are more interested in it than any one else.

THE BOSTON GAME MARKET.

THE matter of a uniform code of game laws in New England, so far as Massachusetts is concerned, is now in the hands of the Committee on Agriculture. Its many friends believe that the committee will report a bill to the Legislature indorsing the measure in the main, though the game dealers have "dined and wined" the members of the committee. The hearing before the committee was exhaustive, occupying two days, and drew out facts showing that the Boston market is even a worse institution for the harboring of game out of season in other States than it has the name of being. Game dealers, who know whereof they speak, testified that the business—all in the hands of twenty or thirty men—amounts to from $200,000 to $300,000 annually. It also appeared that there are now actually in Boston, in cold storage, at least 100,000 quail.

It was proved before the committee that freshly killed quail had been repeatedly seen in the market since Jan. 1, the legal close time for killing in this and many other States. It was also shown that the marketman, being allowed to sell pinnated grouse, takes advantage and sells ruffed grouse illegally. In consequence of this laxity of law in permitting the selling of game out of season, it is next to impossible to prevent the sale of illegally killed birds. It was clearly shown that the game of the West was fast being depleted by the enormous demand for it in Europe, and Boston is the center for its shipment. American deer, grouse and quail are cheaper in Liverpool to-day than in Boston or New York. The refrigerator business of Boston has dug the grave of the game of the northwestern country, unless Massachusetts puts a stop to it.

The chances that the uniform game bill will pass, if reported by the committee, are not doubted by its friends. The enemies, the marketmen, have been out in full force, but they could show at the hearing only that an extensive business would be stopped. They laid claims to class legislation being proposed, and would have other States look out for their own game without help from Massachusetts. But the narrowness and selfishness of their ideas was so apparent as to plainly show that class legislation was long ago granted to them when the law was made allowing them to have in possession and sell game when sportsmen and other people would be arrested for it.

THE PENNSYLVANIA CASE reported in our last issue (page 88) is worthy of notice. The Lycoming Sportsmen's Club sought to secure the indictment of certain men who had drawn a seine in a millpond (public water). The judge, in charging the Grand Jury, is reported to have asserted that the seiners had the same right to take fish from the pond that a farmer would have to take his cattle from the pasture. If the circumstances were as our informant has given them in the communication referred to, this ruling of the judge was clearly wrong. We do not wonder that the members of the club were discouraged by the adverse influence of the judge. There can be no question, we venture to opine, that the society was perfectly right in its position. If the principle stated by the judge in his charge to the jury holds good with regard to the Williamsport millpond, where shall the limit between public and private waters be drawn, and how may the fish in any of the waters of Pennsylvania be protected from improvident netting? When a game protective society undertakes a case of this kind, the least it can ask is a proper and fair administration of the law. When men who ply their unlawful fishing find judges and juries ready and willing to acquit them, in the face of the clearest laws, it is indeed time for societies to organize for the protection of the public. We hope that, for the good of Pennsylvania fishing interests, the Lycoming Sportsmen's Club will not let the case drop here.

A SPORTS DEFENSE ASSOCIATION.—Englishmen are organizing a Sports Defense Association to combat the efforts of those who are attempting to secure a law to forbid pigeon shooting. It is urged that the abolition of trap-shooting will mean the ultimate suppression of all pursuit of game and fish, and the pigeon shooters are calling on the anglers and the fox hunters to join their rally. The bill to suppress pigeon shooting, it is probable, will be urged again this year.

"WOODCRAFT."—A book on "Woodcraft" has been written by "Nessmuk." It is designed to give practical help to amateurs. It will do more than this, it will open the eyes of the veterans. "Woodcraft" will differ from the average book on camping, for as we have said it is written by "Nessmuk." The Forest and Stream Publishing Company will publish the book in April.

The Sportsman Tourist.

BETWEEN THE LAKES.

Sixth Paper.

WHERE TO GO A-FISHING.

THE summer wanderer who finds himself in the Upper Peninsula, will hardly be willing to return to his home without first visiting the city of Marquette, the chief city of the region, between the lakes. Most persons will, doubtless, go a hundred miles by rail or steamer further up and take a look at the great copper mining interests on the Kewena Peninsula, and mayhap some will take a run along the coast up toward the Ontonagon Lighthouse and Union Bay, where there is, I am assured, little difficulty in striking first-class trout streams that have seldom or never been fished. I do not speak by the card, however, having never been there myself; but ere another summer's sun runs its annual course I hope to see and know something of that region, for I have faith in what I have heard of it.

If the visitor does not go up to the copper region, he will be quite sure to take a run out to the iron mines, an hour's ride from Marquette—mines that, in some respects, have not their equal in the world.

At any rate, he will go to Marquette. This is a city of nearly five thousand inhabitants, beautifully situated on the igneous rocks that crop out along the head of the Marquette Bay. The town is fast coming into notice as a summer resort. During the hot months it is so delightfully cool, and the lake views are so charming, and the fishing in the vicinity has been and is so good, that those who try the dog-days there once are sure to try them again. Marquette is the western terminus of the Detroit, Mackinac & Marquette Railroad and the eastern of the Marquette, Negaunee & Houghton which taps the Northwestern leading to Chicago. Besides its railroad connections, lake steamers stop at its wharves at stated intervals, and so it is plain to be seen that Marquette is a town easy to go to and easy to get away from.

I did not go a-fishing while stopping in Marquette. I spent my time looking at the houses of the iron aristocracy, some of which are rather tawdry-looking; I went through the sawmill where lumber retails for about the same it does after being shipped by water and rail five hundred miles southward. I saw long trains of hopper-built ore cars thundering out upon the stilted piers where they dumped their loads into barges and vessels anchored to receive them. I enjoyed the lake breezes and the clear, cool-looking waters; I mentally inventoried the contents in the show windows—the specimens of iron and copper ores, the toy bark canoes, and other supposed evidences of Indian handicraft—and I looked at the people as they tramped cheerfully and busily up and down their principal street—and so I did not go a-fishing.

Fifteen to thirty miles up the lake shore, I am told, there is good fishing to be had in the Garlic, Yellow Dog and Salmon Trout and other streams. Sportsmen row or sail up the shore, and not only visit the streams, but fish off the rocks, and capital times they occasionally have.

But one need not go so far. Two miles south of town the Carp River enters the lake, and at favorable seasons the trout fisherman who knows the pools, the sunken logs and shelving rocks wherein and underneath which the trout love to lurk, may take them in such size and numbers as in some reputed trout regions of our country would claim the admiration of all who saw them.

But a member of the FOREST AND STREAM family will hardly stop at the Carp. He will go further, and if he will follow me I will lead him to some places along the line of the D., M. & M. Railroad, where he will not fare worse.

Going from Marquette the railroad track curves around the bay, and for thirty miles occasional views of bay and lake may be had, so near to the shore does the road run. The first trout stream after passing the Carp is the Chocolate, four miles from Marquette. Here is a station, but we will not stop. It is curious to note, however, that the Chocolate runs parallel with the lake shore for a distance of four miles, and the engineers took advantage of the sand ridge piled up between and laid their track upon it, and at no point within the four miles is the road over half a mile from the creek, or river, as all creeks discharging their waters into the lake are here called.

Eleven miles further on and we come to Sand River, which we cross within a few rods of the lake shore. Here is a station and here trout may be taken, but it would hardly be wise in us to stop for them, and so we go on four miles further to Whitefish Station on the Sable River, as it is named on the map. As Sable means sand, and we have so recently crossed a Sand River, we conclude that we must be in a sandy region, and so we are. Thus far we have been running over ridges of sand that have been piled up in some distant bygone age when the Lake Superior level stood at an altitude of from forty to sixty feet higher than it does now. But we will pass the Sable River by, although trout may be caught in its waters.

Two miles further, which is twenty-one miles from Marquette, brings us to Onota, and a mile therefrom is Deer Lake. Now, I never fished in that lake, but a Mr. Wardle, an Ohio man, and an intelligent Ohio man at that, and one who has evidently done a good deal of fishing during his time, visited us at our camp at Jeromeville and he told us of two visits he had made to Deer Lake. On the first he and his brother sportsman met with marvelous success. Notwithstanding the boat they found on the lake was leaky and unwieldy, they caught with a spoon more bass than they could conveniently handle, besides two or three mascalonge. These bass, Mr. W. said, rose to the fly, and one gallant fellow wrecked the gentleman's trout rod badly. Shortly after that Mr. W. returned to Deer Lake, but not a fish did he take.

Right here it may not be amiss to say that the sportsman who expects inland lake fishing in the Upper Peninsula had better provide himself with a boat. He may occasionally find boats kept for hire, as at Au Train, but generally he must either have his own boat, or put up with a vessel so old and worthless that it is not worth owning.

But let us move along. Three miles east of Onota we come to Rock River, so named because of the numerous and immense rocks lying at its mouth in the lake, and which afford capital fishing in season. Here trout running from two to three pounds are taken. From the railroad crossing to the mouth of the river is almost one mile, and the lower half gives good stream fishing. The evening we went up to Marquette, a couple of elderly gentlemen boarded the train at the Rock River station, who had been stream-fishing below, and each had a nice basket of trout. The top ones weighed not less than three-quarters of a pound; the under ones I did not see, but it would have been in accord with an ancient angler's custom to have had the little ones at the bottom.

Au Train is the next place to be mentioned. The railroad skirts the Au Train Bay for four miles, and at the end of three-quarters of the way, as we go eastward, the Au Train River discharges its waters. The railroad crosses this little river within a sling-stone's throw of the bay, where there is a station. A little over a mile from the river's mouth, as the crow flies, is the Au Train Lake, a reservoir left, doubtless, by the receding waters of the great lake in the remote past; but by the river (which runs through the lake) the distance is all of four miles. The Au Train River, between the two lakes, makes a marvelously big bend, and from this circumstance the name Au Train springs. John Clark, an educated Indian, told me that the name was suggested by the long, sleigh-runner-like bend in the stream. It is French.

Be this as it may, Au Train enjoys quite a celebrity as a camping, hunting and fishing post. A beautiful grove of pine saplings grows on a high level parcel of land a few rods from the station, in the edge of which an enterprising landlord has erected a frame hotel. The wonder is that some vandal has not cut down every sapling of the grove, and one's respect for the place grows in consequence of this uncommon evidence of the existence of a little common sense. The grove actually seems to be cared for, and while campers are permitted to set their tents amid the saplings, chopping them is prohibited.

Au Train Lake is famed as a deer resort during the summer months, and large numbers have been killed here regardless of the law. I have heard some marvelous stories told of deer shooting on this lake. "Tenderfeet," who can't kill deer elsewhere, come to Au Train, and by the aid of a light and a boatman, find it an easy job. I heard one man say that at certain seasons the air was so offensive along the lake shore from the carcasses of slaughtered deer that hunters were often incommoded thereby. No doubt the statement was highly colored, but it was a significant one nevertheless. The fact is, summer shooting on the Au Train has been extensively practiced.

Beyond the lake, within a reasonable walking distance, is the Au Train Falls, which is said to be well worth a visit. Below the falls is good trout fishing.

But let us leave Au Train. A run of fourteen miles, much of which is up grade, brings us to Munising Station, 316 feet above the level of the great lake, and forty miles from Marquette. Here is where one leaves the cars to go and see the Pictured Rocks and get a taste of the lake and stream fishing in their neighborhood. A short distance west of the station the railroad crosses a narrow, rapid, log-filled stream with high banks, known as Anna River, and so named after the first white woman to settle in its near neighborhood. The Anna is no inconsiderable trout stream, but it is so easily reached by the Indians and other Munising people, that one would scarcely expect much success fishing in its waters. Still, if one should from any cause have to stop over at Munising, it would be well to try it; and there are worse places in which to be left than in Munising. Alice lives there, and her cookery is famed the region over. Alice cannot be said to keep a hotel, for her establishment is the veriest shanty, so I can't be charged with writing this as a hotel puff; but if the angler, hunter, camper, traveler, be hungry for a first-class dinner, let him signify the same to Alice, and if she is well enough to undertake it, he will, when he reluctantly turns from her shanty, go away sounding her praise. He will no doubt see old Charley, Alice's husband, hobbling around while there. Old Charley is an oily-looking old gray-beard, and if the guest's wife or daughter is with him, she must not be shocked if old Charley swears a little in her presence; but the apology of Alice, should she hear him—and she generally does—will make all amends. "I am surprised at you, Charley!" she will say, "to think that a gentleman of your excellent sense should swear in the presence of a lady! It is unaccountable!" And turning to the lady she will say, "Really! you must excuse him. He always would swear before ladies, but it is the only fault he has."

The Anna is the last stream flowing into Lake Superior that we cross. Munising is on the comb of the great sandstone roof lying between the two great lakes. The Anna River flows north into Lake Superior, and south of the station less than a mile may be found the headwaters of the West Branch or Stuch's Creek, a tributary of the Manistique. From Munising on, the streams run southward into Lake Michigan until we have passed beyond the Manistique slope.

South and southwest of Munising is an extensive area containing many small lakes, some of which are land-locked, but most are not. All as far as visited have been found to be well stocked with bass, and some with pike and occasionally one with trout, and all are accessible to a determined sportsman with a guide.

About six miles south of Munising a chain of small lakes is met with, leading out into the west branch of the Manistique, or Indian River. An old lumber road leads into the lakes, and boats can be lugged over the portages and the descent of the Indian River be made; but the trip would not be a holiday affair. I talked with one who made the trip as guide, and he told an extravagant story of the trout fishing enjoyed by the party on the way. Mr. William Gunton, a land-looker and lumberman, who has wet his line in nearly every trout stream of importance in that region, assured me that the trout ran larger in the Indian River than in any other stream he had fished. Another year the writer hopes to make his way into the upper waters of the Indian River and settle for himself the question of its trout-bearing qualities. He will carry rod, shotgun and camera. As he descends he will expect the scenery to become quite rugged and picturesque, and around the shores of Indian Lake, a sheet of water covering fifteen or twenty square miles, he will see hills and rocks that will give quite an assortment of photographic views.

But we must go on. It is eight miles to Jeromeville, and there we will go into camp. As we thunder along through a sylvan cañon, a hundred feet in width, with walls as high as the tall, compactly growing trees, the Judge suddenly thrusts his head out of a window, and yells at the top of his voice. His conduct seems so extraordinary that for a moment we think something is wrong with him. Some of the passengers evidently think so too. Listen at that fish-eyed chap who works his jaws languidly over an enormous quid of tobacco. "I say," says he to the Greek Professor, "that 'ere feller's seen a bear or else he has 'em!" But the Greek Professor does not comprehend. He knows when a fish is biting at his hook as well as any man, but what is meant by the Judge "having 'em" passeth his comprehension. He does not understand the language of slang.

"I saw Oscar," said the Judge, as he settled back into his seat.

Now, Oscar is one of the young men who was with the Judge last year in these very woods, and this year Oscar had stopped in the Lower Peninsula. But not long since we got a letter from him, and he wanted to join us, and as he was a good fellow we wrote, "Meet us in Jeromeville." Oscar must be trying to meet us.

Bad news! Bad news! On our arrival at Jeromeville, Louis, a young man belonging to the section boss's family, tells us that "two tileograms had been sint down for the Jidge, one of which said how one of his factories was burnt up, so it was, and the other how some one was sick."

But Mr. Oscar had taken them and was gone no one knew where. We know, however. He is off to meet us with the telegrams—to meet us at Munising. Lucky the Judge happened to look out and make himself known to Oscar. Oscar will soon come back. But in the meantime, how must the Judge feel? He has no factory to burn, but he has a home, and more than that—he has loved ones at home to grow sick. "This is my eleventh year," says he, as he paces up and down the railroad in front of the Jeromeville station, "and never did I receive a word of bad news from home before."

At last Oscar comes and produces the two messages, one states that a certain educational institution (not the Greek Professor's) with which the Judge held some sort of official connection, had been destroyed by fire. This, then, was Louis's "factory," and but for the other message much laughter would Louis's "factory" have occasioned. But, alas! the other: "The doctor says that neither Lillie nor the baby can last long," and the Judge must go. These belong to his household—daughter-in-law and grandchild—and the next train he leaves for home, nearly six hundred miles southward, and I go, too, while the Greek Professor and Oscar stay behind.

When we left we did not expect to return, but we did nevertheless. Poor Lillie! After a valiant struggle for her life she had rapidly declined, and within a few days after our arrival she succumbed to the inevitable, as must we all sooner or later; but the baby recovered and, the grandmother being across the sea, he was put out to nurse. George and Mabel, worn out with watching and care and toil, could ill-endure the depressing heats of the Indiana dog days, and the doctor advised a change of climate, and so the Judge resolved to go back to his camp in the woods and take the tired ones with him, and I returned also.

D. D. BANTA.

THE TENDERFOOT'S FIRST DEER.

THE Tenderfoot had been with us just one week. It was quiet times at the ranch, for the round-ups were over, the winter's wood had been hauled and split, the cattle had drifted with the early November storms toward the South and none remained on the range save here and there bunches of a dozen or more which were trying to rustle through the winter by loafing around the meadow fence or at the corrals and picking up stray morsels which were pitched from the stables, seldom going out on the flats where the feed was good except when they were driven there.

The boys hugged the great box stove in the bunk-house, some busy day after day making quirls, others plaiting rawhide reatas or making hackamores, varying their labors with an occasional game of California Jack or Blue Pete.

Tenderfoot was, in relation to actual experience on a cow ranch, of the tenderfeet a superlative specimen, but he was endowed with a great deal of tact which covered a multitude of harmless errors. He was a man who had had a great deal of experience in both town and country, and had always managed to be at peace with every one, and yet he had the outward appearance of being a man who did not care to have his toes trampled upon without demanding satisfactory explanations. He only looked this as we "sized him up" when he first came among us. He was a modest looking fellow and pleasant spoken, and in the week he had been with us had easily glided into our ways, grown well acquainted and become thoroughly at home. He acknowledged his ignorance of everything connected with his new life, asked questions when he wanted any information in such a way that the boys were all glad to post him or help him, and in the week he was making good quirls and good friends, for the old hands always take kindly to the tenderfoot who gives himself no airs. Nothing they hold in such utter contempt as pretense.

The eighth day came pleasant, and Nervous, who was so nicknamed because he was neither nervous nor fidgety, who had been waiting for the right kind of day, prepared early in the morning for a deer hunt among the canyons below the ranch on the north side of the creek. It was a pleasant morning, though the snow was several inches deep, a twelve-mile breeze blowing from the northwest and the thermometer at least 15° below zero.

Nervous was about ready to start when Tenderfoot asked to accompany him, a request readily granted with the offer to loan him the only spare rifle on the ranch, an old government needle gun. Nervous carried a repeating rifle. Down the creek and across the lower meadow, through the dense boxelder woods covering the flats through which ran the creek, they went, the crisp, frosty snow sounding beneath their tramping feet—well, sounding, eh—eh—well, sounding like the noise made by an awkward man eating hot soup. "Rather too much noise for successful deer hunting," thought and said Nervous, "but as soon as we cross the creek and get into the canyons and commence climbing among the rocks and around the hillsides we will have to move more carefully, but there is not so much snow there and we can get along quietly enough with a little extra care. This wind is a great help to us hunting this direction."

Tenderfoot had never dropped a deer; in fact, had never seen one running wild. He had heard of buck ague, but believed he was in no immediate danger of contracting the disease and, indeed, he looked like a man who could and would keep cool as an iceberg under any deer hunting conditions. He was, and no wonder, anxious to put his nerves to the test to decide which would display the most fear, he or some black-tailed buck.

In the canyons the force of the wind was not felt so much, but above, on top of the ragged bluffs, it played its cool tricks on the loose snow, which it lifted and carried across country or packed away, in every gulch and gully, and dropped on the hunters' heads in showers the frosty flakes. Not a sound but the whistling of the fierce, cold wind, which was evidently trying to keep itself warm by spinning at a twelve-knot gait. It was a cool proceeding but very thin withal. With searching eyes and careful steps they slowly climbed among the hills, now crawling on hands and knees

up almost perpendicular inclines, peering cautiously over them, and then descending feet first on the opposite sides among sage brush and grease wood, across washouts and over pitch-pine logs and wind-battered cedars, that had given up trying to eke out an uncertain living among the rocks. For a couple of miles of the roughest walking and climbing and walking imaginable went Nervous and his companion.

Several jack rabbits had been disturbed from their slumbers behind protecting sage brush, and kicking up little clouds of snow they scampered away with their lives, but bless 'em, they were safe enough this morning. These storm-beaten old canyons are not going to ring with echoes from any rifles pointed at smaller game than blacktails. There was no time consumed for Tenderfoot to admire the scenery, and though he did not say it, he perhaps thought this road was a near relative to Jordan's 'hard road, but he "stayed with it" like a little man, until just as he had slid down six feet from a rock he came in sight of two bucks and a doe not above a hundred yards distant. The doe seemed as though she would like to say—

"How happy could I be with either
Were t'other dear charmer away,"

and both the "dear charmers" were so engrossed in their attentions that they had not seen our friend from the States. No doubt that love is blind.

Quickly turning to Nervous, he told him, and then clapping his rifle to his shoulder, he fired, and one of the bucks dropped and rolled down into a gully, thirty feet below. The others, as much surprised as the mysterious wedding guest was by the Ancient Mariner, started back out of Tenderfoot's sight, but now in full view of Nervous, who made the movements of "turning loose" his repeater, but it refused to "pump."

"Can you see them, Tenderfoot?"

"No, they are out of my sight."

"Well, they have stopped over there, not more than a hundred and fifty yards away. My rifle won't work. Hand me yours."

Tenderfoot could not have got a shot in five minutes, and there was no telling where they would be before he could again sight them; so he handed his rifle over the rock down which he had just slid, and Nervous fired. Down came the second buck, and the doe was just disappearing over a high ridge opposite, when a third time spoke the old-fashioned rifle and the last of the little bunch was done for. She carried the ball about twenty feet, then suddenly dropped it and went with it.

"Tender, I think that will do for a morning hunt, thanks to you for helping me out. Am a little sorry I downed the doe. Now we'll bleed them and go back to the ranch for a team and hang our 'mutton' up a tree."

By following the canyons further down they would have been able to have killed more deer, but present necessities had been bountifully supplied and what was left will furnish work and sport for many another day.

Nervous had placed his shots in the shoulders and Tenderfoot had sent his crushing through the head. In the middle of the afternoon the three were hanging up between the bunk-house and the kitchen. Tenderfoot was complimented on his skill as a rifle shot, but with his usual modesty disclaimed any credit for skill and insisted that he had aimed for the shoulders with a vague idea of hitting somewhere, and his winning shot was nothing but a scratch the likes of which he never expected to repeat.

Could he have had a slight attack of the buck ague? Are not the victims of that disease supposed to make clean misses?

"At any rate," said Nervous, refilling his pipe, "you must know, boys, there ain't any tenderfeet on this ranch."

MILLARD.

BEAR CREEK, Wyo.

Natural History.

WOODLAND AND BARREN GROUND CARIBOU.

Editor Forest and Stream:

I notice in the FOREST AND STREAM of February 14, that the editor does not agree with Judge Caton, author of "Antelope and Deer in America," in regard to the woodland being a distinct species from the barren ground caribou.

I have had no personal experience with the latter animal (my information is obtained from those who have hunted it, also from natural histories), but I have always thought that they belonged to separate and distinct species.

The barren ground caribou is one of the smallest of the deer family, and it is seldom that a buck is killed weighing over one hundred pounds. As its name implies, its habitat is the barren grounds between latitude 62° and the Arctic Sea. In winter it seeks the shelter of wooded tracts on the southern boundary of its range. Its favorite food is the mosses and lichens so abundant in that section. This animal is of great value to the Indians and others in the frozen north; they make some use of every part of the body. Large herds of the barren ground caribou roam over the country, and are easily approached and killed.

The woodland caribou, on the other hand, is a larger animal, the doe being equal in size to a barren ground buck, although the horns are smaller and less branching. They frequent the wooded shores of Hudson's Bay, and tracts further south where the other are never seen. A most singular difference in the habits of the two, and one that, with the difference of size, form, etc., surely entitles them to be ranked as separate species, is that the woodland migrates to the southward every spring, while the barren ground caribou is at the same time on its way to the Arctic Sea. The flesh of the woodland caribou is inferior to that of the other.

I hope that the writer of the illustrated article on page 45, issue of Feb. 14, will give his reason for believing that the two animals belong to one species. RED WING.

GLENCOE, Fla.

In most old works on natural history three distinct species of reindeer are mentioned. These are, the old world form, variously called *Cervus tarandus, Tarandus rangifer* and *Rangifer tarandus;* the American woodland form, *Cervus tarandus*, var. *sylvestris*, or *Tarandus caribou;* and the barren ground form, *Cervus tarandus grænlandicus*, or *Cervus tarandus*, var. *arctica*. Since these works were written the views of naturalists have undergone a great change. It was formerly the fashion to make as many species as possible, and to do this it was often necessary to base specific characters on very slight variations—on what would to-day be regarded as nothing more than individual differences. An old world species found in America was often dignified with a new name, for no better reason than that it lived on the other side of the ocean from its already known relative. In those days the tendency was toward the multiplication of species. To-day the current sets the other way, and naturalists generally strive to reduce the number of species to the lowest point.

At present the circumpolar reindeer, whether they inhabit Norway, Siberia, or British America, are regarded as one and the same form, *Rangifer grænlandicus*, while the woodland caribou is thought to be only a fairly well marked race of its more boreal relative. The only known physical characters by which the two forms may be separated are size and horns, and these are not sufficiently well marked to base specific differences on. Size may go for almost nothing. Judge Caton, in his most excellent work on "The Antelope and Deer of North America," acknowledges this, and says:

"The difference in size, if this were the only distinction, would be entitled to but little weight in the consideration of this question, especially when we remember that we often find animals of the same species occupying high latitudes smaller in size than those of warmer countries. The reverse, however, we find generally the case with our *Cervidæ*. * * * I repeat, however, that I should not consider the difference in size, which is fully one-half, sufficient of itself to establish a specific difference." To the diversity in size of the horns Judge Caton attaches somewhat more weight, yet this character we cannot regard as sufficient to establish specific difference. Judge Caton's main reliance in separating the two forms of caribou is on their supposed differences in migratory habit, and on the supposition that the two forms do not interbreed or grade into one another. But as a matter of fact we have very little evidence on these points. We know that in its home—the center of abundance—the barren ground form is small, with large horns, and that in Maine and Lower Canada the woodland form is large, with small horns; but as to the deer, which inhabit the intermediate country, little is known. It is, we think, probable that an extended series of specimens from the country, where the ranges of the two overlap, would furnish individuals of which the naturalist would be unable to say, "This is a barren ground," or "This is a woodland caribou." To decide a question of this kind the acumen of a trained naturalist would be required, and he should have before him a large series of specimens, if possible freshly killed. We recently talked with some old caribou hunters in a region where the woodland form is the only one known, and yet they spoke of two kinds of caribou, which they believed existed there—"the little green woods deer" and "the big hill deer." As a matter of fact they merely referred in the one case to the young and small, and in the other to the old and large deer.

The opinion of the best mammalogists to-day is that the woodland caribou is only a well marked race of the circumpolar reindeer. If any good specific characters can be shown to separate the two, this opinion will be modified, but at present the evidence to justify such a change of sentiment is wanting.

A case somewhat analogous to the one under consideration existed a few years ago in regard to the common Virginia deer, of which several species were named from different sections of the country, but at present these supposed species have no standing, and several of them have none even as races or varieties.

We may mention that our correspondent has the weight of the barren ground caribou much too low. Richardson says a full-grown buck, dressed, will weigh from 90 to 130 pounds. This would give a live weight of from 135 to 200 pounds. There are some other inaccuracies in "Red Wing's" statements, as will be seen by reference to Judge Caton's book.

We cannot do better than to recommend our correspondent to look up this matter for himself, and when he has done so, we fancy that he will agree with us. As we stated in our review of the work, Judge Caton's admirable volume contains a vast amount of information on this and kindred subjects, and it is one that the naturalist and deer hunter can ill afford to be without. THE REVIEWER.

SOME ARIZONA QUAILS.

Editor Forest and Stream:

The "California quail" mentioned by "Nemo" in your issue of the 31st ult. are in all probability Arizona quail (*Lophortyx gambeli*), inasmuch as they are abundant in Southwestern New Mexico and Arizona. The California quail (*Lophortyx californica*) are, on the other hand, I think, rarely or never seen in that or this part of the country.

The Arizona quail is furthermore exceedingly susceptible of domestication. When first caught they are so violently wild as to be almost unapproachable, but by continued and careful attention they eventually become tame enough to handle without fear.

A. G. Buttner, ex-Chief of Police of this city, has a peculiar penchant for pets. About two years since he procured a pair of Arizona quail. They not only became gentle but raised a brood of eleven young ones. Thirteen eggs were laid, but eleven chicks only were hatched. When about half grown they were in part distributed among friends. One of them afterward escaped, and returned to its former home. I secured a pair of them myself and gave them the freedom of a corral in which alfalfa had been sown. They throve finely, but became somewhat shy. When frightened, however, they invariably sought the house for protection. I had previously tried the same course with a pair of blue quail (*Callipepla squamata*), but attempts to domesticate them were in vain. I finally gave them the same freedom that I had given to their kindred, and lost them on the day subsequent.

During the months of September and October the Papogo Pima and Maricopa Indians snare quail by the thousands. They are brought to the market, dozens in a coop. A fancier can, for a few bits, make a fine selection. About two and a half years since, E. L. Wetmore, a well-known resident of this city, purchased a pair of the Arizona variety, and hung them in separate cages on either side of his office door. For the first few days they were frantic with alarm, then finally settled down to the quietness of a humdrum life. He afterward gave them the freedom of a large room and allowed his children to handle them. In due time they not only thoroughly domesticated, but the male became aggressive, and would fly and peck at the hand for food. On two different occasions, sittings of eggs were laid, but no attempt was made to hatch them. The female finally dying, another was procured. She appeared to tame rapidly, but escaped on the first opportunity; was away two days, then returned, and by repeated calls demanded admission to her mate, and never afterward cared to leave him.

To domesticate them, but little care is required, inasmuch as they will eat almost anything that is placed before them. A pan of clean water, plenty of fresh earth, a few sprigs of vegetables (of which there are plenty at all times in this country), a little bread, cracked wheat or seed, and the sum of their luxuries is made up. But, unlike those mentioned by "Nemo," they are, during the warm weather, exceedingly fond of a bath, and when taking it splash the water in all directions, regardless of their surroundings. Those kept by Mr. Buttner raised their little ones in a box not more than four feet square. They had the natural earth for a floor, the sides of the box had been taken off and replaced by wire screen. The nest, made of dry grass thrown in for that purpose, was built under a board that stood slanting from the floor to the end of the cage. If any one cares to try the experiment and will pay the expressage on a pair of Arizona quail which, in my belief, are the most handsome of their kind, I will, as soon as they become plentiful, send them a pair with pleasure. My address is with the FOREST AND STREAM. ADIOS.

TUCSON, Arizona, Feb. 10, 1884.

COLOR OF THE SEA.

A PARAGRAPH has been going the rounds of the newspapers, stating that Dr. J. J. Wild, F. R. G. S., claims that he has discovered the cause of the various colors of the sea, and that they are due to the greater or less proportion of salt held in solution.

How does Dr. Wild account for the fact that large and deep bodies of fresh water exhibit colors similar to those of the ocean?

The waters of the great American lakes, Superior, Huron and Michigan, in their deepest parts, say from 500 to 1,000 feet, are, under certain conditions of sky and atmosphere, of a deep blue color, like those of the Atlantic, Pacific or Indian oceans, the blue, however, is not so intense, the depth of water being much less in these inland seas than in the ocean, some of the deeper portions of which show color like that of a solution of indigo.

In the shallower parts of both salt and fresh water, where the depth is from twenty to fifty feet, various shades of green occur, more or less opaque as the water is turbid or transparent.

I am inclined to believe that the colors of both salt and fresh water depend on similar conditions, some of which are—

1. Depth and transparency.
2. The state of the sky and atmosphere, whether clear or clouded.
3. The course of the wind, north and west winds producing a clear and deep blue, and east or south winds light blue, blue green, or lead color.
4. The point of view of the observer, whether from high land or low.
5. In shallow water, the nature of the bottom, whether covered with rocks, sand, or algæ. S. C. C.

BIRD NOTES.

It was "immense flocks of blackbirds," not "bluebirds" that were seen here flying southwest on the 14th of February (See FOREST AND STREAM of Feb. 28). Crows have been about here all winter. Saw a bluejay yesterday. A few misguided ducks have appeared, but the Raritan River, which was open, is again frozen, and they will probably leave. Saw a robin flying south to-day. Sensible bird. Mercury, 7 yesterday, 14 to-day. J. L. K.

PERTH AMBOY, N. J., March 1, 1884.

The unusually mild, but wet weather, which we have been having this month, has made some of our small birds think of spring. A song sparrow (*M. melodia*) has stayed with us all winter. Two or three days ago, I caught him singing in our lilac hedge, and he seemed very cheerful. This morning the mercury stood at six degrees, and old Boreas had, during the night, taken up a position in the northwest, and was hurling his keenest javelins at daybreak. This very sudden change from bad to worse caused *melodia* to make friends with his cousins, the field sparrow (*S. pusilla*), and slate-colored snowbird (*Junco hyemalis*). All three of them were busy near our porch picking up such crumbs and bits of grain as were exposed in the path which was cleared to the barn. The two last-named species are common winter residents with us, but we do not recollect seeing a song sparrow in either January or February before. Three winters ago, in '80–'81, we saw, in a severe snow storm in January, a single towhee bunting, who appeared lively and well. This was on Scroggy Neck, Sandwich, Mass.

One bluebird, on Washington's Birthday, gladdened us with his sweet but simple song. He flew from one fence post to another, and we watched to see what food he might take; nothing offered to his taste, however, and we left him to his own happy thoughts of spring and sunshine.

MERGUS.

EAST WAREHAM, Mass., Feb. 29, 1884.

Where are the birds? was the question I asked myself many times yesterday, while taking a three hours' walk on the outskirts of the city. I passed rows of evergreen trees more than a mile in length, and thousands of apple trees, but did not see a bird during the whole time. A year ago the same day, going over the same ground, I saw pine grosbeaks, redpoll linnets, snow-buntings, snowbirds, and one song sparrow that had concluded to try a Northern winter; and he seemed to be doing quite well in his home among the evergreens. But yesterday I saw nothing to remind me of birds, unless it was the coarse, bulky nest of the purple grackle in one of the tall evergreen trees by the roadside, and on the opposite side, near the top of a maple, swung the pensile nest of the oriole, and on a horizontal limb of the same tree was saddled the soft, compact nest of the goldfinch. Then, again, in the evergreens the saucer-shaped nest of the mourning dove, and on the framework of a disused lime kiln I saw the well-built moss nest of the phœbe, and on the opposite timber, about twelve feet distant, was the hard, mud-lined nest of *Turdus migratorius*. Further on, in a large thorn tree, was the feather-lined nest of the kingbird, and last and least of all, in a low withewood bush, the thistle-down-made nest of the summer yellowbird; and from the unusual length of it I came to the conclusion that there was something treasured up in the lower department, and on examination I found the egg of the vagabond cow bunting. All these I saw, but not a sign of bird-life until I reached the main business street of the city, where I had a chance to feast my eyes

on hundreds of the detestable, pugnacious little *Passer domesticus*.

I know of but one reason to account for the scarcity of the winter birds in this vicinity. On the 9th and 10th of last September we had a very severe frost that destroyed most of the vegetables and the seed-bearing weeds in the fields, on which the snow-buntings, horned larks, snowbirds and tree sparrows feed during the winter. I have seen snow-buntings but once this winter, Dec. 27, although I was in the fields probably three days in a week up to Jan. 5. Since then I have seen nothing, excepting one downy woodpecker, and he came to the apple tree at my door to show himself.

J. L. D.

Lockport, N. Y., Feb. 11, 1884.

Monday afternoon I counted seven robins in one tree, and they seemed quite contented, although the air was chilly. Redwing blackbirds are around in considerable numbers. I saw four this morning in front of the house. Quail have wintered well so far, notwithstanding the many crusts we have had this winter. I saw a flock of ten black ducks last week heading north, but I guess they did not stay long. Our meadows will be in first-class condition this spring for the ducks, and I anticipate some fair sport. I am in hopes the ducks will make their appearance soon, and I am sure they will if the weather keeps as warm as it is to-day. Bluebirds have been with us all winter. 16-Bore.

Madison, N. J., Feb. 20.

This is a very hard winter for the birds. The English sparrows have almost disappeared; not a dozen now where there were hundreds before. A number of birds have been found dead, and all the birds seen were in poor condition, except a shrike which I shot the other day; he had had an easy time feeding on the sparrows. There are a few chickadees, bluejays and pine grosbeaks, and that is about all around town. A number of Acadian or saw-whet owls have been killed, and I recently secured a Richardson's owl.

W. A. M.

Fort Covington, N. Y., Feb. 18.

The past cold winter does not seem to have much effect upon the migration of birds here.

Feb. 16, bluebirds and robins first seen. Feb. 19, crows were seen flying along the banks of Lake Erie in great numbers. A great many are killed by Cleveland sportsmen as they fly over. They seem to be the main topic of conversation in the gun stores, probably as the first game of the season. Feb. 21, saw four wild geese (*Bernicla canadensis*) flying north. Several flocks reported and a few ducks.

Of the winter birds noted, which may be of interest to the reader, are song sparrows and brown creeper (*C. familiaris*). A pine grosbeak was brought in by a boy who killed it with a stone. It is rare in this vicinity. A few Bohemian waxwings were here in January. I had the good fortune to take a rough-legged hawk (*A. lagopus sancti-johannis*) in black plumage; color, uniform dark brown. Also a fine pigeon hawk (*F. columbarius*), which is quite rare here. Tufted titmouse (*L. bicolor*) is unusually abundant this winter.

A. Hall.

East Rockport.

The first robin appeared here on the 15th of this month, and the bluebirds arrived on the scene the next day. This is at least a month earlier than they generally come into this cold part of the State. N.

Waterville, N. Y., February.

Evening Grosbeaks in Iowa.—Saturday morning, Feb. 8, Mr. J. Painlin, of this place, discovered a flock of unusual and very handsome birds feeding on the seeds of some box-alder trees that grew near his house. His attention was drawn to them by the very musical twittering and chattering that they incessantly kept up, and approaching them carefully he was surprised that they manifested no signs of alarm, even when he stood directly beneath the tree on which they were feeding. Some of the family had seen them there the day previous. The following day (Sunday) the family were absent, but on Monday the birds were still there, and Mr. P. determined, if possible, to secure a specimen or two, but in order to do this he was obliged to drive them some little distance, as the law forbids any shooting within the corporation limits. They flew very swiftly, and, alighting on some trees at sufficient distance, he fortunately secured three (one male and two females). There were but six in the flock—two males and four females. Desiring to have them identified, and knowing my interest in such matters, he brought them to me, and with the help of "Coues' Birds of the Northwest" I found them to be the evening grosbeak. I have never before seen these birds here, and consider myself very fortunate in being enabled to add them to my collection.—Violet S. Williams, Coralville, Ia., Feb. 13.

The Fog Rainbow.—Cosumnes, Cal., Feb. 20.—*Editor Forest and Stream:* Two of your correspondents have lately written of the fog rainbow as a very unusual experience. I myself never had seen one when I came to this State, and was disposed to doubt that there was such a thing. Here in the Sacramento Valley, however, in the winter or rainy season, we sometimes have fog for days together, and I have quite a number of times seen the white bow, having no prismatic colors, and on two occasions a bow having all the colors of the rainbow; never, however, making a complete circle, as spoken of by one of your correspondents.—W. L. W.

Do Buffalo Mate With Domestic Cattle?—Some ten years ago a gentleman living some miles west of here, while on a hunting excursion in Kansas, purchased and brought here with him a buffalo calf. It has been on his premises ever since and is now a large fine cow. It has never bred. No bull could be induced to mate with it. Is this characteristic of these animals or have hybrids been produced?—K. (Vinton, Iowa). [Hybrids have been produced between the buffalo and domestic cattle. Audubon gives at length experiments conducted long ago in Kentucky, and we believe that there is now, near Winnipeg, a herd of crossbreeds.]

Contributions to the Literature of Snakes.—We have received from Mr. James Simson a pamphlet containing a number of interesting letters contributed by him to *Land and Water* at a time when the question, "Do snakes swallow their young?" was being hotly debated. This question has been decided in the affirmative, which was the side taken by Mr. Simson. The letters are charmingly written, and show careful study of the subject.

Ortyx Virginianus in Arizona.—Mr. J. D. Andrews brought in a pair of genuine Bob White quail, to-day. The bird is an extremely rare one in Arizona. The breast plumage of the male is of a darker brown than that of the eastern variety, otherwise the general appearance of the bird is much the same, although if anything it is smaller in size. Those brought in were killed in the Barboquivari range, about sixty miles southwest of Tuscon. On the Gulf of California they are found in great numbers, but the mountains and mesas southwest of Tuscon are believed to be their northeastern limit.—*Tuscon Weekly Citizen.*

Snow White Opossums.—Mr. H. G. Dulog writes from the Hot Springs, Ark., concerning two white opossums—perfectly white all over—yet not albinoes, for their eyes were not pink, but looked dark, even black. The negro owner told our correspondent that their eyes were blue, "same color as yo' eyes."

Transactions of the Linnean Society.—The second volume of the Transactions is in press, and will probably appear in May next.

Camp Fire Flickerings.

"That reminds me."

105.

Among the many good stories related in Forest and Stream I think the following deserves a place. It was told to me by Mr. George W. Leavitt, the well-known cocker spaniel man of Boston, who vouches for its truth:

"About eight years ago I took a trip to Maine, partly for business partly for pleasure, taking with me an English setter that had been recommended as a great ruffed grouse dog. I was at my old home, Pembroke, and one day on telling my uncle, Mr. Pomeroy, that I was going over to Machias on business, he suggested driving me over that I might have an opportunity to display the good qualities of my dog, and also to get some birds, so off we started with dog and guns, and after getting into the woods where the birds were plenty, I turned the dog loose and away he bounded. At almost the first jump he routed a brood of birds, and dashed through them like a wild calf through a flock of turkeys, showing the speed of a lighting express as he bounded through the underbrush, and in an instant was lost to sight. We had waited five minutes, perhaps, though it seemed an hour, when my uncle, with a sly twinkle in his eye, said: 'Nice dog, that, when do you expect him back?'

"'Oh, he is a trifle wild now, but will soon settle down to close work.'

"We turned back toward the road, thinking the dog might swing round that way, and when we came in sight of the horse saw the famous setter lying under the wagon. There was nothing for me to say, so, maintaining a discreet silence, we drove on and soon met two boys, who had nine birds. One of them had an antiquated gun of about twenty pounds weight and ten feet in length—the regular grandfather musket type—but it was death to the birds, and that was all I cared for, as I always have better luck gunning when the boys have been out a few hours ahead of me.

"'How much will you take for those birds?'

"'They are worth seven cents apiece over at Calais.'

"'Give them the dog for a brace,' suggested Mr. Pomeroy.

"'I will give you fifteen cents apiece for the lot.'

"'All right, you may have them, and there is another fellow ahead of us with some more that you can buy if you want to,' said the boys.

"We found the other boy, bought his birds, and went on our way rejoicing, with seventeen nice, plump partridges. We soon reached Machias, and while I was out on business Mr. Pomeroy remained at the hotel. In the meantime Mr. Morgan, a would-be sportsman from our town, drove up. He had with him his two-hundred-dollar gun, explaining that he hoped to see some birds on his way over. Mr. Pomeroy, bent on mischief, went up to him and said, 'Did you get any birds, Mr. Morgan?'

"'No; I saw some, but could not get near enough to shoot them.'

"'Well, I am sorry,' said my uncle, 'but if you had had Leavitt's dog you could have filled your wagon with birds. He beats all the dogs in America. We only had a few minutes on our way over and got seventeen fine partridges. I wish I was a man of means, I would never allow Leavitt to take that dog back to Boston.'

"Mr. Morgan saw the birds and dog, and was so delighted with both that he asked Mr. Pomeroy if he thought the dog could be bought at any price.

"'I don't know; perhaps, as Leavitt has several more, he migh be induced to sell this one for a hundred, reserving the right to breed to him, also to shoot over him when down this way. If you really want the dog I will try to influence Leavitt to sell, for I would like to keep the dog in this part of the country, he is such a rare one.'

"When I came back my uncle told me of the conversation with Morgan. I tried to discourage the scheme; but Mr. Pomeroy was bound Morgan should have the dog, so when Mr. Morgan came to me I sold the dog and got the money. Then came Mr. Pomeroy's turn to explain the great necessity of knowing how to work the dog; he said, 'You must drive slowly until the dog puts his nose in the air, and wags his tail, then get out, tie your horse, and you will be sure to find the birds somewhere.

"'When you get all ready, just say *charge* to the dog and he will make a charge for the woods, then you must follow, that is one of the secrets of working him successfully. You must keep up.'"

"'How shall I know that he has a bird?' asked Mr. Morgan.

"'Don't look at the dog but keep an eye on his tail, and when it becomes stiff you may be sure he has a bird charmed so thoroughly that you could knock it over with a stick. No bird can move while that dog's tail is stiff.'

"Mr. Morgan felt sure he could work the dog, so started early in order to get a few hours' shooting before dark. Not long after we started for home and had driven about eight miles when, to our intense surprise, we saw the poor dog lying dead by the roadside. We got out to examine him, and found he had been shot, so buried him and went our way. We soon met our boys of the morning, with a fine lot of birds, which we of course bought. While I was paying for them, the boys said, 'We ought to ask you more for these, for John Morgan offered us twenty cents a piece for them a little while ago, but we told him we had sold you seventeen in the morning and shot these for you since, and would not go back on you anyhow.'

"I began to tremble, but Mr. Pomeroy laughed and said, 'What did Morgan say to you then?'

"'He did not say a word, and I think he must be crazy,' said one of the boys, for he jumped out of his wagon, tied his horse to a tree, grabbed his gun, and shot the dog dead; but when I told him it was mean to kill the dog, and I wished that I had taken him in the morning, when Mr. Pomeroy offered him to me for a couple of birds, he roared out something about State's prison, and drove off.'

"When we got home, I tried in every way to make Morgan take his money back, but his grit was thoroughly aroused, and he refused to take a single cent. I then set things up for the crowd, and we had a jolly good time. Morgan at first refused to join us, but finally thought better of it, concluding no doubt that there is no loss without some small gain." Mont Clare.

Claremont, N. H.

Game Bag and Gun.

NEW ENGLAND GAME LAWS.

The bill to amend the Massachusetts law is now with the Committee on Agriculture.

The question of putting the power to license taxidermists in Massachusetts into the hands of the game commissioners, has, by common consent, been attached to the question of uniform game laws, and the committee on agriculture are evidently pleased with the idea. The destruction of song and insectivorous birds for their skins has become a serious question in the minds of the more intelligent of the agricultural community. It has been noticed with alarm that the annual return of certain of the best of New England song birds is beginning to be looked for in vain in many sections of Massachusetts, and the numerous taxidermists, with their boy followers, are likely to be held responsible for the loss of these charms of country life.

At the hearing it appeared that the inhabitants of the deer section on Cape Cod desire no change in the deer law from that making a perpetual close time, as enacted two years ago. Concerning this matter the friends of a uniform code of game laws were not strenuous, and accordingly no change in regard to the deer law in that direction will be asked for. The deer in the State are all confined to a narrow strip on Cape Cod, and any part of an open season would, it is believed, at present result in their utter extermination. The dwellers on the Cape desire that the close time be retained absolute till such time as the deer shall have increased sufficiently, when they will come to the Legislature and ask for an open season.

Several riders are likely to be proposed along with the uniform game law bill. One came up before the Committee on Agriculture. It proposes that any owner of lands or a park under twenty-five acres in extent, shall be protected by law in Massachusetts from the encroachment of gunners on such lands, provided he shall sufficiently post such land with notices forbidding such trespass. The friends of fish and game protection will not oppose such legislation, for they believe in respecting the rights of land-holders, and that by such means the former can be more thoroughly linked with the protection of game. The right would thus be given him to protect the game on his own land. The old proposition to give the farmers' boys the right to snare and sell partridges and quail out of season was, of course, introduced, and the attempt to tack it on as a rider will be made, but probably without success. M.

Boston, Mass., March 3.

OUR DETROIT LETTER.

Just at present the recently organized Michigan Gun Club and Game Protective Society could accomplish a deal of good by stopping the illegal sale of quail by dealers, and the serving of the same in hotels and restaurants in Detroit. It is said that they are sold daily by a Woodward avenue dealer, while nearly every restaurant in town will serve them at a moment's notice.

It would surprise a certain surly, fault-finding chop-house keeper that I know of, very much indeed to be pulled up with a round turn. Indeed, it makes me shudder to imagine his apoplectic wrath were he called to account. For, being an Englishmen of that unhappy class who belittle this country and its inhabitants, albeit they depend on both for subsistence, he would surely nearly explode with rage if called to account for purchasing quail out of season. And several persons I know of would enjoy the scene. For our chop-house keeper denounces America and things American with the utmost impartiality, and only a few months since bitterly berated the sportsmen of this blasted country as a set of lawless, ruthless slaughterers of game, "hand werry much beneath hour Henglish gents who 'ave fine feelinks, hand hin hevery land carefully protect the game, hand respect the laws." When he delivered that special tirade against his adopted land and people, a bystander ventured to suggest that pheasant shooting in England, as so often described, was not very pretty sport; and also called his attention to the wanton slaughter of game by Englishmen upon our Western prairies, whereupon our chop-house keeper became purple and speechless with anger.

By no means let it be inferred that I am unfriendly to our English cousins, for I am not. On the contrary, some English and Irish gentlemen with whom I have shot, fished, and coursed, are among my warmest friends. And the country of Thackeray, Lamb, Goldsmith, Ruskin, and other favorite writers is very dear to me.

But confound a low-bred person, be he Yankee, English man or Irishman, who, in a foreign country, continually berates and belittles the people upon whom he depends for subsistence.

The gun club referred to above held their first regular shoot upon Washington's Birthday. The weather was horrible, snow, rain, and wind each striving for the mastery, but as will be seen from the score, the attendance was large. The club will, from appearances, be a success as a gun club; it remains to be seen how it will develop as a game protective society. It can, as an association, do valuable service to the good cause, for private individuals dread making complaints against law-breakers.

A week since the ducks began dropping in the Detroit River, but the cold snap came, and now all is ice again.

Detroit sportsmen will be glad to learn that Mr. A. O. S. Havens has secured the fine store No. 72 Woodward avenue,

and will open it about March 1, with a fine line of guns, fishing tackle, etc. Mr. Havens has made himself very popular indeed during his residence in Detroit, and in his new location, which is a fine one, he will no doubt do a large business. DELTA.

DETROIT, Feb. 23.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

In an editorial note Feb. 21 you truly say that the comparison of muzzleloaders and the breechloaders is a dead issue, but a comparison of the shooting qualities of the two guns will certainly bring about just the discussion you suggest—"the relation of experiments and tests in loading to secure pattern and penetration."

My experience in hunting, shooting and experimenting runs back for thirty-five years. It has been with all kinds of guns, from the old Continental flint-lock musket to the best breechloaders of the day. I now own three breechloaders made by myself for the especial purpose of experimenting. One is a single barrel 3-bore, weight 11 pounds, in which I use one-inch Gatling-gun brass shells; no paper shell large enough are made. One is a single 10-bore, 14 pounds, and the third a 20-bore, 11 pounds. I design conducting a series of experiments some time this spring and will give you the results. With all my practical experience I do not claim to be authority, but what I have to say are my own convictions, based on the results of many practical tests, and simply give them as such.

The old saying "as straight as a gun barrel" certainly had no reference to very many of our modern double breechloaders, for not one in ten has straight barrels. I refer to the inside bore. This is especially true as to the cheaper grades, and I am sorry to say that many of the better grades have the same fault. In order to get the required strength for the breech action as well as to stand heavy charges, breechloading barrels must be very heavy at the breech end. This necessitates considerable taper in the barrels, or the guns would be very heavy. Nearly all the taper is in the first half of the barrels from the breech end. Very much of the beauty of a gun depends on the graceful sheer given to the taper. In joining at the factory the barrels are sprung together in the center, in order to have the ribs fit properly, as well as to give the gun a graceful appearance, hence the bore of the barrels are not straight. However, twelve to fifteen inches of the muzzle-ends are practically straight, and parallel with the line of sight. It often occurs in the cheaper grades that the barrels are sprung so much in the center that the muzzle ends diverge to the right and left. In such guns the right barrel shoots to the right and the left one to the left. Guns with the barrels tapered down very thin at the muzzle, as a general rule, are better shooters than those with thick ones. A majority of chokebored guns are too heavy at the muzzle, which accounts for their grouping the shot in bunches and leaving many bare spots in the targets. In very thin guns there is a certain amount of expansion and elasticity, which has the effect to overcome the tendency to group the shot, hence give quite an even distribution.

It can be put down as an axiom that guns having the straightest barrels, other things being equal, will give the best results.

The next consideration that has much to do with the good and bad shooting is the quality and quantity of the ammunition. There can be no denying the fact that a good quality of ammunition is better than a poor quality; but as to quantity, opinions differ greatly. From some unaccountable cause, there appears to be a general opinion that breechloaders require very much more powder than the old-styled muzzleloaders, when as a matter of fact guns properly chambered and properly charged require less. In well-constructed breechloaders there are absolutely no escaping gases unless the plunger cuts through the primer. In muzzleloaders it quite often occurs that sufficient gas escapes at the nipples to throw the hammers back to a full cock. In guns of ordinary weight, 8 pounds to 8½ pounds, I would not advise 5 drams of powder to 1¼ ounces shot, nor would I think of 1 dram of powder to 13 buckshot. The proportion of powder to shot that gives the best general results will be found to be 3 drams of powder to 1 ounce of shot. On page 546 of "Haswell" will be found proportions of powder to shot for the following numbers of shot, as determined by experiment:

No.	Shot, oz.	Powder, drams.	No.	Shot, oz.	Powder, drams.	No.	Shot, oz.	Powder, drams.
2	2	1.5	4	1.5	1⅞	6	1.25	2⅜
3	1.75	1.625	5	1.375	2⅛	7	1.125	2⅝

NOTE.—2 ounces of No. 2 shot with 1.5 drams of powder produced the greatest effect. The increase of powder for the greater number of pellets is in consequence of the increased friction of their projection.

With American engineers Haswell is good authority. How few men from actual knowledge could dispute the results as he has given them; I could not do it for I have never experimented with 2 ounces of shot to 1¼ drams of powder. Ogeecher's 1 dram of powder to 13 buck shot is about according to Haswell. Killing a buck at the distance of 120 yards with such a charge caps the climax. Put me down as a little skeptical. Whoever sticks to the proportion of 3 drams of powder to 1 ounce of shot will be satisfied with the results.

Now, in regard to wads. Nearly all guns, by actual measurement, are from one to two gauges smaller than they are called. Many chokebore 10s will gauge but 12 at the muzzle. As a general rule, for No. 10 brass shells No. 8 wads are used; for a paper shell, a wad of the same number as the shell. There is also a general opinion that brass shells will give better results than paper shells; but all of my experiments have proven the contrary. Paper shells, loaded with wads same number as shell, and not crimped, will give better results than brass shells loaded with wads two sizes larger than shell. Firm, elastic felt wads are best. The advantage of two wads on the powder is so very little that I have never been able to discover it.

More of the good or bad results of shooting depend on the manner of loading than most shooters are willing to admit. The ordinary way of loading is to use for brass shells wads two or three sizes larger than the gun. The large wads are with some difficulty forced down on to the powder with a close-fitting loading plug, that has either a perfectly flat or a concave end. The inside of brass shells that have been used are very rough, a kind of sandpaper surface. The friction of the large wads is so great that the force of the discharge will bulge the center of the wads forward, and when the wads reach the smaller or true caliber of the gun at the end of the chamber, they will bulge still more in the center—the worst possible condition for good results. The shot will be projected in a circle, and the center of the target will have few, if any, shot in it. The crimping of paper shells has the same effect, but in a much less degree, inasmuch as the wads are smaller.

To remedy this defect in loading, use a loading plug with a convex or cone-shaped end, and for a No. 10 brass shell use a No. 9 or 10 wad on the powder. The wad should be firmly rammed on the powder and lightly on the shot. If two wads are used on powder they should be each rammed separately. The wads will be seated on the powder cup in the best possible shape for good results in shooting and will be less likely to start from the recoil or rough handling. I once made a very poor shooting muzzleloader a very good one by changing the shape of the butt end of the ramrod. The fault of the gun was that it distributed the shot in a ring. The center of the target for a foot in diameter would be almost entirely free from shot. The butt end of the ramrod was very much concaved, and at that time I used very large wads. I reversed the shape of the end of the rod, made it very much convex or cone-shaped. By using this rod the gun was made an excellent shooter, in fact it acquired such a reputation that I sold it for more than first cost, after using it for six years.

I have one more experimental way of loading, which I hope all glass-ball shooters, who think two wads are a necessity, will try. Load a few shells without any wad between the powder and shot. Use a flat-ended loading plug. Ram the naked powder quite hard; then put in the shot. On the shot put one good felt wad. Try this on glass balls, from any kind of a trap at the regular distance. Now don't say that charges loaded in this way will not break glass balls until you have tried them. In my experiments I used No. 9 shot.

Over-charges of powder are a detriment to the good shooting of any gun. Shot discharged from the muzzle of a gun is very similar to water discharged from a hose nozzle. A hose nozzle to throw a solid stream to any great distance must be chokebored, very similar to a chokebored gun. There is a limit to the distance that water can be projected by pressure through a nozzle, and an increased pressure at that limit will reduce the effective distance. There is certainly a limit to the effective distance of the best shotguns; and over-charges of powder will reduce the effective distance from the same cause that an over-pressure will reduce the distance to which water can be thrown.

Heavy or over-charges cause heavy recoil, which is not only unpleasant to the shooter, but detrimental to good shooting. The force of the recoil backward is at the expense of the force of the discharge forward. This fact is very easily demonstrated. Take a gun that weighs 8 to 8½ pounds; have the shells loaded with 5 drams of powder and 1¼ ounces shot. Let some small man, who weighs about 140 pounds and who has more pluck than muscle, fire a few of the shells at a target 40 yards. Then have a large, muscular man, of 210 pounds weight, shoot the same gun with similar charge. The results will be found very different. The heavy, muscular man by his weight and muscle will hold the gun square to the work, and put all the force of the discharge on the projected shot. The small man, if quite active, will keep on his feet, but when he examines his target will find it just as much poorer as the gun kicked him harder than it did the heavy man. There can be a certain amount of recoil that is not unpleasant, but rather a satisfaction; charges just up to that point will be found very effective. Charges would vary according to the weight of the gun, as well as the weight and muscle of the shooter.

I hope good may result by a full discussion of this subject. CALIFORNIA.

Editor Forest and Stream:

One is not a little surprised at the shooting of some guns, and yet when all things are taken into consideration there is nothing wonderful about the targets presented for our inspection; for all, or nearly all, omit to state whether they are made with "standard" or "trap shot." Then they say 1¼ ounces, leaving the reader to guess how many shot that means. A Bridgeport measure gave 556 pellets by actual count, while a Jas. Dixon & Sons' measure showed 566 pellets of No. 8 standard shot, Tatham's make; while by actual count, according to their table, there ought to be only 500 pellets. Then again, the distances that are given must be guessed at and not measured. English gunmakers all adopt a uniform distance and a uniform target, while our American makers do not appear to have either. Some shoot at 45 yards, 24-inch circle, and some at 40 yards, 30-inch circle. Not long since I was in a testing gallery where a man was shooting guns, and I asked him the distance. "Well, we call it 37 yards, but it is just 35 yards, and we use a 24-inch circle." At another time while in a testing gallery I noticed shot marks all along the side where the pellets had struck on their way toward the target; and any one can guess where the pellets had landed or boarded; viz., in the target, and when I was shown a target with 466 pellets I did not wonder so much as before I saw how and where these patterns were made. Only wondered they did not get more.

Greener advertises that every one of his guns are targeted with 1¼ ounces No. 6 English shot that are counted, and that the distance is 40 yards. Not long since I was shown a "shot counter," devised by M. E. Curd, of Cazenovia, N. Y., that will actually count the exact number of pellets in a charge, and do it very nearly as quickly as they can be measured. When asked why this was not used, the answer was: "This is too accurate for the gunmakers, they want to dip up a measureful, well knowing that it gives them a decided advantage." A few days ago I saw a letter from a man who wanted a gun sent him that would put in a 30-inch circle, at 40 yards, 477 out of an actual 499, all but 22 of the entire charge. I fear this man had been reading some of these wonderful targets which are only made in a paper.

Why can't we have a uniform distance and a uniform target, and as 40 yards and a 30-inch circle is used by all English and a good many American makers, let us adopt that. Measure the distance and count the shot, and as No. 8 is the size generally used in America, adopt that, then one can tell exactly what his gun will do and can make a comparison.

Another thing, a man writes to you and wants to know the proper charge to use and what the result ought to be, and you write that it takes a good deal of experimenting to know what a gun will do. Now, right here, I claim that this is the gunmaker's business to determine, and that he has no business (be he who he may) to allow a gun to go out of his shop until he knows exactly what the gun will do, and the exact charge to use in it; and if the distance, shot and target were uniform he could bore the gun so it would do what it should, and compare favorably with any other gun. Regularity as well as closeness is what is wanted, and if a thirty-inch circle is adopted it gives a larger space and will compel the makers to bore their guns for regularity, as well as to secure a close pattern, and this is what every sportsman wants. A gun with a killing circle of thirty inches at forty yards is better for all kinds of shooting than one that only has a killing circle of twenty inches at same distance.

Tell your correspondent "Oct." that if his gun will average 440 out of a counted charge of 500, I will give him five times as much as he paid for his gun.

These long shots prove nothing—only show what a gun may do once in a while. I once owned a 10-bore, 8-pound 12-ounce gun, 24-inch barrels (breechloader) with which I killed two woodcock, one at 60 and the other at 61 yards, with 3½ drams powder and 1⅛ No. 10 shot, by measure. I also killed a grouse with 2¾ drams powder and 1⅛ No. 8 standard shot at 65 yards. These distances were all measured. How many times I failed, would not care to state.

Muzzleloaders, they are, as you state, things of the past. A man here owns one that will kill a dove at 20 rods every time, and yet I can never get him to shoot at a target with me; and not long ago he offered to sell this gun. I cannot imagine his reason for wishing to dispose of so valuable a gun, for if ever your humble servant gets one that will shoot as this one is said to do, it will take quite a goodly sum to purchase it. HAMMERLESS.

Editor Forest and Stream:

I have a 12 gauge, of 8 pounds weight, that I use for all kinds of shooting except geese. The barrels are choked and are 30 inches in length. I load with 4 drams powder and 1 ounce shot. I never vary from this quantity. I have experimented a good deal and find this to give the best results, especially on ducks, which are the principal game of this region. I am pretty sure of ducks at 30 to 35 yards, and I often kill them at 40 yards. For geese it is too light, but for other kinds of game it suits me better than a 10-gauge, as it is lighter, and as I am not blessed with an extra amount of muscle I find the lighter gun preferable after a hard day's tramp. I use metallic shells. I think them better, but not so handy as paper, which you can throw away after using. I carried this arm with me to the Pacific coast last winter and could always rely on it. I hope this question of shotguns will be as well ventilated as the articles on "The Choice of Hunting Rifles," now appearing in your excellent paper. W. H. R.

IOWA.

Editor Forest and Stream:

I believe the simple but uncompromising principle called "inertia" is responsible for all the difference in straight bores. The fault is not in the gun, but the shell and primer. All unprejudiced men will agree that could the breechloader be made to conform to the most approved muzzleloader as respects practically uniform gauge throughout, a conical base for the powder, and the slow ignition of the charge, beginning at the extreme rear, there should be no difference provided the breechloader were strongly constructed and chambered to fit the shell snugly.

I think if the manufacturers would make some of their brass shells with conical base, and put the least possible amount of fulminate in the center of primers, the improvement in shooting would more than counterbalance the increase in weight of shells. I put conical bases in my brass shells several years since, and the improvement in shooting and decrease in recoil are very evident. I can use 5-drams electric powder with 1¼ ounces shot in my 9-pound gun continually without discomfort.

The flame of the primer is driven through the charge, igniting it instantaneously. Hence the increased recoil (to the serious detriment of the "vis inertia" of the gun) and the necessity for more and coarser powder and wider breeches. There is enough energy in a large Berdan primer to shoot a rifle.

In muzzleloaders only a small portion of flame can be forced into the tube, the charge is ignited at extreme rear of the cone-shaped chamber and the shot started gradually, and urged on with constantly augmented force to the muzzle. The Lyman-Haskell cannon on the multi-charge plan illustrates this.

I have observed (in targeting chokebore guns for customers) that the excessive choke, by contraction in muzzle, adopted by many leading makers, unfits the gun for large shot by reason of jamming them so that they fly "wild;" also that it increases the recoil, impairs the penetration, and gathers powder, dirt and lead in the tapered portion. REFORM.

MISSOURI.

Editor Forest and Stream:

For a man who wants a general service gun, for field, cover and trap shooting, a breechloading gun of 8 pounds to 9 pounds weight, 30-inch barrels and 10-gauge, is the proper tool. It will answer for snipe, grouse, rabbits, foxes, ducks and deer if loaded with buckshot. However, a No. 12 gauge is serviceable enough, the odds against it being merely that it will not stand so heavy a charge as a 10-gauge; and of course will not bag the game shot at as often or as easily as the other for ducks and fox shooting. I use a 10-bore, 32-inch barrel, 9½ pounds.

Correct loading can only be acquired by careful observation and practice. Some persons will say, and quite truly, that all guns of the same bore do not call for the same ammount of ammunition. There are exceptions to the general rule; load them to suit their peculiarities. Very light guns with large bores may not shoot pleasantly, because of too much recoil. Load them with a coarser-grained powder and you may find it to your advantage; if not, you will have to reduce your charge, but at the expense of loss in penetration and wounded game. Very diverse results with good guns may be brought about by having the powder charge disproportionate to the shot, or by using very coarse and very fine powder; also, very coarse and very fine shot, by employing more or less wads, varying in diameter and thickness, and setting them home with different pressure or by ramming, or by mixing shot of different sizes, which is the worst of all if you wish for good pattern and penetration. If all these items control the shooting, does it not follow that to load a gun accurately for all purposes requires many experiments and good judgment and great skill.

I see by your issue of Jan. 24 that "Backwoods" considers chokeboring an abomination. I cannot agree with him on that point. There are but few choice guns made in this country or abroad which may not be called chokebores, for the calibers of the barrels are smaller at the muzzle than at the breech. If any person doubts this statement let him

apply the calipers to the Parker, Bonehill, Remington, Scott, Greener and other guns. I am inclined to think that many sportsmen, who have guns of recent make and good shooters, and who call their guns straight-bores, would find them to be on close inspection chokebores; and, in my opinion, the chokebore properly loaded for long-range is far superior to the straight-bore muzzle or breechloader. This is not only an opinion, but experience from severe tests. Keep the ball a-rolling, we are never too old to learn. L. H. H.

Maine.

Editor Forest and Stream:

I am the owner of two fine breechloaders, and believe I know something about them. One of my guns is a 12-30-7¼ English make. It answered every purpose while I was a resident of the South, but after coming to this country I found it too light for game here, which has to be struck a little harder, and the light weight of the gun would not admit of heavy charges. I then ordered a gun of an American firm as follows: Length, 30; gauge, 12; weight, 9 pounds; full choke and chambered for three-inch shell. I was advised by many, and especially by as high an authority as the Forest and Stream, to get a 10-gauge if I wanted to shoot heavy charges, but right there my inborn stubbornness made me stick to my original idea. In due time the gun was received. It was a thing of beauty. For swans, geese, snow geese and ducks, I use 5 ounces Laflin & Rand, No. 6 and 1¼ ounces shot, and the game must be over sixty-five yards or I will bring it to bag three times out of five. For ruffed sharptail, blue grouse and teal, I use 3 ounces powder and 1 ounce shot, and can kill far enough to satisfy any one. It shoots as well with 2⅝ as with 3-inch shell, but I have to use 3-inch shell for heavy charges. Recoil can scarcely be noticed, especially in wing-shooting. I have never targeted my gun, neither do I intend to. I know what it will do on game, and do not fancy firing at a board. I made a shot at a swan which fell dead without a flutter at sixty-five paces, and as it must have been 100 feet high when struck, the distance can be easily calculated. I made this shot with 5 drams powder and 1¼ ounces No. 1 shot. One shot went through the head and four through the body.

I once had the pleasure of shooting a Purdy gun which cost its owner over $600, and as far as shooting qualities are concerned I would not exchange with him. If "Buckeye" will address me as below I will tell him where to spend his money, so that he will never regret it.

Bitter Root Bill.

Missoula, M. T., Feb. 16, 1884.

Editor Forest and Stream:

In regard to the performance of shotguns, perhaps my experience during past two years will explain why some breechloaders do not come up to the expectations of their owners. About two years ago I purchased a 12-8¼-30, modified and full choke respectively. This gun worked admirably for pigeons at 30 yards rise, but for field work was very unsatisfactory. It took a full season's experience in the field with various combinations of shot and powder to convince me that for cover shooting close-choke would not do. Since then I have been using a 12-7¾-30, open and modified choke respectively, with much more satisfactory results.

W. H. C.

Philadelphia.

Editor Forest and Stream:

Not being a gunsmith, but having sufficient knowledge of the business to enable me to do my own repairing, I desire to add my testimony with regard to pattern at various distances. My gun is a 30-inch, 12-gauge breechloader. With 1¼ ounces of No. 3 shot, at a distance of 33 yards, 185 pellets were put into a 12-inch circle; with the same charge, at a distance of 40 yards, I put 280 pellets into a 20-inch circle. The distance was measured and shot weighed in each instance. Can this be excelled, and if so, in what manner?

D. H. S.

Rushford, N. Y.

Editor Forest and Stream:

Have any of your readers experimented to determine the values of different lengths for gun barrels? What practical (not theoretical) advantage has a 32-inch barrel over a 28-inch barrel? And what are the limits of length and brevity? I hope that this note, which I write because I am in need of the information, will meet the eye of some one who can help me. Senex Septimus.

Editor Forest and Stream:

My friend Dr. R. has, for the past twenty-five years, used a No. 10 bore, double-barreled muzzleloader, which has been regarded by judges as a No. 1 shooter. When breechloaders came into use he and I made a number of tests between his old gun and various makes of the new pattern, and in every case the comparison was in favor of the muzzleloader. The breechloader, however, usually did closer shooting but lacked force. This was particularly noticeable when a less than No. 10 gauge was used.

Great improvement has been made in the shooting quality of the breechloader within the past few years, and we have made but one recent test and that was decidedly in favor of the breechloader. My friend was induced to exchange his old gun for a fine-looking breechloader of the same bore, but after giving it a trial he longed for his old stand-by and went back and purchased it. He then tested the two guns duck shooting on the Potomac, and finally admitted that his new gun would shoot both stronger and closer. He objected to it, however, because of its kicking qualities, sold it to me, and is now looking for a good breechloader that "won't kick." My gun is No. 10 bore, 32-inch barrel, weighs 9½ pounds. Since I have been using it I have compared it with eight or ten muzzleloader guns at a target 40 yards distant, and I succeeded in putting twice as many shot within a described circle as any one of the muzzleloader pieces. For general shooting it is hard to beat, and I would advise "Buckeye" to procure a No. 10 gun, for I am quite sure it will give him greater satisfaction than No. 12. It has always seemed to me that the criticisms and condemnation of the breechloader were in a measure prompted by a degree of prejudice. Our old sportsmen have become attached to their tried and faithful fowling pieces, and no doubt this attachment does at times influence their opinions.

Keystone.

Washington D. C.

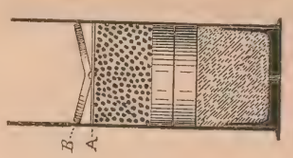
Massachusetts.—Danvers.—Quail and partridge wintered very good here, although it has been very cold for them. Foxes and rabbits have been very scarce around here this season.—J. F. D.

MUCILAGE-EDGED WADS.

Editor Forest and Stream:

My attention has just been called to an article on mucilage-edged wads, which appeared in your last issue. The only patented adhesive wad known to me is one patented by myself, which I have subjected to severe tests for two seasons, and now, as improved, I believe it to be cheaper and far superior to any shot-retaining wad on the market; and it will retain the charge quite as well in a brass as in a paper shell.

I herewith inclose a sample and a sketch showing its application: First, a thin disc or wad, A, is seated over the



shot. The wad B, scored one-half its depth to allow for bending up, is now dropped into position, the scored surface downward, after first wetting it with the tongue or a sponge. You will observe now that if seated with an ordinary rammer the gum will adhere to the walls of the shell at the points desired, and the two halves act as a brace, holding the charge securely in place. The two cut out spaces act as very important factors, as without them the wad would not drop freely into the shell, consequently the gum would rub off, when it would be of no use; hence we use a thin disc first on which to seat, and this prevents the shot from falling through the spaces. The fault with the process named by your Baltimore correspondent is, it has too many "frills," more, in fact, than crimping, while this of mine has none and cannot be excelled for cheapness, simplicity and general excellence. Falcon.

CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

Now that the ammunition question is being rapidly settled, will not some of your correspondents give us their ideas as to the best shape for the butt-plate of a hunting rifle. My own preference is the one used on the Springfield army rifle.

Greenhorn.

New York.

Editor Forest and Stream:

I noticed in your issue of Feb. 21 an article written by "G. F. W." on a subject which I have been studying some time; that is, the manner of igniting gunpowder so as to burn the whole of it, thereby gaining the full force of the charge.

I have a few shells of different sizes that I altered by inserting a small tube inside so as to conduct the fire from primer to the forward end of powder, which I find answers the purpose exactly. I sent a diagram of it to the Winchester Arms Company, and they said it was an old invention and discarded long ago. I think if "G. F. W." will try this he will be satisfied; in fact, I don't see why the shell makers have not tried it before, as it seems to be the only proper way of igniting the charge. J. L. DeH.

Massachusetts.

TENNESSEE NOTES.

THE shooting season of 1883–4 has proved almost a failure here for lovers of what is termed by some "legitimate sport." The rains of November and December, and the heavy snows and floods of January, have kept the birds in the woods and thickets, where wing-shooting ceases to be a pleasure. During the snows large numbers of quail and hares were bagged by pot-hunters, and larger numbers of the former were trapped. Very few ducks have visited us this winter; in fact, this has been the case for two or three seasons. Geese have been plentiful, but few have been shot. No one here ever shoots over decoys or makes any systematic pursuit of geese, such as are killed being from flocks that are accidentally approached by, or come near to, some party of duck hunters. At present the river is out of its banks, and all the bottom fields and woodlands are overflowed. This is the pot-hunter's golden opportunity, as hundreds of hares and quail can be found upon the mounds and stumps in the back water, where they fall easy victims to the pot-metal shotgun or antiquated musket. The game law is not in force in this county, public sentiment here being almost unanimous in its opposition to legislative protection for game.

A few foxes and otters, several beavers, and multitudes of raccoons have been trapped here this winter. There are parties here who make good wages trapping, as minks and 'coons are very abundant. There were a few snipe here this fall, and three were killed within the town limits on the 5th of January.

This is later (or earlier) for snipe in this latitude than I can recollect observing before. I think if the waters subside before the middle of March we may have good snipe shooting on the muddy flats left by the receding waters.

Will.

Savannah, Tenn., Feb. 11.

THE SQUIBOB BEAR MACHINE.

Editor Forest and Stream:

I cannot tell you how glad I am to hear of my old friend, J. B. Squibob, through your correspondent, "Moss Back." So he is about to bring out his bear-trapping device with which he was experimenting when I last saw him, long and long ago.

I wonder if he would forgive my telling the result of one experiment. If you think he would not, pray keep it to yourself, and publish it not in Gotham nor tell it in the streets of Chicago.

J. B. S. had stuck up his ground and greased his tree, and had just set his bait when he "lost his holt" and came sliding down "on the run," as we Horse Marines say, and that part of him which was best acquainted with a chair stuck fast in the lime of his own setting. It could not be said of him that he was "hoist with his own petard," but rather, had sat down upon it, and it would not hoist him, nor could he hoist himself. This, however, was but little compared with what followed. A bear scented the bait and came rushing to and up the tree for it. Half way up his claws slipping, he came down plump on top of my friend J. B. S. with the ponderosity of one of Richard Grant White's jokes, and the days of poor Squibob would have been then and there ended had I not been at hand to finish the bear with my hunting knife, and with it cut my friend loose, who escaped with no greater loss than some wind squeezed out of him and the seat of his leathern breeks.

I am truly glad to know that he still lives and is as fertile of inventions as ever, whereof I was always barren. If any of these words come to his sight I hope to hear again from my old friend. Yours in the cause of truth,

Major Joseph Verity, U. S. H. M.

Adironda, Feb. 30.

An Old Hunter.—Riverhead, N. Y. Feb. 26.—The Long Island Hunters' Association gave a dinner in Terrace Hall this afternoon. More than 200 hunters of all ages were present from all parts of the island. Dozens of hunting dogs lay about under the tables, and guns leaned in every corner. The old hunters told marvelous stories of the number of deer and foxes they had shot, and the younger ones wished that rugged experience had enabled them to tell such stories with equal grace and confidence. The Association was organized fifty years ago for the purpose of protecting the Long Island deer, which were already fast disappearing. Twelve men got together, made a clearing in the midst of a thick wood, and planted it with green truck of all kinds. This was done to attract the deer. It was also agreed never to shoot them in that vicinity. The deer at first accumulated rapidly in that section of the island, and their disappearance was delayed. This hunter's garden has been planted regularly each spring ever since, and at harvest time what the deer have not eaten is cut down and ploughed under. The planting and harvesting of the crops is made an occasion of festivities among the hunters, who accompany their agricultural pursuits with picnics and hunting parties twice a year. At the last meeting, in October, it was resolved by the Association to present an appropriate silver medal to Mr. Wells Tuttle, the president and founder of the Association. Mr. Tuttle is now nearly 90 years old, and is the only survivor of the twelve deer apostles, as they were called. The object of yesterday's meeting and banquet was the formal presentation of the medal. Mr. Tuttle, in spite of his years, told more remarkable fox stories than any one else, and indulged heartily in clam chowder and other good things provided. He sat in a large rocking chair on a raised platform, the background of which was decorated with old flint-lock rifles and stuffed specimens of Long Island birds and beasts. His eyes sparkled with pleasure, and he applauded many of the speakers. The presentation speech was made by Judge Thomas Young. The Judge was applauded with especial emphasis because it was known that he was uttering the sentiments of the aged president. "All that remains of the good old time," said he, "is the dog. Nothing can spoil him. When I see a lot of dainty boys dressed up in white breeches and red coats, mounted on small horses and chasing an anise-seed bag across country, I can find no word in the English language small enough to express what I think of them. How I pity the able dogs that they press into their service. What a pity such superior animals should have to keep such company." Old Mr. Tuttle remarked that he could shoot better with his gun than he could with his mouth, and asked one of the young hunters to respond to the address for him. Mr. R. M. Bayles, of Eastport, did so. The other speakers were Surrogate James H. Tuthill and Mr. George F. Stackpole.—*Sun.*

Long Island Duck Netting.—Good Ground, March 1.—*Editor Forest and Stream:* In your last issue in reply to my notice that ducks were being caught in nets, you advised me to notify the game protector. Now, this thing has been going on for years, and I have been informed by reliable parties, who reside in the vicinity where the netting is done, that the same parties last fall caught in Shinnecock Bay over 7,000 ducks. As I said before, the bay is now full of ducks, and, of course, the netters being so successful last fall, this has brought more netters into the business, and they are now catching from 1,000 to 1,500 ducks at a run. If the business goes on the birds will soon be all caught up and driven away. Not only are they caught in nets, but they are shot nights on their feeding ground. I have notified Mr. Whittaker at two different times, and he has paid no attention to it; and the netting and night shooting go on. I have tried to stop it on my own marshes, and succeeded. We ought to have a game protector who understands the bay, and who is not afraid to go ahead and have the first man arrested who is caught. I could name a man who would take care of the game in the bay if he could be appointed game protector. If this thing is allowed to go on every man living around the bay will in a short time be netting ducks. I think it would be a good thing to have a law passed prohibiting the setting of gill nets on the feeding grounds of ducks. There is no fish to catch at the time ducks are here. I am nearly done with trying to protect the game alone without the help of any one, not even the game protector, who is appointed expressly to take care of the game.—William N. Lane.

Michigan Deer Skins.—Boston, Feb. 26, 1884.—*Editor Forest and Stream:* I have lately returned from a business trip West, and on my way stopped during the early part of the present month at Detroit, Mich. While in the warehouse of a merchant there I commented on quite a large-sized pile of deer skins, and was informed by the owner that there "are over 3,000 in that pile," and "we have already shipped 5,000, and shall handle fully 10,000 this season, every one of which was taken from deer killed in Michigan." I suppose this will be no news to you, but to me it was simply astounding. This merchant is not the only one who deals in deer skins in Michigan and ships them out of the State, but is probably the largest.—A. P.

Bounty on Foxes.—Waterville, N. Y., Feb. 18.—At a meeting of our local sportsmen's club held last Friday evening, a resolution was introduced offering a bounty of one dollar for each old fox killed by residents of our two adjoining towns. After some debate, as the idea was a new one to many of our members, the motion was carried. The plan seems to be a good one, as a few old foxes will create more havoc among our upland game than all the guns of our sportsmen and market hunters combined. Were this plan acted upon by all the clubs throughout the States, I believe we should find a noticeable increase in the number of our game birds.—N.

DEER IN VERMONT.—It will be remembered by our readers that some years ago a party of the citizens of this and adjoining towns subscribed a sum of money for the purpose of placing a number of deer in the mountains with the view of trying to re-stock the woodlands of the State with these valuable and beautiful game animals. The deer at that time were protected by a law which expired by limitation in 1880. The Legislature of that year, however, re-enacted the law and extended its provisions, the expiration of the new law being Nov. 1, 1886. The deer so placed have, it is believed, increased in such a manner as to afford good ground for belief that the experiment will be successful. Rumors have been heard from time to time that deer had been unlawfully killed, but no direct evidence has been produced until yesterday, when a young lad living near Bald Mountain gave Mr. J. C. Dunn, one of the gentleman who was most active in the enterprise, information which led to the discovery of a dead deer, which had evidently been shot by some miscreant who luckily, however, failed to reap the fruit of his infamous act. At the time the deer were turned out a reward of $50 was offered for information leading to the conviction of any person who should kill, take or pursue them, and this offer is still good and the money will be paid to any one who will furnish information upon which the person who killed this deer can be convited. Information may be given to Mr. J. C. Dunn, M. G. Everts, F. Chaffee, A. F. Davis, Geo. H. Cheney, H. W. Cheney, Dr. C. W. Brigham, Hon. D. W. Taylor, S. E. Burnham or Wm. Y. W. Ripley. The offer of the reward is yet in force, not only as far as it concerns this particular animal, but also others who may be killed hereafter—in fact it is a standing offer. That all may know just what the law is we publish the full text below: "A person who prior to the first day of November, 1886, pursues, takes or kills, within this State, a wild deer, or has in his possession a wild deer or any part thereof so taken or killed, shall be fined $50, and the possession of the meat or hide, or any part of a wild deer, shall be presumptive evidence that the person having it in his possession is guilty of a violation of this section. It shall be lawful to kill a dog found pursuing wild deer prior to November, 1886, if such dog is killed while in the actual pursuit of deer—*Rutland (Vt.) Herald, Feb.* 29.

MORE CAT.—As cat stories seem to be in order just now, "that reminds me" of another cat that was not killed. Some years since a handsome maltese cat, having been sentenced to death for catching young chickens, I was requested to officiate as her executioner. The instrument of death selected was a new repeating rifle, to whose sights I had not become accustomed, and which had never yet drawn gore. "To make assurance doubly sure," I tied a rope around pussy's neck, and fastened her to the garden fence; I drew a careful (?) bead on her head (distance five yards) and the way pussy backed away and stretched the rope, she anticipated her fearful doom. Bang!—I saw a blue streak disappearing "over the garden wall," and found that like Alexander of old I had "cut the Gordian knot," not with my trusty sword, but with 40 grains of powder and 200 grains of lead. In a word, the rope was shot, the cat was free. To cap the climax, my neighbor, "Old Muzzle Loader," had witnessed the scene and remarked, "Didn't I tell you the trajectory of your new-fangled repeater is too high?"—BOBOLINK.

RUFFED GROUSE CAPTURED ALIVE.—Orwell, Vt., March 2.—Last week, while two men were chopping, they captured a partridge in the wood pile. Tying a string to its legs, they hitched it to the fence, where it died during the afternoon, having pounded itself to death. Fox hunting has been good this winter, the greatest number killed by one hunter being sixteen.—W. L. P.

CONNECTICUT.—The Senate Committee on Agriculture have reported adversely on all proposed game law changes.

Sea and River Fishing.

DOWELS AND FERRULES.

FOR his blow at that ancient superstition, the dowel pin, Mr. Wells deserves all praise. If the subject had been thoroughly discussed, they would have disappeared before this. Twenty years back, Thaddeus Norris—than whom a better American angler and rod-maker never lived—condemned them unhesitatingly, and stated that he never used them. But there are some points against both them and the present style of ferrules, that neither he nor Mr. Wells in his article have touched upon. They are the cause of the present article.

First—As Mr. Wells has shown, the greatest points of strain (*i.e.*, transverse strain) are at the juncture of the wood with the lower end of the female and upper end of the male ferrules. For, as the rod begins bending at the tip, the transverse strain is thrown further and further down the rod, the strain becoming more longitudinal upon the bent part. But as the strain progresses down the rod, it strikes the ferrules; but the ferrules cannot bend, therefore at their junction they act as a lever against the wood, and the longer they are the greater the strain. Every one can see this, and it is therefore plain that those parts of the rod should be especially strong. But you will ask, what bearing has this upon the dowel pin and tenon? Why, simply this: It is evident, to reduce the strain as much as possible, we must shorten the ferrule, and if we shorten the ferrule and retain the hole for the dowel, we bore away the wood at the very place where we need the most. And there is still another grave objection. Wood is porous, and by virtue of capillary attraction will suck up moisture. This moisture rots and weakens the fibers of cellulose tissue, of which the wood is composed; therefore we varnish our rods to keep it out. Now, woods of all sorts exert their capillary force strongest in the line of the grain. That is, wood will drink up moisture faster when a cross section of the grain is wet than in any other way. The reason of this is plain, when we see that the interstices of the fibres are really minute capillary tubes, which draw the water up. Now, the dowel hole in almost all rods has no covering to prevent this; it is impossible to keep its side well varnished, and the dowel pin would soon wear it off if we could. So, whenever we get moisture into the hole, and it is almost impossible to avoid this, it acts as a little cup, to retain and draw moisture into the pores of the wood, weakening and rotting it at the point where we want it strongest. To rods which have a waterproof cup for the dowel pin this objection does not apply, but the former one does. So far as we know, however, there are no wooden rods in the market which have this cup, and only one make of split bamboo, and this latter objection is doubly strong against the latter, because bamboo is not only more porous than other woods on its cross section, but there is also the glue to be spoiled by the capillary attraction.

Second—It strengthens the joint, is claimed for it. It does no such thing. The leverage in the ferrule itself is brass against brass, and as Mr. Wells has shown, even thin brass is amply strong. How many ferrules split or collapse in comparison with the number of rods that break the wood at the junction with the ferrule?

Third—It is claimed that it holds the joints together. This assertion is also false. Look at your own rod, and see which shows the most signs of friction, the wooden dowel or the



brass ferrule. It is evidently the friction of the lip of the female ferrule upon the tapered male ferrule that holds the joints together. If it were the friction of the tight-fitting dowel, when the brass became worn we should have to trim the whole thing down, whereas this, practically, never happens. The dowel hole is always made too large for any friction, to prevent the joints sticking from moisture.

As the summing up of this article, I would like, with all due humility, to submit the following design, which will cover the above objections:

The above figure represents the joint cut away to show a longitudinal section. It will be observed that at A and B the wood is full size, thus getting the greatest amount of fiber, to resist transverse strain. Some ferrules are already made this way, and they are the best in the market. I shows a round wad of brass, cut to exactly fit the bore of the ferrule. It is pushed down ahead of the wood, to which it is fastened by shellac, till it comes to the shoulder. It prevents all moisture getting at the cross section of the wood and weakening it. The dotted lines show where rods usually break on this account. It will also be observed that the male ferrule is also capped with brass, as shown at D, for a similar reason. This cap could more conveniently be made a solid part of the male ferrule, and I have so represented it.

To prevent unjointing and the nuisance of throwing away a joint or two, I have shown at C a little brass cleat, fastened to the rod by silk lashings. A similar one is put on at the lower end of the female ferrule, pointing in the opposite direction, and a few turns of silk, taken around these, prevent all accidents. This is an old device and a good one.

The proportion of parts in the figure is exaggerated to show them more clearly. These ferrules could be made very short to lessen the leverage.

I should be glad of any criticisms from other anglers. Everything to forward the angler's art, should be the angler's motto, and in this spirit I have writen. PERCYVAL.

A MASCALONGE.

MANY years ago when a boy my father and myself were devoted disciples of the rod and line. Few, if any, could equal the old gentleman either in handling a fish, or in the number in his basket at the end of a day's fishing in the St. Lawrence, that most beautiful river. Where we fished, bass, pickerel, pike, and now and then a mascalonge were to be caught; but the story I wish to tell is of a mascalonge which my father and myself attempted to capture, and we tried it so often that we called him the "one-eyed perch."

On a bright day in June the pater suggested to the writer that a few hours spent on the river would be pleasant, and that he get the boat and fixings ready. Away scampers the boy for the river bank; the boat is washed, the paddle and oars are soon in place, we step in, and away for the second island, round the head of it we go, and down the south side with a six-mile current helping us on, the big copper spoon towing behind us sixty yards away. Down around the island we go, pulling slowly but moving swiftly, when, as if struck by a streak of lightning, the flat-bottomed scow rises on a wave and we are in the middle of a riffle, well known to lovers of bass fishing.

"Pull," cries father, "and we will make the foot of the island;" and pull it was for some ten minutes with current setting us down the river, and the long line and spoon dragging behind. At last we catch the eddy, and then the veteran in the stern says: "We will pull along that bank of rushes and I think we will find a fish near the end of the island." So we move on slowly for a hundred yards or more, when "Make her move" comes from the stern, and the boat moves along briskly, the oars just touching the rushes, when as we near the point I hear the magic words, dear to every angler's heart, "I've got him!" Then the boat stood still. "Pull, pull, boy!" cries the old man, and I labor at the oars for all I am worth, until nearly black in the face, when I see a shining object rise from the water some five feet or more distant, and with a splash it disappears, to rise again and again. Still it is "Pull, boy, pull!" and away we go from the rushes and twist and turn in the eddy of the island till we think the fish is tired out, and father begins to haul in, when whiz goes the line through his fingers, which are cut to the bone. "Stop," he cried, and I rest my weary arms for a second or two, when I notice a look of pain, disgust and anger on the old man's face as he says, "Bless him, he's gone!" and sinks into his seat. Presently he hauls in the line and behold the hook, a good large one, is straightened out. That is enough fishing for one day, so we pull home, sadder if not wiser.

The soldering irons are got out, and ere night closes in, we have a new and stronger hook fastened to the spoon, and are ready for the "one-eyed perch." Some days elapsed before we could get away again, but at last we are off, and go down on the north side of the island; we round the point of rushes, and come with a long, steady stroke past the hole where we hooked him before, but without getting a rise; so on to the southern end of the island and back again. "Steady, boy, he ought to be here!" and here he is, as I feel the boat cease moving in spite of my efforts to keep her going. "Pull from the rushes!" and pull it is; slowly the boat moves, now the fish makes a rush toward us and the boat flies as fast as young muscles can make her, till we strike the two currents meeting at the northeast end of the island. Then right about we go with the fish, now in the water, now out, pulling like a devil possessed, now to the right, now to the left of the boat, and sometimes under it, but the line kept taut. At last, tired with his efforts, he is brought alongside. "Get the gaff," but alas! the gaff was left behind, "Shoot him!" and I spring for the old muzzleloader in the bow, when with a last desperate effort he plunges below the boat and is gone! Then the old man sat down and wept (swore) in French.

We tried to catch this monster of the deep until we had hooked him seven times, the last of which was but a repetition of the two first attempts with only this difference; this time he took away with him thirty yards of line, and the following morning he was caught some five miles lower down the river on a night line, with which he had entangled himself. He was sold by the fishermen who caught him to the "Lord of the Manor" and weighed thirty pounds. We recovered the spoon and line, and had lots of sport with the spoon afterward. CANUCK.

VICTORIA, B. C., Feb. 2, 1884.

HINTS AND WRINKLES.

Editor Forest and Stream:

I have just read with pleasure the article on dowel pins, by Mr. Wells, in your issue of the 21st.

Three years ago a friend took up rod-making as a winter pastime and turned out three or four rods that were, and are yet, equal to anything short of a split bamboo. The dowels bothered him, and thinking the matter over, neither he nor the friends whom he called into council could find any *raison d'etre* for them. So the rods were finished without dowels, and we cannot see that anything has been lost in any way.

Many thanks to Mr. Wells for the suggestion regarding rod handles. I for one will try it, and I have so much faith in it that I shall use it on my best rod. We anglers want more such points. Almost every one of us might do something. We are, all of us, or a great many, at least, indebted to the FOREST AND STREAM for hints and wrinkles of which we have made use, and yet I suppose not one in ten have ever acknowledged them or tried to give other points in return.

Here is a little one that helped four of us on Spider Lake some years ago. We found a splendid place for bass one day and caught some beauties, but we had no landing net, so that the biggest one generally got away, until some one thought of making a gaff with a lake trout hook. Simplest thing in the world! We just took a three-inch Limerick hook and lashed it to the end of a three-foot switch and lost no more bass for want of a landing net. Such a hook can be carried in the fly-book, and when you unexpectedly fall in with big fish (no joke) why there you are!

And this leads to a question I have wanted to ask for a long time. We have all read time and again of a bass when hooked leaping from the water and falling on the leader so as to break it. How does he do it? If both ends of the line were fast I could understand it, but they are practically loose. For experiment: Fasten the hook to the floor and let the rod be held so that the line will be at about the same angle and tension as when a bass is about to leap. Now drop a ten-pound weight on the leader two or three feet from the hook. The finest gut will stand the test. I know how they shake the hook from their mouths when they get a slack line and that the gut does sometimes break when they leap, but do they break it by falling on it, or by striking it with their tail? I don't think so. J. G. W.

CANADA.

FISHING AND FISHERMEN.

HAVING been inspired on several of these warm and spring-like February days, my mind has been stirred from its alpha to its omega along the line of the past as touching the streams I have waded, with rod in hand, and the boats I have sat in on the rough or smooth rivers and lakes, as the case might have been, waiting with my attractive lure for a bite.

None but a born fisherman can enter into the sport. None but a follower of Izaak Walton can climb and wade from early morn till dewy eve over hills, through vales, and call it sport.

He only can sit by the fireside while the last snow of winter is falling and extract the profoundest comfort out of the by-gones, as the fly-book is turned leaf by leaf and each crumpled, feathered hook is eagerly examined and the history of them read, telling how a three-pound trout played havoc with the cowdung, the red ibis, or the king or queen of the water; how some great black bass, or tremendous salmon spoiled this or that fly in such a year, and wondering, as the light blue smoke of the companionable pipe rises in dainty cloudlets above our heads, if the like will ever occur again. Hope, in a whispered prayer, bubbles over the lips from the depths of the heart, and trusts that the all-wise Providence that created the beauties of the streams and the deep, who also established in our souls the desire to enjoy—as only we fishermen can—the greatest of pleasure, of a spring and summer time, with rod and creel, may not blast our hope, or leave our cravings for the beautiful unsatisfied.

In the week that has just past, my mind has retraversed all the brooks, rivers and lakes, where joy came to my heart over the line and rod, as it only can be telegraphed to the sportsman who had it born and bred in his bones. One unpleasant reflection I called to mind wherein I got a severe flogging from my father for leaving my work to go fishing. He told us if it rained we might go. It sprinkled a little from a cloud not larger than a man's hand, and away my brother and I ran for the charming Susquehanna. We were checkmated on the banks of a brook by a switch that somewhat resembled a modern trout rod, wielded by him who was not born as we were, with more love for angling than manual labor. That whipping no doubt decided my future. I soon began the study of physic, and ere long I bade adieu to brush and stones, and the hardships of the old farm, and took up my abode near the beautiful Cayuga Lake, in the city that boasts of the college upon a hill, founded by the late lamented Cornell. After my departure, all my brothers but one followed, and to-day four of us are fishers for patients in the winter and muddy spring, but the desire which our father tried to check when we were young has, to all appearances, intensified, and must yearly be gratified.

There is no more beautiful village than Ithaca, not a more beautiful body of water than Lake Cayuga. The several streams that empty into it and the grand falls, of Fall Creek and Taughannock, the cascades and rocky shores of Six Mile Creek add to the beauty and grandeur of this vicinity. The fish and game clubs here are alive to the stocking of streams and the protection of fish and game. We expect 60,000 California mountain trout this summer for our streams in Tompkins county. Last season we took several California trout on bait and fly in Fall Creek and the Inlet Creek. Dr. Sharp caught a California salmon under the falls that weighed two pounds. This beautiful specimen showed much pluck and endurance in the fight against the line and rod. The mountain trout were put in the stream one year ago last summer, and when taken by C. B. Brown measured seven inches in length, and acted quite as gamy as brook trout of the same weight.

Our lake abounds in small and big-mouthed black bass, wall-eyed pike, perch, pickerel, swamp pickerel, bullheads, rock bass, salmon trout, California salmon, eels, suckers and herring. Black bass have been caught at the head of the lake weighing six pounds and a quarter by E. C. Van Kirk and a Mr. Grayer with minnows. Dr. Fowler caught one bass on a fly, that weighed four and three-quarter pounds. The writer has frequently taken on a fly and with bait twenty to thirty pounds in a forenoon or a part of the afternoon.

Several years ago I caught five salmon trout before 10 o'clock A. M. I with my oarsman got on the water about 6 A. M., and before we had gone one hundred rods below McKinney's I hooked a beauty; going once over the water from this point to Bloom's bar, and through Burdick's Bay, the five beauties were secured. They all took a Canandaigua spoon, leaf shape. A friend came from Bradford, Pa., and went out with me. I rowed the boat for him to fish, which I have no love for, and after an hour of faithful trolling he gave up in despair and handed the line to me. We had not proceeded far in Burdick's Bay before I struck something so solid that I called to my friend to stop the boat, as I had fear of losing my line, thinking I had caught a slab. As soon as the boat slacked I felt the object tugging at my hook. I remarked that whatever had hold must be alive, as the movements were really like a monster fish. I cautiously took up the line, keeping it taut, and after some anxiety and trepidation, saw fifty feet away in the clear water a sight that sent a thrill through every nerve. "A ten-pound trout," I cried, "Oh, he's a bouncer, Mr. Welles; hold the boat steady now; keep an eye on the fish when he comes near the boat and turn the stern away sufficiently to allow me to lift him in without touching the gunwale." He did so in a masterly style, and to our great joy we secured a salmon trout that weighed eight and one-fourth pounds. After our knees had got over trembling, and our palpitating hearts steadied down a little, we went over the same water and took another that weighed five and three-fourths pounds. We went home the happiest of men; envied by all.

The late Dr. Bristol, of Syracuse, went with me on another occasion and we captured five salmon trout and one wall-eyed pike. Their weight we did not take, but such a fine basket of fish is seldom taken from any inland waters. The beautiful cottages that dot the shores of Cayuga in the summer time are most charming to view from the decks of the passing steamers, steam and sailing yachts. If any one who reads this article wishes to spend a few of the hottest months in the year profitably and pleasantly, come.

Onondaga Lake is a clear, deep body of water, near the city of Syracuse; is well stocked with small and big-mouthed black bass, glass-eyed pike, wall-eyed pike, pickerel, perch, bullheads, catfish, eels, and the finest whitefish in the State. The writer has caught many a fine creel of the fish of this lake with fly, bait and spoon.

The most killing flies for Onondaga Lake are the R. W., John Mann (resembling the bee), Ferguson, Lottie, black, Montreal and a black body with white tip wings and tail—the name I have forgotten.* I have had good success now and then with a red wing and green bodied fly, gold tinsel—never knew the name.† The last pleasant time casting the fly on this lake was in company with Reuben Wood, of Syracuse, who died a few days since. Mr. Wood was one of the most accomplished fly-casters I ever saw handle a rod. He was, as the wide world knows, an expert. He needs no eulogy from me, for his name stands among the highest as a successful fisherman, and what is still grander than all, as a man; he excelled in gentleness, generosity and integrity. All who ever met him on the banks of a trout stream, or wherever a fish could be lured to a fly, must have been impressed with his true manhood and genial disposition.

Lake Oneida is one of the most natural waters for fishculture in any State. The water is not so clear as that in Onondaga, Cayuga, or Senaca lakes. Thousands of acres of bottom, covered with weeds, exist at both ends of the lake, and along either shore the water is but a few feet in depth in many places, and the grasses, or water weeds, are often above the surface. There are several small bays in which the fishermen have grand good luck in capturing big-mouthed bass, pike (glass-eyed), and pickerel. I caught 75 pounds of bass, pike and pickerel, including a 12-pound catfish, in little more than half a day last summer, with trolling spoon. Charles Preston, of Syracuse, and the writer, caught 63 pounds of big-mouthed bass, pike and pickerel, over 30 pounds of bass, there last summer, in a few hours. The bass would average over two pounds and one-half each. The best time to go to Oneida Lake for trolling is in the month of June and the early part of July. About the 15th of July the eel lifes cover the water and the fishing is not good until past the middle of August. Small-mouthed bass can be taken with a fly in June at the eastern end of the lake, and at West Porte.

On the Susquehanna River, last summer in the early part of July, a party of gentlemen from Elmira and one from Ithaca and myself took passage in flat-bottom boats, leaving Elmira at the early hour of 3 A. M. With lamps and lanterns in our several crafts we passed down the crooked Chemung, looking much like a fleet of Indian canoes bound for some distant point to make an attack upon some hated foe. The breezes that caused our lamps to sputter filled our sleepy eyes with pungent smoke, and when daylight appeared we all might have been taken for boys who had just returned from a fishing tour instead of a happy lot who were just leaving home for a grand time and a glorious summer vacation. The water was muddy, the river swollen and the current rapid, so we traveled at a great speed.

As the sun rose bright and lovely over the eastern hilltops, a view grand in the extreme presented itself to us in one continuous panorama as we floated on. Like a kaleidoscope the changing scenes came and went hour after hour, till we landed at Tioga Point, below Athens, where we met a party made up of gentlemen from Waverly and the neighboring towns, with a large flatboat. We all pulled out together and floated and fished till we arrived at Towanda, Pa., about 4 P. M.

The islands in the Susquehanna, between Tioga Point and Towanda, presented a beautiful aspect, almost tropical in appearance. The wide spreading branches, covered with vines and flowers, lent a perfect charm. "Oh, how beautiful!" was upon every one's lips. Those who had been shut up in the dust and peculiar smell of the cities were transported with ecstacy. Who has not been charmed as we were, on many an occasion, with nature's beauty—the smell of new-mown hay; the eyes feasting upon the harvest, all nearly ripe for the reapers; the vine-clad rocks and blossoming islands; the songs of wild birds—all gloriously lighted with vertical sunbeams and a cloudless sky? The charm was as complete as complete could be.

Arriving at the hotel in Towanda, we startled the denizens with the fine display of bass and wall-eyed pike on our string. I took one of the latter of seven and one-half pounds with a perfect revolving spoon. One eight and one-half pounds was killed by a man accidentally while crossing the river. He put down his pike pole and thrust it clean through the fish while pushing the boat. Pike, or yellow bass as they are termed in Bradford county, are very numerous in the Susquehanna.

The following day we sailed for Wyalusing, where we ended our journey and stayed for a few days enjoying ourselves to the fullest extent. The hotel there has the best of accommodations, and boats and fishing tackle in abundance. For three miles above and below this place one can catch all the black bass he desires. From thirty to fifty a day is an average catch, with flies in June, and bait in July, August and September.

There are numerous small trout streams near Wyalusing, and one can enjoy this kind of sport if he chooses to do so after a surfeit of bass fishing.

The helgramite, clipper or dobson, a name given to a little black, many-legged worm that is found in the river under stones, is one of the killing baits used there. The best and surest, however, is the little minnow bullhead, also found under the stones in the bed of the stream. Boys keep these baits constantly on hand near the hotel. One visit to this locality will be sure to make a convert of you.

I have done. If your readers take as much pleasure and profit reading this tale as I have in writing it, and dwelling upon the by-gones, some little good will have come to us through the element of our natures, begetting a love for the pastime upon the stream, and beside the rippling brook.

M. M. Brown, M.D.

Ithaca, N. Y., Feb. 26.

*Magpie. †Hooker.

TROUTING ON THE BIGOSH.

A DIGRESSION.

OWING to the temporary absence of the writer of these articles, and the fact that he had not revised more of his manuscript, we publish a few extracts from letters received, which show a variety of opinions on the different subjects treated of in the papers.

A writer from Ohio says: "It is neither right nor fair to write of such good fishing grounds and not give their location. After getting interested in the narrative, I wanted to find out where the 'Bigosh' was situated, but, on looking back to the first chapter, I find that this point is carefully concealed. I protest that this is not fair." [We advise our friend to wait, perhaps the secret may be told at some future time].

Another Ohio man writes: "I know where the 'Bigosh' is, and have fished it long before Mr. Mather ever saw it. It is a good-sized stream and mill pond, about twenty-five miles north of Port Colborne, on the north shore of Lake Ontario. I met Mr. M. near there in 1870, as he was returning from a fishing trip. He has exaggerated the size of the trout found there, for I never took one above a pound weight." [Wrong, guess again].

Mr. N. R. Pierce is of the opinion that the river "is either Thunder Bay River or one of the streams flowing into Cheboygan Lake in Michigan. The size of the trout is overstated, but all indications point to this. 'Uncle Ben' is a nom de plume to hide a well-known settler, who is now a guide, whose favorite expletive has been used to conceal the identity of the locality." [Also wrong, the fishing there is not as good as is represented on the "Bigosh," the narrative of adventures upon which has been called by the writer of them a "truttaceous history"].

Mr. R. B. Marston, of the London *Fishing Gazette*, says: "I have been much interested and amused at the 'Trouting on the Bigosh' and the adventures and mishaps of 'Uncle Ben.' The catching of that 'anker' was, indeed, a surprise."

Mr. A. N. Cheney remarks: "I hope the story will be continued; it is a most excellent plan for combining instruction and amusement, and many will profit by it who would find plain directions very dry. The 'Bigosh' papers deserve to be gathered into a book when finished, and I hope they will be so published."

Dr. J. A. Henshall in a private letter to the writer of the articles in question says: "I wish to thank you personally for your 'Bigosh papers,' which have pleased me very much. They are *multum in parvo*, and will impart much valuable information in a very pleasant way, to anglers generally and to the novice particularly."

"A Subscriber" writes: "If a man is going to write about good fishing why does he not tell where the place is? I want to go to a good place next summer, and I want to find one that is not overrun with tourists and anglers. It is very exasperating to read of such places and not know where they are. I would prefer not to read of them, for I don't care a cent about the good times they had nor how they fished, how a fly should be cast or a stream waded. What I want is to know where to go and if the 'Bigosh papers' does not tell then I will soon lose interest in them. If the writer of them declines to inform us where these happy fishing grounds lie, then it is the duty of Forest and Stream to do so." ["Subscriber" will have to wait the pleasure of the author of the papers. Forest and Stream has not asked his secret and does not possess it. We have heard him say that some day in the near future he would give this information to the public, but how long or short a time may elapse before he does it we cannot say.]

"Von W." writes: "I have a point of difference to make with my old friend Mather, who I do not think does Frank Forester fair justice in regard to his distinction between the pike and muscalonge. I have not "Fish and Fishing" by me now, for I lent it some half dozen years since, and it has never come back again, but I remember very clearly the difference between the two heads in the book. The pike toothed to the extreme point of the jaw, and the muscalonge with his great tusk about half way to the front, and a long bony projection forming the extremity of the jaw, together with the entirely reversed markings of the two fish, the muscalonge having dark reticulations on an olive ground; the pike light oblong blotches, and think that Frank Forester noted and understood these differences, although he was all at sea on the varieties of the genus *Salmo*, and that is not much to be wondered at, as the researches of thirty years, since Herbert's day, have not defined them clearly as yet. Although *Salmo namaycush, amethystus, confinis, tonia*, etc., etc., are generally now relegated to one species, while Prof. Jordan is gradually crystallizing the various species of the Rocky Mountain region and Pacific Slope."

A DOMESTIC TROUT POND.

I AM often asked by acquaintances, who are fond of trout and trout fishing, whether, under given circumstances, an artificially made pond will pay in either a sporting or pecuniary sense; and how such can best be constructed with a due regard to economy and success? Not being an ichthyologist, nor at all skilled in pisciculture, I always answer such questions by simply relating my own experience in this matter; leaving the inquirer to make the application to his particular case as best he may. The subject is one of such great and general interest, and of so much real economic importance, that I am sure many hundreds of your readers will be glad to hear a short and plain account of my experiment, and its results. I will enter into details no further than is necessary to make myself understood, and to enable the reader to judge how far my mode of procedure may be applicable to his own locality and circumstances.

On a certain part of a large farm, which I once owned and occupied, there was, and is, a beautiful and never failing spring, which, issuing from the base of a high range of hills, discharges its waters after a course of a few hundred yards, through a gravelly clay soil, into an adjacent trout brook, of which it is one of the numerous feeders. At the time I write of, there was never any perceptible difference between the winter and summer flow of this spring. Its trickling stream always furnished, I should think, about two hundred gallons per hour of the purest and most delicious water; which was of almost icy coldness on first emerging from its mysterious birthplace—the dark recesses of the hills. The ground which lay between the spring and the creek presented a gentle slope, being about five feet lower at the bank's edge of the latter than it was at the spring's outlet, the distance between the two being less than a quarter of a mile. The bank which overlooked the brook, was here about thirty feet high, but had been cut into a deep and jagged gully or ravine, by the overflow from the spring, which at first probably had marked out a course, but at length, aided through successive ages by the drainage from the contiguous uplands, had widened and deepened the ravine until the bottom at its mouth was on a level with the bed of the creek; while close to the spring it was not much larger than a ploughed furrow.

Of course, as through process of time and constant erosion of the running water this ravine had gradually become deeper, clay and gravel from its sides would fall into the abyss; the soluble parts being washed away, while the boulders and small stones remained in its bed. Thus, by the time it had reached hard pan it was some sixty feet wide at the surface of its lower part and thirty feet deep, and thence tapered off to almost nothing at its highest part near the spring.

One day a friend from England, who was an enthusiastic angler, had been fishing with me in the creek. The trout were becoming rather scarce, and those still remaining were of small size. Consequently our luck had not been very great, but we had taken a few tolerably good fish at the mouth of the ravine, which was their favorite resort, owing to the discharge of cold water from the spring. Upon seeing this great gully my friend said: "Why in the world do you not make a trout pond here? The work is already done to your hand. All you have to do more is to build a dam." Some further conversation followed, during which my visitor gave me some facts and figures as to the productiveness and consequent value of a properly managed pond of this kind. The upshot was that I determined to try the experiment. It was now the beginning of June, our spring seeding was all done, and we could devote a few days to this work without damage to other interests. I will briefly state exactly what we did, how we did it, its estimated cost, and the result in the way of returns for time and labor expended. It must be borne in mind that the gulch which was to become the channel of our proposed pond was already excavated in the form of the letter V, being quite wide at the surface of the ground, and almost sharp at the bottom, its width and depth, of course, increasing from the upper to the lower end.

We commenced our dam by procuring fifteen strong cedar posts varying in length from six to thirty-four feet. These were charred at one end and firmly set in a row across the mouth of the ravine, at distances of four feet apart and to about the same depth in the ground. As each post was planted, it was thoroughly puddled around with stiff clay, and the three center ones were strengthened by long transverse braces notched into their tops and also into a hard bed of concrete on the lower side of the dam, where they were further secured by large boulders. Then we split a number of cedar logs into rough four-inch slabs, and spiked them to the up-stream face of the posts, the ends of the slabs being let into the clay banks on either side, and well puddled. Now we took the green brush of the cedar tops and two or three loads of spruce and hemlock spray, and arranged all carefully at the bottom of the gully against our wall of slabs. Then, with a pair of horses, a plough and a common road scraper, we turned up and drew in the heavy earth from the heights on each side, ramming it down firmly as we went along, until we had made a sloping embankment of perhaps fifty feet wide at the bottom of the ravine and ten feet at the top. This we covered over from end to end with coarse gravel and upon this a layer of as large boulders as we could handle; except just in the center, where we arranged a rude grated sluiceway which would allow the passage of superfluous water and yet prevent the escape of fish. Our dam was now finished and was evidently water-tight, as quite a little pond had already formed at its base although we had only been two days engaged in its construction.

Next, with a view of providing shade, shelter and hiding places for our trout, we placed eight very large cedar logs, at distances of twenty feet apart, across the ravine, and two feet from its bottom. The ends of these logs were let into the banks and weighted by boulders. At about one-third of the distance from the spring to the dam, where we judged the water would be when the pond was full, two or three feet deep, we stretched a screen of common fanning-mill wire netting, with half-inch meshes. This was to furnish a safe retreat for the small fry when pressed by their cannibalistic relatives, and most admirably it answered its purpose. In twelve days from the time the dam was finished the reser-

Rod vs. Hand Line.—Last summer Mr. Charles F. Pan coast, of Germantown, trolled for bluefish with a twelve-ounce rod and succeeded in killing several weighing as high as ten pounds each, and many of smaller size. Mr. P. represents the sport as being very fine and a decided improvement over the common method of taking bluefish with a hand line, a style of fishing which requires no dexterity.

voir was full to the brim, and a small stream trickled out through the waste weir. We then planted along the edge of the water, on each bank, at intervals of ten feet, a number of stubby pieces of the branches of the common yellow willow, entirely denuded of twigs and leaves. Late as it was in the season, all of these cuttings took root and grew. We now had a pond, of triangular shape, about four hundred yards long, twenty yards wide and nearly thirty feet deep at the dam, from whence it tapered off to nothing toward the spring. The superficial area of its surface would be something over three-fourths of an acre. The great desideratum was to stock it with trout. This we did in half a day by stretching a small-meshed net across the creek and driving the stream until we had obtained about two hundred and fifty troutlings, averaging five inches in length. These were turned, after every haul, directly out of the net into the pond, and all lived and throve. In the following September we put in two hundred more.

Now for cost and results. We need not put any price upon the site, as it was waste land; in fact, we may enter something to the credit side of account on this score, as this considerable body of water in the newly-formed pond greatly improved the surrounding pasturage to a distance of many yards on either margin. The total cost to me was very trifling, as I had the team and men and all the material at hand, except spikes and wire netting. But assuming that I had been obliged to hire and purchase everything for the occasion, the debit account would stand about thus:

One pair of horses and two men, 3 days	$15 00
Cedar for posts and slabs, say	10 00
Spikes, nails and wire netting, say	5 00
Total	$30 00

To this we may add a supposed sum of five dollars for netting minnows all through the first two summers (none were required after that) to supply the trout with food, and we have a grand total of $35. Not a fish was taken from the pond—except to be looked at and returned—for four years, by which time the willows on the banks had grown to thrifty trees, and every alternate one was then removed. Those remaining not only furnished a grateful shade, but their pendant branches yielded a constant summer supply of fish food in the shape of falling caterpillars and other larvæ and insects. During these four years we could see that the trout were increasing rapidly in size and numbers, and that the progeny of the sucker, chub and shiner minnows first put in were also plentiful enough to supply the choice fish with a square meal when desired. The fifth summer I took from this preserve with a barbless hook one hundred and sixty-three pounds of trout, returning to the water all individuals which I thought to be under eight ounces in weight. Reckon this one season's catch at even twenty-five cents per pound, and you will see that I was already recouped for my whole expenditure. In each of the sixth, seventh and eighth summers I took about two hundred pounds of beautiful fish, some specimens now weighing over two pounds. Then I sold the farm, getting at least $500 more for it than I would have done if minus the pond. Any schoolboy can answer the question as to whether my experiment paid.

It is now, or will be next June, just twenty-nine years since this pond was made. I have not seen it for twenty-one years, but was told, eighteen months ago, that the dam was then perfectly sound and tight; the fish thrifty and plentiful, and yielding to the owner of the farm a greater yearly net profit than any five acres of his best land. Now, it is true that every farmer has not upon his property a hillside spring, nor a site for a trout pond already excavated; but a great many have both of those requisites, and a still larger number have the spring. If the water of this is of a quality suitable for trout it will always pay its fortunate possessor to make a pond for the culture of these valuable fish, even if he has to scoop it out of a level piece of ground on the most fertile portion of his estate. From no crop whatever, on the same limited area, can so large an amount of pleasure, profit and amusement be derived, always supposing that the enterprise is conducted with a correct idea of the nature of the fish and a due regard for their requirements. My pond, the reader will observe, furnished near its upper part a perfect spawning and breeding ground. W. T.

East Saginaw, February, 1884.

Showing the Boys How To Do It.—Grand Rapids, Mich.—The three boats of the "Hill Spoon Gang" returned to camp at noon and reported a "water haul," when up spoke C., who had remained in camp: "Oh, you fellows are no good; you don't know how to catch fish. Your best hold is to blow about what you have done or are a-going to do, while, with the best kind of fishing ground all around us, we are obliged to eat salt pork or go hungry, all on account of a set of ne'er do wells. But there is going to be a radical change in the fashion—a civil reform. I'll go with you this afternoon and just show you how to do it. It's time you chaps had some instruction; so come along after dinner and you shall have it free gratis for nothing." That afternoon all hands were out, and the three boats kept well together, in order that we might derive as much benefit as possible from our self-constituted instructor. There was some haste, a little confusion and considerable chaffing during the three minutes' time spent in getting to the spot, and all were more or less excited in consequence. C. had laid violent hands on the first rod which came in his way that was rigged up, scrambled into the boat, hurriedly untied the snell which was on the line, drew from his pocket a fine, long leader, tied to this a new snell, and about eighteen inches up on the leader fastened a large brown hackle, and again above this another fly of the most gorgeous character. Then selecting and hooking a fine, large minnow, with a sort of a superior "you'll see, I know" kind of a look, grasped his rod with one hand, leader with the other, and made a two-handed cast. The bait touched the water about six feet from the boat, and as the minnow slowly settled and leisurely wiggled away, dragging after him two snells, two flies and a brand new leader, it was plainly to be seen that C. had, in his hurry and confusion, tied his leader to the old snell instead of his line! There was a snort, a wild yell, some considerable language used more emphatic than polite, as the occupants of the boat with one accord arose and announced to the balance of the gang the result of their first lesson of "how to catch 'em." There were no fish caught that afternoon, as the jeering, screaming and laughing sent them miles away. It will be some time before C. hears the last of the first lesson he gave us, notwithstanding he has been liberal in doing penance in the way of cigars and other fixings.—W.

A Happy Day.—Sullivan county, New York, is dotted here and there with beautiful sheets of water; one of these, situated on one of the peaks of the Shawangunk range, my companion and I selected for a day's fishing. Pickerel was our game to-day, but we were not above the catfish and perch which also inhabit these waters. The morning, however, was not favorable for pickerel, as the wind was high, and not a cloud was to be seen. The perch bit rapidly, though, and we soon had a fine string of these, and also a few catfish. In the afternoon, much to our satisfaction, the wind began to moderate, and sunset (which time, in my estimation, is as good as any for pickerel) found us on our favorite grounds, ready for business. My line, touching water first, was immediately seized by a fine one, which, after a noble fight, proved to be "two-pounder." My companion, not to be outdone, fastened to one that threatened to end his sport by carrying everything away; but being an adept in the art, he soon had the fish under control, and after a well-fought battle of some minutes, succeeded in landing him, amid great objections on the part of the fish. About this time we were visited by a shower of white millers, a phenomenon that I have never witnessed since or before. The pickerel now began to jump in rapid succession all around us after these insects, and we discovered then, to our sorrow, that we had left our spoons at home. After the millers left us the pickerel refused to bite, and as it was getting late, we prepared to go home. Our day's catch summed up as follows: Fifteen pounds of perch, three catfish and eight pickerel, the largest, whose capture I described, weighing four pounds; total weight of pickerel, sixteen pounds. After a weary walk home and a hearty meal of pickerel, we retired to bed to live the day over in our dreams.—Sullivan.

Muddy Flavor in Fish.—Fillmore County, Minn.—In the valentine number of Forest and Stream, Capt. M. P. Peirce writes of the edible qualities of carp, illustrating it by Jersey chickens raised on offal and then fed on pure food and clean water in a short time being fit for the table. I believe the same method workable with fish. The creeks in this part of Minnesota three years ago were teeming with brook trout in June, July and August, and I seldom, in a day's fishing, failed to creel twenty-five pounds of average half-pounders. Now I am satisfied with half a dozen of the same average weight, and have put in a full day, wind and weather favorable, summing up three trout, weighing one and one-quarter pounds. Why the change? Reasons various. The first great cause was "breaking up" all land that could be tilled for wheat, the wash from plowing filled our streams with mud, and no suitable places being left for spawning. I now come to the point I started out to make—a long way around, but a fisherman has to detour at times to make a cast—table quality of fish in turbid versus clear water. Trout caught in our streams when muddy lose all their flavor, while in five to eight days after the water becomes clear, they are as fine flavored as before the flood. Last summer, from the middle of May to the last of June, with spoon I caught from one to five black bass nearly every day. When the water was muddy the fish were contaminated, when clear they were free from any taint of mud. Our grangers the past five years have paid more attention to stock raising, "seeded down" the valleys, hence the wash is small; plants are again growing in the running brooks, affording cover for trout, and we hope to obtain fry from the State to restock our streams the coming summer.—J. M. C.

Tennessee.—Dyersburg, Tenn., Feb. 27.—A few ruffed grouse have been seen, and one was killed by Guy Douglass in the Obion hills, near this place, last week. As I have never seen nor heard of one before in West Tennessee, we are anxious to know where they came from. I will give you a slight description, and ask if it has been correctly named. In color, nearly same as quail or woodcock, with ruffle around neck and crest on back of head, like the bluejay; also dark circle in tail, and in size nearly as large as a guinea hen. It was sitting on a log at time it was killed. Everybody in vicinity has been cautioned not to shoot or disturb the rest of flock, and they all express an anxiety to protect them and encourage them to remain, as there is no better place on earth than the hills that lie on Obion River for them to rear their young. Live quail have been offered here freely at one dollar per dozen, others at seventy-five cents per dozen. A few woodcock are occasionally brought in. John Tarrant was returning home a few days ago, with game bag well filled with quail, and met a negro with a lot of woodcock he had just killed. The negro proposed to swap "dem four brown snipe" for four quail, which was accepted and presented to the writer.—T. L. W.

Growth of Rainbow Trout.—Waterville, N. Y.—Two years ago about ten thousand California mountain trout were put into a pond in this village. The next spring we found that the growth of these trout, compared to that of our native trout, was astounding. The following August one weighing three-quarters of a pound was caught by a small boy. I would never have believed that their growth was so rapid had I not seen the fish weighed. The trout at the time this large one was caught were a little over a year old. Now, many of our fishermen are wild on the subject of California trout, and we shall put twenty thousand more into the same pond again this summer. But for one I do not think that they compare with our own brook trout in gaminess, flavor or beauty. But our experiment was a decided success. For the past three or four years we have been stocking our streams with brook trout, and find the fishing very much improved thereby. Unless something unforeseen occurs we shall continue to stock them every year.—N.

What is Done with Small Lobsters.—Newport, R. I., Feb. 29.—The Fish Commission of Massachusetts is trying to stop the sale of small lobsters in market by having the law amended so as to increase the length at which they can be sold. I would ask them if they think that all under the legal size are put back. If they think so they are mistaken; they are put into cars and kept alive for bait for the tautog fishermen, when they are "exposed" for sale at prices ranging from fifty cents to one dollar per bushel. In this case the lobster catcher has broken the law by offering them for sale, and the tautog fisher has violated it by having them in his possession, even though he throws them into the water after putting them on his hook. True, he is obeying the letter of the law in "returning them to the water," but does he not violate its spirit? Yet our lobster men complain that there are few large lobsters.—Clams and Crabs.

Illustrated Catalogue of Fishing Tackle.—We have received a finely illustrated catalogue and price list of fine fishing tackle, manufactured by Messrs. Abbey & Imbrie. The large, handsome plates give a good idea of the varied articles which go to make up an angler's outfit, and the side-bends of the hooks are well shown by shadows. There are 92 full-page folio plates and over twenty pages of text, in which all that the angler requires, except boats and provisions, are catalogued. These articles are so numerous that the list is surprising, even to one familiar with such matters. The great merit of this catalogue is its accuracy. The different articles figured in it are drawn of the exact size of nature, and by referring to the price list, the intending purchaser will learn all those particulars about the article he is interested in which cannot be told in an engraving. The price of the catalogue is fifty cents.

Anglers' Association of the St. Lawrence.—Utica, Feb. 27.—*Editor Forest and Stream:* A special meeting of the Anglers' Association of the St Lawrence River will be held in the parlors of the Butterfield House, Utica, on the afternoon and evening of March 11, commencing at 3 P. M. Matters of great importance regarding the work of the association during the coming spring and summer will be discussed, and arrangements will be made for a strict enforcement of the laws governing fishing in the St. Lawrence River. In addition to the business of the association to come before the meeting, it is hoped that papers of interest in relation to the favorite fish of the St. Lawrence will be read and discussed. It will be a favor if all members who intend to be present will give notice to the secretary by card as early as convenient.—Chas. H. Ballou, Recording Secretary.

Fishculture.

MORE GERMAN TROUT EGGS.—The steamer Donau, of the North German Lloyds, recently brought 70,000 eggs of *Salmo fario* to this country. Forty thousand of these were consigned to Mr. Fred Mather for the U. S. F. C., and 30,000 to Mr. E. G. Blackford on account of New York. The eggs were of two kinds, large and small, and were sent to Cold Spring Harbor for distribution. They have been divided between Northville, Mich.; Central Station, Washington; Wytheville, Va.; Caledonia, N. Y., and Cold Spring Harbor. They came from the ponds of Mr. C. Schuster, Freiburg, Baden, and were in good order. The North German Lloyds made no charge for transportation.

EGGS SHIPPED ABROAD.—On Saturday last Mr. James Annin, Jr., of Caledonia, N. Y., sent 10,000 eggs of brook trout by steamer Iceland, directed to Herrn Fiskeri Inspektor Landmark, Kristiani, Norway. On the 8th the New York Fish Commission will send 30,000 eggs of the rainbow trout to the Deutschen Fischerei Verein, Berlin, by the steamer Main. These shipments are made by Mr. E. G. Blackford, New York. Professor Baird has sent to Germany 1,000,000 whitefish eggs, 25,000 brook trout and 25,000 lake trout, and on the 8th will send 5,000 land-locked salmon to Sir James G. Maitland, Scotland.

ENGLISH TROUT IN AMERICA.—The steamer Adriatic, of the White Star Line, brought 10,000 eggs of the *Salmo fario* as a present to the Cold Spring Harbor Station of the New York Fish Commission, presented by the *Fishing Gazette*, of London. They were in three lots, 5,000 marked "best trout," 3,000 from the Itchin and 2,000 from the Wey districts. They came in excellent order, and were carried free of charge by Messrs. Ismay, Imrie & Co., the London agents of the line.

THE CONNECTICUT COMMISSION.—The Governor of Connecticut has appointed Mr. James A. Bill, of Lyme, to be a Commissioner of Fisheries for three years from August next, in place of Mr. G. N. Woodruff, whose term expires at that time. Mr. Bill has served with credit in that capacity in former years. The Senate has confirmed his appointment.

New Publications.

Hints on Camping. Mr. Howard Henderson's "Practical Hints on Camping" contains a considerable amount of information, and will no doubt be useful to those who are contemplating their first camping trip. And yet the author gives a deal of instruction which is wholly opposed to what many years of camp life have taught us. His list of articles required for a trip covers three octavo pages in small type, and unless the camper is supposed to be traveling with a fleet of boats or a good-sized wagon train, we are at a loss to know just how all this material is to be transported. We have always found that the less one carries with him into camp the more easily he can get along, and we believe that nothing so contributes to the annoyance and delay of the outdoor traveler as his burdening himself with a great variety of articles that might just as well be left at home. It is wiser to travel light, and the more one lives in camp the lighter will be his outfit. On the other hand, if one is near a railroad or a steamboat landing, there is no reason why he should not have almost everything that he would if he were at home in his own house. It is a fact, however, that it is almost impossible for any one to give instructions which will serve the tyro in his first efforts to live comfortably out of doors. The only teacher is experience, but Mr. Henderson's little book will be a help to some of this class. Some of his recipes for camp cookery are excellent, as are many of the directions in the chapter on accidents and ailments. We give a list of the chapters: I. Preparation; II. Outfit; III. Shelter; IV. General Directions; V. Knots and Ties; VI. Camp Cooking; VII. Rod and Line: VIII. How to Make a Fish Net and Hammock; IX. The Horsehair Fish Line, X. The Gun; XI. Boats and Boating; XII. Night Spearing; XIII. Accidents and Ailments; XIV. Camp Photography. (Jansen, McClurg & Co., Chicago, Ill.).

Florida and the Game Water Birds.—In the year 1882 Messrs. Robert B. Roosevelt and Seth Green went to Florida in Mr. Roosevelt's yacht, the Heartsease. The trip has been made famous by a widely distributed patent medicine advertisement, in which, under his portrait and over his signature, Mr. Green deposes that in Florida he contracted malaria. At this statement the souls of loyal Floridians are greatly vexed with indignation. Another and pleasanter fruit of the Heartsease expedition is a book by Mr. Roosevelt, in which he details the Florida experience of himself and companions. If Floridians resent Mr. Green's malaria inuendoes, they have abundant reason to be pleased with the book. Mr. Roosevelt always writes in a delightful vein when the theme is field or water sport. In the present volume the author displays his usual felicity of style, and writes with enthusiasm. The log of the yacht is given in detail, and the directions will be found invaluable to those who follow the course of the Heartsease from New York to Florida, via the inside passage. Mr. Roosevelt is loud in his praises of Florida as a winter cruising ground. To the account of the Florida trip has been added a revision of a former book on the game water birds of the Atlantic coast and the lakes, and those who have long sought in vain for a copy of the first edition will welcome this reprint. In the several chapters Mr. Roosevelt has stored up a rich fund of gunner's wisdom, and we can heartily commend the work to the novice, who will find here more than he will probably ever learn by experience. The book, otherwise well printed, is disfigured by numerous aged and second-hand cuts, the credit for inserting which, we presume, belongs to the publishers. (Orange Judd Co.).

Corpulence and Its Treatment is a small pamphlet, translated by Emil W. Haeber, M. D., from the German of Dr. William Ebestein. (Brentano Bros., New York).

Failing Powers in Middle Age are best provided against by an endowment policy in the Travelers, of Hartford, Conn. At age 30, an endowment for $1,000 maturing at 50 costs but $39.70 a year.

The Kennel.

FIXTURES.

BENCH SHOWS.

March 4, 5, 6 and 7.—Cincinnati Bench Show, Melodian Hall. Entries close Feb. 25. Charles Lincoln, Superintendent, care of B. Kittredge & Co., Cincinnati, Ohio.

March 12, 13 and 14.—New Haven Kennel Club's First Annual Bench Show, Second Regiment Armory. Edward S. Porter, Secretary, Box 667 New Haven, Conn. Entries close March 1.

March 18 to 21.—Washington Bench Show, Masonic Hall, Washington, D. C. Chas. Lincoln, Superintendent.

March 26, 27 and 28.—The Dominion Kennel Club's Second Annual Bench Show, Horticultural Gardens. Charles Lincoln, Superintendent. C. Greville Harston, Secretary, Toronto, Canada.

April 3, 4 and 5.—The Cleveland Bench Show Association's Second Bench Show. Charles Lincoln, Superintendent. C. M. Munhall, Secretary, Cleveland, Ohio.

May 6, 7, 8 and 9.—The Westminster Kennel Club's Eighth Annual Bench Show, Madison Square Garden. Entries close April 21. Chas. Lincoln, Superintendent. R. C. Cornell, Secretary, 54 William street, New York.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 3832, New York. Number of entries already printed **1010.** Volume I., bound in cloth, sent postpaid, $1.50.

WASHINGTON DOG SHOW.

FOLLOWING is the premium list for the bench show to be held at Washington, commencing March 18:

Champion mastiffs, dogs, champion medal, bitches the same, open, dogs, $10 and $5, bitches the same. Rough-coated St. Bernards and smooth-coated St. Bernards, same as mastiffs. Newfoundlands, $10 and silver medal. Champion greyhound, dogs, champion medal, bitches the same; open, dogs, $10 and silver medal, bitches the same; puppies, silver medal. Champion deerhounds, champion medal; open, $10 and silver medal. Champion pointers, dogs and bitches over 55lbs., $15; open, dogs, $15 and $5; bitches over 50lbs., the same. Champion pointers, dogs and bitches under 55lbs., $15; open, dogs, $15 and $5; bitches under 50lbs., the same; puppies $7 and $3. Champion English setters, dogs, $15; bitches, the same; open, dogs, $15 and $5; bitches, the same; puppies, dogs, $7 and $3; bitches, the same. Champion black and tan setters, dog or bitch, $15; open, dogs, $15 and $5; bitches, the same; puppies, $7 and $3. Champion Irish setters, dogs, $15; bitches, the same; open, dogs, $15 and $5; bitches, the same; puppies, $7 and $3. Chesapeake Bay dogs, $10 and silver medal. Champion Irish water spaniels, champion medal; open, $10 and silver medal. Champion field spaniels, any color, over 28lbs., champion medal; open, $10 and $5. Champion cocker spaniels (any color) under 28lbs., champion medal; open, $10 and $5. Champion foxhounds, champion medal; open, $10 and $5. Champion beagles, champion medal; open, dogs $10 and $5, bitches the same. Dachshunde, $10 and silver medal. Champion fox-terriers, champion medal; open, dogs $10 and $5, bitches the same; puppies silver medal. Champion collie dogs, champion medal, bitches the same; open, dogs $10 and $5, bitches the same; puppies silver medal. Champion bulldogs, champion medal, bitches the same; open, dogs $10 and $5, bitches the same. Champion bull-terriers, champion medal; open, $10 and $5. Rough-haired terriers $10 and silver medal; black and tan terriers, over 7lbs., $10 and silver medal; Dandy Dinmonts, $10 and silver medal; Irish terriers, $10 and silver medal. Champion Skye terriers, champion medal; open, $10 and $5. Champion pug dogs, champion medal, bitches the same; open, dogs $10 and $5, bitches the same; puppies silver medal. Champion Yorkshire terriers, champion medal; open, $10 and $5. Toy terriers under 7lbs., $10 and silver medal. King Charles spaniels, $10 and silver medal. Blenheim spaniels, $10 and silver medal. Japanese spaniels, $10 and silver medal. Italian greyhounds, $10 and silver medal. Miscellaneous, three prizes $5 each.

NEW YORK DOG SHOW.

WE have received the premium list of the eighth annual bench show of the Westminster Kennel Club, to be held at Madison Square Garden, May 6, 7, 8 and 9. The list is the same as that of last year, except that a class is made for Basset hounds, champion and open classes for bull bitches, a class for Bedlington terriers, and a dog and bitch class for poodles, making 120 classes in all, as against 114 last year. The premiums are as follows: Champion mastiffs, dogs, champion medal, bitches the same; open, dogs $10, $5 and silver medal, bitches the same; puppies $5 and silver medal. Rough-coated St. Bernards the same as mastiff class, except that puppies get $10 and silver medal. Smooth-coated St. Bernards the same. Berghunde dogs $10 and silver medal, bitches the same. Newfoundlands, dogs or bitches $10 and silver medal. Champion greyhounds, dogs champion medal, bitches the same; open, dogs $10 and silver medal, bitches the same; puppies, dogs or bitches, the same. Champion deerhounds, dogs or bitches, champion medal; open, dogs $10 and silver medal, bitches the same. Champion pointers (over 55lbs.) dogs $25, bitches (over 50lbs.) the same; open, dogs $20, $10 and silver medal, bitches the same, small pointer class the same; puppies, dogs over 12 and under 18 months $10 and silver medal, bitches the same; under 12 months, dogs or bitches the same. Champion English setter dogs $25, bitches the same; open, dogs $20, $10 and silver medal, bitches the same; puppies, dogs over 12 and under 18 months $10 and silver medal, bitches the same; under 12 months; dogs or bitches, the same. Champion black and tan setter dogs $25, bitches the same; open, dogs $20, $10 and silver medal, bitches the same; puppies, dogs $10 and silver medal, bitches the same; Irish setters the same as the black and tan setters. Chesapeake Bay dogs, dogs or bitches, $10 and silver medal. Champion Irish water spaniels, dogs or bitches, champion medal; open, $10 and silver medal. Champion field spaniels (any color) over 28lbs., dogs or bitches, champion medal; open, $10 and $5. Champion cocker spaniels (any color) under 28lbs., dogs or bitches, champion medal; open (liver and black) $10 and $5, any color other than liver or black the same; puppies, field or cocker, (any color) $5 and silver medal. Champion foxhounds, dogs or bitches, champion medal; open, $10, $5 and silver medal. Champion beagles, dogs or bitches, champion medal; open, dogs, $10, $5 and silver medal, bitches the same; puppies, dogs or bitches, silver medal. Basset hounds, dogs or bitches, $10 and silver medal. Dachshunde, dogs or bitches, $10 and silver medal. Champion fox-terriers, dogs, champion medal; bitches the same; open, dogs, $10, $5 and silver medal, bitches the same; puppies, dogs, silver medal, bitches the same. Wire-haired fox-terriers, dogs or bitches, $10 and $5. Champion collies, dogs, champion medal, bitches the same; open, dogs, $10, $5 and silver medal, bitches the same; puppies, dogs, silver medal, bitches the same. Champion bulls, dogs, champion medal, bitches (if of sufficient merit) the same; open, dogs, $10, $5 and silver medal, bitches the same. Champion bull-terriers over 25lbs., dogs or bitches, champion medal; open, $10, $5 and silver medal; class under 25lbs. the same; puppies, silver medal. Black and tan terriers over 7lbs., dogs or bitches, $10 and silver medal; rough-haired terriers the same; Dandie Dinmont terriers the same: Irish terriers the same; Bedlington terriers the same. Champion Skye terriers, dogs or bitches, champion medal; open, $10, $5 and silver medal. Champion pugs, dogs, champion medal, bitches the same; open, dogs, $10, $5 and silver medal, bitches the same; puppies, silver medal. Champion Yorkshire terriers over 5lbs., dogs or bitches, champion medal; open, $10, $5 and silver medal; class under 5lbs. the same. Toy terriers other than Yorkshire under 7lbs., $10 and silver medal; King Charles spaniels the same; Blenheim spaniels the same; Japanese spaniels the same; Italian greyhounds the same. Poodles, dogs, the same, bitches the same. Miscellaneous class over 25lbs., $10, $5 and silver medal; class under 25lbs. the same. In addition to the above list it is expected that a large number of valuable specials will be offered. Entries close April 23.

Editor Forest and Stream:

The managers of the bench show have decided to give a champion medal for the best bull bitch in Class 87, provided there is a bitch worthy of it in the opinion of the judges.

CHAS. LINCOLN, Supt.

NEW YORK, March 3, 1884.

IMPORTATION OF BEAGLES.

Editor Forest and Stream:

The steamship Pennsylvania, which arrived at this port Feb. 27, brought three beagles consigned to Wm. H. Ashburner of this city, president of the beagle club.

As this importation is of direct interest to the breeders of beagles, giving opportunity of fresh crosses with some of the most approved of the British strains, it is proper to give the following description of them:

Minstrel, a black, white and tan dog hound, from a noted pack in Cornwall, a second season dog and two years old, of nice style and quality, good eyes, ears well carried and of good length, excellent body, legs and feet, altogether a desirable hound. This dog was selected by Louis Clement ("Wildfowler"), the well-known correspondent of the London *Field*, and formerly its kennel editor, now publisher and proprietor of the *Kennel News*, London, England.

"Wildfowler" was at particular trouble and care in procuring this beagle, and speaks in high terms of his blood and breeding.

Owing to delay in the mails, the extended pedigree has not been yet received from abroad.

Foreman, tan, lemon and white dog, four years old, ten inches at shoulder, has a well domed skull, broad across the top, excellent ears, eyes of true beagle character, good coat of proper texture, body cobby and compact, a grand little dog, and of the accepted type. Bred by Mr. J. Crane, Surry, England.

PEDIGREE OF ENGLISH BEAGLE DOG FOREMAN.

Foreman.

Bravo.	Honesty.
Fashion. Butterfly.	Hymen. Moorhen.

Hymen, by Pilgrim (Pealer—Dewdrop) out of Harmony. Dewdrop, by Damper out of Precious.

Deborah, black, white and tan bitch, two years old, height ten (10) inches at the shoulder. This is a remarkably fine beagle; indeed, it is a question if her superior can be found in this country. In many of the points that go to make up the first-class hound she cannot be excelled. In head, eyes, ears, muzzle, jaw and lips she is wonderfully fine, while her legs and feet are of the best, and her general appearance very attractive.

PEDIGREE OF ENGLISH BEAGLE BITCH DEBORAH.

Deborah.

Miraculous.		Rachel.	
Mushroom.	Pleasant.	Pealer.	Dewdrop.
Pilgrim.	Harmony. Damper.	Precious.	Damper. Precious.

The bitch Deborah is an inbred Damper, sire of Mr. Crane's famous 10-inch dog Giant, that is claimed to be the best beagle in England. Precious, to whom she is also closely inbred, won first and cup at Crystal Palace, London, and first and cup at Portsmouth, the only times shown.

Foreman and Deborah were bred by Mr. J. Crane, of Southover House, Surrey, England. The Crane strain of beagles are admitted to be the best in England. Stonehenge, in "Dogs of the British Islands," makes special mention of them, and selected Giant and Ringlet, two of Mr. Crane's breeding, to illustrate his article on the beagle.

Foreman and Deborah were purchased of E. Carew-Gibson, Esq., of Sussex, England.

Mr. Ashburner's importation experienced a very rough passage out, but arrived in good condition. RUSTICUS.

PHILADELPHIA, Feb. 29.

BEAGLES AND WILDCATS.

Editor Forest and Stream:

My friend C. and I had agreed to have a chase as soon as the weather cleared. Jan. 18 opened as dark and dreary as some preceding days, but toward noon the clouds disappeared and the evening was calm, bright and pleasant. It was just the evening almost any one, be he sportsman or other, could enjoy in the open air after having been housed for a week. So, early in the afternoon, my son (who, for the occasion, acted as our whipper in) and I, mounted and equipped, were prepared for the promised hunt. Our hounds, it seems, had anticipated the event and had preceded us to the woods and at that moment were running quite lively not more than half a mile away. We were off for them in a twinkling, but before we overtook them the wildcat was up a tree. We had some beagle puppies with us, and, wishing to see how they would perform in a cat chase, we tried to jump the game out by throwing stones and sticks at it, but it did not seem disposed to come down. We drew a Colt's .44, then it tumbled.

On to meet C., whom we soon joined. His three hounds increased our pack, all told, to twelve dogs. This little dog is King Charlie, first at New York in May, 1883; but he gets his prizes at shows. This trim, blueticked and tan bitch is Flora, the dog without a registered pedigree, but whose fame is attested by the bleaching skeletons of her many victims in the hills and vales of Southwest Texas, and this black and tan dog is Cap. The others are promising young hounds on the road to fame.

We make a cast down the creek half a mile, finding nothing, and swing around to the hills on the right. Soon Cap gives tongue, and is quickly joined by the pack. They are getting settled down to their work about night, when a fine old buck shows up in front. Cap, Charlie and some of the others can't resist the temptation, so after the antlers they go, Flora and one other holding steadily to first game. The whip goes after the truants and succeeds in bringing part of them back. C. and I follow the two. They carry their game circling to our left. Their cry, once lost in the distance, is again heard as they come around, as if coming back to the place of starting. The whip having rejoined us, we hasten to meet them, but before we get to them they have overtaken the cat and are holding her at bay in thick live oak runners about as high as our horses. She makes frequent attempts to break and save herself by flight again, but the hounds compel her to turn and fight for life. Once I saw her have poor old Flora down, but the young bloods closed in and compelled her to attend to them. At another time I saw her make directly for C., and I expected she would attempt to mount up with him, but she only passed under his horse. On account of the brush and the fear of killing a dog, it was some time before we could get in a shot, but at last the opportunity came and a shot from C.'s .45 ended the fray.

On again we went, and when we had proceeded but a short distance a fine blue doe passed just in front of us, but as we were not after deer we let her pass without a shot, and succeeded in getting our dogs across the scent without any of them getting off after her. Another half mile Flora challenges to scent, and the young hounds were soon at work. A spirited little chase reminds the old gent that it is best to quit the ground. But we did not have to apply our noses to the tree, as the captain of the 'coon hunters did, for he was in plain view. A crack of my long whip persuaded the old scamp it was time to be going. Down he came and made good his escape to the brush. The dogs, however, after an exciting chase, having several times been thrown over the scent by his doubling on them, brought him to bay, when again the bullet did the work for cat No. 3.

The snort blown, we prepared for home, but Daisy! Where is the little beagle Daisy? The horns ring again and again, but she don't appear. The whip is sent to hunt her, and soon returns with her in his arm, torn or cut and bleeding, and reports that where found the scent of the musk-hog was so rank that he felt uneasy when he dismounted to get the puppy.

Our time was up, and as we were going home the dogs started another cat, but circumstances compelled us to leave some of them in the woods. Lame and tired they came home next day. J. S. H.

RANCH, Bee County, Texas.

BEAGLES FOR FOXES.

Editor Forest and Stream:

Replying to "Bugle," I would say that beagles are not at all suitable for fox hunting, although for fox shooting they are deadly enough.

An average pack of beagles will carry a cold trail with about the same speed and precision as an average pack of foxhounds, while for beating cover late in the day beagles will be at a positive advantage, chiefly from their habits of working through close briers and inspecting knolls and tussocks in swampy places, for the beagle hunts a good deal by sight until the game is a-foot, and foxes love to lie in such places as the hare chooses for her form. But when once the fox is started the beagle's usefulness ends. A red fox will canter away from them, and they cannot force him to give off a good body scent; while even a gray fox will play before them all day long quite cool and self-possessed.

But if the object is to exterminate foxes with the gun, then, most assuredly, the beagle should be the chosen agent, for he will show up the quarry much oftener than foxhounds do.

I may add, that in this section of country foxes are never shot, and no man can think of such a deed without a shudder. True, there is no statute on the subject, but the omission is doubtless on the Spartan principle, that to imagine the possibility of a crime so base would be an insult to the commonwealth.

We can imagine Marc Antony pledging his dusky queen in all the pearls of the Orient, and some sympathizing soul, oblivious of the waste, shouting, "Hurrah for Antony!" We can see the midnight incendiary, caught torch in hand, wringing drops of pity from his captors' eyes by raising his shrivelled fingers and protesting they are cold. We can see the baffled horse thief remounted on the favorite mare and dismissed with a foaming stirrup-cup, on pleading that his legs are tired.

For acts like these some palliating feature may well be found; but, alas! who can imagine any word of extenuation falling from the pallid lips of the man who has shot a fox!

WAUZEE.

GLEN VALLEY, Va., March 1, 1884.

Editor Forest and Stream:

I don't want any beagles for hunting foxes in this country. They cannot be heard far enough, and I don't believe they can stand it. Now what I use and what I think is best for hunting the fox is a short-legged dog, with heavy bones, large feet, and very slow. With this kind of dog I can kill my fox very nearly every time. I have shot nine and my partner five. We have three hounds—two very slow dogs and one very fast bitch. We use the slow dogs until 3 in the afternoon; if the fox is not killed before that then we take off the dogs and put on the bitch. She will catch or run them down in a very short time, and we hardly ever lose a fox.

There are a good many rabbits, foxes, squirrels, partridges, ducks, etc., here. If any sportsman should pass this way let him make me a visit, and I will see that he is well taken care of. E. G. B.

SCOTT, Wisconsin.

DUKE.

SECOND BARK.

DUKE had been on his good behavior for two weeks, and it was generally believed that he had reformed when, early one morning, Mr. H. was startled by an exclamation from 'Manuel.

"Fo' goodness sake Mars H., look at dat bird!"

Coming across the lawn was a curious looking fowl, with the head of a turkey gobbler and a body that resembled a Hubbard squash that had been dipped in molasses and rolled in feathers.

"What is it, 'Manuel—it must be a wounded buzzard?"

"'Spec it am; an' dars law 'bout killin' dem buzzards. Some o' dem Smif boys bin done it, I 'spec. I'll jis go——"

"'Manuel! You 'Manuel!" and Aunt Phyllis beckoned excitedly to her man, who started toward the kitchen, as Mr. H. walked toward the bird for a closer view.

"It's too light for a buzzard, and yet—" A quick, sharp yelp from the neighborhood of the servants' quarters, and Duke sped across the field closely pursued by Aunt Phyllis and 'Manuel, armed with broom and clothes prop.

"Oh you inceitful, disrepentent hound! I'll flam yer wuss dan dat 'fi ketch you!" shouted Phyllis, as she shook the broom and stopped to pant.

"How's dat fur a prize turkey?" said 'Manuel, bitterly, as he waved his arm in the direction of the dilapidated fowl on the lawn. "Bin workin' on dat gobbla six weeks, Mars H., t' git him fat an' slick fur de powltree show. 'Spected fust t' git him fat an' slick fur de powltree show. 'Spected fust t' git him fat an' slick fur de powltree show. 'Spected fust

True to her word, Phyllis was ready to depart early next morning.

"Isn't you gwine, 'Manuel? Is you gwine ter let me go 'lone?"

"I' you don't know when you'se well off, I does; and I'se gwine 't stay well off, dat's me!" and 'Manuel turned to leave her.

"I'se jis fooled 'nough wid dat dog, and I'se gwine."

"Good bye, Phyllis."

"Good bye, 'Man," and they parted. EVERETT VON CULIN.

LICE ON DOGS.

Editor Forest and Stream:

The remedies supplied in your last issue in an article—"Lice on Dogs"—are all good, especially when applied as you direct. In addition thereto, would add that a saturated solution of common salt in water with some saltpetre, the quantity of saltpetre at pleasure, applied warm, is equally good. Kills the eggs and parasites and all is over, unless the animal is allowed to play with others infested. How many owners of dogs take care of their animals, or know how to? Right here, I will add, that a mixture of equal parts of boracic acid, vaseline, oil of tar and lac sulphur, will cure the worst case of mange with two applications, and, equal parts of vaseline and boracic acid, will cure canker of the ear with three applications.

THOMAS BUT.

UTICA, March 1, 1884.

THE NATIONAL STUD BOOK.

Editor Forest and Stream:

Nearly four years ago I paid to the Secretary of the National American Kennel Club the fees for the registration of one or two dogs. I have, in common with many more, waited patiently the appearance of their second volume of the Stud Book.

In the only report that I have seen of the late business meeting of the N.A.K.C. not one word is said about the Stud Book. Will Mr. Bryson kindly say whether the club has given the matter up as hopeless? I certainly think the many contributors of "quarters" are entitled to a report, if nothing more, for their money. Respectfully,

JAMES WATSON.

NEW YORK, March 3, 1884.

WHAT DOGS SHALL BE REGISTERED?

SOME of the breeders are discussing in the *American Kennel Register* the propriety of restricting registration in that book. We quote below the letter which has given rise to this discussion:

Editor American Kennel Register:

The writer is a subscriber to the *American Kennel Register*, is an owner of dogs registered therein, is an admirer of all dogs whose pedigrees are pure and whose deeds are untarnished, and desires not only to see pure bred dogs recognized at their true value, but also desires to protect those who can truthfully lay claim to "blue blood" from being placed upon an equality with dogs whose only recommendation is their owner's personal regard, and whose only *prima facie* evidence of respectability is the fact of their registration in the *American Kennel Register*.

The blanks, which are furnished to applicants who desire to register their canine pets, trace the pedigree back to the great grand sire and dam on the side of both sire and dam.

When a dog is duly registered and assigned a number in the *American Kennel Register* she becomes known as Lassie (A.K.R. 199), or Lassie (A.K.R. 208), or Lassie (A.K.R. 445), or Lassie (A.K.R. 623), and I think the management of the *American Kennel Register* will agree with me that a registration is, and ought to be, accepted as an evidence of freedom from bastardy, and as possessing qualities of blood or bench show or field trial records, desirable to breed from and to own.

I am an owner of pure bred dogs, and desire to protect not only myself, but also all my brethren in the field of caninology, and I know that they will indorse what I say. It has been said that "Illustration is the picture of thought," and being compelled to give examples of faulty registration, will use only the names of gentlemen who are known to be most excellent connoisseurs of purity of blood, and to possess whose friendship is both an honor and a pleasure. While in the cases of registration I shall quote, the names of the owners are in themselves a sufficient guarantee of truthfulness and respectability, yet others might enter their stock in exactly a similar manner, and both dogs and owners be, in the language of our friend Barnum, "a prince of humbugs."

To illustrate: "Fly (331), black and tan bitch, date of birth not known. Breeder, Capt. Graham, Londonderry, Ireland. Sire, Davidson's Firefly. Dam, Graham's Beauty."

"Tweed (335), black, white breast, dog, date of birth not stated. Breeder, Mr. W. B. Macbeth, Forfar, Scotland. Sire, Rob Roy. Dam, Helen McGregor."

"Lassie (199) * * * * * * *

Sire, Van Schaick's Punch. Dam, Van Schaick's Bess."

In the above cases I have transcribed from the pages of the *American Kennel Register*. Nothing else is needed than the names of the owners to insure respectability; but Smith and Jones can also send in a Tweed and Fly, and a Black or Brown can register a dog out of his Punch and Bess, and what reason have we to think that they are any better than the waifs of fortune, or perhaps it would be better to say, of misfortune, that are continually happening into existence in every back alley? What is it that makes "Burke's Peerage" a work of influence, or "Wallace's Horse Register" valuable to the breeder or owner?

What is the course of action which will make the pages of the *American Kennel Register* stand upon an equality with the above? It is to be obtained by excluding all dogs who do not produce proof of being valuable in other than the owner's eyes. The mere fact of Jack being imported from Ireland, or Jill from Scotland, is no guarantee of purity of blood. They have as many curs and mongrels over there as do we in this country. And I could ere this have entered my "Boxer," by my "Old Jack," out of my "Nell," only that I have considered that it would be lowering the standard of registration, and tend to make it a laughing stock and a by-word and reproach. Is it any evidence that my "Boxer" is any better than any other cur, because I happen to own his sire and dam?

I must beg your pardon for writing at such length; it is my purpose and desire always to condense my few ideas in as small a space as possible, and only desired in this brief squib to start the ball a rolling, and obtain the opinions of brother breeders upon this subject. In closing, I will with due humility offer the following suggestions, to wit:

First—Every dog registered in the *American Kennel Register* must have a complete authentic pedigree, as the registration blank provides; or,

Second—The parent (of the dog registered), whose pedigree is unknown, must have been placed either in a field trial or at a bench show, held under proper kennel club rules; or,

Third—The dog registered must have been placed in a field trial or taken a prize in a bench show, held under properly acknowledged kennel club rules, his pedigree according to rule first being incomplete, or the stipulation in rule second being unfulfilled.

I should be pleased to read the ideas upon this subject especially of such gentlemen as Dr. Jarvis, Dr. Downey, Mr. Moore, Messrs. Rutherfurd, Mr. Wade, Messrs. Thayer & Bros., and others.

C. VAN W. FISH,

Owner of { Lassie Regis (A.K.R. 393).
Ettrick Shepherd (A.K.R. 534).

CURRENT DOG STORIES.

XXV.

Mr. N. O. Chichester, superintendent of Arnold's chair factory, tells a wonderful dog story. On Thursday he was looking out on the river from an upper window of the factory when he discovered a dog in the ferry track, struggling hard to get out. The dog would swim along the edge of the ice, then get both feet on it and raise himself partly out of the water and fall back. The animal did this once or twice, when another dog was seen hurrying to the spot. The latter seized the half drowned dog by the neck and pulled and tugged away, vainly endeavoring to haul him out. He got him nearly out two or three times, but each time he fell back. Suddenly the would-be rescuer started like lightning for the shore, and the dog in the water kept up his struggles. In a minute or two the other dog was seen returning and there was a man with him, who was running. Dog and man reached the drowning dog in time to pull him out, and all started for the shore. When the two dogs reached the bridge which leads from the ice to the Brewery pier they laid down side by side, and made extraordinary manifestations of joy and delight, and their cries, not barks, were incessant. The dog that was saved is owned by Mr. Geo. Lumb, of Swart & Lumb Bros., and the dog that went to his rescue is a hunting dog belonging to Isaac H. Wood, of the Exchange House. Taking everything into consideration it was a most wonderful occurence.—*Poughkeepsie (N.Y.) Eagle, Feb. 6, 1884.*

XXVI.

General Cass's position on the slave question while he was a candidate for the Presidency was a subject of much discussion and no little ridicule. Among other stories told was one by a Kentuckian, who would preface his remarks by drawing from one pocket a copy of the Cleveland *Plaindealer*, and from the other a copy of the Nashville *Union*. He would then read from the *Plaindealer* the most strenuous assurances to the Democracy of the North that General Cass was a Wilmot proviso man, and from the *Union* assurances just as positive that General Cass was a pro slavery man.

"Now, I am not good at speaking," continued the Kentuckian, "but the Michigan man's position puts me in mind of a little circumstance which happened in my neighborhood in Kentucky some time ago, which I must tell you. I had a neighbor by the name of Martin, who was an uncommon clever physician and an importer of fine stock. One day the doctor stopped to get his horse shod at neighbor Bird's, the blacksmith, who lived about two miles from the doctor's house. The doctor commenced talking about his beautiful Berkshire pigs, and told the blacksmith, in a fit of liberality, that he would give him a pig out of the next litter 'Su' had.

"In the course of two months or such a matter, the doctor called at the shop and told neighbor Bird that 'Su' had had a fine litter, and to send and get his pig. So Bird posts his man Bob off with his wife's large willow basket to get the pig. Between Bird's and Martin's Sam Smith, who was a great quiz, kept a little grocery, and seeing Bob coming post haste on his master's horse old Tom, with the basket on his arm, he sang out, 'Halloo Bob, where are you going in such a hurry this morning?' 'I is gwine to Massa Doctor Martin's to get Massa Tom's Buckshur pig, what massa doctor promised Massa Tom the las' time he shod his hoss,' said the negro as he reined in his animal. 'Well, Bob, you must stop as you come back and let me see the pig.' 'Dat I will, Massa Sam, that I will,' and away he went at the top of 'old Tom's' speed.

"In less than an hour Bob returned with a genuine swine, and, alighting at the grocery, he lifted the cover of the basket, and to the astonished gaze of the grocery man, who imagined a Berkshire to be something more than a mere hog, exhibited a very beautiful specimen of a jet black pig. An idea struck Sam Smith to play a joke on Bob, and knowing his propensity to imbibe, told him to go in the grocery and get a dram. While Bob was gone, Sam Smith ran around the back of the house and got a little black pup about the same heft, and took the pig out of the basket and put the pup in. When Bob came out and mounted his nag, Sam Smith handed him the basket and off he went. On arriving at home the blacksmith asked him if he had got the pig. 'Yes, massa, and a werry fine pig he be, too,' said Bob, lifting up the cover, 'black as a coal,' when, to the utter astonishment of Bob and Bird, there lay a little black curly puppy. 'Is that a Berkshire pig?' asked the blacksmith in amazement; 'why, it is a pup, not a pig?' 'Bless de Lord,' said Bob, 'he be pig when I put him in the basket, but he changed to pup!' 'Take him back, sir,' said Bird, highly indignant, 'and tell Doctor Martin that I don't want to be fooled with his puppies, and if he don't want to give me a Berkshire pig, to say so.'

"Bob started back, and, naturally enough, he stopped at the grocer's to relate his mishaps to Sam Smith, who heard him out with a countenance expressive of wonder, at the same time doing his best to control his increasing desire to burst into fits. 'Well, get down, Bob,' said the grocer, 'and have another dram.' Bob didn't require a second invite, and while he was getting his 'bald face,' the grocer took the pup from the basket, and put back the pig. 'Massa Sam,' said Bob, coming out to mount his horse, 'I am mighty obfusticated 'bout dis pig. First I think him pig, I know he is pig first, and den I know he is pup, too. Ain't you sartin, Massa Sam, he was pig first?' asked Bob, as he mounted his crittur. 'I'll swear to it,' replied Smith, and away rode Bob for the doctor's.

"On arriving at the house, Bob delivered his message, but the doctor seeming somewhat incredulous as to the truth of the story, Bob with a flourish of insulted veracity opened the lid of the basket, when lo, there was the identical pig that he had started with. Bob stood transfixed, and with eyes protruding and mouth open, remarked: 'For God, 'taint no use, massa, he be pup or pig, just as he pleases.'" The crowd became convulsed with laughter, and gave the Kentuckian three cheers.—*Ben Perley Poore, in Boston Budget.*

XXVII.

A superior setter dog which probably had been in the woods a year or more and become wild, was lately run down by a pack of hounds and captured near Crawfordsville, Ga. He was of large size and extremely thin, but soon became tame and manageable. He is supposed to have escaped from a passing train of cars.—*Germantown Telegraph.*

XXVIII.

A shabbily dressed man, who carried a bundle loosely wrapped in a newspaper, and was followed by a small white dog that barked playfully as it snapped at his heels, walked along the west track of the Harlem Railroad toward Williamsbridge at a few minutes before 8 o'clock yesterday morning. At the curve a few hundred feet south of the station the man stepped to the east track to avoid a south-bound train that he saw coming. The dog ran ahead of him, and barked at the train as it passed. The noise of the train drowned the noise made by rapid transit train 24, north-bound on the east track. The engine struck the man and killed him. It also struck the dog and broke his leg. When the train was stopped the dog, with one of its fore paws hanging disabled, stood whining over the dead man. At first it flew savagely at those who tried to remove the body, but finally, appearing to understand that their intentions were friendly, caught the coat collar of the dead man and tried to move him. The body was lifted on a shutter and carried to the Tremont station. The dog followed a short distance, and then disappeared. All who witnessed the scene, and others who were told of it, were anxious to find the dog and care for its injured leg. A search was instituted for it by over 100 people, including policemen, and kept up last night, but without success.—*Sun.*

XXIX.

A good story is told of the presence of mind of a New Hampshire deacon, who was very fond of dogs. He had one valuable setter that he had trained himself, and that understood his every word and slightest gesture with an almost human intelligence. One evening at a prayer meeting the good man was offering an earnest exhortation and the people sat with bowed heads, giving earnest attention. The audience faced the stand where sat the pastor; the doors opened on either side. All at once one of the doors, which had been left ajar, was pushed open and the handsome head of the deacon's favorite setter was thrust in. The head was followed by the body, and the dog in toto had just started with a joyful bound toward its master. The deacon generally knew what was going on about him, whether he was praying or shooting, and the first movement of the intruder attracted his attention Quick as a flash the deacon, raising his hand with a warning gesture, exclaimed, "Thou hast given us our *charge;* help us to keep it." At the emphasized word, so well known to his canine ear, the handsome brute stopped, as if shot, on the very threshold of the door, with his intelligent eye fixed on his master. In the same unmoved tone, with a slight wave of the extended hand, "We would not return *back* to Thee with our duty on earth unfulfilled." Again the perfect training of the deacon's pet was made evident, for without a whimper he turned as noiselessly as he had entered, and remained quietly outside until his master appeared.—*Boston (Mass.) Globe.*

REMEDY FOR WORMS.—Savannah, Ga.—*Editor Forest and Stream:* After trying many remedies and losing many valuable whelps from worms I find the best remedy for that complaint to be twenty drops of Fahnestock's vermifuge, given twice a day for three days to a puppy four weeks old, and in proportion according to the age. It was prescribed by my physician for my child. After trying santonin, areca nut, turpentine and oil on my pups I lost two, and the rest were greatly reduced, so much so that on leaving them at night I expected them to be dead in the morning. My wife suggested the vermifuge. I used it, and with wonderful result, each puppy passing worms enough to have filled a tea cup; and now they are well. It acted in about four hours after the first dose, continuing through the next day. I send you this, hoping it may be of as much benefit to your readers as it has been to me.—VITUS.

A HOUND'S SINGULAR DEATH.—Oxford, Me., Feb. 25.—Last Saturday a fox driven by a hound took for the railroad track. The fox was so loaded down with snow and rain as to be hardly able to drag one foot after the other. There it was met by an approaching train and barely cleared the track in time to save its life. The pursuing hound was less fortunate, and was ground to pieces beneath the wheels of the locomotive. The hound was owned by Samuel Wardwell, of Oxford, Me. He refused an offer of $100 last fall for her.—JOSH. JEEMS.

A COLLAR FOR NO. 1000.—The *American Kennel Register* numbers for March rise up into the four digits. The Medford Fancy Goods Company, 101 Chambers street, have emphasized this progress of the *Register* by giving one of their handsome collars to the thousandth dog. As the *Register* is not out yet, we are not at liberty to give the name of the fortunate dog, but it will be announced next week.

CINCINNATI DOG SHOW.—*Special Dispatch to Forest and Stream:* There were about 300 dogs present at the opening of the show. Many of the best dogs in the country are here. The attendance is very good for the first day.—M.

MR. W. H. PIERCE, of the Glencho Kennels, Peekskill, N. Y., has been spending the winter, with several of his dogs, shooting in Volusia and Hernando counties, Fla. He reports excellent quail, snipe and duck shooting.

NEW HAVEN DOG SHOW.—Judging of sporting classes will be commenced by Mr. Watson at 11 A. M. instead of at 2 P. M. on March 12.

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, or breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Busy and Baneful. By Mr. T. G. Tucker, South Gaston, N. C., for Byron foxhound bitches, whelped Feb. 25, by Epps (Brodnax's Spot ——) out of Bett (Watchman—Hannah).

Donald II. By Mr. C. M. Munhall, Cleveland, O., for liver and white ticked pointer dog, whelped August, 1882, by champion Donald out of Devonshire Lass (Don—Lady).

Blue Frisk. By Mr. J. M. Avent, Hickory Valley, Tenn., for black, white and tan English setter bitch, whelped Aug. 29, 1883 (Rush Gladstone—Clara).

Brit. By Mr. Dan Storrs, Lebanon, N. H., for black, white and tan beagle dog, whelped Aug. 16, 1883, by Mr. N. Elmore's imported Ringwood out of Thorne.

Queen Bow. By Mr. George Hoover, Canal Fulton, O., for lemon and white pointer bitch, whelped Nov. 14, 1883, by King Bow (A.K.R. 83) out of Bow Queen (A.K.R. 558).

Pert. By Mr. Eugene D. Chaplin, Bridgton, Me., for liver cocker spaniel bitch, whelped Aug. 10, 1883, by Piper (Col. Stubbs—Beauty) out of Quand (Captain—Fanny Fern).

Pat Glencho, Mike Glencho, Dan Glencho, Dick Glencho, Mack Glencho and Ned Glencho. By Mr. Wm. K. Lente, Seville, Fla., for red Irish setter dogs, whelped Jan. 27, by Glencho out of his Trix (A.K.R. 187).

Eileen Trix, Bridget Trix, Kathleen Trix and Queen Trix. By Mr. Wm. K. Lente, Seville, Fla., for red Irish setter bitches, whelped Jan. 27, by Glencho out of his Trix (A.K.R. 187).

Pippo. By Mr. Joseph D. Culver, New London, Conn., for red Irish setter dog, whelped July 21, 1883, by Elcho (A.K.R. 295) out of Meg (A.K.R. 425).

Dashing Ruby. By Mr. L. F. Patterson, Bainbridge, Ga., for liver pointer bitch, whelped July 24, 1883, by Nip (Rush—Tina) out of Josie (Bow—Topsy).

Bluster, Boaster and Brantor. By Mr. T. G. Tucker, South Gaston, N. C., for Byron foxhound dogs, whelped Feb. 25, by Epps (Brodnax's Spot— ——) out of Bett (Watchman—Hannah).

Tuck. By Mr. J. W. Gross, Harrisburg, Pa., for black, white and tan beagle bitch, whelped Nov. 26, 1883, by Ringwood (Ranter—Beauty) out of Myrtle (Rattler—Lulu).

Nora II. By Mr. John Wilkinson, Vermont, Ill., for red Irish setter bitch, whelped July 9, 1883 (Rory O'More—Nora O'More).

Sport. By Mr. Arthur D. Martin, Hartford, Conn., for English setter dog, whelped April, 1883, by Echo (Fly—Queen) out of Pearl (Duke—Nell).

Belle Ringwood. By Mr. A. C. Krueger, Wrightsville, Pa., for white, black and tan beagle bitch, whelped Nov. 13, 1883, by imported Ringwood out of Belle.

Bessy. By Mr. Haven Doe, Salmon Falls, N. H., for black, white and tan beagle bitch, whelped Nov. 21, 1883, by imported Ringwood out of Music III.

Bunny. By Mr. Haven Doe, Salmon Falls, N. H., for black, white and tan beagle dog, whelped Nov. 13, 1883, by imported Ringwood out of Belle.

Fritz. By Mr. C. W. Littlejohn, Leesburg, Va., for lemon and white ticked pointer dog, whelped June 7, 1881 (Beaufort—Spot).

Pilot. By Mr. C. W. Littlejohn, Leesburg, Va., for lemon and white pointer dog, whelped June 23, 1880 (Scout—Spot).

Nip. By Mr. J. W. Gross, Harrisburg, Pa., for black, white and tan beagle dog, whelped Nov. 12, 1883, by Ringwood (Ranter—Beauty) out of Silver (Flute—Bess).

BRED.

☞ *See instructions at head of this column.*

Lassie—Glencho. Mr. T. D. Husted's (Peekskill, N. Y.) red Irish setter bitch Lassie to Mr. W. H. Pierce's Glencho (Elcho—Noreen), Feb. 9.

Claire—Glencho. Mr. James T. Walker's (Baltimore, Md.) red Irish setter bitch Claire (A.K.R. 233) to Mr. W. H. Pierce's Glencho (Elcho—Noreen). Feb. 11.

Bessie—Don. Mr. Wm. H. Force's (New York) pointer bitch Bessie (Sensation—Minnecla) to Mr. R. T. Vandevort's Don (A.K.R. 165), Feb. 3.

Beasey—Glencho. Mr. Charles J. Steward's (New York) red Irish setter bitch Beasey to Mr. W. H. Pierce's Glencho (Elcho—Noreen), Jan. 23.

Juno—Glencho. Mr. Geo. Langran's (Yonkers, N. Y.) red Irish setter bitch Juno (Berkley—Tilley) to Mr. W. H. Pierce's Glencho (Elcho—Noreen), Jan. 30.

Polly—Bang Bang. Mr. H. B. Tallman's (Providence, R. I.) lemon and white pointer bitch Polly (Beaufort—Nymph) to Bang Bang (A.K.R. 394), Feb. 16.

Dessey—Don. Mr. A. R. Hayward's (Rock Hill, S. C.) pointer bitch Dessey (Percy's Fowler—Vixen) to Mr. R. T. Vandevort's Don (A.K.R. 165), Jan. 19.

Ruby—Scout. The Knickerbocker Kennel Club's liver and white pointer bitch Ruby (Dick—Fan) to Mr. D. G. Elliot's Scout (A.K.R. 216).

Fanchon—Young Toby. Mr. F. H. Adams's (Pawtucket, R. I.) pug bitch Fanchon (Echo—Victoria) to the Chequasset Kennel's imported Young Toby (A.K.R. 473), Feb. 23.

May—Rebel Windem. Mr. R. M. Brown, Jr.'s (Amherst C. H., Va.) English setter bitch May (Lincoln—Daisy Dean) to Rebel Windem, Feb. 21.

Pearl Blue—Gun. Mr. Chas. York's (Bangor, Me.) English setter bitch Pearl Blue (Royal Blue—Oryad) to his Gun (Gladstone—May B.), Nov. 1.

Surf—Icicle. Mr. Chas. L. Lundy's (Cincinnati, O.), orange and white pointer bitch Surf (Bow—King's Maid) to Mr. Geo. W. Fisher's Icicle (A.K.R. 82), Feb. 21.

Flora—Glen II. Mr. G. A. Coleman's (Charlestown, Mass.) Gordon bitch Flora (Tom—Chloe) to Mr. Geo. E. Brown's Glen II. (Dr. Aten's Glen—Border Lilly).

Hornell Daisy—Hornell Silk. The Hornell Spaniel Club's (Hornellsville, N. Y.) liver cocker spaniel bitch Hornell Daisy (Benedict—Flirt) to their Hornell Silk (Obo—Chloe II.), Jan. 26.

Hornell Belle II.—Hornell Silk. The Hornell Spaniel Club's (Hornellsville, N. Y.) black and tan cocker spaniel bitch Hornell Belle II. (Hornell Dandy—Hornell Belle) to their Hornell Silk (Obo—Chloe II.), Feb. 9.

Princess Rose II.—Rebel Windem. Mr. R. S. Terry's English setter bitch Princess Rose II. (Gladstone, Jr.—Princess Rose) to Rebel Windem, Feb. 23.

Frost's Queen—Rebel Windem. Mr. A. S. Payne's English setter bitch Frost's Queen (Scout—Frost) to Rebel Windem, Feb. 15.

Ress—Rush Gladstone. Mr. J. E. Mask's (Hickory Valley, Tenn.) black setter bitch Ress (Mark—Vic) to Mr. J. M. Avent's Rush Gladstone (Gladstone—Donna J.), Feb. 17.

Countess A.—Count Noble. Mr. J. M. Avent's (Hickory Valley, Tenn.) English setter bitch Countess A. (Dashing Lion—Armida) to Count Noble, Dec. 25, 1883.

WHELPS.

☞ *See instructions at head of this column.*

Princess Eugenia. Mr. H. C. Sherman's English setter bitch Princess Eugenia (Ranger III.— ———). Feb. 17, ten (eight dogs), by Mr. W. A. Coster's Buckelew (A.K.R. 30); all orange and white ticked.

Model Blue. Mr. A. P. Garland's (Ipswich, Mass.) English setter bitch Model Blue (Druid—Gussie), Feb. 18, nine (five dogs), by Mr. A. M. Tucker's Dash III.

Matchless. Mr. F. Thurls's (Newburyport, Mass.) English setter bitch Matchless, Feb. 13, nine (four dogs), by Mr. A. M. Tucker's Dash III.

Pearl Blue. Mr. Chas. York's (Bangor, Me.) English setter bitch Pearl Blue (Royal Blue—Oryad), Jan. 2, twelve (seven dogs), by his Gun (Gladstone—May B.).

Bett. Mr. Rhos. Goode Tucker's (South Gaston, N. C.) Byron foxhound bitch Bett (Watchman—Hannah), Feb. 25, five (three dogs), by Epps (Broduax's Spot— ———).

Fan. Mr. E. C. Alden's (Dedham, Mass.) champion black pointer bitch Fan (Pete—Belle), Jan. 19, five (three dogs), by his champion Pete, Jr. (Pete—Nell).

SALES.

☞ *See instructions at head of this column.*

Countess Rake. Black, white and tan English setter bitch, 2½ years old (Rake—Phyllis), by Mr. Edward Odell, New Orleans, La., to Mr. J. B. C. Lucas.

Antea II. Fawn mastiff bitch (A.K.R. 685), by the Riverside Kennel, Clinton, Mass., to Mr. W. H. Herrick, Montpelier, Vt.

Ralph H. Red Irish setter dog, whelped June 9, 1883, by Ronold (Elcho—Rose) out of Nellie B. (Dash—Creena), by Dr. J. R. Housel, Watsontown, Pa., to Mr. Geo. Snyder, Almota, W. T.

Floss II. Liver and white cocker spaniel bitch, age not given (Handy—Nellie Coporn), by Mr. L. C. Andrus, Malone, N. Y., to Dr. G. H. Kidney, same place.

Lute. White beagle bitch, whelped June 23, 1882 (Ringwood—Norah), by Mr. T. T. Phlegar, Pearisburg, Va., to Mr. C. F. Kent, Monticello, N. Y.

Nashie. White, black and tan beagle bitch, whelped June 23, 1883 (Ringwood—Norah), by Mr. T. T. Phlegar, Pearisburg, Va., to Mr. C. F. Kent, Monticello, N. Y.

Elcho—Rose whelp. Red Irish setter bitch, whelped Aug. 4, 1883, by Dr. Wm. Jarvis, Claremont, N. H., to Mr. J. A. J. Sprague, Englewood, Ill.

Freund. Orange and white rough-coated St. Bernard dog, whelped Aug. 2, 1883 (champion Bonivard—Theon, A.K.R. 94), by the Chequasset Kennels, Lancaster, Mass., to Mr. Chas. Parsons, Jr., New York.

Cæsar. Orange, with white markings, imported rough-coated St. Bernard dog, whelped July 5, 1879 (A.K.R. 22), by the Chequasset Kennels, Lancaster, Mass., to the Forest City Kennels, Portland, Me.

Salme. Fawn pug dog, whelped Oct. 11, 1883 (Little Boffin—Santa), by Mr. F. B. Lucy, Boston, Mass., to Mr. C. H. Andrus, same place.

Tokie. Black and white Japanese spaniel, 2 years old (Jim Willie—Tokio), by Mr. F. B. Lucy, Boston, Mass., to Mrs. Dr. Kimball, Lowell, Mass.

Benglo. Black and white Japanese spaniel, 2 years old (Larley—See So), by Mr. F. B. Lucy, Boston, Mass., to Mr. M. Hodges, same place.

Game. English setter dog, whelped Dec. 31, 1883 (Dashing Dan—Daisy Starlight), by Mr. H. W. Durgin, Bangor, Me., to Mr. F. S. Davenport.

Dashing Dan—Daisy Starlight whelps. English setter dogs, whelped Dec. 31, 1883, by Mr. H. W. Durgin, Bangor, Me., a lemon belton to Mr. R. L. Henry, Hamden, Conn., and a blue belton and tan to Mr. Twombley, Boston, Mass.

Norena. Red Irish setter bitch, whelped July 30, 1883, by champion Elcho (A.K.R. 295) out of champion Noreen (A.K.R. 397), by Dr. Wm. Jarvis, Claremont, N. H., to Dr. J. Frank Perry, Boston, Mass.

Quail II. Red Irish setter bitch, age not given (Red Gauntlet—Quail II.) by the Rory O'More Kennel, Albany, N. Y., to Mr. A. P. Pope, Olean, N.Y.

Sontag. Imported black and tan cocker spaniel dog, whelped March 6, 1879 (Briar—Gypsy), by Mr. J. W. Rushforth, Yonkers, N.Y., to Dr. C. T. Hubbard, Taunton, Mass.

Gypsy O'More. Red Irish setter bitch, whelped July 6, 1883 (Rory O'More—Quail III.), by the Rory O'More Kennels, Albany, N. Y., to Mr. Jas. A. Stimson, Cohoes, N. Y.

Sylvia. Red Irish setter bitch, age not given (Rory O'More—Sampson's Nora), by the Rory O'More Kennels, Albany, N. Y., to Mr. Jas. A. Stimson, Cohoes, N. Y.

Dash III.—Katydid whelps. Black and white English setters, dog and bitch, whelped Dec. 14, 1883, by Mr. E. H. Fisher, New Bedford, Mass., to Drs. C. T. Hubbard and J. W. Hayward, Taunton, Mass.

Katydid. Black and white English setter bitch, whelped May 19, 1881 (Guy Mannering—Whirlwind), by Mr. E. H. Fisher, New Bedford, Mass., to Drs. C. T. Hubbard and J. W. Hayward, Taunton, Mass.

Wallace. Red Irish setter dog, whelped June 5, 1883 (Ruby—Kit), by Miss Ida F. Warren, Leicester, Mass., to Mr. Charles E. Sanford, Worcester, Mass.

Grace B. Black and white English setter bitch, 21 months old (London—Dawn), Mr. H. Bailey Harrison, Tilsonburg, Ont., to Mr. C. Fred. Crawford, Pawtucket, R. I.

Mack B. Lemon roan English setter dog, 16 months old (Dick Laverack—Twilight), by Mr. H. Bailey Harrison, Tilsonburg, Ont., to Mr. C. Fred. Crawford, Pawtucket, R. I.

Gem. Lemon and white English setter bitch, 16 months old (Dick Laverack—Twilight), by Mr. H. Bailey Harrison, Tilsonburg, Ont., to Mr. C. Fred Crawford, Pawtucket, R. I.

Belle II. White, black and tan beagle bitch, whelped Oct. 23, 1881 (King—Belle), by Mr. A. C. Krueger, Wrightsville, Pa., to Mr. Charles F. Kent, Monticello, N. Y.

Judge. White, black and tan beagle dog, whelped Aug. 24, 1883 (Rattler II.—Rena), by Mr. A. C. Krueger, Wrightsville, Pa., to Mr. Geo. L. Barnes, Tyringham, Mass.

Kitty. White, black and tan beagle bitch, whelped Aug. 24, 1883 (Rattler II.—Rena), by Mr. A. C. Krueger, Wrightsville, Pa., to Mr. J. H. Morgan, Baltimore, Md.

DEATHS.

☞ *See instructions at head of this column.*

Rainbow. Liver and white pointer dog (champion Bow—Roxie), owned by Mr. Edward Odell, New Orleans, La.

Minnie. Lemon and white pointer bitch, 7 years old (Sensation—Whiskey), owned by Mr. Elliot Smith, New York, Feb. 25, from paralysis.

Nellie Horton. Black and tan Gordon setter bitch, 7 years old (Duke of Gordon—Tilley's Dream), owned by Mr. George E. Brown, Dedham, Mass., Feb. 19, cause unknown.

Rector. Lemon and white pointer dog (A.K.R. 700), owned by Mr. Forest W. Forbes, Westboro, Mass., Feb. 15.

Bruce. Liver spaniel dog (A.K.R. 728), owned by Mr. J. W. Rushforth, Yonkers, N.Y., Feb. 14, from distemper.

Dandy III. Black spaniel dog (A.K.R. 730), owned by Mr. J. W. Rushforth, Yonkers, N.Y., March 2, from distemper.

KENNEL MANAGEMENT.

☞ **No Notice Taken of Anonymous Correspondents.**

H. B., Holton, Kan.—A puppy two months old, if in good health, should stand the journey this time of year.

Verax, Port Rowan, Ont.—Bathe the eyes twice daily with a wash composed of five grains borax and one ounce rosewater.

H. K., East Saugus, Mass.—Give an accurate description of the wart and its exact location and we will advise as to its removal.

F. W., Dunkirk, O.—Have a little patience. When he recovers his strength he may come all right. Bathe with cold tea twice a day.

C. F. R., Washington, D. C.—1. We would not advise breeding so near relatives. 2. We have no picture of Dash. 3. See Kennel department.

A. R., Cape Girardeau, Mo.—Your dog is probably ruined, and it would pay you better to get rid of him and get another that has not got his bad habits.

L. & T., South Royalton, Vt.—Keep the bandage on the foot wet with chloride of zinc—three grains to the ounce of water. Give him occasional small dose of Epsom salts.

J. H. W., Philadelphia, Pa.—We doubt if she will show any after-effects of the accident as a breeder, and you will know nothing of it so far as her field qualities are concerned. Dry her up as soon as possible and destroy the pups.

C. F. W., Palmyra, O.—Dress with sulphur and lard ointment. Give five drops of Fowler's solution of arsenic in her food twice a day and increase one drop every second day up to twelve drops, and keep up the treatment until you see an improvement or she shows bloodshot eyes.

S., Ogdensburg.—It is a failing with short-legged spaniels to get crooked in front. Is the leg bone crooked, or is your pup loose-jointed and out at elbows? Your treatment of the bitch was correct; but you should give a change from the cornmeal and oatmeal diet. Give bread, meat and vegetables mixed. Tone the system up a little, and do not be afraid of meat until you see an improvement in her appearance. Dogs require meat, and you do not seem to give your bitch any. Do not feed more than twice a day under any circumstances, and the morning meal should be light.

Rifle and Trap Shooting.

FIXTURES.

First International Clay-Pigeon Tournament, at Chicago, Ill., May 26 to 31. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

SCIENCE OF RIFLE SHOOTING.

Editor Forest and Stream:

I beg to submit the following answers to the queries of Messrs. "J. J. P." and "G. W. F.," in your issue of Feb. 21, from the standpoint of a reader of Forest and Stream interested in such subjects, with the view of starting the discussion requested:

No. 1.—If I understand the question, the answer may be: The forces are quite different; in the first case the effect of the wind is a rather complex one, dependent, for the most part, upon the strength and direction of the breeze, and the velocity, shape, area presented by and weight of the bullet. In the second case, it is mainly gravity. An instance might occur where the effect of the two adjustments would be equal in amount, and—aiming toward the zenith—where wind disturbance of the trajectory and that caused by elevating the rear sight would be equal and opposite, but by no mechanical contrivance could they be made to vary in the ratio of their respective forces, the cases of possible difference being so infinitely great in number.

No. 2.—The maximum pressure depends in amount upon the density of the gaseous products of combustion at the instant the projectile starts (which is not saying the projectile does not sometimes start before the maximum is reached) and the amount of upset depends upon this pressure. It is clear that air space will diminish this density and hence the pressure.

The upsetting of a naked bullet should be merely sufficient to increase the diameter to such a point as will effect a normal rotation, as anything more entails no end of evil features, among which may be mentioned, a loss of useful energy of the charge in excessive molecular distortion of the bullet, and hence in heat; in friction on the walls of the bore, and finally in accuracy of the projectile once outside. With too quick powder air space may be necessary to eliminate all these difficulties. With heavy or old powder it may be a positive disadvantage. With the heavy charges used in large artillery its use is indispensable, as no gun metal is strong enough to stand the strains without.

If not necessary, it entails a loss in useful length of bore as the velocity depends, other features being equal, upon the number of times the charge is expanded from its original volume.

No. 3.—Winchester's or any other, I think the blast from the primer should be just sufficient to ignite the point in the charge to which it is applied. Otherwise there is a possibility of burning the charge under greater pressure than it will itself furnish, not only through the undue accession of gas from the primer, but from pulverizing the powder grains and enhancing their rate of combustion. Valuable notes on this subject may be found in Berthelot's latest lecture on explosives.

No. 4.—If the diameter of the patched portion of the bullet and the material of the patch are suited to the caliber and the rifling, and the weight of the bullet to the nature of the powder, that is to say all else being equal, lubrication is a source of gain in energy to the bullet, and I think it can be applied with suitable uniformity. It is quite possible to imagine conditions where a lubricant would be disadvantageous. Having, in particular, powder, the qualities of which are indefinite, this can only be determined by experiment. Any tyro can make such experiments for himself if he be patient and weigh well all his results.

No. 5.—The question is just a little vague, but if I understand the querist correctly, I think it is because, for the same wind, a displacement of the gauge on a short piece is less than with a long one, and the habit of the eye in sighting with no gauge is less deranged, enabling the marksman to adjust himself with less change of position. It seems probable also that with either long or short guns there would be with most men less change from the habitual and natural position in aiming, the wind gauge being placed at the muzzle.

No. 6.—The patching and bullet must be concentric, or, better, the center of gravity of the bullet must be in its axis, and the patching of uniform thickness and flexibility, otherwise the bullet will not center itself, and the flight will be a spiral.

No. 7.—There is a certain lack of relation between the features referred to in the beginning of the question, but the latter may be answered by a "Yes" if the weight of the bullet is not greatly changed by a lack of uniformity in its composition. It is quite clear that the release of the patch, as usually made, is of the first importance.

Referring to the latter part of the question, it is more certain to be separated from the bullet, if in contact with the charge, the pressure and heat being greater in this position.

No. 8.—I am not perhaps qualified to fully answer this question, not being a professional marksman, but think that much of the disadvantage in the change of light may be eliminated by the use of a shade susceptible of being pivoted in three directions, to be placed at will on either side of the piece abreast the rear sight. The difficulty is usually caused by the interference of rays of light reflected by the surfaces of the different positions of the sight, in variable quantity and quality with a change in the position of the sun. The effects referred to may be studied with a candle placed in different positions near the rear sight and the benefits of the suggested shade illustrated.

No. 9.—A most important question, not specially so in regard to the selection of the powder maker, but of the powder. Each weight and caliber of bullet should have its suitable charge in which the quality of the powder is quite as important a feature as the quantity. The weight of the bullet being fixed, the question is to develop the highest velocity with accuracy, within the limits of safety and distress in recoil. A long series of experiments will alone establish the powder charge best suited to each class, in which the nature of the powder as affected by its specific gravity, its size of grain and special features of ingredients or manipulation in manufacture will be the task of the investigator. It will be answered. This is all done now, but I think not so to a sufficient extent, else there would be fewer queries. I have no doubt many of the powder manufacturers can produce good work and can vary the qualities of their product at will. I do know however, that the scientific knowledge and experience brought to bear in their profession by the Messrs. Dupont are quite on a level with the importance of the question. In common with other readers of Forest and Stream I shall look with interest for the disclosure promised by "J. J. P." at a later day.

Queries by "G. F. W." First—It depends principally as remarked in response to "J. J. P.," upon the nature of the powder. Each new lot you receive, experiment a little to see if air spacing prove beneficial. In no case, however, compress the powder. If you allow nothing between bullet and charge, place the former simply and crimp without force, having previously tapped the charge down to its smallest volume.

Second—All the flaming particles seen at the muzzle of a gun on discharge are not partially burned powder. This effect is usually caused by the solid products of combustion heated to incandescence. Powder, however, may be, and frequently is, blown out unburned, but (among fifty other possible causes) it is perhaps too dense, or the relation between the weights of the charge and projectile and the length and caliber of the bore has not been correctly established.

It has been found that ignition at the front end of the cartridge increased slightly the velocity of the projectile—probably because there is less vibration of the gaseous wave as the projectile travels down the bore—thus giving a more uniform impulse to produce acceleration.

W. M. F.

Annapolis, Md., Feb. 28.

MILITIA SHOOTING EAST AND WEST.

The Hartford *Courant*, speaking of the work of the State National Guard on the ranges, says:

"The splendid results of the season's work are deserving of more than a limited notice when it is considered how important this branch of the service is to the military service of the State. A military organization with gaudy uniforms, marching with perfect alignments and steady step, is applauded as the perfection of military discipline, and so far as it goes it is well deserved, but one of the vital qualifications of a soldier is his ability to use his rifle with effect. This can only be accomplished by systematic and persistent practice with the majority of recruits. The present system of target practice in the Connecticut National Guard requires that every man shall begin to shoot at 100yds. distance; if he succeeds in making 13 points out of a possible 25, he is promoted to the next class, which is 200yds.; there are the same conditions to the second class, which is 300 and 400yds. All men who can make 50 per cent. of a possible score at the latter range are then in the first class and can shoot for the marksman's badge. The distances are 200 and 500yds., and five shots are allowed at each range. Two trials only can be made, and if a guardsmen succeeds in making a 50 per cent. score he is a marksman and entitled to wear the State badge. If he makes an 80 per cent. score, or better, he receives a silver bar or badge with the word 'sharpshooter' inscribed thereon. Each year a man must demonstrate his ability to shoot by going back into the second class and advancing as before. So it will be seen that our citizen soldiers are put through a practical course of training in the use of a weapon which is too often carried by men who haven't the slightest knowledge of its use. The value of this course of discipline cannot be overrated. Since target practice was first established for the C. N. G. the First regiment has led the entire brigade in the number of marksmen. In 1879 the entire brigade had 567 marksmen, of which the First had 306. In 1880 the brigade had 546, of which the First regiment, with ten companies, had 316. In 1881, out of 387 in the entire brigade, the regiment, with eight companies, had 267. In 1882 the total was 394, of which the First regiment had 160. It is generally known, of course, that there are four regiments and a battalion of three companies, besides a battery of artillery in the brigade. It will be easy to estimate that the First regiment has averaged as many marksmen as the entire rest of the brigade, and can appropriately be called the "shooting regiment." In 1880, when the regiment qualified 316 marksmen, there were two more companies in the regiment and over two hundred more men on the rolls than at the present time. We give below the figures of each company, and it is safe to conclude that no other regiment in the country can equal it:

	Marksmen.	Sharpshooters.	Total.
Field and Staff	5	9	14
Company A	50	2	52
Company B	35	7	42
Company D	14	1	15
Company E	27	3	30
Company F	42	18	60
Company G	13	3	16
Company H	28	16	44
Company K	44	19	63

Company K qualified every member of the company and Company F all but one."

In the far away State of Minnesota there does not come such a favorable report. C. M. Skinner, of Co. B, 1st Regiment, says in a recent letter: "The result of battles is decided largely by the number of guns, large and small, their range, and above all, by the skill with which the gunners use them.

Recognizing this fact, those in authority in all civilized nations are taking great pains, and expend a large amount of money to perfect as far as possible, the rank and file of their armies in the use of their rifles as an implement to shoot with, and every inducement is held out in the way of prizes, badges of distinction, honor, etc., to bring out the highest degree of skill. This has been going on in all European countries for twenty years and upward and never have they been more interested in it than at the present time.

The War Department of our own country now authorize the expenditure of large amounts of ammunition for target practice, and any one who has witnessed the annual department contests at Fort Snelling can but notice the earnestness with which the soldiers enter the contests, and be surprised at the great accuracy displayed up to 600yds. In a government like ours, whose chief strength is the National Guards and volunteers, all see the importance of having them as well skilled in the use of firearms as possible.

In all Eastern States the militia have already attained an enviable degree of skill as marksmen.

But at the West, with the exception of the single State of Michigan, which last fall bore away the Hilton trophy from Creedmoor, there has been nothing done, except what a few companies have done at their own expense. In fact, it would seem that they have been discouraged by those in authority.

I hold that no better looking, abler bodied, more courageous, better disciplined, better drilled in manual of arms and field movements exist in the country than our own Minnesota National Guards; but alas! 200 buffalo hunters who don't know a "carry" from a "present" arms, or a "right wheel" from a "parade rest," in an open plain would drive the National Guard of Minnesota from the field. The reason is obvious, but few of the gentlemen know what to do with their rifles at 200yds., and almost none at 400, 500 and 600yds.

The staff officers could create a good deal of interest with the company officers, and they with their men. A captain can lead his men to the target, as well as to a bayonet charge, an exhibition drill, dress parade, or ball.

Target practice is now a very prominent feature of the annual encampments of all Eastern troops, and the result is eagerly watched by staff and State officers, and this is as it should be. Thus far Minnesota has done nothing to encourage rifle practice among her National Guard. No State range has been laid out, and the militia are furnished the liberal supply of 1,000 cartridges per company, about 15 or 18 per man, an amount that ought to be fired each month, but they have positive instructions to never use them.

Several companies have done some 200yds. work at their own expense, and some of the shooting has been very creditable. The greatest effort made by any company, perhaps, was by "B." Company First Regiment, who entered a team of six men to contest for the champion military badge at Fort Snelling last September, and as they had no opposition bore it away in triumph. The W. R. A. has done more to get up an interest in military shooting in the West, among the militia, than all other agencies put together. Special matches have been made and liberal prizes offered for two years at their tournaments at Fort Snelling. The first year saw their prize, the champion military badge, go to "C" Company, Seventh Infantry and carried away to Ft. Laramie. Last September, recognizing the fact that they must get the commissioned officers interested, they offered an elegant silver cup valued at $25 in a commissioned officers' match, especially gotten up for commissioned officers of the National Guard, but on the day of the match but one commissioned officer was on the ground and he was from Illinois, although both match and prize were liberally advertised.

The Association, doomed to disappointment at not getting any entries from the National Guards, they offered it to the United States Army commissioned officers and it was carried off by Lieut. Emery. This apathy on the part of the commissioned officers of the National Guards is easily explained, no one was in practice, no one wanted to be laughed at for their poor scores; or the awkward handling of their guns.

If any here would inquire why the W. R. A. are so solicitous about the skill of the N. G., I would answer that most of its members and warmest supporters are ex-soldiers and know the need of having the

militia well skilled in the use of their rifles, and the W. R. A. was organized, as one of its sections reads, to encourage the art of rifle shooting, and especially that of the N. G. They have met with but little encouragement so far but are on a good footing and still hopeful. Let the officers decide that target practice shall be made a part of each day's programme at the annual encampments. Targets can be constructed at small expense. Select no camp ground where target practice cannot be had. If we can't get ammunition from the State, let's furnish our own and petition the Legislature when in session to authorize the issue of 250 rounds per man per annum; have company, regimental and a State inspector of rifle practice, let the score be kept and a report made to the Adjutant-General, annually of the result of the year's practice, and the number of 3d, 2d and 1st class marksmen and sharpshooters there are in the State. Provide marksmen and sharpshooters' badges for those who win them. Finally, and of greatest importance, let all commissioned officers wake up to the importance of skilling our National Guards in the art of rifle shooting. Encourage the men by their presence on practice days, but better still, take a rifle and lead the score themselves, and we will soon overtake our Eastern brethren who at present are so far ahead of us in this respect."

RANGE AND GALLERY.

BOSTON, March 1.—There was but a small attendance to-day at Walnut Hill, and the scores made were not high. The snow which covered the ground made a bad light, which considerably troubled the riflemen. The highest records made are appended:

W Charles	5555555554—48	C B Edwards	4454444545—43
W Gardner	5544555455—47	J Payson (mil)	4454444445—42
C W Adams	4554545554—46	A Keach	4344441544—40
G Warren	4555545444—45	J E Darmoddy	5343444444—39
H Cushing	4544454545—44	J R Carmichael	3433944434—37

Creedmoor Prize Match.

W Gardner, E	5 5 5 5 4 5 5 4 4 5—47
G Warren, C	4 4 5 4 5 5 4 5 5 4—46
J B Thomas, B	5 5 4 4 4 4 5 5 4 4—44

Rest Match.

W Charles, E	9 9 9 10 10 10 10 10 9 9—95
R Reed, E	9 10 9 10 10 9 10 9 8 8—89
T Everett, D	9 9 10 10 9 7 9 10 10 9—92

ZETTLER VS. FRELINGHUYSEN.—Monday evening a well-contested match was shot between the Zettlers, of New York City, and the Frelinghuysen Club, of Newark, on the range of the former, No. 207 Bowery. The shooting opened at 8:15 and continued until 1:30 A. M., resulting in favor of the Zettlers. As the above club has shot over one hundred matches, and have been in all victorious, the visiting club may feel proud of their score, their opponents leading them only by five points. The return match will be shot on March 19 at the Frelinghuysen range, No. 189 Market street, Newark, N. J. The following score was made:

Zettler Team.

J H Brown	11 12 12 12 11 11 12 11 12 12—116
M Dorrler	11 11 12 12 11 12 12 12 10 11—114
M B Engel	10 11 12 11 10 11 11 12 12 12 112
C G Zettler	9 11 11 12 11 11 11 10 12 12—110
C Judson	12 11 11 10 11 12 10 11 10 12—110
P Fenning	12 12 11 10 11 11 10 11 12 10—110
B Zettler	12 12 11 11 9 9 11 11 10 12—108
A Lober	11 11 11 11 12 11 9 12 10 10—108
D Miller	12 11 10 9 10 10 11 12 9 12—106
W Klein	11 11 11 5 12 12 7 10 10 10— 99
Total	1,093

Frelinghuysen Team.

A C Neumann	12 12 12 12 11 12 11 12 10 11—115
Wm Hayes	12 10 12 12 10 10 12 10 12 12 112
G D Weigman	10 8 12 12 11 10 12 12 12 12—111
E O Chase	12 10 12 10 12 9 12 11 11 11—110
Wm McLeod	12 12 10 8 11 11 12 11 10 11—108
J L Tobin	11 10 10 12 10 11 11 11 11 11—108
S H Shackelford	11 11 10 11 10 12 11 12 10 10—108
J K Walsh	10 10 10 12 10 12 11 11 9 12—107
F W Lynn	7 10 12 12 10 12 11 12 10 11—107
George Zimmer	8 10 11 11 11 10 11 10 11 9—102
Total	1,088

Zettler Rifle Club held its regular weekly shoot Feb. 26, 12-ring target.

A Lober	110	T Fitz	110
C Judson	112	B Zettler	111
M Dorrler	115	H Holges	108
P Fenning	110	V Stembach	108
M B Engler	114	T C Noone	97
C G Zettler	113	H Puckhaber	95

DENVER, Col., Feb. 22.—As early as 8 o'clock this morning the trains of the Circle road were filled with members of the First Infantry Regiment, on their way to the Jewell Park range to engage in the contests with the rifle which had been arranged to occur on Washington's Birthday.

The first shoot was between the Routt Rifles and the Governor's Guard for the State championship, which was won by the latter company two years ago in a series of contests with the Sherley Light Infantry, of Leadville, and has been held by it ever since. The judges were Major Bedson and Mr. J. T. Bourke, and the referee was Mr. J. P. Lower.

The shooting commenced at 10 and continued for two hours. A very high wind prevailed during the entire day and caused the scores made to be very poor. J. N. Lower, of Company B, made the highest score, thirty-eight, while on a fair day there are at least five men on each team who may be counted upon to make forty or over. The shooting was off-hand, two hundred yards, ten shots per man, and the score is as follows:

Governor's Guard.		Routt Rifles.	
J N Lower	38	K E Noah	28
W A Rice	27	E H Cling	31
C C Compton	32	C J Kelley	33
Geo Henderson	24	A E Schaffer	32
Leo Marix	33	G H Sill	31
G Coryell	23	Capt E A More	18
F S High	34	Robert Collier	58
H S Davis	22	A W Peterson	37
Lt E W Lehman	28	Lt T Stone	31—281
G Lower	33—294		

The Governor's Guard is consequently still the State champion. The Routt Rifles gave notice that they should challenge the winners, and the next match will probably be shot on Memorial Day.

For the handsome rifle presented to Colorado National Guard by Mr. Lower, Companies B, D and E entered. The prize must be won three times consecutively by one company before becoming its property. Although the wind still continued to blow, the shooting was much better than in the first contest, as the following score will show:

Governor's Guards.		Routt Rifles—Co. E.		Company D.	
J N Lower	39—	McGuire	39	Platfoot	29
W A Rice	36—	Kling	29	McCartney	34
Compton	38	Kelly	32	Ed Capps	20
Henderson	30	Schaffer	34	Eugene Capps	28
Marix	38	Sill	23	Falkner	10
Coryell	21	E C Moore	34	Moore	31
High	37	Collier	39	Kingsley	26
Davis	30	Lesley	27	Hogle	10
Lehman	39	A Peterson	37	Jennison	28
G W Lower	32	T Stone	34	Brittling	22
	322		328		268

A FINE SCORE.—The new model Springfield rifle which is to be chanced off by the Wheatley Cadets, Co. D, of Phœnixville, Pa., was sent to E. A. Leopold, of Norristown, Pa., a few days ago, with the request that he test its accuracy at the target. Feb. 21, the weather being favorable, he took it to the Bridgeport range, and in five consecutive shots at 100yds., made the remarkable short string of 4.98 inches. He also put seven consecutive shots in a four-inch bullseye. The shooting was done lying down without artificial rest.

JAMESTOWN, N. Y., March 1.—Regular medal match of C. S. A. yesterday, Creedmoor target, 200yds., wind heavy at 8 o'clock, light very bright:

G Shattuck	5545455454—46	R H Burns	4434434555—41
O H Lilly	4554544455—45	W H Sprague	3333455444—40
S N Ayres	4544555544—45	W N Goke	5454334354—39
J Haycock	5535534454—43	A F Ward	3423534345—36
A F Warner	4514355444—42	H Briggs	3523534343—35

BOSTON, March 1.—The amateur prize match, at the Mammoth Rifle Gallery, of the last two weeks of February, closed last night, R. Ford winning the first, A. B. Loring the second. Following are the scores made:

R Ford	45 45 46 46—182	J T Stetson	44 44 44 44—176
A B Loring	45 45 45 45—185	A W Rand	45 43 42 42—172
T Lyman	46 44 44 43—177	R E Bellows	44 42 42 42—170

For the month of March three prizes will be put up for amateurs.

NEWARK, N. J.—The fifth match in the tournament of the Newark Rifle Association commence on Monday evening, March 10, at the Plymouth range, clubs shooting in the following order: Plymouth, Domestic, Celluloid, Essex, Warren, Frelinghuysen. The corrected scores of last month are: Frelinghuysen 468, Essex 455, Domestic 438, Celluloid 432, Plymouth 420, Warren 420. The last match will be shot on the Warren range, this closing the season for inside shooting, with the exception of private matches on hand.

A meeting was held on Tuesday evening, Feb. 26, at Roseville Park, and a rifle club was organized, to be known as the Roseville Rifle Association, for out-door shooting. They will have a 100yds. range, which is being fitted up in the park.

BRATTLEBORO, Vt., Feb. 26.—Oak Grove range, Feb. 26.

Cabb	11	11	11	11	10	12	10	12	12	11—111	
Re-entry	12	11	11	11	12	11	11	11	9	8—107	
Pentland	10	9	10	12	12	12	11	11	12	7—106	
Re-entry	12	11	11	10	9	12	10	9	10	11—105	
Howe	11	12	11	15	10	9	12	11	9	10—105	
Re-entry	12	11	10	9	11	11	10	12	10	12—108	
Lamb	12	12	10	9	12	12	5	10	11	12—105	
Re-entry	12	11	10	12	9	10	11	11	12	12—110	
Taft	7	11	10	10	9	11	11	11	11	11—102	
Re-entry	12	11	11	12	10	12	12	12	7	11—110	
Sargent	8	10	11	9	11	11	7	10	10	11— 98	
Re-entry	11	10	12	10	11	9	10	9	12	9—103	

FIVE-BULLSEYES RIFLE WANTED.—Mechanicsburg, Pa., March 3.—*Editor Forest and Stream:* Where can I get a rifle that will carry up the fifth shot 100yds. to a 4in. bullseye. I have tried the Remington and made four successive bullseyes, but the fifth sank six inches. I have also tried a muzzleloader and made three bulls in five shots. Where does Capt. Stubbs live? I am open for a challenge for the championship.—PHILIP UHLER.

THE PISTOL NUISANCE.—Chicago is not free from the annoyance which follows the sale and use of pocket pistols and revolvers. The *Daily News* of that city has been looking into the matter and adds the following testimony to that already given against the free and easy trading in these wee guns of every description. It says: "The habit of carrying revolvers and pistols, frequently commented on and severely criticized by the newspapers, is a growing one among the youthful and middle-aged population of Chicago. A well-known Madison street dealer in guns and firearms told a reporter for the *Daily News* that the sale of the serviceable kind of pistol, that will 'kill a man every time,' is continually increasing. The 'bulldog' revolver, such as Garfield was shot with, is the most popular. Just after Garfield's assassination a Pittsburg dealer was obliged to send all his clerks and salesmen into the department, and even then he could not meet the demands of his customers. The American manufacturers, moreover, were unable to supply the abnormal demand for these weapons, and the English sources of production were soon exhausted. The awful destructiveness of the 'bulldog' was its chief recommendation to public favor at that time. Men wanted some weapon to practically protect themselves from such wild, deluded beings as Guiteau had proven himself. The danger from such a source was considerable, and a genuine, practical remedy was believed to be in this devastating instrument. In selling a revolver or pistol to any one the dealer is required to record the purchaser's name, age, residence and the purpose for which the weapon is bought. No one under twenty-one years of age is allowed to buy any weapon of defence without a written permission from his parents or guardian of the purchaser, addressed to the dealer or 'to whom it may concern.' The average age of the purchasers of revolvers is between twenty-three and twenty five years. These are mostly young men. Very few women in Chicago either purchase or use revolvers, although many husbands declare that they wish the weapons for their wives to practice with and learn to use with some degree of skill. In case of burglars they hope that their 'better halves' may find it possible to protect themselves. The reasons which many people give the gunsmiths and dealers for investing in firearms are very amusing. One man wants to 'shoot a dog,' another expects to 'take a shot at an army of feline marauders that make night hideous by their dismal howls beneath his latticed window, and the sandbagged individual (who wears one eye in a sling and has so lumpy a forehead that no hat can conceal its lofty baldness), with a firm conviction that no sand-bagger will cross his path alive in the future. This man wants and inquires for something that will shoot a big ball, and he must have it. The costly revolvers with carved pearl handles and silver-plated engraved barrels, are sold mostly to the theatrical profession and the cowboy class of humanity. The prices of this class of weapons run as high as $50, $60 and $100. It is a remarkable fact that they are usually worn by men who wear the broad sombrero of Buffalo Bill style of head, flannel shirts and cowhide boots. The high price is seldom objected to by these men, since the article is perhaps the most valued one in their wardrobes. An ordinance of the city of Chicago provides that no concealed firearms shall be carried by any citizen without a special permit from the city government. It is probably the most grossly and persistently violated ordinance of the much abused statutes of the city."

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

UNKNOWN GUN CLUB.—The regular monthly match at Dexter's, Long Island, Feb. 28. Snowing hard in the forenoon; damp and a strong westerly wind blowing in the afternoon. Twenty-eight members shot for three regular and three extra prizes; 7 birds, handicap rise. 80yds. boundary, one barrel, gun below the elbow near the hip, club rule and classified. Of the regular prizes, Knebel and Pope divided first; Vogelsang, Van Staden, Schweinler and Plate second; Smith, Appel, Marlborough, Tomford, Midmer, Moller, Gref and Detlefsen having tied for third prize, shot off under the rule, miss and out. It being near dark at the time, after one round the result was: Smith, Marlborough, Midmer and Detlefsen, having each killed a bird they divided third prize. The birds were a fine lot and very strong fliers. Some of the best shots found hard work to stop them. There will be two more shoots to decide who will be the lucky ones for the three extra prizes, the scores in the three regular monthly matches (February, March and April) to count best two scores out of three, with a proviso that all those who kill 12, 13 or 14 birds in two out of three shoots are to shoot off or divide first prize; 9, 10 or 11 birds second prize; 6, 7 or 8 birds third prize. This is a very liberal plan and gives the poor shots a chance to come in for a prize. Two members having resigned, their places were filled on the grounds, keeping the club up to its limit, 50 in number, with a dozen applicants ready to come in at the first chance.—H. K.

CHAMPIONSHIP OF AMERICA.—Louisville Sportsmen's Association, Louisville, Ky., Feb. 20.—*Editor Forest and Stream:* At our annual tournament to be given about the 1st of June next, and to continue seven days, we propose to give a larger purse than was ever given in this country. We shall call the stake the "Louisville Sportsmen's Association cup, for the championship of America." Our proposition is to secure one hundred entries, before the first day of June at $50 each. All entries must be accompanied by a forfeit of $3. This match is to be as follows: 50 live birds to each entry, 15 at 26yds. plunge traps; 15 at 30yds. ground traps, English rules; 10 pair at 21yds. plunge trap, our rules. The entrance fee includes the cost of birds. As you will observe the purse will amount to $5,000, and to this the association will add a cup referred to above, valued at $250, to be presented to the gentleman making the best score in this match. The net money in the match, $3,350 will be divided as follows: 25 per cent. to the first $812.50, 18 per cent. to the second $585, 14 per cent. to the third $455, 12 per cent. to fourth $390, 10 per cent. to fifth $325, 8 per cent. to sixth $260, 7 per cent. to seventh $227.50, 6 per cent. to eighth $195. Should any entry be made and the party entering is unable to attend, he may nominate some one to shoot in his stead. But no one person will be permitted to shoot two scores. A substitute must be named the day previous to this match. Any person is privileged to enter another to shoot for him.—J. M. BARBOUR, President.

BOSTON GUN CLUB.—The Boston Gun Club opened its fourth grand tournament on its grounds at Wellington yesterday, to continue on each alternate Wednesday as follows: March 5 and 19, April 2, 16 and 30, and May 14. The principal event of these days will be the New England clay-pigeon, three men team badge championship match. The Boston Gun Club will give a solid gold medal of the value of $50 to the club getting the best aggregate of two scores out of the above shoots. Conditions—a team to consist of three men from any organized club in the New England States, each club entitled to send two teams, scores to consist of five singles from five separate and constantly repigeoned traps, three pair doubles from two traps, and ten single birds from a constantly altered trap, each team's score to be thus: Sixty-three birds, singles to be shot from eighteen yards rise, doubles fifteen yards rise, ties each day to be shot at one pair doubles and one single straightaway bird, meaning nine birds per team. If any tie exist on the total of two best scores the teams shall shoot off at five straightaway birds and three pair doubles, or thirty-three birds per team. Entrance, $1 per man, the money on each day to be divided, 50, 35 and 15 per cent. to the clubs in usual rotation. One man can be changed if by sickness or inability to shoot on different days, but no change can be made by members from one team to another of same club. Not less than six teams to constitute a shoot. In addition to these sweepstakes, alternating at fifty cents and $1, entries will be shot.

BROWN'S DRIVING PARK, Long Island, Feb. 20.—Twenty gentlemen assembled to witness the Langley cup match, which should have been shot off in 1883, but was permitted to hold over till February, 1884, by Mr. Langley, who presented the cup to be "fought" for by Messrs. Murray, Nichols, Belmont and Aspinwall. Those interested have heretofore been unable to get the above named gentlemen together. The morning was extremely pleasant though windy, the birds were strong, which called for hard hitting. Among those present was Lord Melton, a widely-known English sportsman. Capt. Stratton was in charge of the traps, Mr. Bruce-Wallis was scorer, Mr. Meredith Cummings referee. Matthew Lyons furnished the pigeons, a wild lot, and his dog Sherry did the retrieving. Conditions: 25 birds each, 5 traps, 5yds. apart, handicap rise, 80yds. boundry, 1¾ ounces shot, American-Hurlingham rules. Mr. Allan Nichols killed 25, Mr. Foster Murray 23, Mr. Warren Aspinwall 23, and Mr. H. Belmont 22. In shooting off the tie Mr. Aspinwall killed seven birds straight, Mr. Murray missing his seventh and taking third place.

MALDEN GUN CLUB.—Some seventy-five lovers of the shotgun assembled at the cosy quarters of the Malden Gun Club in Wellington, March 1, and participated in matches, with the following result:

First match—Henry first, Stark second, Adams and Nichols third, Allen fourth.

Second match—Henry first, Johnson and Allen second, Adams and Field third, Nichols fourth.

Third match—De Rochmont and Stark first, Allen and Johnson second, Law third, Nichols fourth.

Fourth match—Stark first, Eager second, Henry third, Field fourth.

Fifth match—Eager first, Johnson and Stark second, Henry and Field third, Nichols fourth.

Sixth match—Johnson and Law first, Henry and Stark second, Adams third, Allen and Field fourth.

Seventh match—Law first, Eager second, Henry and Stark third Dill fourth.

Eighth match—Johnson first, Adams second, Stark third, Law fourth.

Ninth match—De Rochmont first, Law second, Dill and Hopkins third, Cutting, Field and Adams fourth.

Tenth match—Stark and Law first, Johnson second, Henry, Hopkins and Purington third, Locke fourth.

Eleventh match—Law and Stark first, Dill and Eager second, Field third, Brown and Henry fourth.

Twelfth match—Eager first, Dickey and Stark second, Johnson third, Locke and Adams fourth.

Thirteenth match—Dickey and Eager first, Henry second, Sawyer and Stark third, Purington fourth.

Fourteenth match—De Rochmont and Eager first, Stark and Sawyer second, Law and Cutting third, Dickey fourth.

Fifth match—Miss and out, divided by Henry and Law.

BETHEL, Me., March 2.—Wednesday evening, Feb. 27, the Bethel Shooting Club had a rousing good meeting at Major Lovejoy's, and the following officers were elected for the ensuing year: President, W. E. Shillings; Vice-President, C. M. Wormwell; Secretary, G. R. Wiley; Treasurer, Fred Clark; Executive Committee, Enoch Foster, Jr., John Chapman, Seth Walker, Charley Johnson, S. F. Gibson. About thirty new members were taken in, and now as we have two new clay-pigeon traps and a good amount of cash in the treasury, it gives the boys a hearty feeling to begin work at once, so as to prepare a team to enter for the valuable badge presented to the Williard Club of Portland, which is to be competed for by the several clubs throughout the State. By the way the boys scored the other day they will be hard to beat.—MAJOR LOVEJOY.

THE CLAY TOURNAMENT.—Cincinnati, O., Feb. 25.—*Editor Forest and Stream:* Permit us to inform your numerous readers that the main reason why clubs should enter now by remitting us $100 initial entrance money for the championship match at First International Clay-Pigeon Tournament, May 20-31, 1884, is this: That we expect shortly to make an application to the general passenger agents at Chicago for reduced railroad rates from all parts of the country, and it will materially assist us in effecting this if we can present a large list of clubs who expect to attend.—THE LIGOWSKY C. P. CO.

SPRINGFIELD SHOOTING CLUB.—Programme, March 1, 1884.—Individual State championship glass-ball match between W. S. Perry, of Worcester, and "B. Moses," of Springfield.

Perry	1111111011101111011111111101111111111111111111111110—43
"Moses"	1111111111101100111111111110101111111111101110011—42

Large attendance of spectators; good shooting; sweepstakes.

Yachting.

FIXTURES.

May 24.—Oswego Y. C., Opening Cruise.
May 24.—Boston Y. C., Opening Cruise.
May 30.—Knickerbocker Y. C., Spring Matches.
May 31.—Boston Y.C., First Match, Connor and Commodore's cups.
June 10.—Atlantic Y. C., Annual Match.
June 12.—New York Y. C., Annual Matches.
June 14.—Hull Y. C., Club Meet.
June 16.—East River Y. C., Annual Matches.
June 28.—Boston Y. C., Ladies' Day.
July 9.—Beverly Y. C., Marblehead, First Championship.
July 12.—Hull Y. C., Club Meet.
July 12.—Boston Y. C., Second Club Match.
July 26.—Beverly Y. C., Nahant, Second Championship.
Aug. 9.—Hull Y. C., Club Meet.
Aug. 9.—Boston Y. C., Open Matches, all clubs.
Aug. 16.—Beverly Y. C., Swampscott, Third Championship.
Aug. 23.—Beverly Y. C., Marblehead, Open Matches.
Aug. 23.—Boston Y. C., Third Club Match.
Sept. 6.—Beverly Y. C., Marblehead, Special Matches.
Sept. 13.—Hull Y. C., Club Meet.
Sept. 13.—Boston Y. C., Second Ladies' Day.

SMALL YACHTS IN THE CHICAGO Y. C.

THIS live club is animated with a laudable desire to promote sport in all its phases. Corinthians being still scarce on the fresh water high seas, it is proposed to force their education by special encouragement of "small safe boats." No more commendable course could be advised. Small yachts, if more than open sailing traps, afford all the sport and solid benefits to be expected from larger vessels and at a fraction of the cost. The way to popularize yachting is to invest small boats with the dignity of equal recognition, as there are hundred candidates thirsting for the nautical flame who can afford the time and funds for crewless vessels to every one who can commission a big schooner. And to the hundreds every club ought to look for numerous accessions to the band of sailor yachtsmen. "Only a little boat" was once an expression of mild scorn, but it is becoming understood that a smart man with a smart boat is worth more to himself and the community than the most pretentious vessel in respect to tonnage. Any person's money will buy a large yacht and hire the required crew, but it takes brains to conceive a well-planned little knock-about cruiser and spunk with manliness in mind and body to skipper her with success. To start the fashion in Chicago, we should recommend a design similar to those which have appeared in this journal. Next week we hope to produce another very suitable craft.

Perhaps the club might advance the funds for a couple of trial yachts, allowing members to hire them by the day with limitations, giving all hands a chance. Should any one develop fancy enough for such sailing, he could purchase the boat at cost, the club replacing her by another if advisable. This would lead off faster than waiting for individual action. We can promise those in Chicago, that when the small yacht shall have been once fairly tried, she will become a popular institution and help along the good cause on the Lakes with rapid strides. Mr. Miles G. Nixon recently read an entertaining paper before the club, with a good word for sail area measurement and a start to one gun to increase the smartness and interest in the races. The same gentleman also spoke in favor of classes without time allowance, a most excellent idea. Only the question at once arises, how are those classes to be determined, by what sort of measurement? That brings us back to the necessity of first settling some just basis of comparison, without which no equitable division into classes can be suggested.

One advantage in respect to small yachts, is the facility of finding purchasers for small tonnage, and the many new designs undertaken in consequence to supply the places of boats sold. The building of a dozen small yachts affords just twelve times as many chances for experiment and trial of variations and new ideas, as the building of a single large yacht. Life and progress with rapid evolution are the distinguishing traits of a club recognizing small yachts, while stagnation of ideas and conservative sloth follow in the wake of large, unwieldy and long-time investments, affording less opportunity for change. The beau-ideal of a yacht club is a Corinthian concern with a fleet of two hundred cutters from one to ten tons. If the Chicago Y. C. can bring about, by well directed fostering care, a flourishing squadron of the kind, it will not have lived in vain, though large yachts continue to receive a goodly share of attention and appropriations from the club funds.

Realizing from our own experience pretty much all over the yachting world, that the zest and spirit of the sport lies in the furtherance of a taste for small boat sailing, we have made the subject a matter

of prominence in these columns, and hope our contemporaries who look to us for their cue will lend what aid they can to put the small decked cruiser with fixed ballast upon the plane of appreciation she ought to occupy in America, as she already does abroad. No more suitable waters for small cutters exist than the chain of lakes on our northern border. The short jump which quickly makes and the necessity of putting to sea for a cruise, are certain to demonstrate before long the special adaptability of decked boats of good weight in opposition to light drafts of unsteady behavior, and devoid of ability in troubled waters. The Chicago Y. C. proposes regular matches every two weeks, and will not be slow to offer purses or trophies to attract competition. A shipkeeper and suitable harbor will be found, so that it only remains for some one to start the ball with a two or three ton cutter, aboard of which live individuals can catch the sailing fever, which never releases its clutches in a lifetime.

THE RATIONAL VIEW OF IT.

THE following we quote from an interview with Mr. A. Cary Smith recently published in the *Herald*. It is the most sensible view of affairs we have seen in print, and coincides with the progressive spirit of the day inaugurated through these columns:

"Many, or in fact all the improvements in yacht building can be placed to the credit of the younger generation of yachtsmen. Veterans of the sport, on the contrary, have frequently stood shoulder to shoulder against any departure from the time-honored methods of the olden times, and too often decried the universal right of judicious experiment. To my mind great improvements in yachts will be made in the next few years. Even now yacht designing is being recognized as a profession. The tendency of the day is toward specialties, and the result will be for the better. The desire for extended cruises is growing every day, and an improved type of boat will, of necessity, be built. Every yachtsman cannot afford to build and sail a craft 100 feet on the water line, so that smaller boats must be constructed able to cope with any kind of weather. It will not be long before our coast is made a cruising ground for yachts, even as is the coast of England. The nation is fast growing wealthy, and yachting will keep pace with our prosperity. The size of a yacht in the near future will have but little to do with the length of a cruise. Two years ago, while the fleet of the New York Club was at the eastward, the weather began to look dirty, and a signal was made to return to anchorage. One of the boats that kept on to the last was only 26ft. 6in. on the water line; but of course she was a deep craft, with weight on the keel—the only kind of boat that can be depended upon in bad weather."

THE NEW ENGLAND Y. A.

THERE is a general disposition to adopt loadline length as the standard for measurement in all classes in Eastern circles. So let it be. This must be understood. If length is a fair criterion of relative performance, the consequences must be accepted in all cases without reservation. Animated only by a sense of justice to every craft, FOREST AND STREAM has urged with all its force and logic the adoption of a bulk rule, to force large cutters on a length to pay as they ought to lighter and smaller sloops, sharpies, dugouts and the like. But in refusing to accord recognition to views based upon equity, as we have sought to explain, and in setting up a length rule, the yachting community must be prepared to shoulder full responsibility for what may happen. When a big, powerful cutter thrashes a light and smaller sloop in a breeze and a lop, when she twists away from her in light airs on account of her weight, there must be no backsliding, no childish, whimpering excuses, and no attempt to shirk the decision of a race by pointing to the cutter's big displacement and draft as an advantage not taxed. Either the length rule is equitable or it is not. If not it should not be set up as a standard of comparison. If set up and accepted, the big boat has a right to her bigness, and the little boat cannot complain under any pretext. The "simplicity" of the length rule is quite likely to lead to its adoption. Having done our full duty in defending the small sloop against the encroachments of large cutters, we herewith wash our hands of the whole business and will permit affairs to take their own course. Let no one say FOREST AND STREAM was ever untrue to justice to the sloop, for it was the sloop's battle we have been fighting in seeking the furtherance of the bulk rule, though little-brained chatterers failed to grasp the trend and course of our arguments. When length for length the large vessel wins, it is without the province of length measurement logic to ascribe the score to aught but equity. It will be too late then to put about in search of restrictions to save the light displacements from extinction. All hands once agreed upon length, they must swallow their own medicine, sour as the dose will undoubtedly be. When the deep draft, with her low lead weights and wadding big rig lords it over her smaller sisters and drives them out of existence under the length rule, she does so upon her merits (in the light of that rule). It is well. Now for cutters with unheard-of displacement, greater draft than ever before, tremendous lead keels and swinging, sky-scraping rigs, and woe to the puny traps who may tackle the giants because they happen to be of like length! The light of the small, handy, economical boat has gone out. Brute force is the cue to the model of the future. The biggest, the deepest, the most expensive on the length, and none other need apply. The star of the mammoth cutter has risen and the last faint ray of hope for the light displacement has flickered out its life. And it is very, very rough on the sharpie and soap boxes.

Length let it be. All hail length measurement then. All hail to big displacement. Thrice hail to the modern cutter!

The flounder-bottom sloop with her board and light displacement has been strangled. Choked by her own nurse, so short-sighted that poison has been administered while the weakling has been crying for pap.

Now for the biggest kind of cutters on the length, with the deepest kind of keels and the biggest lumps of lead hung in the lowest possible way. The good patriot's slab with a board, skimming "over the water" is dead. The work of reform is nearing completion. We are happy.

A GENERAL TOPIC.

Editor Forest and Stream:

In reply to your editorial comments upon my communication, published in your last issue, I will take up the matter in the order taken by you. As to weight in light airs, "experience has settled" that when the sea is heavier than the wind and sloops "slat" it out of their sails, cutters have an advantage in their depth, which prevents them from rolling so much, and consequently they hold the wind better and keep their headway. Upon these terms they have beaten the sloop in light winds; but given a day when the sea was quiet, and the result has always been to the credit of the lighter vessel, as all logic must admit, that the less resistance in weight or anything else must obtain superior speed. You say "to make a sloop a good sloop she must be turned into a cutter. She should have only four beams, like the great majority of cutters. She should have the depth, and rig, and sheer, and straight side of a cutter." To the best of my information the great majority of cutters average at least five beams, and racing cutters on the other side, that I have seen have, very frequently, fully six beams. The Bedouin, which is one of the broadest here, has 5½ beams, so I fail to find any warrant for your assertion of four beams.

As to depth, I would advocate some, certainly, but by no means the extreme; rig for a sloop could incorporate some of the cutter's best points, as suggested before, without having the doublings in the middle of the mast, or the mainsail loose on the foot, which are both objectionable for many reasons. As to sheer, the less of that the better for either class. From this resumé I fail to see that I have advocated going "about nine-tenths of the whole thing at a bound." That a sloop may have all that I suggest and still be a sloop, I must still maintain. No yacht of any class with ten or twelve feet of fixed draft could anchor within hailing distance of shore in twenty yacht-frequented harbors that I can name, while eight feet of water can be obtained in the great majority of them. As to "finding fault with the Gracie's model," the evils I noted were known and remedied by Captain Phil. Ellsworth in all his models long before cutters came here to instruct us in yacht designing. While admitting that the Gracie is the "queen of the fleet in America," I still contend that she is so through superior size only; that a vessel of the same dimensions, designed, built and rigged as I suggested in my last, would give her time in any kind of weather. That the Bennett champion cup was won by Bedouin in "our weather and our waters" is quite true, but the result would certainly have been more satisfactory to every one if both competitors could have had some wind at the same time.

The chances of adding victories to the cutter's side would certainly be increased by a large fleet from which to select a champion, and the absence of a number to choose from is exactly the difficulty upon the sloop side. There really isn't a first-class sloop in the country. When Americans have felt like building 80-foot yachts they have invariably built schooners. You say that "in point of cost, the modern beamy sloop of large displacement is more expensive and has a greater draft than the cutter." The Bedouin cost not a cent less than $45,000, and I have heard it estimated even at $50,000; the owner of the Gracie would very cheerfully sell out for half that sum, and any builder in this country would be glad to take a contract to build and fit out complete a sloop or schooner 100ft. long for $40,000, so that I am again compelled to question your claim as regards cost, and as regards draft. I fail to comprehend how an American centerboard can draw anywhere near as much as an English keel. In concluding, you say that, in reference to the Fortuna, "it is one of her good points to lift readily to everything." Now a yacht that lifts to a ten or fifteen foot sea instead of jamming into it and checking her headway is certainly doing well, but that can hardly be said of Fortuna's "lifting" in the Gibraltar cup race, when there was no sea over six feet in height, and when that same "lifting" evidently did more to defeat her than anything else. FRANKLYN BASSFORD.

55 CONCORD STREET, Brooklyn.

[A review of this subject is crowded out till next week.]

MIGNONETTE, CUTTER.

IN placing before the public a series of designs for small yachts, we have been animated with the desire to supply the general reader with accurate information relating to the capabilities of such boats, and above all to disabuse his mind of the prevailing but mistaken notion that yachting and a long purse must needs go hand in hand, and that the sport to be got from small tonnage is necessarily more limited than is to be expected from vessels of considerable size. Two greater falacies could not exist. A very small outlay and a very small boat will realize to the beginner or adept everything contributing to the fullest participation in the enjoyments and benefits of yachting. It is important that this should be thoroughly understood, as the small craft is within the purchasing power and management of hundreds who may never expect or care to make the investment of time and money entailed with the ownership of an unwieldy affair demanding a hired crew. In fact, unless able to devote one's time to cruising all the year round, size in a yacht acts as a damper upon quick and ready ardor, inasmuch as the attainment of the end desired is more distant and indefinite. A large yacht is always a sort of financial millstone about the neck, and represents such a big undertaking in all her doings that she is naturally put to service with hesitation at intervals only; the crew, however, never once ceasing their onslaught upon the grub locker, nor is there any let up to other expenses of commission while idly swinging to an anchor. Of course, the sailing of large yachts has charms and advantages of its own in some respects, but so far as all the essentials of the sport are concerned we know they are at our command on two tons just as well as upon a hundred times two, while the little boat likewise has certain good points of her own as an offset to those of her big sister. The belief to the contrary has a certain basis of justification. It has been but a universal custom in America to model, rig and fit small boats as toys merely, exacting from them more than boys' play, never suspecting the possibilities of which they were really capable, because bidden to first impresions. Our small yachts have not been built as yachts at all, but as makeshifts and machines, flourishing only in a sort of ephemeral afternoon butterfly existence. The possession of sturdy vested qualities characterizing big tonnage has not until recently been contemplated in their planning. With the present development of the sailorizing side of the sport and the practical lessons inculcated through the instrumentality of "cutter ideas," a new field of utility has suddenly opened to the small boat which is being welcomed by the masses, for it offers them a chance to participate in that chapter of yachting from which they have so long considered themselves shut out.

To adapt a small boat to the same ends as a large one and with equal success, it is only necessary to abandon prevailing impressions and to boldly branch out in the directions indicated by experience.

The small boat engaged in active work makes heavy weather of it so much oftener than the large one that it is paramount to incorporate in her scheme the greatest possible power and ability to face whatever may come along. She must for this reason possess the maximum weight on her length. As this cannot be engrafted upon a beamy form, it is a sequence that she should be deep and narrow in proportion. To further add to her ability the weights should be stowed as low as the structure will allow. The boat should possess a keel upon which to hang them. Both of these requisites carry with them the greatest accommodation and safety and moderation in rig. The first due to the absence of a centerboard trunk, good height underneath the beams, with ventilation and light; the second due to a low center of gravity, and the third to fineness of form, it being well established that large displacement on small beam can be more economically driven than less displacement on wide beam. These provisions will insure the three chief virtues a small craft should display—ability, practically available room, safety from capsizing. The fourth essential is speed. Success or failure in this respect will depend upon the proper distribution of the boat's bulk for ready passage through the water and for sail-carrying to be derived from a consideration of both form and the weights. Of secondary importance, but none the less deserving of attention, are such matters as handiness of rig in connection with efficiency, the various requirements of comfort and convenience, and the arrangement of details of equipment. Simplicity throughout should of course be studied, but in no case should simplicity be allowed to overrule adaptability. Such a sacrifice cannot be tolerated. Far better have a surplus of complex contrivances than be unprepared to execute just what ought to be executed under all circumstances likely to arise. It is a grave and common mistake to seek simplicity in all hazards and to sacrifice more important considerations in magnifying the value of simplicity beyond all reason. Simplicity is the easiest thing attainable. A clothes pole, a night shirt, and that irresistible charm to ill-matured conceptions, the "single halliard," are within the comprehension of every one, but of what avail is such a primitive affair, if success in plying to windward is at stake? And a clothes pole without proper staying is simplicity itself, but where is the man of experience who would expect the highest performance with masthead whipping about, and who would choose to buck such poverty-stricken equipment into a steep sea? The green hand may fail to appreciate the issue. Those who "have been there" cannot be inveigled by the claptrap of "simplicity" at the expense of other things worth having.

In the foregoing we have outlined the general principles which must be followed where the most in the way of performance is wanted out of the least in the way of boat. A neglect to acquiesce in these principles established through endless practice, is only to invite failure in proportion to the departure. Innumerable notions have risen to the surface, and every now and then pop up again in some trifling disguise, whereby their promoters seek to evade common laws of nature and the multiplication table. First, it is this or that fisherman's old hulk, then some dugout of a canoe, then a Block Island bouncer, then the sharpie, then some Fiji island importation, and so on, which are in turn held up to admiration as the personification of all that is perfect in naval design. Worshippers more important than ever are never found wanting to take up the cudgels for transparent accidents, which an expert can dissect at once as radically wanting and faulty in some of the principal elements imperative in a small yacht. But the combined science and experience of the civilized professional world is not easily overthrown by the crudities of aboriginals, with whom form and peculiarities in boat building are invariably the merest accident of the immediate surroundings. Limited in wealth, in material or in skill, their boats are makeshifts to cover one or a few special wants. To the well-planned yacht designed to meet a wider range of more exacting contingencies, all these makeshifts must bow in deference to the broader intelligence which calls the modern yacht into being.

Let no one be deceived. It is impossible to juggle nature. You cannot circumvent her. You must accomplish your aims by calling nature to your aid. You must expect to pay for what you get, and a saving by curtailing the weight upon which you depend for momentum, or the draft to hold you against surface agitation, or the equipment with which you are to do your pointing can only lead to disappointment. A small boat which is not able in lumpy water is worthless for aught but restricted harbor operations, and that is not the kind of boat with which to solve the proposition of "yachting on small tonnage."

When it comes to a matter of model and rig in specific detail, it should not be overlooked that success may be expected from more than one individual design. Indeed within reasonable limits there must always be a variety to choose from, each excelling most in the direction her features are most salient. Thus the narrow and heavy boat will be the ablest driving to windward in rough water. She will heel rather more at the start, but show stiffness in strong breezes; can be crowded more, but calls for smaller rig; will draw more water; have narrower deck, less wings, but more headroom and ends below; will be drier than a shoaler, wider boat; toss less spray; be easier in her rolling, but pitch rather more on account of fine ends and little floor; will be steadier on her helm, hold her way better, show more speed in trifling airs, and, in short, show the distinguishing attributes of a regular cutter on a larger scale.

On the other hand, the broader and the lighter of two boats will be stiffer in ordinary winds, have more deck room and wings below, require the larger rig, draw less water, have less headroom, toss rather more spray, be quicker in her rolling, slower in her pitching, harder on her helm, with less ability in a sea, lose way quicker, and, in short, partake of the flat bottom centerboard's qualities to a greater degree than another boat having less beam, greater depth and weight, all of which may be no cause for complaint, if the departure from the trap model has been marked enough to correct her faults to such an extent that we can afford to overlook what remains as of no great consequence.

A boat which appears in every way to answer as an exponent of the last-described class is the new cutter Mignonette, which is illustrated with this article. Stated curtly, she is the product of ingrafting beam enough upon the cutter type to realize the objects for which she is intended—for cruising about the coast between this and Mount Desert, single-handed or with a friend, as occasion demands. Her model is from Keating, of Marblehead, a further modification upon his well-known Carmita toward the cutter, inasmuch as the beam has been clipped, depth and displacement increased, and a regular cutter rig accepted, with the jib set flying on its own luff. She embodies, as a whole and in detail, the well-digested ideas of Dr. E. G. Loring, her owner and projector. Long experience in small boat and yacht-sailing along the coast, and experiments with various styles and rigs have led up to the construction of the Mignonette, and there is little doubt that she will suit his purposes famously and become the first of a large class soon to follow. She has been built in excellent style by Wallin & Gorman, of South Brooklyn, to whom she is a decided credit in her smooth skin and tidy finish about decks. With a 1,500lbs. shoe hung low and a small well the Mignonette is without question uncapsizable, and also "unfillable" in the event of a serious knock down. A judicious apportionment of beam and depth permits 4ft. 8in. under a low house of 12in. height, with a floor of 30in. This with two berths of 24in. width (shown too low in the plans) by 7ft., lockers, shelving, racks, etc., give exceedingly liberal accommodations on the length of 20ft. 10in. The cockpit is peculiar. The floor of the well is 18in. below level of deck and 6 by 3½ft. with 14in. of deck all round utilized for seats, the mahogany coaming being set back from the well that distance. In this way the volume of water which could be shipped is reduced to a harmless amount, and the cabin doorsill is almost at deck height to prevent a sea finding its way below. The overhang supplies a good lead to mainsheet, and increases useful deck area. The rig is that of a full cutter, chosen after experiment with many other kinds. The division of sail puts the yacht within easy control of one hand, who finds himself at all times prepared for anything that may come along. Indeed, the cutter represents a combination in speed and handiness which is not equalled by any other rig under the sun. That it is a fast and close-winded arrangement all know from observation of the races in these and Boston waters. In speed the cutter is second to no rig, and it is probable that no other can really equal it. In handiness it is far superior to the sloop. The Mignonette, for example, strikes into strong wind. She lowers foresail in a jiffy, and has taken off nearly one-fourth the sail plan, equivalent to a double reef in mainsail at a tithe of the trouble and time. Should a squall overtake her, mainsail and jib can be let go by the run, and the boat can still ply to windward under foresail alone. To enable her to do so to some good, the foresail is "hugged" three feet abaft the mast. The owner states that by keeping foreside of mast clear of pins, and pointing the jib band by a bolt passing down flush through lugs, dovetailing lunge fashion, in place of setting up with screw and nut, he finds no trouble in lighting over the sheet when heaving about in stays, and that he finds the long foot foresail a fine pulling sail, a sort of continuation of the mainsail forward the mast, sheets being led to trim very flat. Under all circumstances just the right balance can be preserved through five successive modifications of the sail plan. Thus: All plain lower sail; mainsail and jib; reefed mainsail and small jib, or full foresail; close reefed mainsail and reefed foresail or small jib; and fifth, under foresail only. You can always reef at leisure by keeping on your course with foresail, making more sail as convenient. You can work out of a harbor under foresail and set the reef when clear. The mainboom is but 19ft. long against some 23 or 24 in a sloop. Toe jib is small and easily trimmed. It is run out to bowsprit end on a traveler, and when not wanted is quickly got rid of by a pull on the inhaul and lowering away. In a sea it saves laying out on a light spar to furl, and likewise takes the weight and bunt of the sail out of harm's way. A little dexterity is required in handling the jib lest it get away from you during the operation, and this a little practice speedily teaches. This method also enables you to run jib out or in to a suitable distance to balance the rest of the sail. That there is need for all these accommodations no sailorman needs to be told, but we may say that Dr. Loring has often had occasion when single-handed to go through all these operations, notably in a coarse-weather beat of twenty-two miles on a passage in from the Isles of Shoals. The safety of a shifting jib was vividly brought home to him one day when his brother nearly lost his life trying to reef jib out on the bowsprit in a tumbling sea. On the other hand, no more lubberly and ineffectual way of shortening sail than "bobbing" the jib of a sloop can well be imagined. It involves the loss of control over head sheets, and this no good sailor will view with favor, however much the custom may pertain among green hands, or as a hasty and cheap makeshift among small fishing smacks, engaged principally in smooth water. To be sure the cutter carries with it one more halliard and sheet than the sloop, but as you are not obliged to attend all sails at once the "complexity" in practice amounts to absolutely nothing whatever. You trim jib first, then flatten foresail in the next half minute. But should even this bother a beginner, he may drop foresail for short work in and out of a crowded anchorage. As between the delusive value of simplicity so called and the practical adaptability of a rig, we advise adaptability without hesitation.

The principal specifications of the Mignonette are as follows: Keel, 6x8; stem, sided, 3½; post, 10in., moulded; all of oak, including deadwood. Frames, oak, 1½x3 at heels and 1½x1¾ at head, double, riveted together, boxed into keel, with hackmatack floors bolted through keel. Clamps of oak, 1x3½, full length of boat, as is also all other plank. Deck frame of oak, 1½x2¼, riveted to clamps, with knees to side. Top streaks of oak, 1x3½, with two wales of Georgia pine, rest of 1in. cedar. Planksheer of oak, 1½x3½, whole length; deck of white pine, bright, 1¼ square. Ceiling ¼in. thick, narrow and beaded. Mahogany fittings. Four sidelights to house and two 5in. brass ports in forward end. All ironwork of best galvanized Norway iron; lignum vitæ deadeyes, iron strapped, two shrouds each side. Spars of spruce, three coats of varnish. Patent bouched iron strap, lignum vitæ blocks. Builder to furnish yacht complete with all rigging, gear, anchors, chain, hawser, sails of 10oz. double-bighted cotton duck. Ballast, 2,300lbs. inside and 1,500lbs. on keel.

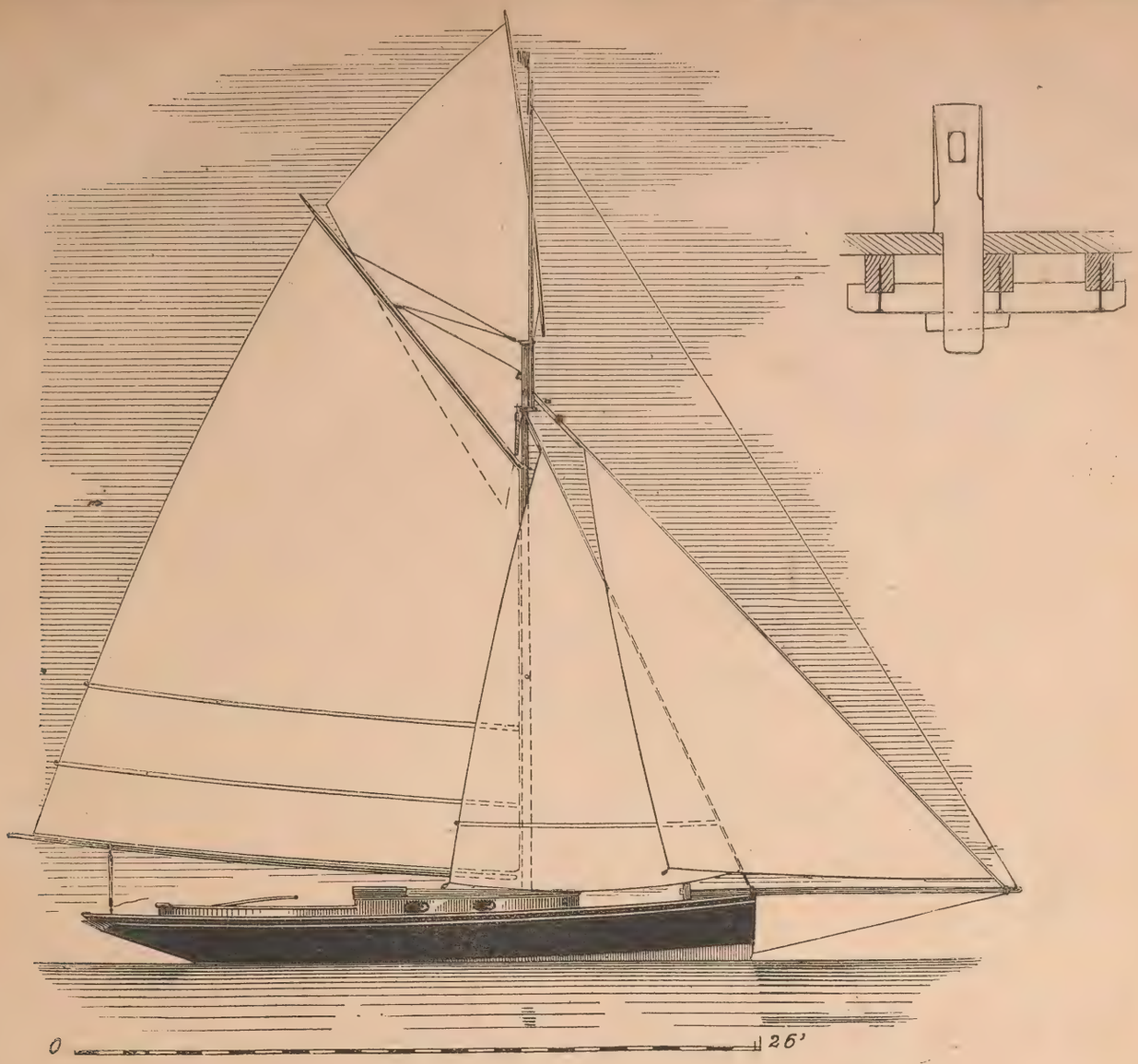
The increase in displacement of the Mignonette over the Carmita we have considered offset by the cabin house deeper throating to floors, and regular cruising outfit and stores to be carried. The ballast and its ratio to displacement would vary of course with the outfit. The manner of keying the locust bitts to the deck to do away with crowding the eyes below is shown in our sketch. A wood knee will in addition be worked on the forward side on deck to further stiffen them.

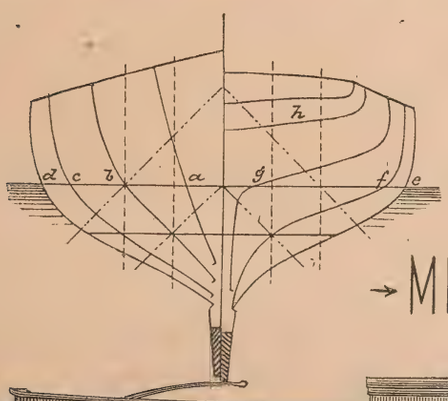
The sections shown in the plans are not building frames, but the sections by which the boat was laid down. The elements are as under:

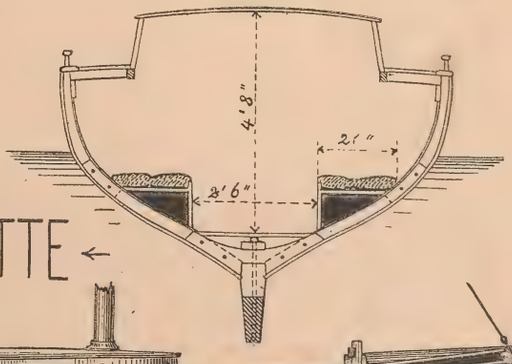
	Mignonette.	Carmita.
Length on deck	25ft. 10in.	24ft. 8in.
Length loadline	20ft. 10in.	20ft. 6in.
Greatest beam moulded	7ft. 9in.	7ft. 11in.
Beam on loadline	7ft. 3in.	7ft. 6in.
Depth M. S. planksheer to rabbet	4ft. 2in.	3ft. 11in.
Greatest draft	4ft.	3ft. 7in.
Least freeboard top planksheer	1ft. 9in.	1ft. 7in.
Area immersed M.S. with keel	11.48sq. ft.	10 25sq.ft.
Area loadline plane	105.33sq. ft.	101.20sq. ft
Ratio sq. root M.S. to L.W.L	3.39	3.20
Area longitudinal section with rudder	71.5sq. ft.	62.0sq. ft.
Ratio M.S. to same	0.34	6.05
Area wetted surface with rudder	203sq. ft.	184sq. ft.
Displacement	8,350lbs.	7,735lbs.
Displacement in short tons	4.175 tons.	3.867 tons.
Same per inch at loadline	562lbs.	540lbs.
Wet surface per short ton displacement	10.2sq. ft.	47 6sq. ft.
Ballast inside	2,350lbs.	2,050lbs.
Ballast on keel	1,500lbs.	1,150lbs.
Ratio ballast to displacement	46pr. ct.	48pr. ct.
M.S. from end L.W.L	12ft. 4in.	12ft. 6in.
Center lateral resistance from L.W.L	12ft. 4in.	11ft. 4in.
Center effort of sails from L.W.L	11ft. 8in.	11ft. 4in.
Center of buoyancy from L.W.L	—— ——	11ft. 6in.
Area three lower sails	460sq. ft.	430sq. ft.
Ratio to square of loadline	106 per cent.	102 p. cent.
Sail per sq. ft. wet surface	2.28sq. ft.	2.33sq. ft.
Sail per ton of displacement	110.3sq. ft.	111.2sq. ft.
Area mainsail	279sq. ft.	298sq. ft.
Area lug foresail	91sq. ft.	56sq. ft.
Area large jib	90sq. ft.	76sq. ft
Hoist of mainsail	15ft.	15ft.
Foresail on foot	11ft. 3in.	8ft.
Jib on foot	12ft.	10ft. 6in.
Mast from end L.W.L	8ft. 8in.	7ft. 6in.
Mast from deck to hounds	19ft.	17ft. 6in.
Boom over all	19ft.	18ft.
Gaff over all	12ft.	16ft.
Bowsprit end L.W.L to stay	9ft. 6in.	9ft. 8in.

ARRIVED OUT.—Schooner Montauk made Bermuda in safety Feb. 27, after a very long and bad passage. Distance 800 miles. Time of passage over seven days. Was compelled to heave to sixteen hours, and eleven hours unable to face the sea. The skipper watches her closely to prevent a capsize, and will not buck her at it in a steep sea, which should allay all fears for her safety.

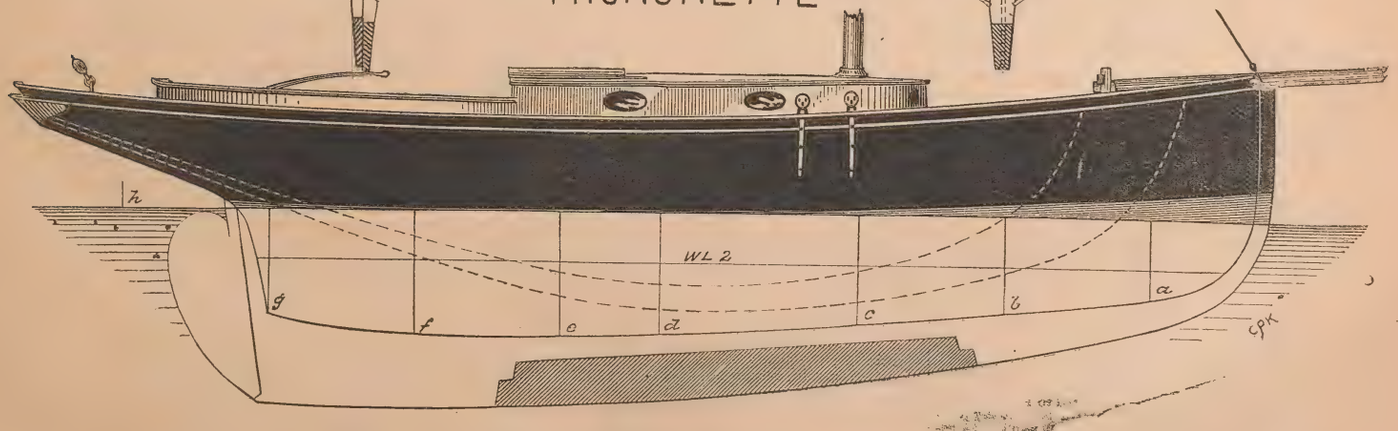
CRUISING.—Steamer Atalanta, Mr. Gould, sailed from Charleston, March 4, bound south. Schooner Fortuna, Mr. Hovey, sailed from Havana, March 4, bound for Bermuda.

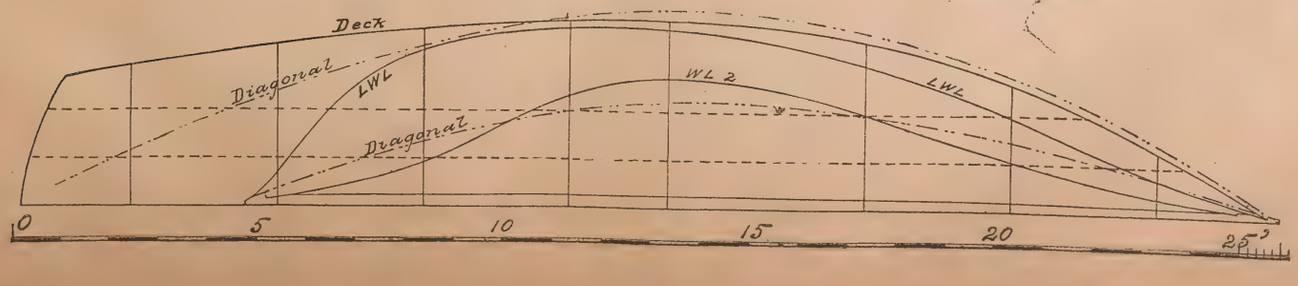

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26'


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4'8"
2'1"
3'6"

MIGNONETTE


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SPK


Deck
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A FINE PIECE OF WORK.

Editor Forest and Stream:

I have noticed that in one or two of your published accounts of the cutter ("No. Twelve") building at South Brooklyn, you have connected Mr. Lennox's name with her. Mr. Lennox has nothing to do with her building, and as she is the best yet turned out in this vicinity so far, I think the credit should be given to whom it belongs. She is being built by Daniel C. Bernard in his own shop and yard, and for first-class material and fine workmanship she is way ahead of the ordinary yacht building in these parts. F. B.

[We can indorse the foregoing. The workmanship about the Merlin is almost carried to the pitch of a fine art. She is the best job turned out in these parts, and promises likewise to be a brilliant success in respect to her planning and design.]

A YACHT OF GREAT INTEREST.—Mr. E. G. Weld's new yacht now building by Smith, of South Boston, will afford some very instructive comparisons when sailed against the Hera, belonging to the same owner. The new yacht is of the same length about, but narrower, deeper, and of larger displacement. Hera is 35ft. loadline, 13½ft. beam, and 7ft. 4in. draft. The new boat is 36ft. loadline, 11ft. 11in. extreme beam and 8ft. draft, with no less than 7 tons lead on her keel. She will have a flush deck, and is built, we believe, mainly with a view to accurately test large displacement on less beam for racing under length measurement. The frame, according to the Boston *Herald*, is steam bent, moulded 8½in. at heel, and 2½ at head, spaced 15in., and sided 2½. She will be through copper fastened with 1¼in. planking. Incidentally, it may be remarked, that the draft of the new Hera on 36ft. length is as great as that of the English cutter Maggie on 45ft. loadline, and 6in. greater than that of the Scotch cutter Madge of 38ft. loadline. In the East, the bugbear of draft has been dissipated, and the length rule boats already draw more than and displace as much as cutters of same loadline. The displacement of the new Hera is about 14 tons on 36ft., and that of the cutter Madge is 16½ tons on 38ft.

STEERING VERY WIDE.—The *Herald* put a green hand at the bellows last Friday, and sent him on a cruise to Bay Ridge, that holy of holies, the last spot where the sloop still doth flourish, though even there in a modified form. Dr. Barron is graciously patted on the back for his lynx-like discernment in building a centerboard, which, considering that Dr. Barron was within a few hundred dollars of buying the cutter Wenonah, and that his new sloop is described as 8ft. deep in place of the 5½ft. which was the regulation allowance of ye olden time trap, must be very amusing to Dr. Barron. Then we are told the Oriva is 51ft. instead of 50, to mislead the public in possible future races between the two boats, and to cap the climax, the fine little cutter illustrated in our issue this week, is described as a centerboard of Block Island model, with a long overhang! Somebody has been making a fearful guy of the *Herald*, but we suppose that sort of stuff is just the kind of stuff expected from such a source. Are we never going to have any one on the daily press who can tell one end of a boat from the other?

SEAWANHAKA CORINTHIAN Y. C.—The club book to appear May 1 will show a fleet of over 100 vessels and a large increase of membership. The club has the finest fleet of cutters in America. From one or two straggling yachts of that sort they have increased and multiplied into a squadron in less than four years, and more are being added right along. Affairs were never in a more flourishing condition, and the S.C.Y.C. is now the most sporting organization in New York, a combination of the leading and most progressive spirits in the amateur sailing world. It is said with truth that the club contains more gentlemen capable of designing and building as well as sailing their yachts and deserving to rank as experts than any other club in America or abroad. It is a yachtsmen's club and not merely a collection of yacht owners.

COUNTERFEITS.—When a person cannot command his own English, but steals whole sentences from others, he is at once convicted of being a plagiarist, having no brains of his own. We do not object to the frightful rubbish printed in an alleged newspaper over the grandiloquent signature of "America." The illogical stuff carries its own answer. But we do dislike to see such an incapable pretender draw sustenance by appropriating our language, which has a strength of its own easily recognized in the worst hodge podge. But, we suppose, such is fame. You have to furnish the enemy with powder to shoot, or there would be no enemy to knock over when occasion arrives for giving him the dignity of that much recognition.

PLAY SOLDIERS.—We learn from the *Sun* that the S. S. Utowana belongs to Captain Connor and the S. S. Promise to Captain Cordova. Do these gentlemen, guilelessly innocent of everything appertaining to a captain, dress up in tin swords, pasteboard chapeaux and paper cockades, that the *Sun* should confound a stockbroker with a "captain?" It is time the newspapers stopped such sickly slobber. Neither Mr. Connor nor Mr. Cordova are "captings." They are yacht owners.

BEVERLY Y. C.—The fixtures of the club will be found at the head of these columns. The club has adopted the one gun start for all but the open match in August.

Canoeing.

FIXTURES.

Winter Camp-fire.—Wednesday, March 12, 8 P. M., No. 23 East Fourteenth street, Kit Kat Club Room. Subject—Tents and Camp Outfits.

Secretaries of canoe clubs are requested to send to Forest and Stream their addresses, with name, membership, signals, etc., of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to Forest and Stream their addresses, with logs of cruises, maps and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.

CANOE vs. SNEAKBOX.

Editor Forest and Stream:

I am decidedly of opinion that a well-constructed sneakbox will drown out any canoe that ever floated. This is based on several years' experience with both. The sneakbox possesses the further advantage of permitting you to take one or more friends with you. The handsomest and lightest sneakboxes are probably made by Rushton. They are likewise the most expensive. For a heavier, rougher built and much cheaper box of better model, communicate with J. F. Kilpatrick, Barnegat, N. J. Four years ago he built one for me, 16x3, and the following year one for a friend 18x3½. Both have given excellent satisfaction. These boats are wonderfully able, it being almost impossible to upset them unless the sheet fouls in a hard blow or squall. For speed my box will hold its own with the average catboat of same length sailing on the wind. Before the wind the catboat will beat it. I carry a fair amount of sail (balance lug) as seen in accompanying photos. Have never reefed but twice, and then because the crew were ladies. I usually spend three months each year at the waterside, and would be pleased to have Mr. Neidé visit the Sound, Connecticut shore, with his Pearl during a stiff southeaster. The sneakbox is pre-eminently the boat for boys in which to gain their first experience. Good also for inland lakes where winds are flawy, and the balance lug the best rig. Bojum.

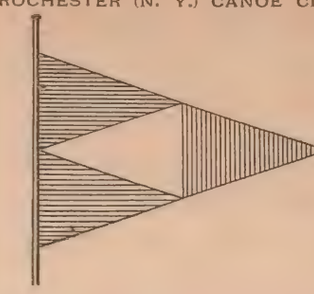
Editor Forest and Stream:

The one objection I've always entertained to canoe meets in general is that so much of their programme is devoted to racing. I am only a solitary cruising canoeist, and as such must stick to my principles and decline Dr. Neidé's friendly challenge to match the sneakbox against a canoe. I stick to my opinion, however, that the sneakbox is far more seaworthy in wide waters than the canoe. If my declension to race looks like inability to prove what I assert, so be it. I'm not on the race. Seneca.

Washington, March 3, 1884.

[The present owner of "Bojum's" old canoe, after more than 2,000 miles cruising in her, has this season taken to the sneak box for one of the reasons given by "Bojum," that a large boat will hold more than a small one, but after thoroughly testing the box, he declares for the canoe as a cruising boat. Of course, a boat of 18x5½ft. is larger and should carry more, sail faster and be stiffer than one of 14x2½ft., but to compare the models, boats of about the same size should be taken. It is but fair to the canoe in question to mention that her reputation for stability has greatly improved since the change of owners. If "Seneca" will visit any of the canoe meets he will find that the racing is confined almost exclusively to well-known cruising canoeists, and to canoes that have cruising records of hundreds of miles. Of course, the only test of the merits of the boats is by racing or cruising together, and a little wind and water will settle the question much more conclusively than ink and paper.]

ROCHESTER (N. Y.) CANOE CLUB.



Rochester, N. Y.—Organized Sept. 22, 1882. George H. Harris, Commodore; F. W. Storms, Vice-Commodore. Matt Angle, Purser. Fifteen members. Signal, pointed burgee, composed of four triangles; the two at base blue, center white, apex red.

AMATEUR CANOE BUILDING.

Ninth Paper.

BUILDING—CONTINUED.

Before removing the staff from the moulds, the position of each mould must be marked on it, as the breadths will be laid off afterward at each mould.

A board is now selected free from knots, sap or checks for the garboard. If it can be had planed to the thickness, ¼in., much trouble will be avoided, but where this is not possible, a board ⅜ or 1in. thick is planed smooth on both sides, the staff is taken carefully from the moulds, laid on it and held by a few tacks, then with the compasses still set to the same distance, the measurements are reversed, placing a point of the compasses on the marks on the staff, and measuring out on the board. This operation, if accurately performed, will give the exact shape of the lower edge of the garboard.

The sirmark is now transferred to the board, and also the position of the moulds, after which the staff is removed and a batten is run through the spots, the curves on the ends being drawn in with the rabbet moulds. To lay off the upper edge, the breadths on the stem, stern and each mould, as previously marked off, are taken and transferred to the respective points on the board, an extra width of ⅜in. being added for the lap, and a line drawn through them with a batten.

Some woods, cedar and oak especially, will spring or change their shape when a strip is sawed off one edge, and if this happens, the shape may be so altered that it will be very difficult to make the plank fit. If a straight line is drawn down the center of the board before sawing, and then tested, after one edge is sawn to shape, it will show whether the plank has sprung at all, and if it has, a strip should be sawn off the other edge, leaving the board still a little wider than the finished strake will be, and then the board should be laid off anew from the staff, as in the first instance, after which the edges may be planed up, with little danger of further springing.

If the board is thick enough to make two strakes, gauge lines are now run around the edges ⅛in. from each side, the piece is laid on the saw benches, one end wedged fast between the two upright pieces previously mentioned, and it is sawn through, using the rip saw held nearly vertical, a few inches being sawn from one edge, then the piece being turned over and sawn for a short distance from the other edge, this process being repeated until the sawing is finished, as the saw will certainly run if used entirely from one side.

When the board is sawn in two, the pieces are each planed to thickness on the inside, after which the edges must be beveled to fit the rabbet. The best bevel for this purpose is made of two pieces of wood ⅜in. wide and 1½in. long, one piece, ¼in. thick, having a saw cut in one end, in which the other piece, 7/16in. thick, is slipped. The bevel is applied to different points of the rabbet about 6in. apart in succession, and the angles transferred to the respective points on the strake, after which the entire edge is planed to correspond to these spots.

The second or broad strake will, of course, lap over the first, but at the ends the laps must diminish until the surface of both planks is flush with the stem at the rabbet. To secure this the adjoining surfaces of both are beveled off, beginning about 18in. from each end and increasing in depth until about half is taken from each piece at the rabbet of stem and stern. This may be done with a rabbet plane or sharp chisel. The lower edge of the broad strake is left 7/16in. thick, a rabbet being cut in the garboard to receive it, but the upper edge of the garboard is simply planed to a feather edge. Before cutting this rabbet the width of the lap, ⅜in., should be marked with a scratch gauge on the outside of the garboard as a guide for setting the next plank.

All being ready, the garboard is now held in place, with the help of an assistant, each part of it being tried in the rabbet, to test the accuracy of the bevels. In doing this, the plank is not put in place for its entire length at once, but one end is tried, then the middle, and finally the other end.

The fitting being complete, the stop waters in, and the hole bored for the centerboard bolt, if any; the garboard is fitted in place on the fore end, adjusted by the sirmark, the after part being held well up by an assistant, and one or more clamps are put on to hold it, then holes are bored and countersunk for the screws, which will be ⅜in. No. 5 brass, and the garboard is screwed fast as far as it lies in place.

In fastening such light plank, great care is needed to avoid splitting it; the pieces must be in contact before the screw or nail is put in, otherwise, if it is attempted to draw them together with the screws, the plank will usually split. Screws are only used at the extreme ends, where nails cannot be driven through and riveted, but along the keel the latter are put in. After the fore end is fastened, the plank is laid in place along the middle of the boat and nailed, every other nail being omitted to be put in after the timbers are in place, after which the stern is screwed fast.

If the operations described have been carried out correctly, the garboard should fit exactly without any further cutting, and the greatest care should be taken to do so, as if the strake does not fit at first, it is very difficult to make it do so by cutting it afterward. When both garboards are on, a spiling is taken for the broad strake; it is got out and put on in a similar manner, the staff, however, in this case being in one length. After the strake is in place and screwed at the fore end, it is fastened with clamps, and the positions of the nails, omitting all that will pass through the timbers, are marked off, using a thin batten bent around the boat, from the marks on the keel to those on the ribband, to insure the rows of nails being straight.

The nails for this work are of copper, ¾ or 1in. long. As the holes for them are bored, they may sometimes refuse to hold at first, in which case a block of soft wood, 1in. square, is held inside the seam and the nail driven into it, the block being removed before riveting. It may sometimes be necessary to drive a nail through the plank into a mould, using a hutchock to hold the plank down, but this should be avoided if possible, as the hole will have to be plugged afterward.

To recapitulate, the process of preparing and placing a plank is as follows: First, to set the staff, mark it and take the spiling with the compasses, mark positions of moulds, plane both sides of board, remove staff, place it on board, nail it, spile off on the board, mark position of moulds on latter, remove staff, mark line of lower edge through the spots, lay off breadths at each mould on plank, leaving ⅝ extra for lap, line upper edge through these spots, saw out, plane up edges (if a thick plank, gauge edges, slit and plane insides), bevel edges, gauge upper edge on outside for lap, cut rabbets at each end for next plank (on the bilge it will be necessary to bevel the upper edge of plank on outside for its entire length), put in place, clamp, screw fore end in rabbet, nail along lap, and cut and screw after end.

Where there is a quick turn to the bilge, it is best to use ⅛in. stuff for each plank, hollowing the inside with a plane, and rounding the outside to fit the curve of the moulds. At the ends, where the laps are thinned down, tacks, ¾ and ⅝in. long, are used instead of nails.

The planking being completed, the canoe, if built with the keel up, is turned over on the stocks and shored in position, the keel being blocked to the proper rocker, then the ribs or timbers are sawed out of a piece of stave timber, ⅝x¾in., the upper corners are rounded off, and if not flexible enough to bend easily, they are put in the steam box or laid in boiling water.

The holes for the nails are now marked off by means of a wide, thin batten, which is bent into the bottom of the boat and adjusted to the mark on keel, and also so that it stands upright; then a mark is made where it crosses each lap, and a hole bored in the middle of the lap with a 7/16in. German bit. When all the holes are bored, the ribs are taken one by one, bent over the knee and pressed down into the bottom of the boat; then the nails, which have previously been driven lightly into the holes, are driven up through the timber, using a set to hold on the top of latter alongside of the nail as it comes through. The lowest nail must always be driven first, then the others in succession from keel to gunwale.

As many ribs as possible should be put in before the moulds are removed, those alongside of the bulkheads, however, being omitted entirely. A nail must be put through the middle of the garboard and broad into each timber. After all are in, the boat is kept from spreading by means of cross spalls, pieces holding the gunwales together, and the moulds are removed; the blocks are then pulled off the ends of the nails, and the riveting up begins.

A copper burr or washer is slipped over a nail and driven home with a burr starter, an attendant outside holding the set on the head of the nail. When the burr is on, the end of the nail is cut off close to it, and the projecting part (about 1/16in.) is headed with a few blows from a light riveting hammer, the tacks at the ends merely having their ends turned down. After the riveting is completed the gunwales are put on.

These were formerly put inside the boat, being jogged over the heads of the timbers, but a stronger and neater plan is to put them outside, making them of a hard wood, preferably mahogany. The deck is screwed to them, and they serve also as chafing battens, protecting the sides. They should be about 1¾in. wide at middle, 1¼ at fore and 1½ at after ends, and ⅜in. thick. A rivet is put through the stem and both fore ends, and another through the stern, thus strengthening what was formerly one of the weakest points of a canoe. Nails are also driven through them and the upper streak and the head of each timber and riveted, making a much stiffer side than the old method. After the gunwales are in, the cross spalls may be shifted if necessary until the curves of both sides of the boat are perfectly fair and symmetrical.

The bulkhead timbers will be sawed from hackmatack knees ⅜in. deep and ⅛in. wide. They must be fitted accurately to place in order to make a water-tight joint, to do which, a piece of thin board is cut to fit closely, the timbers being marked from it. After the timbers are fitted as tightly as possible by this means, a little dark paint is laid on where the timber will come, the latter is put in place and pressed down, with a slight fore and aft movement, and on removing it, the points where it touches will be marked with paint.

These are cut away slightly, the piece replaced, and the operation repeated until the paint shows on the entire surface of the timber; it is then painted with thick white lead, pressed into place, and fastened by screws or nails through the planks at each lap and also in the middle of each strake, or if a wide strake, with two nails.

The bulkheads will be of white pine, ⅜in. thick; they are placed on that side of the timbers nearest the end of the boat, and are riveted to them. A door is sometimes cut in the bulkhead to give access to the compartment in place of a deck hatch. These latter are to be avoided if possible, as they are never to be relied on as water-tight, and being exposed to rain and waves, are apt to wet all below, while a door in the bulkhead, even if not tight, is only exposed to water in case of a complete capsize.

THE GALLEY FIRE.

CANOE AND CAMP COOKERY.

No canoe trip can be thoroughly enjoyed unless the canoeist is able to cook a square meal. A friend lately said to me: "I like to paddle around the harbor of an afternoon after office hours, but how a sane man can make a cruise of a week or more and live on crackers and condensed milk, surpasses my understanding. I tried it once and lost five pounds in four days, then I quit."

"But, Aleck, why didn't you cook up three good meals a day? Didn't you have your cooking outfit along?"

"Yes; but, Seneca, I never learned how to cook even a pot of coffee. I hung around the kitchen before I started and asked Bridget so many questions that she gave a week's warning. Besides, a man can't carry a kitchen range along in a canoe."

"Certainly not; but a canoeist, if he has the proper outfit, can bake, boil, fry, broil and stew without a range at all."

"Do you mean to say a man can bake without an oven?"

"He can certainly bake with no more of an oven than he can make himself with a few minutes' labor."

"I should like to know how."

"Well, I will give you a few pointers from my own experience, and trust you will give them a trial on a long cruise next summer. First, suppose you've caught a three-pound bass and want to bake him. Don't scale him, but just remove his 'in'ards,' and wipe him dry inside. Then dig a hole in the ground about eighteen inches deep

big enough to contain the fish. Build a fire in it and let it burn to coals, but leave the hot ashes on the bottom, and upon these place a thick layer of green grass. Lay your bass atop of this on his side, and cover him with another layer of grass. Now rake back your coals and loose earth, and build a small fire over all on the surface of the ground. After three-quarters of an hour dig out your fish. His skin will peel off and leave the flesh clean, and he will be baked better than any fish you ever tasted, because the juices are all retained. Now to bake bread—"

"Bread baked in a hole in the ground! Not much, Seneca. No sand in my bread, please."

"Not an atom, Aleck. For bread you must have plenty of coals, so a brisk fire must be kept up in the hole for five or six hours. Make what is called 'biscuit dough.' For one man take, say one quart of flour, and mix in it while dry a heaping teaspoonful of yeast powder and a couple of pinches of salt. Then add a teaspoonful of lard (if you use butter, don't put in much salt) and mix thoroughly. Add water, small quantities at a time, continuing the mixing till you have a good stiff dough. Now you want two basins, made each of one piece, without solder. Hammer the edges of these into a sort of rim, and put enough dough into one of them to fill it two-thirds full. Cover this with the other basin, take out all the coals except two or three inches in the bottom of the hole, set in your basins, and surround and cover them with hot coals. Spread earth over all, and go fishing for half a day. When you come back you'll have first-rate camp bread."

"But won't it burn?"

"No; it will rise, but not enough to reach the bottom of the upper basin, and the gases will escape where the basins come together."

"But it takes a whole day to bake bread."

"Yes, but a cruising canoeist has to stop for a day once in awhile to make repairs, and no canoeist is ever in a hurry, anyhow. That's the whole essence of pleasurable canoeing, to be free from all anxiety about reaching a certain point in a given time, to take it easy, and having his habitation with him, like a snail, to eat his supper and go to bed wherever night finds him. I heard this winter of a method of baking bread in a short time, however, and I mean to try it next summer."

"What is the method?"

"I'd rather not tell you till I've tried it, for I haven't much confidence in its success."

"Never mind; tell it, and I promise I won't try it till you report your experience."

"Well, you make your dough and roll it to a thickness of half an inch. Grease a frying pan and set it over hot embers till the grease begins to melt. Then put the dough into the pan set it on the fire, shaking the pan frequently to prevent the dough from adhering. When the crust has formed on the bottom, take the bread out of the pan and prop it up on edge, close to the fire, turning it occasionally to insure its being baked through."

"I'd rather you'd eat that bread than me, Seneca. Give me a recipe for a simple kind of flap-jack."

"The simplest flap-jack I know of is made this way: Put a small quantity of salt and flour in water, beat it with a fork till foam rises, and then mix quickly with more flour until you have a thin batter. Cook on a well-greased frying pan. This beating of salt and flour in water was used by old Injun Joe in camp instead of baking powder or yeast for making bread, and his camp bread was the best I ever tasted."

"I was down the Chesapeake last fall and got plenty of oysters, but nobody could cook them except in the old-fashioned ways, and I soon grew tired of them. Don't you know some good way of cooking them in camp?"

"Yes, I do, Aleck, and it's a dish fit for a star-route contractor. Get the largest oysters you can find, cut fat bacon into very thin slices, wrap an oyster in each slice, and skewer with a small stick. Heat a frying pan very hot, put in your oysters, and cook long enough to just crisp the bacon—not over two minutes, taking care that they do not burn. Serve immediately on slices of toast without removing the skewers."

"Yum, yum! You make me hungry to tell me that. Say, Seneca, why don't you send some of your Indian recipes to FOREST AND STREAM, for the benefit of canoeists and campers? They have started a 'Galley Fire' column, you know."

"Oh, all those old woodsmen and cruisers that take FOREST AND STREAM know more about camp cookery than I can tell them."

"But there must be, I am sure, a lot of 'fresh Alecks' among them like me, who would be glad of elementary instruction."

"Well, they can refer to a lady who teaches cooking schools, and who has written a book on 'Camp Cookery,' a book I have never seen, but my boarding-house keeper was a pupil of Miss Parloa's, and her consommés are heavenly. However, I will try them with a few dishes I can recommend from experience, and if they take well, I'll try to rake up the whole lot and send 'em in." SENECA.

LARGE VERSUS SMALL CANOES.

Editor Forest and Stream:

I have read "Widgeon's" letter with regard to the Stella Maris 27in. canoe and, although I agree with him on some points in favor of that type, I must say that after a cruise of 250 miles in one last summer I do not consider her up to the mark as an all-around cruising canoe. Because, first, she was never dry and sometimes not over safe in rough water. Why? Because she was too low, and had not enough sheer, and when running before the wind would poke her nose under as if about to "dive." Secondly, she is so small as to be unable to hold enough camp kit, as I found by bitter experience on my cruise, when we had exceptionally cold weather, and she would not carry enough blankets to keep me warm at night. Is that comfort? Thirdly, "Widgeon" speaks about cruising in a Stella Maris from Labrador to Cape Cod; it might be done, but I should prefer to be excused.

Now, speaking of portages and when the avoirdupois of a canoe counts, I do not see why one cannot be built, of the same length as the Stella Maris, but somewhat broader and deeper, which would weigh pretty nearly the same, and be far more comfortable and safer. FRIDAY.

CLUB SIGNALS.—We have to acknowledge the receipt of club signals from the Chicago, Rondout, Mohican of Albany, Alleghany of Pittsburgh, Keystone of Philadelphia, Rob Roy C. C. of Indianapolis, Ind., with a number yet to hear from. Where are the Cleveland, Cincinnati, Newark, N. J., Whitehall, Bayonne and Philadelphia clubs?

SPEED OF CANOES.—"Stormy Petrel," writing to the London *Field*, claims to have made 14¼ miles under sail in 2 hours 5 minutes; first 7 miles in slack water, last 7 with strong tide, the tide and distance being accurately noted. The canoe was 14ft. x27in., weighing less than 50lbs. This is not equal to Mr. Alden's trip of 60 miles in 7 hours on the Great South Bay last summer, but is very fair considering the size of the canoe.

LYMAN'S SIGHTS will help a man to use his rifle effectively. A shooter can do best with the sights he has become used to, and it is well to accustom oneself to the best. We know of no better now on the market than Lyman's.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

ST. BERNARD, Boston, Mass.—Breed her to a St. Bernard.

M. B. C., Oswego, N. Y.—Write to J. I. Miller, Montvale, N. J.

H. R., Boston, Mass.—Pilkington's Dash was by Laverack's old Blue Dash and out of Pilkington's Lill.

"FIVE CONSTANT READERS" ought to know by this time that we require name and address of correspondents.

C. W. E., Boston, Mass.—Probably you will find a satisfactory map of the New Brunswick region in Osgood's "Guide to the Maritime Provinces."

W. B. P., New York.—Perfection (A.K.R. 826) is a pure Laverack. Beauty (A.K.R. 806) goes back to Fauntleroy's Snake, and is not a pure Laverack.

A. D., Providence, R. I.—We don't know of an English greyhound named Leo I. Trace back the pedigree of your dog through the man you bought him from.

H. P. U.—What is the weight of the largest brook trout, *S. fontinalis*, on record? Ans. We know of none larger than the one in the National Museum, which weighed 11¼lbs.

C. S. D., Warren, R. I.—There are quite a number of Scotch deerhounds in this country. Write to Hillside Kennel, Lancaster, Mass. The price will depend upon breeding and quality.

H., Syracuse, N. Y.—1. Colburn's Dash was by Putnam's Dan (Paul Mead's Dash—Putnam's Nell), and out of Valentine's Fanny (Talcott's Sport—Talcott's Nell). 2. Write to Dr. William Jarvis, Claremont, N. H.

H. A. C., Portland, Me.—1. What is the best glue for split bamboo rods? 2. What is the best varnish for either bamboo or lancewood rods? Ans. 1. Get best white glue. 2. Use shellac dissolved in alcohol.

O. F. C., Pawtucket, R. I.—Dorothee is the dam of Othello (A.K.R. 756), Queen Bess (A.K.R. 757) and Le Beau (A.K.R. 755). Clio is the dam of La Belle (A.K.R. 754). Subscribe to the *American Kennel Register*.

P. D., New York.—Can I lawfully shoot quail from a trap on my own grounds in Westchester county, the birds being brought from another State? Ans. No, neither lawfully nor decently. The proper time to shoot quail is in the open season, and the proper mode is with a dog in the field.

YOUNG SPORT.—Will you please tell me what part of the stream I will find trout in the months of March and April? Ans. It is unlawful to take them in March. In April you will find them all along the streams where the water is clear and good, especially in pools and under banks, and other hiding places.

READER, Philadelphia.—Will you inform me where I can find good striped bass, or rock, fishing? I do not care about sea fishing. I prefer the bay or river fishing, where they run from one to five pounds. Ans. There is often good bass fishing down the Delaware River, and in the bay; also in the Chesapeake. The fish move so that particular points cannot now be named.

B. H., Norman County, Minn.—There is a fish is the Red River that closely resembles the whitefish in size, shape and color. It has golden circles around its eyes, and it bites at grubs and meat readily in May, June, July and August. Some call it whitefish, while others call it "golden eyes." What is the correct name of the fish and its habits? ANS. The description is not sufficient to decide upon the species.

P. E. H., West Liberty, O.—St. Bernard puppies sell from $50 to $200 each when ready to leave the dam, so you will find them rather too expensive for your purpose. Mr. Rodney Benson, P. O. Box 1,957, New York; Mr. E. R. Hearn, Passaic, N. J.; The Chequasset Kennels, Lancaster, Mass.; The Essex Kennel, Andover, Mass., breed St. Bernards. For a bulldog you may apply to Hillside Kennel, Lancaster, Mass.

S. R. D., Brooklyn.—1. Will you inform me where I can buy a first-class book on dog diseases and their treatment? 2. If there is any rifle fastened to the stock as the U. S. Springfield rifle? 3. Is not the repeater considered as good as any? I have Hammond's dog book, and like it very much. Ans. 1. "Management and Disease of the Dog," by J. Woodroffe Hill. We can supply it for $2. 2. We do not understand what you mean. 3. Yes.

W. N. MACA., Covington, N. Y.—Will you kindly inform me in your columns—first, if the crested titmouse (*Lophophanes bicolor*) is ever found in this section, and its average size; second, if bluewing teal, which I have shot having cinnamon brown legs (dark) and others havin light yellow legs and feet (apparently alike in all other respects), are of the same species. Ans. 1. Not commonly, we think, but it may occur occasionally. 2. The same. Difference due to age.

A. R., Pawtucket, R. I.—1. Can you uform me as to the best book on the dog, if possible? I shoul like one very minute in detail; also treating on the diseases of the dog, and have colored illustrations. I have never seen a book with colored plates, and do not know whether one exists. 2. At the same time please inform me if there is a book published exclusively on the mastiff. I have studied "Stonehenge," but he does not go into detail enough for me. Ans. 1. Vero Shaw's "Book of the Dog." We can supply it for $12.50, cloth; half morocco, $17.50. 2. No.

T. M. E., Washington, D. C.—I have a white wolfskin robe (new) which "sheds hair" so badly as to become a nuisance. Will the application of salt and alum, as stated in reply to "Tanner," in issue of Feb. 28, prevent the further shedding? I don't think the fur is moth-eaten, but that the skin was badly cured, as I have seen several other new robes in the same condition. Ans. It is possible that a bath of strong "pickle," *i. e.*, a solution of one part alum to two parts salt in water might fasten the hair, but we think it doubtful. You might try it, however.

S. W. A., Jr., New York.—Where will I be able to procure a print of one of the dogs, Dan by name, comprising one of the set by A. Pope, Jr., and published by Armstrong & Co., of Boston? There were twenty or more altogether, and, having most of the others, am very desirous of obtaining this particular one. The picture represents a liver and white pointer dog, Dan or Don, I am not certain which is the correct name, facing to the right, with head erect and holding a quail in his mouth. The mate to this picture is a dog called Bow, which I have. Ans. We cannot tell you where picture may be obtained. Have you written to the publishers?

C. P., Yonkers, N. Y.—Will you inform me whether the publication of the FOREST AND STREAM Kennel Register has been discontinued, and whether the *American Kennel Register* covers the ground of the other. Also, whether a copy of the FOREST AND STREAM Kennel Register can be obtained? Ans. The FOREST AND STREAM'S register entries were some years ago turned over to the National American Kennel Club, upon the representation that they were about to publish an annual stud book, and it was thought best that there should be but one book of the kind. The club did publish one volume of the book in 1879. Then after delaying a long time, they gave the entries for the second volume to a Western concern which has to all intents and purposes suppressed the whole thing. The *American Kennel Register* has taken the place of the former FOREST AND STREAM Register, and is, in fact, the only published record of the kind that is of contemporaneous utility.

ACCOMAC, Va.—Will the Kynoch brass shell answer for any gun, or do the guns have to be fitted specially to them? Are they as durable as the thick brass shells? Ans. The Kynoch shell being thinner than the ordinary brass shell, will not fit unless the chamber is bored specially for it. But the chamber may be reduced by the bushing process. For instance, the interior diameters of the barrel of a 12-gauge gun and of a 12-gauge shell are, say, .729 in. But the paper shell being, say, .030 in. in diameter, it is perfectly plain that the chamber of the gun to receive this paper shell must have a diameter of .729 plus twice .030, or .789. Now, were the Kynoch shell equal in interior diameter to the barrel of the gun, and only .007 in. thick, the chamber should be only .729 plus twice .007 or .743 in. It is evident, therefore, that the chamber bored to .789 for the paper shell, would, in that case, have to be reduced to .743 for the Kynoch .729 interior diameter. This could be accomplished by inserting in the chamber a steel lining which is bored out to the desired diameter. As a matter of fact, however, the Kynoch shells being made with exterior diameters to fit the present chambers of the several gauges, it has been found that a 12-gauge gun may be bushed with best advantage for a 14-gauge Kynoch shell, the interior diameter of the shell being .744 in. The process of bushing is made perfectly intelligible by the illustration given in our issue of July 5, 1883.

THE ROCK CREEK RABBIT FEAST.

A recent event, which caused much excitement in the vicinity of Rock Creek, Iowa, is recorded in verse by the local laureate, and printed in the Iola (Ia.) *Register:*

The farmers out on Rock Creek
Took notice last July,
That rabbits were in abundance,
And would vastly multiply.
They therefore promised the dogs and boys.
If they'd stop the vast increase,
That they should be rewarded
In the way of a rabbit feast.

So the farmers, to keep their orchards
From being demoralized,
And the ladies, to save their gardens,
Said they'd help to organize—
The boys, dogs and shotguns
To kill off the trifling beast;
And before the spring was over
They would have a rabbit feast.

So they organized two parties
To have a grand old hunt,
And save all game they captured,
From the Jack to the prairie runt.
Each hunter had to save his scalps,
And the gang who had the least
Had to pay for all expenses
Of the Rock Creek rabbit feast.

Last week they met and counted scalps
To determi e which side beat,
And make necessary arrangements
For their great big rabbit eat.
And they settled on last Tuesday night,
When the rabbits they had fleeced,
Should be served at the Rock Creek school house,
Where they'd have their rabbit feast.

Rutledge's gang won all the laurels.
As they had gained the day,
They'd eat a supper rich and grand
As Fisher's gang would pay.
For Rutledge's gang had killed the most,
And Fisher's gang the least,
Five hundred and sixty-five against two hundred and sixty two
Pays for the rabbit feast.

It was a dark and gloomy night,
For that the boys don't care,
And the farmers all turned out en masse,
And every girl was there;
And the ladies had the table spread
Good enough for any priest,
Loaded down with cakes and pies
For the glorious rabbit feast.

The entertainment too, was grand,
It was well worth your quarter;
They'd everything that heart could wish,
To the smile of a farmer's daughter.
I would not have missed that supper
For a meal or two at least,
I never had a better time
Than I did at the rabbit feast.

And should I live a thousand years
I'll think of the rabbit slaughter,
And never forget the love I have
For a Rock Creek farmer's daughter.
So now I've told you all I dare,
But I'll send this message east,
And wait for time to bring around
Another such a feast.

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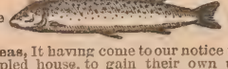
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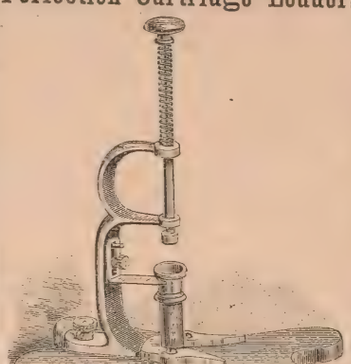
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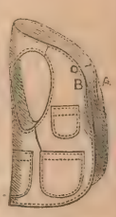
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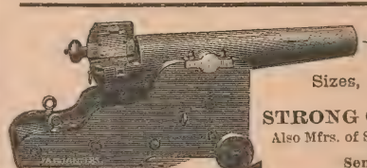
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YELLOWSTONE PARK MATTERS.

SENATOR VEST'S bill for the protection of the National Park has passed the Senate. Just what the bill is may be seen by referring to its text, which is printed in another column.

An amendment offered by Senator McMillan, of Minnesota, and agreed to, although opposed by Senators Vest and Harrison, provides that "possession, within the said Park, of the dead bodies or any part thereof, of any of the animals or birds hereinbefore mentioned, shall be *prima facie* evidence that the person or persons having the same are guilty of violating this act." This amendment goes a long way toward nullifying the section forbidding the killing of wild animals, since men who may kill game within the Park, and can transport it beyond its borders before being detected, cannot then be interfered with. The change is thus an unfortunate one.

On the whole, the bill, as passed, is a vast improvement on the laws we have hitherto had in relation to the Park. While the area of the reservation is increased only two-fifths, instead of being more than doubled, as we had hoped would be the case, the enlargement is sufficient to greatly enhance its value to the people, and to include many natural features which properly belong to such a national reservation. Aside from the conservation of these natural beauties, which will attract the tourists of all countries, the fact that the Park is to be treated as a preserve for the indigenous wild animals of our western territory, must be a source of congratulation to all intelligent people. To naturalists of all nations this will be welcome news, and it will equally rejoice all sportsmen. It is to be hoped that the Senate bill may be passed by the House.

Assuming that the bill is to become a law, the question of its enforcement is the next one which will present itself to those who are interested in the Park. We have before alluded to the deplorable inefficiency of the attempts at protection last summer, and to the fact that the Superintendent and his assistants, while they were authorized and ordered by the Secretary of the Interior to perform certain acts, were not furnished with the means for carrying out their instructions. They were at first turned loose in the Park without horses, quarters or subsistence, and ordered—less than a dozen of them—to protect it, to arrest those who might break down the craters of the geysers, who might destroy the timber, or who might kill the game. They—a few inexperienced Eastern men—were to pursue on foot, and to capture, the mounted skin hunters. But, after they had performed this impossible task, what were they to do with those whom they had arrested? These matters have now been changed. The men have quarters, horses and rations. Their year's work in the Park cannot have failed to teach them something. Next summer, if they are the right kind of men, they will be of some use. Last year they were perfectly raw and unaccustomed to Western life, and so could not have been expected to accomplish much.

A careful study of Secretary Teller's response to the Senate resolution calling for copies of all papers and correspondence relating to the Yellowstone National Park since the last session of Congress, indicates that public opinion has not been altogether just to the Superintendent of the Park. He has been accused of neglecting his duty, of failing to put a stop to several illegal practices within the Park, and even of permitting his subordinates to traffic in specimens. Some of these accusations appear to have been made hastily and on insufficient evidence, as well as on the assumption that Major Conger had the power to enforce the regulations laid down by the Secretary of the Interior. The report of the special agent of the Interior Department attacks the Superintendent's administration of the Park very savagely, and shows that hunting has gone on openly and in bold defiance of the regulations. We do not find that the Superintendent has reported such violations of the law to the Department, and this he certainly should have done, even if it were not in his power to put a stop to them. Instead of receiving any reports of violations of the regulations, the Secretary of the Interior has several times had occasion to call the attention of the Superintendent to failures to comply with the law within the Park, a state of things which, under the circumstances, seems sufficiently absurd.

This neglect on the part of Major Conger finds some excuse in the fact that he has been hampered throughout by the knowledge of his inability to enforce the regulations established for the government of the Park, by the willingness of a large proportion of those within its limits to violate the law, and by the continuous hostility of the Yellowstone Park Improvement Company. This corporation, true to its traditions, has, during the past summer, seized in the most high-handed fashion everything belonging to the Government on which it could lay its hands. The Superintendent writes under date of Nov. 6, 1883:

"They help themselves indiscriminately to whatever they may want inside or outside of the Government inclosures without reference to any other interest than their own. They have cut and manufactured nearly all of the timber available for building purposes anywhere near this place [Mammoth Hot Springs] to build their great hotel and their numerous other buildings here. They have overrun the Park with their herds of horses and cattle; have wilfully and purposely broken down and destroyed the fences around the Government pastures, which I have taken great pains to repair and keep in order so as to enable us to keep the Government stock here without expense. Mr. Hobart has been heard to say that he would tear down the fences as often as I would put them up; that he would show me he had a right to do as he pleased here. The pastures, as a consequence, are eaten entirely bare of everything that an animal can subsist upon, and now I am compelled to take the stock all out of the Park to winter, or import feed for them here at heavy cost. They have several hundred head of cattle, besides a large number of horses; consequently they require and monopolize all the hay within twenty miles of here. And this is not all. Mr. Hobart has obstructed me in every way in his power ever since he has been here. He kept me from getting possession of McCartney's cabin, where I wanted to quarter some of my assistants, for more than a month, by telling the man whom I had ordered to vacate not to mind me but to stay there and that he would see him through, as I would not be here long anyway. Hobart has boasted in my hearing of his influence with you, and that he had frequent letters from you; and he told one of my assistants that you had promised him that I should not visit Washington this winter, and he also said that the reason you would not write to me was that you was not going to have my letters paraded before Congress. Not only this, but he has lost no opportunity all the summer, at his hotel, openly, before the thousands of people that have been there, and wherever he has been, to abuse and belittle me to every person that he could command the attention of, as I have been informed and believe. This company is now in financial disgrace all over the country. They have transferred their cattle and horses to Mrs. McGowan, notwithstanding which, creditors have levied attachments on them, and this is the situation here to-day."

From all this it is apparent that the Superintendent's position has not been a very comfortable one during the past year.

Special Agent Smith has touched one of the roots of the evils that have been so apparent when he alludes to the fact that the assistants ought to be frontiersmen, and the Superintendent, in making excuses for his assistants, rather naively and pathetically says of them: "I must beg you to remember that they are all strangers to this section of the country, and that a number of them are quite young and inexperienced; and I think some allowance should be made on that account, not only on their account, but mine as well." Not a particle of allowance on that account, Mr. Conger. If you appoint men who are strangers to the country, who are young and inexperienced, the responsibility can rest on no other shoulders but your own. We warned you last year against doing just this thing. There were plenty of good men to be had in Montana, Wyoming and Idaho—men who would have been willing and able to do their duty faithfully and well by the Government that employed them. Such men should have been appointed, and if they had been, their efficiency would have spared you a great deal of trouble and annoyance.

There are now before Congress at least two bills incorporating railroads to run through the National Park. If these bills, or any like them, are passed, and any railroads are laid into the Park, the good work that has been accomplished by Senator Vest and others will all be undone. We call attention to Mr. Hague's letter, in another column, which gives some of the many good reasons why no such permission should be given. The subject is one that could be enlarged on indefinitely, but it is hoped that Congress may be trusted to act wisely in this matter.

AN ADIRONDACK BILL.

FOR the present year the prospects for preserving the Adirondack forests appear dark. The lumbermen, aided by the lobby, have won over to their side so large a number of the Assembly that the good bills have been put one side, and a cunningly devised and carefully worded substitute, presented by Mr. Boynton, have taken their place. This bill, as originally framed, offered but little hope of protection to the sources of our great river, but after its introduction, Mr. Boynton gravely rose and began to offer amendments to it. The way being thus opened, every other Assemblyman proceeded to offer his little amendment. Thus followed the old scene, which has so often been witnessed by those who have followed the course of the game laws in the various Legislatures of our States. Each member desired to have his section exempted from the provisions of the bill. Some went further and intelligently (?) argued that this was a vile scheme of monopoly by which the suffering lumbermen of the northern counties were to be robbed for the benefit of the aristocrats of the southern portion of the State. The champion speech, however, was made by an Assemblyman whose name we do not give because it does not seem possible that he can have been correctly reported. The daily papers quote him as saying: "The Hudson River is an arm of the sea, subject to tides, and there will be plenty of water upon which to float the commerce of the State if not a drop of water flows into it from the Adirondack region." He went further, and declared that the river would be far more navigable if all the upper streams emptying into the Hudson were dried up. These streams brought down vast amounts of refuse and dirt, rendering dredging necessary every year. He declared that the Chamber of Commerce bill was a grand scheme in the interest of individuals, and was backed by an eager and unscrupulous lobby, which invaded even the rooms of members of the Legislature. He denied that any additional legislation was needed.

It seems inconceivable that any civilized man of the present day should make statements such as these. A boy ten years old would know better. The Assemblyman referred to may perhaps be acting up to his own ideas of what is right in opposing the preservation of the Adirondacks, but why he should be willing to publish his stupendous ignorance to the people of New York State, it is really hard to see. Mr. Littlejohn, of Oswego, shares with the gentleman quoted above the very questionable glory of uttering about the Hudson River, the veriest nonsense, knowing it to be nonsense. But then, from what is known of Mr. Littlejohn's

record this was to have been expected of him. Besides, he is understood to be himself largely interested in lumbering, and so is very naturally found on the side of those who are wholly indifferent as to the general welfare, provided only their own profits are not interfered with. These two Assemblymen and Senator Ingalls, of Kansas, who gained such a cheerful notoriety by his liberally intelligent views on National Park matters, ought really to be taken about the country and exhibited as specimen sticks of the timber from which a considerable proportion of our American law makers are hewn. If this were done a great work of political reform might be inaugurated.

In agreeable contrast to the utterances above quoted are those of Mr. Roosevelt and a few other gentlemen, who in all matters pertaining to the public good, take liberal and advanced views. It is satisfactory to see, now and then, in our legislative halls a man whom neither money, nor influence, nor politics can induce to turn from what he believes to be right, to what he knows to be wrong.

All that can be said of the bill is that it satisfies the lumbermen and the enormously powerful array of lobbyists, who have so well earned their pay at Albany. When this has been said it requires intelligence of no very high order to understand that it does not satisfy those who are looking after the best interests of the State.

It is even doubtful whether any bill protecting these forests will pass at all this winter.

The Tide of Travel, which during the winter has set so strongly southward to the Southern States, is now on the turn. Almost every day we hear from returned travelers, accounts of pleasant winter days, when good bags were made and glorious sport had in the South. The residents of these States must remember that each year the number of sportsmen who go South for the winter is increasing, and that all the destruction of the birds which is going on from year to year, cannot fail to seriously reduce their numbers. It will be wise then for these States to make an earnest effort to render the game laws something more than the mere dead letter which they are at present. In the absence of any other remedy, individual land owners can, by posting their land, keep off intruders, after the close season begins.

The Massachusetts Law.—The matter of a uniformity of game laws in Massachusetts is still with the Committee on Agriculture, which is expected daily to report.

The Sportsman Tourist.

LIFE AMONG THE BLACKFEET.

BY J. WILLARD SCHULTZ.

Thirteenth Paper—Folk-Lore.

SCAR-FACE, THE MAN WHO WENT TO THE SUN.

THERE was once a young man who had a great scar on his cheek. He was a very good young man, but because he had this deformity, the people made fun of him and called him Scar-face. There was a very beautiful girl in the camp, and one day Scar-face met her when she was going after water and asked her to be his wife. But the girl laughed and said: "Do you think I would marry such an ugly man as you are? When you get that great scar off your face then come and ask me. I don't want to marry an ugly man."

Now, Scar-face loved this girl, and his heart cried because she had spoken so badly to him, and he went off alone and prayed to all the animals to help him. His secret helper said to him, "Go to the Sun, he is good and will help you." Then Scar-face arose and started on to the Sun.

After the second day, he could travel only at night, for it was very hot. In the day time he slept in big holes which he dug in the ground. When he had come close to the Sun's place, he found in the trail some one's leaving. A war shirt was there and many weapons of strange and beautiful make. But he touched them not, for, he said, some god has left them there and will come for them. Now a little way further on he met a young man, the most beautiful person he had ever seen, his hair was very long and he wore a shirt and leggins and robe made of some strange animal's fur, and, his moccasins were embroidered in strange colors. The young man said to him, "Did you see a war shirt and some weapons lying on the trail?"

"Yes," said Scar-face, "I saw them."

"But didn't you touch them?" asked the young man.

"No," replied Scar-face, "I thought some one had left them there, so I did not take them."

"You are not a thief. What is your name?" said the young man.

"Scar-face."

"Where are you going?" asked the young man.

"To the Sun," replied Scar-face.

"My name, said the young man "is E-pĭ-sŭ-ahts [early riser, the Morning Star], the Sun is my father. Come, I will take you to our lodge. Now he is not sitting there, at night he will enter."

They came to his lodge, very large it was, and very beautiful. Many unknown animals were painted on it in strange colors, and behind it, suspended on a tripod, were the war clothes of the Sun, made of large and beautiful feathers and the skins of great animals. Scar-face was ashamed to enter such a great lodge, for his clothes were of common cow skin and his moccasins all torn with much travel; but Morning Star said, "Enter, my new friend; and fear not; our hearts are like our faces, we conceal them not."

They entered. All about were sitting-places covered with white robes, and everything was strange. One person sat in the lodge and that was the Moon (Kŏ-kŏ-mĭk'-e-ĭs: Night-light), the Sun's wife, and the mother of Morning Star, and she spoke to Scar-face kindly, and gave him something to eat. "Why have you come so far from your people?" she said.

Then Scar-face told her about the beautiful girl who would not marry him because of the ugly scar on his face, and that he had come to ask the Sun to remove the scar. Now when it was time for the Sun to return home, the Moon hid Scar-face under a pile of robes. But as soon as the Sun got to the door-way he stopped and said, "I smell a person."

"Yes, father," said Morning Star, "a good young man has come to see you, a very good young man. I know he is a good person, for he found my beautiful clothes in the trail and did not touch them."

"I am glad," said the Sun, as he entered the lodge and took his accustomed seat, "that a good person enters my lodge. Be friends, my son," said he to Morning Star, "with this newly arrived young man."

The next day the Moon called Scar-face away out of the lodge and said to him, "Go with Morning Star and hunt where you please, but never go near a large lake way out there, for by that lake live great birds with long sharp bills, which they use to pluck out people's hearts. I have had many sons, but these birds have killed them all except Morning Star. Never let him go there."

Now, one day when the young men were out hunting, they came in sight of this lake and saw the great sharp-billed birds swimming in the water. "Come," said Morning Star, "let us go and kill the birds." "No, no," said Scar-face. "we must not go near them," but Morning Star ran quickly to the lake, and so he followed, for thought he, "I may save him." The birds, seeing the young men close, came and fought them, and with their spears the young men killed them all, and they cut off their heads and carried them home.

Now, when the Sun came home that night, the Moon told him what a brave deed the boys had accomplished, and his heart was very glad. "My heart is glad," he said, when he had sung a song, "for the sharp-billed birds which have killed my children are destroyed. Speak, my son Scar-face, what can I do to pay you?"

Then Scar-face told the Sun about the beautiful girl he loved, and that she would not marry him because of the scar on his face. "Pity me," he said; "take off this scar which makes my heart so sad."

Then the Sun made some powerful medicine, and put it on Scar-face, which made him handsome, and he took him and Morning Star to the Moon, and said, "Look, mother; which is your son?" and she recognized Morning Star.

Then he took the boys away and rubbed some more of the medicine on Scar-face, and again he took them before the Moon and said, "Now, mother, which is your son?" and she looked a long time, but could not tell which was Morning Star, for the Sun had made Scar-face beautiful, just like his own son.

Then the Sun gave him some beautiful clothes and food and told him he could return home. "But, my son," said he, "do not marry that girl. A woman who will not marry a good man merely because he has a scar on his face is surely not a good woman. Be glad that you did not get her. But punish her, that the people may know that a bad face is no sign that the heart is bad." and he told him what to do.

When Scar-face started to return home Morning Star hung on his neck and cried, saying: "How can I part from my friend, my brother?" and the Moon also cried, saying: "How can I let my new son go away?" and all their hearts were sad.

Now, when Scar-face had come close to his home, he met a young man, and inquired if his father still lived in the camp; and learning which lodge his father owned, he entered and sat down, and no one knew him, and when he told his father and mother who he was and where he had been, for a long time they did not believe him.

Toward evening he walked out in the camp, and all the people crowded around him to listen to his wonderful story, and the beautiful girl whom he had loved called him away to one side, and she said: "You are such a good-looking man that I will be glad to be your wife," and Scar-face replied: "All right, come into my lodge to-night," and when she had come in and lain down beside him he smothered her to death with a robe, for so the Sun had told him to do, and he married good women and lived a long time, and when he died the Morning Star came and took him back to the Sun, where he lived forever.

[TO BE CONTINUED.]

DOWN THE YUKON ON A RAFT.

BY LIEUT. FRED'K SCHWATKA, U. S. ARMY.

Seventh Paper.

THE Tahkheesh Indian, who was ahead in a canoe, to show us when we were near the only canyon in the Yukon, would have let the raft go right on through as far as any valuable information was concerned. Long before we reached the canyon and its appended rapids, the passage of which every Indian in the country had predicted impossible for such a vessel as a raft, it was becoming painfully evident that our Tahkheesh guide in the canoe would inform us of the canyon just in time to be too late. Anticipating just such an emergency, and having ascertained that the proper camp was on the right hand or eastern bank, we kept the Resolute into the bank as well as the current would allow, for it was now so swift that it kept shooting us from one side to the other, and we were glad to keep from "jamming" the raft end on the gravel-banks and having ourselves torn to pieces.

Already the perpendicular walls of the canyon were in sight, and the first break of the white water entering them showed like the white teeth of a tiger as we started to make the bank in the swift current. This current helped us for a few seconds until we had nearly reached the shore, when it started us out, and from there an almost straight line of water led to the narrow canyon but a couple of hundred yards away. The first line that hands could be laid upon was thrown ashore, and our half-breed interpreter, Billy, jumped into the canoe and paddled ashore, and quicker than it takes to pen these lines one end was made fast to the strongest tree convenient and the other to a cross-log of the raft. There was no time for "snubbing" with so few to manage the line, and the raft was allowed a running gait of some twenty or thirty yards out into the swift water before it brought up with a twang that ought to have snapped an inch and a half rope, let alone the little quarter-inch flag halliard that was thrown out to do this duty of a giant. As the raft was brought up by the thread the current came rushing over the end of the logs and even over the cross-piece, and every one expected to see the halliards part, but they stood the strain, singing like a taut telegraph wire in a high wind until we struck the shore, and the raft was let down a few yards into a whirling eddy and tied up until an inspection could be made of the obstacles ahead.

This revealed a canyon about three-quarters of a mile long, to which was appended a series of rapids and cascades extending for another four miles. This canyon was not over thirty or forty yards wide and as many feet deep. Its banks were perpendicular columns of basalt, as regular as those of Fingal's Cave, and looking more like the workmanship of man than of nature. In this channel the water contracted to nearly one-tenth its average width, fairly boiled as it rushed through, and it must have been very deep to have allowed the entire volume to pass through even at its rapid gait. Dangerous as it looked, with its frothy waves running three and four feet high, I doubt if it was at all as perilous for a raft as the four miles of rapids that succeeded it, running, in the former width of the river, over shoals and bars of boulders, and tangled and intricate masses of captured driftwood, where it seemed impossible that a bulky craft like ours could escape them all as they appeared in echelon. Just at the tail end of these rapids came a cascade, where the river again narrowed into such small proportions that all the water could not get through, and it ran up over the ascending sides and poured down over these, making a perfect crescent of water. Here, too, near and just before this cascade, were pretty and regular columns of basalt, but in no way so high as those in the canyon four miles above. The portage around the canyon, made by the Indians, was over quite a high ridge, and then descended abruptly with a dizzy incline into a valley, which, after continuing nearly down to the cascades again, ascended a sandy hill very hard to climb. The hilly part around the canyon was pretty thoroughly covered with small pines and spruce, and all along the portage trail some miners that had preceded us had cut these down near the path and felled them across it, and then barked them on their upper sides, forming stationary skids along which they could drag their whip-sawed boats. Two large logs, on the dizzy declivity, well trimmed of their limbs and bark, made inclines on which the boats could be lowered into the valley below. Here they had floated their boats by tow-lines down to the cascades and had dragged them around this. It is not very hard to imagine that such a chapparal of felled brush and poles across the path did not improve the walking in the least. The day we walked over the trail on the eastern side of the canyon and rapids was one of the most insufferably hot ones I ever experienced, and every time one sat down it was only to have a regular "Down-East fog" of mosquitoes come buzzing around, and the clawing in the air and the slapping of the face was an exercise equally as lusty as that of traveling. The only way was to walk along brandishing a handful of evergreens from shoulder to shoulder. As one advanced they kept the same invariable distance ahead, as if they had not the remotest idea you were coming toward them. An occasional vicious reach forward through the mass with the evergreens would have about as much deadly effect as going through the same amount of fog, for I believe they could dodge a streak of lightning. Nothing was better than a good strong wind in one's face, and as you emerged from the brush or timber, it was simply delicious to see them disappear. If you would look on your back, however, you would see it spotted with them, even then crawling along and testing every thread in one's coat to see if they cannot find a thin hole where they can bore through. Once in the wind it is comical to turn around slowly and see their efforts to keep under the lee of a red shirt, as one by one they lose their hold and are wafted away in the wind.

Returning to the raft, nearly all of the remainder of the day was occupied in the splendid grayling fishing that was so abundant in this part of the Yukon, and if ancient writers were right in recommending these fish as proper food for sick persons, then Miles's Canyon (for so it was named in honor of the Department Commander who had ordered the expedition) would probably be one of the great health resorts of the world. They were delicious and fat, and as this fat the ancients also believed had the "property of obliterating the marks of small-pox, freckles, and other spots on the skin," if certain natural histories can be believed, there might also be some curative power for the infinite variety of mosquito bites that were making the tops of our heads, as we sat in rows at meal times, look like half-bushel displays of assorted red apples. These grayling were the most persistent biters I ever saw rise to a fly, and more uncertain than those uncertain fish usually are in grasping for a bait, for there were times that I really believed we got fifty or sixty rises from one fish before he was hooked or the contest would be given up. The same invariable two sizes, already alluded to in the previous article, were yet met, with here and there a slight deviation in grade. This grayling fishing was much diminished after we left the Miles's Canyon and rapids, but never wholly ceased until the White River, nearly a hundred miles below Selkirk, pours in its swift, murky waters, of supersaturated glacier mud, when all bait and fly-fishing ceases, and with only fish hooks as articles of barter with the natives, one must go into bankruptcy.

We did not leave this vicinity for two or three days after, and during our stay I believe that fully 400 or 500 were caught, and our Tahkheesh Indian allies, some ten in number, men, *women* and CHILDREN (graded according to type), lived almost solely off of our catchings. Whenever a little gravel bar ran out into the swift water and sent a long string of diminishing whirlpools from its point, there any one could satiate his fishing appetite. The Doctor was the only one with a reel in the party, and it kept a constant opposition in buzzing with the swarms of mosquitoes. The Doctor thought that the fish might be caught in seines, but as he tumbled off of the slippery rock where he was standing out in the water drawing them in, as he turned around to see the effect, no court martial was deemed necessary in the case. During warm sunny days not a "rise" could be had even in the shady places, but in the cool evenings with a few clouds over the sun, two or three flies on a line might each be rewarded with a fish at a single cast. The picture of a Michigan grayling in "Sport with Gun and Rod" is a most accurate portrait of the gamy fellows we captured near this part of the Yukon River, and I doubt not they are identical varieties, or very closely allied. Whenever the strong southern winds that had done us so much good in sailing over the lakes would cease, a light breeze from the north would follow with clearing weather and warm sunny days, and for a few days during this particular part of the year these zephyrs from the north would bring with them a perfect snowstorm of small brown moths or millers, not unlike the grasshopper plague of years ago on the Western plains. A puff of wind or an eddying gust would tumble many of them in the water where the current would pack them down in strings of brown color faster than the fish could think of eating them, and most curious of all it was during this very time that we caught our gamy grayling, and that, too, with brown flies. The millers caught by the water and drifted

into eddies would not be touched, and it was only when an isolated one came beating its wings and fluttering on the waters' top around the swiftest corners that a spring for it was at all certain, and a brown hackle dancing around in the same place would monopolize every rise within the radius of a game fish's eyesight. They were not much inclined to jump at any time in the vicinity of the canyon or its rapids, probably fearing that the mosquitoes would eat them up, as some one remarked, but on several other occasions and places, especially during quiet but lowering and rainy evenings, they could be heard seeking their suppers, being probably the gnats and mosquitoes the rain was beating down; at least, let us all hope so and pray for rain and graylings or grayling.* Our Tahkheesh friends were as much surprised at this peculiar kind of fishing as the grayling themselves, and expressed their astonishment in guttural grunts.

They ate all the spare ones we would give them, which was often nearly a dozen apiece. The largest grayling we weighed was two pounds and a quarter.

Early on the morning of the 2d of July a small rafting party of two or three persons was sent over the portage trail to get below the cascades and help the raft's being brought ashore at that point, and were supplied with rope for that purpose. A little after 10 o'clock in the morning, Billy, our half-breed, entered the canyon with our canoe and disappeared around the corner of the basaltic columns. At 11:25 A. M. we loosened the raft from her moorings and, although it took fully five minutes to pole her out from the eddy where she had been moored, she at last got under headway and started out. The first accident was a smashing collision with the basaltic columns of the canyon's west side, that tore off the inner log in a twinkling and snapped off the outer one and shot it into the middle of the stream. It swung around the landing place with tremendous velocity and soon took up its original swiftness. Right about the center the canyon widens out into a circular basin of basalt where the water's edge might possibly be reached on the western shore, and in this whirlpool and boiling cauldron it was thought that the raft might get left spinning around in the big eddies, but no such misfortune befel it, and it shot through the basin so that a person on the banks couldn't have told it from a stern wheel steamer. It went grating over the rapids below, laboring like a ship in a heavy sea until nearly down to the sandhills by the cascades, when Billy and Indianne, a large burly Chilkat-Tahkheesh Indian, rowed out to meet it at the bend and, then gathering itself like a horse for a hurdle, it rushed at the cascades, first buried its nose in the flying froth, and then rising in the air shot through at an angle of twenty-five or thirty degrees in the air, sinking to a level in the simmering suds beyond. The same old halliards was gotten ashore that had stood us so well before, but it snapped like a thread as the raft reached its end.

A second attempt, about 400 to 450 yards below the cascades, was more successful, with a good, generous shaking up of the whole. Not far from here was a little grove of small pines, that had been well seasoned by some disasterous fire raging through them within the last two or three years, and as our present deck looked like the horizantal plan of a pound of fish hooks, we determined to take advantage of this little grove to redeck our boat, which was accordingly done. All of these groves and timber districts must be subject to periodical devastation of fire, especially the conifers, the spruce, the pine and other resin-bearing trees, according to the appearances that were presented to us from time to time along our route, and are no doubt set fire to by careless campers of nomadic Indians, or more probably by their setting fire to dense masses so as to throw up a thick smoke that can be seen for miles as signals. In most of the fired ranges the trees are quite large, and falling into decay after having been killed by the fire, they soon form an entanglement of blackened limbs and trunks. This is anything but easy for a pedestrian to make any headway through, especially when it is coupled, as usual, with a dense growth of young trees, whose limbs extend to the ground. As I have worked my way through them at a rate of a mile in twenty-four hours, I could not help thinking of the chances of escape if a grizzly bear should be out taking the fresh air at the same time, and the two paths should intersect at an angle of 180°, and the bear was of that unreasonable nature that insisted on the whole path and that "mighty quick." But as no bear in his right mind would have lived twenty-four hours among so many mosquitoes for all the unwashed explorers from "the land of the midnight sun" to "the dark continent," no such a collision occurred, and I was left alone to fight my mosquitoes in peace. And, by the way, there is some reason why the grizzly should dread the mosquito of Alaska, and that reason is, that they have been known to kill them during the short summer months. Absurd as this appears, and as first it appeared to me, I was at last a convert to the theory advanced by the Indians, that the large brown bear of Alaska, here inappropriately, I think, called the grizzly, has been known to succumb to mosquitoes in these parts. I first heard of this on the lower river, and although I was in a better frame of mind than the average reader of the FOREST AND STREAM for believing the story, I did not, until an old trader in these parts who had no object in stuffing me, and whose every manner and conversation on every other subject was perfectly reliable, confirmed it. Should one of these big brown fellows, tempted by something unusual, as a savory mess of defunct salmon, wander down into or across a swamp unusually full of these prickly pirates, and they make their attack upon him, the bear is likely to rear up on his hindquarters, bruin fashion, and fight them with his paws until he is nearly exhausted and his eyes become vulnerable to the incessant attacks of the insects, and in course of time they are swollen shut, and if in this condition the bear is not able to get away from the district, or should get deeper into the marsh, starvation finally ends his sufferings. Hard as this is to believe I felt that the reasoning was not unreasonable and the outside facts in the case strongly corroborating it in all that was needed to make it appear possible and even probable. I think I have spoken in a former article of the widespread terror the brown bear produces among all the Alaska natives within the limits of my travels. I found the animals or heard of them, by this means principally, along the whole length of the Yukon, and extending back along all its estuaries whose Indian tribes visit the great river.

[TO BE CONTINUED.]

*"Would you say that graylings or grayling were caught in large numbers on the Upper Yukon?" asked one writer of another of the party as they sat together in the evening balancing accounts for the day. "It makes no difference whether you lie in the singular or plural in Alaska," was the unsatisfactory answer of the individual interrogated, who had supposed the questioner referred to the Yukon above this place as the "Upper."

Natural History.

THE DEER OF THE OTTAWA VALLEY.

BY WILLIAM PITTMAN LETT.

[Read before the Field Naturalists' Club of the City of Ottawa, Ontario, Canada, on the 13th day of March, 1884.]

"The antler'd monarch of the waste
Sprang from his heathery couch in haste.
But, ere his fleet career he took,
The dewdrops from his flanks he shook;
Like crested leader, proud and high,
Toss'd his beam'd frontlet to the sky:
A moment gazed adown the dale,
A moment snuffed the tainted gale,
A moment listened to the cry
That thicken'd as the chase drew nigh;
Then, as the headmost foes appear'd,
With one brave bound the copse he clear'd,
And, stretching forward, free and far,
Sought the wild heaths of Uam-Var."

—*Lady of the Lake.*

IN engaging, as briefly as possible, in the, to me, delightful task of dealing with the deer of the Ottawa Valley, I shall be obliged, for the sake of necessary conciseness, as far as may be, to steer clear of the rifle, the camp-fire and the runway, and confine myself to hard and, if possible, interesting facts connected with the history of the noble and beautiful race of animals of which I am to treat.

First and foremost on the list, properly and correctly, I believe, I shall place the wapiti (*Cervus canadensis*), the great stag of Canada. I do so on account of his being not only the most noble specimen of the genus in America, but by far the most beautiful and stately animal of the deer tribe in the world. No animal known to naturalists carries such a magestic and symmetrical set of horns as the wapiti. In this particular he far surpasses the great sambur of India and the red stag of the British Islands. A large male of this species will weigh between eight hundred and a thousand pounds, the female, when full grown and fat, weighing upwards of seven hundred pounds. The form of this noble animal is compact, strongly built and graceful, the only apparent drawback to its perfect beauty being the shortness of its tail. A large buck wapiti stands seventeen hands high, equal to the height of a large horse. The colour is yellowish brown, verging towards a dark, glossy brown about the head and shoulders, belly brown, and a yellowish white patch on each hindquarter. The horns, however, constitute the greatest point of beauty in the wapiti. Antlers of the largest size have been frequently met with measuring upwards of six feet from the burr, around the beam to the highest point, ornamented with four formidable brow antlers, two over each eye, each eighteen, and sometimes twenty-four inches long, curved upward, and elegantly tapering and sharp and smooth at the points. The other prongs or tines range from a foot to eighteen inches in length, and are nicely graduated to fine points, as if they had been artificially tapered and polished. The horns shoot upward with a graceful sweep, and are generally peculiar for the almost uniform regularity of their growth. The largest stag of the highlands of Scotland would appear but a mere fawn standing beside a full-grown, peerlessly-crowned stag of Canada. The monarch of the highland glens seldom reaches more than four hundred and twenty-five pounds in weight, while his giant American congener turns the scale, when gralloched, at double that weight.

The wapiti—long misnamed an elk—was formerly quite numerous in the Ottawa Valley. In contradistinction to the cariboo and the moose, he was found more generally on the southern shore of the river. One hundred years ago these animals were still present in no inconsiderable numbers in the county of Carleton, the hardwood forests of which were their favorite haunts. The horns of the wapiti are still quite frequently turned up by the plough in the vicinity of the city of Ottawa. I have frequently found them when a boy, in the woods around the village of Richmond, lying on the surface of the ground in a pretty fair state of preservation, a sure indication that not very long before those majestic animals must have been natives of our immediate neighborhood. The fragment of a wapiti horn, which I show you now, was found a few years ago near Eastman's Springs, and about eight years ago a much larger and more perfect specimen was found on the farm of Mr. R. J. Hinton, within two miles of the city limits. Many naturalists imagine that the presence of the wapiti in this neighborhood dates back to a period comparatively remote. This, however, can scarcely be the case, as facts more conclusive than even the finding of their horns can be adduced in proof of those animals having been numerous here less than one hundred years ago. Mr. Rice Honeywell, of the township of Nepean, one of our earliest settlers in this region, positively affirms that within the last seventy years he has seen the wapiti both alive and dead within four miles of the city of Ottawa, on the old Thompson farm. Mr. Honeywell knows well the difference between a wapiti and a moose, many of the latter he was in the habit of seeing in the same locality. This brings the period of the existence of this grand animal in our midst much closer and less remote than is generally supposed. The wapiti is still hunted successfully, being much less vigilant and much more easily approached than any other Canadian deer. In the Northwest, the Indians ride in amongst a herd, keeping well down on the necks of their horses, and thus frequently succeed in killing a herd of nine or ten in a few minutes. A wounded wapiti is a dangerous animal to approach unprepared, as many an unlucky hunter has found out to his cost.

The progress of settlement, the cutting down of the forests and the resistless march of civilization has driven those noble animals out of their old haunts. The race in this neighborhood was by no means exterminated; for then there were but few hunters, and the appliances for slaughter were of a much more primitive description than the arms of precision of the present day. Rifles in Canada were unknown in the days of the wapiti; and the weapon of the Algonquin, the Iroquois and the Abenakis was the bow and arrow. Like the Indian, the wapiti has had to travel before the aggressive strokes of the axe toward the setting sun; and he is now only to be found in Canada at the North and South forks of the Saskatchewan in any great numbers. Parker Gilmore, a famous sportsman and a naturalist of no mean order, says: "I do not think from the information I have been able to obtain from searching old authorities who have written on the fauna of North America, that the range of the wapiti ever extended eastward to the Atlantic seaboard; but that their habitat commenced with the prairie country, say Illinois or Indiana. However, those States have long ceased to know them; for, like other large game, they have rapidly retired before the tide of emigration. The upper waters of the Missouri, the plains around the fork of the North and South Saskatchewan are where, at present, this mammoth stag will be found most abundant."

The stag of Canada, like the cariboo, is essentially gregarious, the herds frequently numbering hundreds. Those grand animals, year after year, are growing scarcer. The assassin skin-hunter and the repeating rifle are doing their deadly work amongst them, and the time will shortly arrive, if legislatures in Canada and the United States do not forthwith undertake the needed work of protection with a strong and relentless hand, when this stately ornament of forest and prairie will leave his last shed antlers to tell the people of no distant day of the folly and improvidence which deprived them of a woodland glory of which any country ought to be proud. The miserable, thoughtless Indian, and the atrocious skin-hunter, have nearly exterminated the bison, the mightiest of all American game animals. The boundless prairies where they were formerly to be found by hundreds of thousands, even in millions, are now wide wastes covered by the white bones of the butchered herds. The tramp which shook the prairie as the mighty cavalcades thundered along, is no longer heard; and small bands of ten or twenty here and there, like heaps of ashes, indicating where fires had once been, alone tell the pitiful story of the present.

Do not say that I speak from a sportsman's selfishness. I never expect to kill a bison or a wapiti; but I love the beasts of the wilderness and the beautiful birds of the air. If I could, I would not exterminate even the skunk. Each beast of the field and each bird of the air has been allotted its proper place, and assigned its legitimate position of usefulness or beauty; and I hold no feeling in common with the man who, through avarice or cruelty, wantonly destroys them.

The wapiti has long been called an elk, while it has always been well known by naturalists that he has none of the distinguishing characteristics of the genus *Alces*, in either form, appearance, anatomy or shape of horns, but must be recognized as the head of the family of stags, the largest and the most stately of the whole tribe of the *Cervidæ*. To this family belong the red deer of the British Islands and the Indian and Asiatic stags. It is time that the misnomer applied to the wapiti were transferred to the moose, the true elk and undoubted congener of the Scandinavian and great Irish elk. In this particular of misnaming, history, year after year, repeats itself, and, as it were, causes the world to listen again and again to a gross misrepresentation, countenanced and tolerated by science.

THE BARREN GROUND CARIBOO (*Tarandus arcticus*).

As you are all doubtless aware, there are two species of the reindeer of North America—the barren ground cariboo and the woodland cariboo (*Tarandus rangifer*)—resembling each other in almost every particular, excepting in size of body and shape of horns. The barren ground cariboo is found in every part of Arctic America, including the region from Hudson's Bay to within the Arctic circle. It is somewhat smaller than our common deer (*Cervus virginianus*), the largest bucks seldom weighing more than 125 pounds when skinned and dressed. These animals, however, do not entirely confine themselves to the extreme north, but in the autumn migrate southward, and spend the winter in the woods, where they have been frequently killed by the Indians. Both male and female of this species have horns, and, like all animals of the deer genus, shed them yearly, in the month of February, somewhat later in the season than the red deer of America. Like the wapiti, the cariboo of both species have canine teeth in the upper jaw, but no incisors. The smaller species, not being now, nor has it been at any time common to the valley of the Ottawa, and being nearly identical in habits with the larger, I shall not go into any more minute particulars as to food, color, size or habits of the former, but proceed with a description of the larger species, which has always been, and is still, an inhabitant of certain parts of the Ottawa country.

The woodland cariboo (*Tarandus rangifer*), as I have remarked, is similar in appearance and habits to the *Tarandus arcticus*, but double as large, with shorter and stouter horns in proportion to its size. It inhabits Labrador and Northern Canada, and thence may be found south to Nova Scotia and New Brunswick, the northern part of the State of Maine and Lower Canada on both sides of the St. Lawrence, thence westerly in the country north of Quebec back of Lake Superior. It never migrates towards the north, but makes its migration in a southerly direction. In this particular it acts directly opposite to the course pursued by the smaller species in its migrations. The following is the description given by Audubon of this deer:

"Larger and less graceful than the common American deer, body short and heavy, neck stout, hoofs thin and flattened, broad and spreading, excavated or concave beneath; accessory hoofs large and thin, legs short, no glandular opening and scarcely a perceptible tuft on the hind legs; nose somewhat like that of a cow, but fully covered with soft hairs of a somewhat moderate length; no beard, but on the under side of the neck a line of hairs about four inches in length, which hang down in a longitudinal direction; ears small, blunt and oval, thickly covered with hair on both surfaces; horns one foot three and a half inches in height, slender, one with two and the other with one prong; prongs about five inches long, hair soft and woolly underneath, the longer hairs, like those of the antelope, crimped or waved, and about one to one and a half inches long." As to the color of the animal, this author states that, "at the roots the hairs are whitish, then become brownish gray, whiter on the neck than elsewhere; nose, ears and outer surface of legs and shoulders brownish, a slight shade of the same tinge behind the fore legs, hoofs black and throat dull white, a faint whitish patch on the side of the shoulders, forehead brownish white, belly white, tail white, with a slight shade of brown at the root and on the whole upper surface, outside of legs brown, a band of white around all the legs adjoining the hoofs and extending to the small secondary hoofs, horns yellowish brown, worn white in places."

This description is all very well, and in the main points generally correct. The rather arbitrary dimensions given of the horns is scarcely borne out or corroborated by the practical naturalist known as the hunter. The horns measured by Audubon for this description were likely those of a female. Here before you are two sets of horns of the woodland cariboo, both of which came from above the Desert River on the Gatineau, seventy or eighty miles further north. They are singularly dissimilar in appearance, and I am of opinion that both were taken from the heads of male animals. I saw a pair of cariboo horns some years ago in the possession of Mr. Hiram Robinson of this city, which were very much

larger, more massive and wide-spreading, and had many more and longer prongs than either of these. The height of a full-grown animal of this species is about four and a half feet, and the weight of its carcass about 350 pounds. Large bucks are occasionally met with nearly 400 pounds in weight. The food of the cariboo consists of mosses, lichens and creeping plants found in the swamps in summer, and in search of which it paws up the snow with its hoofs in winter. The flesh when fat is most delicious venison; when thin and meagre it is dry and insipid. The cariboo is the fleetest of American deer. In galloping it makes most extraordinary leaps; and as a trotter, the slow-going 2:15 horses attempting to compete with him would be simply nowhere. Like his useful congener—some authors believe them to be of the same species—the reindeer of Northern Europe, the cariboo is possessed of great powers of endurance, frequently escaping from the Indian hunters after the fatigue and starvation inseparable from four or five days of a continuous following up hunt. When the hunted animal gets upon glare ice, over which he can glide at a rate that would double upon the fleetest skater, the hunter is obliged to give it up as a bad job. The cariboo is a shy and exceedingly wary animal, and most difficult to still-hunt, neither can he be successfully hunted in deep snow, he being enabled to go over the surface of the snow like a hare, upon his broad flat hoofs. So far as I have ever been able to learn, it is only time lost attempting to hunt them with dogs. The hounds might follow the scent, but they could scarcely ever be in at the death, and it is pretty well known that dogs cannot drive them to water. They are, however, successfully still-hunted by Indians, and also by white hunters skilled in the craft. Large numbers of them are also frequently slaughtered when discovered swimming across a river or lake in their migrations. The cariboo is still to be found in considerable abundance on the Riviere du Lievres as close as sixty or seventy miles from the Ottawa, on the Gatineau River above the Desert, and in more limited numbers above Pembroke, in the neighborhood of Black River, and along the shores of Lake Nipissing; they are still plentiful on both sides of the St. Lawrence, beyond Riviere du Loup below Quebec. They are also quite numerous on the northern shore of Lake Superior. I have no recollection of cariboo being met with on the south shore of the Ottawa River, with the exception of an odd one occasionally many years ago; in each of such cases the animals had evidently strayed from the north side, which has always been their true and natural habitat. The skin of the cariboo, when tanned, is made into moccasins and wind-proof garments, and in its raw state is used in the manufacture of snowshoes. It is fine, thin, tough and durable. Frank Forester has described hunting the woodland caribou in the following terms:

"As to his habits, while the Lapland or Siberian reindeer is the tamest and most docile of its genus, the American cariboo is the fiercest, fleetest, wildest, shyest and most untameable. So much so, that they are rarely pursued by white hunters, or shot by them except through casual good fortune; Indians alone having the patience and instinctive craft, which enables them to crawl unseen, unsmelt—for the nose of the cariboo can detect the smallest taint upon the air of anything human at least two miles up wind of him—and unsuspected. If he takes alarm and starts off on the run, no one dreams of pursuing. As well pursue the wind, of which no man knoweth whence it cometh or whither it goeth. Snowshoes against him alone avail little, for propped upon the broad, natural snowshoes of his long, elastic pasterns and wide cleft clacking hoofs, he shoots over the crust of the deepest drifts unbroken; in which the lordly moose would soon flounder, shoulder deep, if hard pressed, and the graceful deer would fall despairing, and bleat in vain for mercy—but he, the ship of the winter wilderness, out-speeds the wind among his native pines and tamaracs—even as the desert ship, the dromedary, out-trots the red simoon on the terrible Sahara—and once started may be seen no more by human eyes, nor run down by fleetest feet of man, no, not if they pursue him from their nightly casual camps, unwearied, following his trail by the day, by the week, by the month, till a fresh snow effaces his tracks, and leaves the hunter at the last, as he was at the first of the chase, less only the fatigue, the disappointment and the folly."

While we have no historical record of the woodland cariboo ever having been found in any considerable numbers on the south shore of the Ottawa, I think there can be little doubt of its having been quite plentiful on the north side of the Ottawa within a few miles, sixty or seventy years ago. As mentioned before, stray members of the family have been, to my own knowledge, seen on the south side of the Ottawa, one having been killed at L'Origual about twenty years ago. The cariboo migrates in herds of from ten to two, three and four hundred, and it is a notable fact that a concealed hunter, with the wind in his favor, if he has ammunition enough and does not show himself, can slaughter a whole herd, providing the man behind the rifle is "the right man in the right place." While under ordinary conditions the cariboo is the most difficult of approach of any known species of deer, when accidentally met with under circumstances such as I have mentioned, the animals seem to be completely panic-stricken, and unable to make any attempt to escape.

[TO BE CONCLUDED.]

BIRD NOTES.

WHILE out on the 23d day of February, to find out if all the quails had perished during the deep snows and severe cold of the past winter, my dogs found a nice little bevy of eight. This goes to prove that Bob White has lived through the inclement weather and will multiply the coming season. My dogs also found on that day a woodcock in an alder thicket. Is not this early for Mr. Longbill to be in New England? Robins and bluebirds are plenty, and have been for the last three weeks. D. D.

GLENVILLE, Conn., March 4.

Partridges, squirrels, rabbits and such game have wintered well. While in the woods lately I heard numbers of gray squirrels barking all around me, but did not try to get a shot, as I was out for pine grosbeaks and bluejays, which have been very plenty. I have secured several fine specimens of males but taking no more than I wish to mount. The Lapland bunting and black snowbird are very scarce, have mounted but one of each. A. C. MILLER.

BROOKFIELD, N. Y., Feb. 10.

I saw a blackbird this morning. It was snowing very hard at the time, and my advice to the voyager was to lay his course due south for at least twenty days. Never saw one so early in the season before. PARSON O'GATH.

GORE, O., March 5.

SEALS IN THE UPPER ST. LAWRENCE.

BY C. HART MERRIAM, M.D.

SEALS are commonly supposed to confine themselves to the immediate vicinity of the sea; still they frequently ascend large rivers, and have been known to reach fresh-water lakes far in the interior. At least two have been killed in Lake Champlain, and several have been recorded from Lake Ontario. The most extraordinary record that I have seen is that already published in your columns concerning the capture of a seal in Onondaga Lake, in the interior of New York State. This animal was shot (April 28, 1882) by George F. Kennedy in the very suburbs of the city of Syracuse. (FOREST AND STREAM, Vol. XVIII., No. 15, May 11, 1882, p. 286). As stated by your correspondent, it must have ascended the Oswego River from Lake Ontario.

All of these examples belong to the species known as the harbor seal or dotard (*Phoca vitulina*), which is at present abundant in the St. Lawrence, fifty miles below Quebec. In the Brockville *Evening Recorder* for Jan. 11, 1884, appeared the following: "Seals in the St. Lawrence.—Several gentlemen crossing the river from Morristown this morning were considerably surprised to find in the open water near the first Sister Island an exceedingly lively seal, which was gamboling about in apparent glee. When first noticed it was making an abortive attempt to capture two winter ducks, failing in which it suddenly went under water and out of sight. Mr. William Griffiths, of Morristown, one of the gentlemen who witnessed the animal's gambols, says it was about the size of an ordinary Newfoundland dog. Seals have been seen in the St. Lawrence on several occasions during the past few years, and two have been known to meet death at the hands of fishermen, one at Chippewa Bay and one at Wolfe Island."

Upon reading this notice I wrote to Captain Ward Plumb, of the steamer Armstong, for further information, and he has kindly favored me with the following facts: He first saw the seal at 9 A. M., Jan. 11, ult., a quarter of a mile from Morristown, and says, "We were then crossing over to Brockville. It kept ahead of us all the way across, occasionally coming up so we had a full view of it. I should judge its size was that of the end of a flour barrel. Its color was a very dark brown. The last I saw of it was at 4 P. M. the same day, but have since learned of its presence about four miles above here, at a place called McDonald's Point. Two years ago one was caught in a gill net at Chippewa Bay, twelve miles above Brockville, but was dead when found." Chippewa Bay is about twenty five miles above Ogdensburg and fifty from Lake Ontario. Wolfe Island is at the point where Lake Ontario flows into the St. Lawrence, about 600 miles above the Gulf of St. Lawrence.

ORTYX VIRGINIANUS NOT IN ARIZONA.—The article in last week's FOREST AND STREAM (p. 104), copied from the Tucson *Weekly Citizen*, stating the capture of this species in the Barboquivari range, probably refers to the Massena quail (*Cyrtonyx massena*), which occurs abundantly in many parts of Arizona. *Ortyx virginianus* has not been traced further west than Central Texas, where it is confined to the country east of Llano Estacado, or Staked Plains; and the birds occurring there are a light-colored, grayish race, distinguished from *O. virginianus* proper by the name *O. virginianus texanus*, or Texan quail. *Cyrtonyx massena* presents somewhat of a superficial resemblance to *O. virginianus*, but upon comparison will be found exceedingly distinct, both in form and coloration. If not the Massena quail, the bird referred to must be one of the Mexican species of *Ortyx* (perhaps *O. graysoni*), none of which, however, have been taken on our side of the boundary line. In order to settle the question, it is very desirable that a specimen be sent for examination; merely a wing, with a portion of the skin of the breast, with feathers attached, would be sufficient to insure identification.—ROBERT RIDGWAY (Smithsonian Institution). [We were assured by the writer of the article in the Tucson *Citizen* that the birds were Bob White. We will have more definite information on the subject shortly.]

ICE ALWAYS FLOATS.—If I am not mistaken I read an account in your paper some time ago in regard to ice sinking in some small lakes in the spring. I once lived near a small lake where the ice would disappear very suddenly, and I was told that it sunk. Will you please advise me if you ever heard of such a thing?—W. D. S. (Smithport, Pa.). [Water expands in freezing, and ice always floats. Anchor ice, often seen on the bottom of streams, is formed there, and is held in its place by cohesion between it and the stones at the bottom. The impression that ice sinks arises, no doubt, from its sudden disappearance. It is usually supposed to sink in spring when the waters of the lake are growing warmer constantly, and the ice is melting from below as well as above. If under such conditions the waters of the lake are agitated by a wind and the warmer lower strata are thus brought to the surface, the ice will often disappear in a few hours.]

MANY RATTLES—Mr. Grant, of our town, has recently returned from Florida, where his son has a plantation, bringing many things which, though common there, are looked upon as curiosities here. Among the collection was one thing which is really a curiosity—it being the rattles from a rattlesnake killed near the plantation, and the tail shows twenty-nine (29) rattles. Bluebirds and song sparrows were seen here Feb. 17.—S. F. DEXTER (Pawtucket, March 8).

CONCERNING ROBINS.—*Editor Forest and Stream:* A few days since, while on a St. Augustine ferry boat, a native white man came aboard with a shotgun and a bag of forty robins, shot in the woods opposite Jacksonville. I inquired what he proposed to do with them, and he replied: "O, them's mighty fine eating, and we shoot heaps of them every winter." I looked the thing square in the face and replied: "Fortunate for you, sir, that you live in the South; if you were seen in the North with that bag of song birds in your possession you would be lynched, and your carcass given to the crows;" and turning on my heel, I moved to a less irritating atmosphere. Is it lawful, Mr. Editor, to so slaughter the little songsters that sing so sweetly about our Northern homes? Would it not be well for a few missionaries from the North to visit this section and labor with the lawmakers? It seems to be an inviting field with plenty to do. —A. T. S. [Robins are shot in the North as well as in the South. One country is not much behind the other in the wholesale methods of game killing. If our correspondent wants to do missionary work in this direction, he can probably find a field at home. But to give a man to understand that he is deserving of a halter is hardly the way to convert him to your way of thinking. Our correspondent neglects to tell us what the Floridian said, and this omission is to be deplored, for doubtless the remarks were interesting.]

Game Bag and Gun.

THE YELLOWSTONE PARK BILL.

WE print below the text of the bill passed March 6 by the Senate, providing for the enlargement and better protection of the National Park. It is an interesting document and will well repay study.

The letter from Mr. Arnold Hague, of the Geological Survey, will commend itself to our readers. The writer is thoroughly familiar with the Park, and his opinions are entitled to the greatest weight.

A Bill to amend sections twenty-four hundred and seventy-four and twenty-four hundred and seventy-five of the Revised Statutes of the United States, setting apart a certain tract of land lying near the head waters of the Yellowstone River as a public park.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the boundaries of the Yellowstone National Park, as now fixed by section numbered twenty-four hundred and seventy-four of the Revised Statutes, shall hereafter be as follows: Beginning at a point on the forty-fifth parallel of north latitude where said parallel is intersected by the meridian of one hundred and eleven degrees west longitude; thence due east to a point on said meridian within ten miles of the eastern boundary of the Park as now established; thence due south five miles; thence due east to the meridian of one hundred and nine degrees and thirty minutes west longitude; thence due south along said meridian to the forty-fourth parallel of north latitude; thence due west along said parallel to its point of intersection with the meridian of one hundred and eleven degrees west longitude; thence due north along said meridian to the place of beginning; and it shall be the duty of the Secretary of the Interior to cause an accurate survey to be made of the boundary lines of said Park as established by this act, said survey to be recorded in the offices of the Surveyor-General and Commissioner of the General Land Office of the United States, as provided by law.

Sec. 2. That all of the territory embraced within the limits of the Park as herein established shall be reserved and withdrawn from settlement, occupancy or sale under the laws of the United States, and dedicated and set apart as a public park or pleasure ground for the benefit and enjoyment of the people of the United States; and said territory so set apart shall be under the control of the Secretary of the Interior, and subject to all the provisions of sections numbered twenty-four hundred and seventy-four and twenty-four hundred and seventy-five of the Revised Statutes of the United States, except as herein otherwise provided.

Sec. 3. That the Secretary of the Interior shall make and publish such rules and regulations as he may deem necessary and proper for the management and care of the Park, especially for the preservation from injury or spoliation of all timber, mineral deposits, natural curiosities, or wonderful objects within said Park, and for the protection of the game animals found in the Park, to prevent their capture or destruction. He shall cause all persons trespassing upon the Park to be removed therefrom, and shall take all measures which he may think necessary to carry out the purposes of this act; and the Secretary of War is hereby directed to make such details of troops as the Secretary of the Interior, with the approval of the President, may require for the purpose of preventing trespassers or intruders from entering the Park with the object of destroying the game therein, or other illegal purposes, and for removing such persons from the Park.

Sec. 4. That the killing, wounding, or capturing, at any time, of any buffalo, bison, moose, elk, deer, mountain sheep, Rocky Mountain goat, antelope, beaver, otter, martin, fisher, grouse, prairie chicken, pheasant, fool-hen, partridge, quail, wild goose, duck, eagle, magpie, swan, heron, sparrow, robin, meadow lark, thrush, goldfinch, flicker or yellowhammer, blackbird, oriole, jay, snowbird, or any of the small birds commonly known as singing-birds, is prohibited within the limits of said Park; nor shall any fish be taken out of the waters of the Park by means of seines, nets, traps, or by the use of drugs, or any explosive substances or compounds, or in any other way than by hook and line. Any person violating the provisions of this section shall be deemed guilty of a misdemeanor, and, upon conviction, shall be fined for each offense not less than twenty nor more than one hundred dollars, or by imprisonment for not more than three months, or by both such fine and imprisonment. Possession of the dead bodies, or any part thereof, of any of the animals or birds hereinbefore mentioned, shall be prima facie evidence that the person or persons having the same are guilty of violating this act. Any person or persons, or stage, express, or railroad company, receiving for transportation any of the animals, birds, or fish named herein, knowing or having reasonable cause to believe that such animals, birds, or fish were killed or captured in violation of this act, shall be deemed guilty of a misdemeanor, and shall forfeit and pay for every such offense the sum of two hundred and fifty dollars, to be recovered by a proceeding in the nature of an information before any Territorial or United States district court within whose jurisdiction such offense was committed; and it shall be the duty of the district attorney of the United States for such Territory or district to institute and prosecute said proceeding in the name of the United States, the amount collected from the party offending to be paid into the treasury of the United States.

Sec. 5. That the Secretary of the Interior may lease small portions of ground in the Park, not exceeding ten acres in extent for each tract, on which may be erected hotels and the necessary out-buildings, and for a period not exceeding ten years; but such lease shall not include any of the geysers or other objects of curiosity or interest in said Park, or exclude the public from the free and convenient approach thereto, or include any ground within one quarter of a mile of any of the geysers or the Yellowstone Falls, nor shall there be leased more than one tract of not exceeding ten acres to any one person, association or corporation; nor shall any hotel or other buildings be erected within the Park until such lease shall be executed by the Secretary of the Interior; and all contracts, agreements or exclusive privileges heretofore made or given in regard to said Park, or any part thereof, inconsistent with this act, are hereby declared invalid; nor shall the Secretary of the Interior, in any lease which he may make and execute, grant any exclusive privileges within said Park, except upon the ground leased.

Sec. 6. That for the purpose of giving protection to life and property within said Park the laws of the Territory of Montana are hereby extended over the same, so far as said laws do not conflict with this act; and said Park is declared to be, for the purpose aforesaid, and the administration of justice generally therein, a part of the county of Gallatin, in said Territory, until Congress shall otherwise provide. All costs and expenses arising in cases under this act, and properly chargeable to the United States, shall be certified by the court or justice trying said cases to the United States marshal for Montana, and shall be paid by him out of any public funds in his hands, and be reported by him to the Department of Justice, as in the case of other cases in the United States courts. The violation of any regulation made and published by the Secretary of the Interior in regard to the control and management of the Park, and the protection of the game and public property therein, is hereby declared to be a misdemeanor, and the party convicted shall be punished for each offense by a fine of not less than twenty nor more than one hundred dollars, or by imprisonment for not exceeding three months, or by both such fine and imprisonment.

Sec. 7. That the Secretary of the Interior shall appoint a superintendent of the Park, who shall be paid an annual salary of two thousand dollars, and fifteen assistants, who shall each be paid annually nine hundred dollars. And it shall be the duty of said superintendent and his assistants to reside continuously in the Park, and to protect the game and public property, to preserve the peace, and prevent crime; and for this purpose they shall have power to arrest all persons committing any crime or misdemeanor within the Park, and shall also have all the powers and duties conferred by law upon the sheriffs and constables for the Territory of Montana, and their deputies: Provided, That the power hereby conferred shall be exercised only within the limits of said Park, and in conveying persons arrested to the nearest court or officer having jurisdiction of the crime or misdemeanor with which the person or persons have been charged: And provided also, That nothing herein contained shall be construed as preventing the United States marshals from serving within the territory of the Park any writ or process issued by lawful authority: And provided also, That no timber in said Park shall be cut, either for building purposes or for firewood, except by the permission in writing of the superintendent of said Park, specifying the place at which said timber may be cut, and the quantity thereof.

Sec. 8. That the Secretary of War shall detail an officer from the Corps of Engineers whose duty it shall be to survey and lay out suitable roads in said Park, and select the proper location for bridges therein; and the Secretary of War shall, upon the report of said officer, make annual estimates for the cost of such improvements, and communicate the same to Congress, with such other recommendations in regard to the Park as he may deem proper; and all sums received by the Secretary of the Interior from rents in the Park, or arising from fines or forfeitures for violations of the laws and regulations made for the government of said Park, and protection of the game and public property therein, shall be applied to the improve-

ments hereinbefore mentioned; and the officer or officers collecting said fines and forfeitures shall pay the same to the Superintendent of the Park, to be accounted for by him to the Secretary of the Interior.

Sec. 9. That all leases, contracts, rules and regulations made or issued by the Secretary of the Interior as herein provided for shall be subject to the approval of the President.

NEW YORK, Dec. 28, 1883.

Hon. George G. Vest, United States Senator, Washington, D. C.:

SIR—During an interview, last summer, on the borders of the Yellowstone Lake, you asked me, on my returning East, to give you my views about the Park, and such suggestions as seemed to me necessary for its protection and preservation. Expecting to be in Washington in January, I deferred the matter, hoping to see you then, and present a few suggestions more fully than I could by letter. Noticing, however, that you had brought the subject up in the United States Senate, I take the liberty of writing you in regard to one or two points upon which, it seems to me, some action should be taken this winter.

The most important object to be gained in maintaining the national reservation is the preservation of the forests which now cover the greater part of the Park plateau and neighboring mountains. The Park is situated along the continental watershed, in a region remarkably well favored in its rain and snow fall, and abounding in such broad sheets of water as the Yellowstone, Shoshone, Lewis, and Heart lakes. These lakes are the sources and natural reservoirs of the Mississippi and Columbia rivers, and for the supply and storing up of the waters the forest is an absolute necessity. Without arguing the question at length, I need only call your attention to the discussion now going on in New York State in regard to the importance of preserving the Adirondack forest, by State legislation, in order to maintain a steady supply of water for the Hudson River. The difficulties and expenses of buying and controlling this forest region at this late date are found to be very great.

No such reasons exist to-day against forever protecting the forests in the neighborhood of the Park; while the reasons for so doing are equally urgent. In a country like the far West, with its vast treeless areas rapidly being taken up by settlers, it is all the more important that certain exceptionally situated timber regions should be carefully protected by law, before seized upon by people.

For these reasons I wish to see the Park area considerably extended to the south and east, and at the same time to slightly alter the boundaries on the north and west. In the original bill setting aside the Park domain the boundaries are somewhat loosely stated, and should at all events be more clearly defined.

The present northern boundary is at the "junction of the Gardiner's River with the Yellowstone River." By making the 45th parallel the northern boundary it places the line about two miles south of the present one, and makes it the same as the boundary between the Territories of Wyoming and Montana. In making this change but little would be lost in the way of timber land or natural scenery needing protection. The Mammoth Hot Springs would still be two miles south of the boundary.

The western boundary is very poorly defined, the law reading "the meridian passing fifteen miles west of the most western point of Madison Lake." At that time Shoshone Lake was frequently designated as Madison Lake, and is so called in the bill setting aside the Park, as it was supposed to be the headwaters of the Madison River. As you well know, however, the Shoshone is one of the sources of Snake River, the headwaters of the Madison rising in a small insignificant lake. By placing the western line along the one hundred and eleventh meridian it would be made to coincide with the boundary between Wyoming and Montana, and would at the same time only cut off a strip about two miles wide. It would place the Park wholly within Wyoming.

According to the present law, the eastern and southern boundaries of the Park run ten miles from the most eastern and most southern points of the Yellowstone Lake. Now the southeastern end of Yellowstone Lake is low marshy ground, and between high and low water there is a considerable difference in the position of the shore line, a difference which might easily at some future time give rise to questions as to the ownership of valuable timber. This, however, a trivial question compared with the importance of extending the area of the Park both south and east. In my opinion the forty-fourth parallel of latitude would be the most suitable southern line. By extending the Park as far south it would take in a rough mountainous country mainly made up of volcanic lavas, but densely covered with forests and a resort for large game. On the other hand, by extending the line still further south, there would be some danger of including what might prove, upon exploration, to be valuable mineral lands, as well as lands favorable for summer pasturage. This is the line, I believe, suggested two years ago by General Sheridan.

To the east of the Yellowstone Lake lies a broad elevated region, singularly rough and wild, full of striking and grand scenery, and densely covered forests. These mountains are the resort of large animals, and are regarded by hunters as the best game region anywhere in this part of the country. As shooting within the Park limits is prohibited, these mountains are already frequented both for sportsmen and those shooting to supply the demand of visitors in the Park for fresh meat.

I would recommend making the eastern boundary the meridian of 109° 30'. This would extend the area of the Park about thirty miles to the eastward of the present boundary. It would take in all the streams draining westward to the Yellowstone River and the headwaters of most of the streams running eastward, besides adding largely to the domain of timber and protected game area. General Sheridan advised carrying the line further east, to Cedar Hill. This, I understand, would take land already occupied by ranchmen as grazing country, upon which a number of people have already settled. It is also more likely to embrace valuable mineral land, and is moreover a far less definite point than a standard meridian line.

As a Park for the preservation of game the present limits are by no means satisfactory, if it is intended, as it should be, to make the place one where large game will naturally roam, particularly when driven in from outside for protection; the neighborhood of the hot springs and the geyser basins is one which has never been used to any great extent by game as a permanent haunt, and the broad volcanic plateau lying between the geyser basin and the Yellowstone Lake and canyon is not a favorable grazing country. On the other hand, the mountains lying to the south, east and west abound in game, and present all the natural advantages sought for by deer and elk. Enlarge the Park and you make the whole area a game country.

It seems to me it should be the policy of the government, in the management of the Park, to protect above everything else the timber and game. If this view is correct then the admission of railways within the Park should be prohibited. Nothing would tend more to destroy the timber by the mere passage of trains through the forest. Moreover, the locomotive whistle and the additional traffic caused by railway transportation would convert the place into a public highway and tend to destroy all aspects of a Park. It would most effectually drive out all large game. The Park should be kept as a place of recreation and rest for those who can afford sufficient time to enjoy its benefits and reap the advantages of an out-door life. The country already offers a sufficient number of resorts for gripsack travelers who like to huddle together in large hotels and move with the crowd.

It is also very essential that more efficient means be taken to prevent the destruction of the deposits and incrustations around the springs and geysers. Probably no other place in the world bears any comparison to the Yellowstone Park in the display of the phenomena connected with thermal waters, and every precaution should be taken to preserve the place from destruction by tourists.

During the past season the demolition of these natural curiosities has been very great. I was surprised at the condition of the Mammoth Hot Springs upon my first visit early in August, but on returning to the springs in October I was amazed to see to what extent the destruction of the deposits had been carried on in the short space of three months.

Upon the general management of the Park I have some views which I would be glad to express to you, but preferred, in this already too long letter, to restrict myself to some of the more scientific questions, such as the all-important one of maintaining the forests, the protection of large game, and the preservation of natural curiosities of a scientific interest.

Very respectfully, your obedient servant,

ARNOLD HAGUE,
Geologist, United States Geological Survey.

BURSTED GUN BARRELS.—We presume that most men who know anything about guns are aware that it is injudicious to discharge a gun or rifle which has an obstruction in its barrel, for it is very likely that the barrel may be bursted. This familiar principle has lately been made the subject of a number of experiments by Mr. W. McK. Heath, of Philadelphia, who has burst several guns and rifles by shooting them with stuck bullets, snow, wet sand or mud in the barrel at the muzzle. Mr. Heath publishes a photograph showing the condition of fourteen such barrels after his experiments. He is with J. C. Grubb & Co., Philadelphia.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

I was pleased with the paraphrased remarks you made in issue of Feb. 21, to the effect that a comparison, muzzleloader versus breechloader, was a dead issue. Just so I consider it. No sportsman wants to go back to the muzzleloader. The advantages of the breechloading system are so well settled that it is quite proper to let all discussion on that point drop right here, save only that suggested by my first inquiries, the vital one of shooting qualities.

It so happens that we have to charge the shells of our breechloader upon principles (as recommended by the best authorities) entirely different from the charging of our old muzzleloaders. These principles are not understood by numbers who are novices with these improved weapons. I am free to confess my ignorance. This difficulty is aggravated by the various and contradictory instructions published by the different manufacturers. One utterly eschews paper shells and advises the use of metal shells exclusively. Another, a proportionately larger charge of powder than of shot. One, to use a pink-edge felt wad two sizes larger than the gauge of the gun. Still another claims that this is wrong; use wads of same gauge but two or three thicknesses of them between the powder and shot. Then, too, in the country, where breechloaders are rapidly being introduced, the force of old habit is so strong, aside from the further difficulty of obtaining exactly what you want in that line, for you cannot pick it up at a country store, your economical countryman loads his shells with an ordinary charge of common powder, a dossil of old paper for a wad, a charge of shot, and another dossil of old paper for a wad—the same as he managed his old muzzleloader—and so I might go on at much greater length, but this will suffice. Hence arise a diversity of results, independent, probably, of the intrinsic shooting qualities of the arm considered alone. Is it any wonder, then, that so many complain of failure?

If my former views, or inquiries rather, have led any of your correspondents astray touching these pertinent matters, I beg to recall them to the points proper for discussion—*range, closeness of distribution, and penetration.* How to attain these three desiderata.

In making comparisons, I think it quite proper to compare guns of equal gauge or caliber, using charges of same quantity or quality.

The result obtained by your correspondent "Oct," p. 66, Feb. 21, is certainly far ahead of anything in the way of pattern I have been able to accomplish.

If such grand results are only attainable, as some correspondents seem to intimate, by an increase of caliber (heavy weight and large gauge), then your modern "Sampson" has the advantage, for, while he may rejoice in slamming a quarter of a pound of shot after a single bird, very few of us small folks could stand up to that sort of "racket," nor would we, if we could.

I would commend the attention of the "big gun" men to the article by N. E. White to the Sacramento (Cal.) *Bee* (published in your paper of Feb. 28), as well as to my own in same issue.

BACKWOODS.

BEVERLY, W. Va.

Editor Forest and Stream:

I have owned half a dozen and experimented with as many more, both 10 and 12 gauges of standard manufacturers. My trials have proved to me at least the fallacy of a great many assertions about the sure killing powers of guns loaded with from 3 to 4 drams powder and from 1 to 1¼ ounces of shot. I have yet to see the gun, either of 10 or 12 gauge, I don't care how it is loaded (providing it is a field gun), that will kill every shot at 90, 80 or even 70 yards, measured distance. Of course a person will occasionally make an extra long shot, but to depend on it every time brings little but disappointment. A close, hard-shooting gun of either gauge loaded with the proper proportions will kill with No. 8, 9 or 10 shot, quail, snipe, woodcock, etc., with reasonable certainty at from 45 to 50 yards, which is the limit of certainty for these sizes. The larger sizes of shot will kill further simply on account of maintaining a greater velocity during flight over same distance. But the larger the shot the larger the pattern, and the greater distance between pellets decreases the certainty of killing very rapidly. If, on trial, the gun loaded with No. 4 to 6 shot will give a pattern at 60 yards, so close and evenly distributed that a duck or same sized bird cannot escape being struck even by one shot, I should not try to get a better one.

As to the most effective gauge, opinions differ widely. I prefer a 12-gauge for general shooting, on account of using less ammunition per load, and having less weight of ammunition to carry for given number of shots; and I think it has equal killing power. For general shooting, if loaded properly, a 12-gauge 2⅝-inch paper shell, loaded with 4 drams powder, 2 pink-edge wads and 1⅛ ounces shot, sizes from 6 down, or 1 ounce shot, sizes 7, 8, 9 or 10, will give as good result with most guns as any one could wish for. Of course the load is for the extreme distances; less powder and shot answers very well for shooting in cover. * * * *

Editor Forest and Stream:

There are three things in which I think many of us err. We use the small shot and too heavy charges, and are not careful enough in suiting the size of the grain of the powder to the length of the barrel of our guns. My field gun is a 12-gauge Webley, barrels only 26 inches. For larger game, ducks, etc., I use a 10-gauge, 30-inch barrels. In this gun I use 4 drams No. 8 Curtis & Harvey's powder and 1¼ ounces of shot. In the 12-gauge, 3 drams a size finer, with 1 ounce shot. Some may ask, why this change in the quality of the powder? All will admit that in order to get the full power of the powder it must be burnt in the barrel. If I load my 26-inch gun with the coarser grade, I find some of it blown out without being burnt, adding nothing to the force of the charge. In my 30-inch barrels a much smaller portion escapes, as it has longer time in the barrel to ignite and exert its force behind the shot. In regard to the relative charges of powder and shot, my experience teaches me that the proportions stated are not far out of the way. We want always all the speed put into our lead that we can get, even then it sometimes seems to me a frightened quail will keep ahead of the swiftest shot; so we must not plug up our guns with too much lead. Am I right? I claim that no small proportion of the birds we hit are lost because they are not knocked right down, but fly out of sight before they drop. I admit that at the best, we cannot always make dead shots, but I do believe that the wounded birds we leave for the foxes would be less if we used heavier lead. For woodcock I use number eight. They are a tender bird, and if hit with but three or four pellets, are pretty sure to stop, where the plucky "Bob Whites" sail away beyond your sight. For them and ruffed grouse I find number six is not too large.

As to muzzle or breechloaders, I am sure your verdict is in accordance with the facts; the muzzleloaders are a "thing of the past." Years ago I owned one, a far-shooting gun; with its left barrel I have killed a good many foxes over ten rods away, but my breechloader will do the same thing, and it is always ready for the next fellow. I hope that others will be induced to enter into this discussion. Take it for granted we all have good guns, now let us tell each other how to load them to fill our bags and let the foxes go hungry.

SPICEWOOD.

CENTRALIA, Pa.

Editor Forest and Stream:

We are very apt to place our poor holding on our gun. I remember that, for a year or two, I experimented largely endeavoring to secure a gun which would kill, and did not learn to shoot well until I studied holding.

In a certain city in Massachusetts there lives a retired man of business, who, for a hobby occupies his time dealing in guns and rifles in a small way, going hunting occasionally, and experimenting extensively. Indeed, though it may have happened, I never knew Mr. Sam Brown to go into the field loaded twice alike.

One beautiful autumn morning (I remember it well from its perfection) together we started full of joy and hope for a day's sport. Sam had a habit of straying off by himself, the better I suppose to notice the result of some deeply matured experiment. Happening, as usual, to miss him, I soon discovered him all doubled up, with every appearance of extreme caution in his manner, trying to creep up on a grouse which was viewing him with calm contemplation from its perch on a wall. Approaching within about forty yards, Sam slowly raised his gun and was about to fire, when to his astonishment the grouse asked, "Are you Sam Brown?" "Yes," said Sam, after partly recovering from his astonishment, "I am." "Well, then, Sam," said the grouse, "blaze away, blaze away."

RIGHT AND LEFT.

HILLSBORO BRIDGE, N. H.

Editor Forest and Stream:

I was very slow to acknowledge the superior qualities of the breechloader, and the first one I owned proved to be a very inferior weapon, although I paid a high price for it; but I tried again, and this time obtained a piece which satisfied me that a good breechloader would do good execution. I have owned five as good muzzleloaders as any one, and eight breechloaders of the best American and English make, and with the exception of the first breechloader they were all far superior to the muzzleloaders, both in pattern and penetration.

I was greatly pleased with Mr. H. E. White's article from the Sacramento *Bee* in your issue of Feb. 28, as it expressed my own views of a gun for game-bird shooting.

There are hundreds of sportsmen to-day who think that nothing short of a 4 or 8 bore of 16 or 25 pounds will kill wildfowl. I have used 6 and 8 bores, and found them exceedingly unhandy in a light duck boat, beside requiring a vast amount of ammunition.

Last fall I purchased a 10-bore, 10¼ pounds, and found I could kill more ducks with the same amount of powder and shot than I could with the heavy guns, that is, a pound of powder and five pounds of shot used in the 10-bore would bag more ducks than if used in the 8-bore.

I am well aware that more havoc can be done to a flock of wildfowl at one discharge from a gun loaded with 7 drams powder and 2¼ ounces shot than from one loaded with 1¼ ounces, but where ducks are flying in singles or pairs the 10-bore is the weapon I prefer, and if properly loaded will kill a single duck nearly, if not quite, as far as an 8-bore.

I know there are large gun advocates who will differ with me, but after having used 6 and 8 bores I am satisfied to use a 10-bore for all wildfowl in the future.

I have killed large numbers of ducks with my field gun, a 12-bore, 7¾ pounds, and when on the marsh rail shooting, have killed teal with 2½ drams powder and ¾ ounce 10-shot at 30 and 35 yards.

I have three breechloaders now, and have tested them with the best muzzleloaders in this vicinity, and have not found one yet to beat me, although some of the guns were much heavier than my own.

GEO. F. ALDEN.

FISHKILL-ON-THE-HUDSON.

Editor Forest and Stream:

A good breechloader will beat a good muzzleloader in one way only, viz., distribution. As distribution means everything in a shotgun, it must be conceded a superior weapon. Powder will give the penetration far beyond the "hitting" range of either. I speak of good guns. A good muzzleloader will beat a poor breechloader and *vice versa*. A very heavy muzzle gun may be a better gun for long range than a lighter breechloader, but a really good 10-bore 10-pound breechloader will beat any muzzleloader same weight and bore, at all ranges. This opinion is backed by just such a gun and something to make it more interesting if desired.

Some one asks about the relative shooting of 10s and 12s. I think the superiority of the 10 gun is mainly due to the extra weight and larger bore, chambering more shot and burning more powder; 4 drams powder and 1¼ ounces shot is just as effective in a 12 as a 10-bore. Bogardus used a 12-gauge in all matches shot in England, and made them all drop their dollars. In a pigeon match shot at our town some years ago, a 12-gauge muzzleloader "grassed" more birds than any one gun in the match. But for general shooting a 10-bore is preferred, as it will take in more "territory." There is one very important factor in gunning that is quite often overlooked—"The man behind the gun." Good holding will make a poor gun appear to very good advantage.

Good loading is very important; cheap powder is as good as any, but cheap wads are an abomination. My advice is to buy a 10-bore 10-pound gun from a reliable maker. 38.

MARION, Ind.

Editor Forest and Stream:

I have been using shotguns ever since I could hold one at arm's length. I have had several of different makes, both muzzleloaders and breechloaders, and after careful and thorough tests I must confess that the breechloader, properly loaded, will surpass the muzzleloader, both for pattern and penetration. The best test is game shooting. I have killed a good quantity of game in my hunting, and I never yet had a muzzleloader kill a deer, wild goose, duck or turkey over 50 yards, while, on the other hand, I have killed with my breechloader deer, turkey and wild geese from 80 yards to 100 yards in several instances; and I killed one deer this winter at 120 yards, measured, hitting it with two shot in the neck. I am now using a 12-gauge, 36-inch Damascus barrel.

weighing 10¾ pounds. This gun when properly loaded is sure to kill at 100 yards, if held on the game.

There is a great deal in good powder, shot to fit the muzzle of your gun and shells properly loaded. I use in deer hunting, nickle-plated shells 2¾ inches long, 3½ drams Orange Lightning powder, 2 pink-edge wads, hard down on powder, 12 buckshot weighing 1¼ ounces, 1 pink-edge wad, well down on the shot. Then I run wax from a wax candle all around the edge of the wad on shot—nearly equal to crimping.

I have used this gun two years, it has never failed to do execution under 100 yards when held on the object shot at; it is as good as when first bought, and not for sale. I have never had a muzzleloading gun to shoot anything like the breechloader, and I've owned some fine guns, both 10 and 12-gauge. I prefer the 12-gauge to any other, believing they give more satisfaction. I owned a 10-gauge gun before I bought the one I now have and sold it, soon after I tested its shooting qualities. I have owned muzzleloaders, made by W. & C. Scott & Son, W. W. Greener, H. & J. W. King, and Bliss & Hutchinson; the last I still have and keep it for old associations' sake. I find a heavy gun does better and harder shooting than a light gun, and I prefer the close choke to any other. My gun shoots any size shot well, and a turkey, duck, or squirrel, with No. 6 shot at 50 yards, is in great danger of losing its life. I owned a 12-gauge, 32-inch, five years ago, and sold it, not liking the way it scattered large shot; since then I have found out it was my fault in loading, not the gun. Mark Ivel.

Alabama.

Editor Forest and Stream:

I like small bores for several reasons. They handle with a clean, prompt feeling, which of itself is a pleasure. A 6-pound gun weighs 12 pounds by night, especially if the bag is light and the tramp long. Large guns for flocks are certainly effective weapons, but why carry a number of pounds of often high-priced wood and iron for the occasional big chance, ignoring the average shooting of the section within your reach. I commenced some twenty years ago with a 16-bore, single muzzleloader. Getting "tony" I bought a 14-bore, double gun, then a 12, then a 10, and back to a 14-bore. Losing some geese (*A. canadensis*) because their size made me think I was near enough when I wasn't, I invested in an 8-bore, double, being determined to be prepared next time. I followed "float gunning" off and on all that winter, but my big gun was generally quiet. An old 10-bore Lane & Read did most work. These I sold and bought my first breechloader. I had done good work with my old friends, but I have never regretted my change of system, and of course to-day argument is superfluous. That is, as a rule. I have owned two 12-bores, one 10 and a 16. The 10-bore I used shooting hagdons, and such sea birds, on the banks of Newfoundland. It shot well and killed clean, but a 12-bore, then at home, has since done equally well. I shot two seasons from a float and on the marshes, using a 12-bore, and the birds I got were numerous and varied.

I used a 12-bore while in the Arctic, and have fed the whole ship's company repeatedly. I shot seals, gulls, eider ducks, old squaws, brant geese, plover and ptarmigan. This gun was a pleasure to shoot. Alas, to-day I have it not. It was sold in far Northern Siberia, where I was with other survivors of the Jeannette. The articles gotten in exchange were sorely needed or else I should never have parted with her. I called her "Betsy," and now we "are out." To-day I am using a 16-bore Parker, 6 pounds. It is a strong shooting gun. My first day out with it I got thirteen snipe (*G. wilsonii*). One I shot dead and picked up fifty-four paces away. I shot a curlew (*N. hudsonicus*) dead at seventy-six paces. The bird is stuffed and in my dining-room to-day. Charge, 2¾ powder, 1 ounce No. 8 shot. Sportsmen, I think, generally use pretty fair-sized guns for upland plover (*T. bartramius*). I find my little Parker has to be held close, but kills as clean as any gun I ever owned.

While at Plum Island last fall I met a party from Gloucester. They all had heavy guns, 10-bores and one 12-bore, weighing 10 to 11 pounds each. Sport ran quiet, so we shot at targets. All their guns and my own were shot from rest, same distance, same man and same sized target. In charges they used 4½ powder, 1¼ shot, No. 8 and No. 4. I used 2¾ of powder and 1 ounce of shot No. 8 and No. 4. One of them beat me only once. I beat it twice badly, another three times, and the third twice. These guns, I presume, are in the hands of their respective owners, Mr. Frank Gaffney, Mr. Abbott Coffin, Mr. Marchant and Mr. Rowe. I think that to-day I should take a 16-bore were I going again to the Arctic. Raymond Lee Newcomb.

Salem, Mass., March, 1884.

Editor Forest and Stream:

A common 10-gauge gun of Parker's, which I targeted on Jan. 27 last, with following results: My targets were 24-inch. Distance 45 paces, as long as I could take (which is at least 40 inches), and shot against a heavy wind blowing from over an immense marsh: No. 10 shot, right-hand, 276; left-hand, 265. No. 8 shot, right-hand, 165; left-hand, 119. No. 6 shot, right-hand, 91; left-hand, 85. Charge used, 4½ powder, 1¼ shot, 2 wads on powder, 1 on shot. G. H. W.

Toledo, O.

Editor Forest and Stream:

His shotgun—killed a buck with it 120 yards—the charge was one dram of powder and thirteen buckshot. With "Ogeechee" to tell it for the muzzleloader the breechloader must stand back. Send "Ogeechee" first prize next time. The cold spell I fear has about used up the quail here. Our shooting was very poor last fall. A bill is before the Ohio Legislature to protect squirrels between January and June. May it pass. W. H. H.

Wauseon, Ohio.

Editor Forest and Stream:

With me it is a settled question that a breechloader is the gun; also, that for all kinds of game, large or small, a 10-bore is the thing. I have never seen a 12-bore that could hold its own, everything considered, with a 10-bore. If that is not so, why are the 10-bore barred, as Mr. "N. E. W." writes? Let us hear from parties that have used both bores, 10 and 12 gauge, and that bag game and learn which will kill the cleanest at long distance, both large and small game. I use a 10-bore and have friends that have used and owned both, and they all say that a 10-bore will kill cleaner at a long distance. Let us hear from those that have used both, and that are not prejudiced. New Subscriber.

SHOOTING IN MEXICO.

PERHAPS a word from this "land of God and liberty," of the Montezumas, of the Aztecs, and of Mañanas, may not prove wholly uninteresting. This city, Monterey (or King Mountain), lies in a beautiful valley entirely surrounded by mountains, the principal of which, or rather the most widely known of which, is the Saddle Mountain, from its close resemblance in shape to a Mexican saddle. Distant from Laredo, Tex., about 165 miles on the Mexican National Railroad. It is the capital of the State of Nuevo Leon, and has a population of about 50,000. Some 500 Americans do business and reside here, principally German-Americans; climate perfectly delightful. Game—quail, jack rabbits, cotton tails, ducks, deer, wild hogs, wildcats, Mexican tigers and cougars, all found within three leagues of the plaza. A strange country this; you never see nor hear of a sportsman, seldom see a dead quail (you can buy live trapped ones in the market); occasionally a greaser rides in with a deer, but about the only sign you see of the existence of this game is on Sunday morning. Then you see a dozen different Mexicans hawking the hides of wild cats, wild hogs and deer, with occasionally a fine specimen skin of the tiger and cougar, or Mexican lion, as it is called. I have the pelt of a deer shot by me here two months since that measures exactly seven feet long. Is not that more than the average? All the deer here are the blacktail variety.

Of late I have enjoyed (save for the want of a fellow sportsman) this fine shooting ground. I have a fine Irish red setter bitch, Vick, and at my rancho, adjoining the city, can bag any day thirty to fifty quail with a couple of braces of rabbits. My grand old dog Pete (his like will never be seen in Mexico) died three weeks ago of throat disease. Shooting here would be a paradise but for the warm weather. We rarely ever see a frost. The undergrowth is rank, intensely so, and what with prickly pears, sand burrs, thorns, mesquite, etc., it is almost a "cruelty to animals" to hunt a setter here. Above here, say ninety miles, at Saltillo in Coahuillo, it is much cooler, with more open land, a grain country, and I am told it is full of quail. Of this more anon.

This week I have bagged in one day thirty-five quail, one teal, seven rabbits and thirteen doves. Not bad for Mexico, is it? Duck shooting is good here almost any cool day on the water courses.

I have all the outfit a sportsman ever wants in any country, and would gladly welcome any sportsman from the United States and do my level best for him.

Are you fond of mocking birds? Verily this is their Eden. Bird and cage for fifty cents, Mexican money, with 18 per cent. discount thrown in. One five years old is singing above my head so beautifully this moment, as if to say, "Don't forget me." Don Carlos.

Monterey, Mexico.

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

Among other things I desire to call attention to a new cartridge, which, as I am indirectly informed, is soon to be put upon the market.

I do not think I am the only one who will favor its introduction. The cartridge referred to is of .45-caliber, and will be loaded with 115 to 120 grains of powder and 350 grains of lead. This, in my present opinion, would be greatly in advance of anything yet made for hunting purposes. With reference to this cartridge I would invite the opinion of some of your correspondents who have already given us the benefit of their views upon other subjects pertinent to this discussion.

"Greenhorn" early in the discussion, "Prairie Dog" and others have already demanded a cartridge somewhat similar, and I have small doubt that it will meet with almost universal approval.

My predeliction for the .40-caliber is not so great that I cannot recognize the advantages claimed for other calibers, nor will it prevent me from adopting a larger caliber, if, upon good and sufficient reasoning, it can be shown me that it is better adapted to game shooting. After all, my preference for the .40-caliber may be founded more upon individual taste than upon any better reason. The results which would probably be obtained from the use of this .45-115-350 I confess, I think, would be in advance of anything obtainable in a .40-caliber cartridge. This proportion—something more than 3 to 1—should give a very flat trajectory, and yet the bullet is of a weight which would, when impelled with a high degree of velocity, give penetration and bone-crushing effects sufficient to satisfy the most exacting, especially if a hard, solid bullet is used, or one with a very small hole, tapering to a point at the bottom, and extending one-half its length, as described by Mr. Van Dyke. His suggestion that in every box of cartridges, one-half be loaded with solid bullets and one-half with hollow-fronted bullets, is an excellent one. In this way not only could every one be suited, but all could have an opportunity of testing for themselves the efficacy of the hollow-pointed bullet.

For every kind of game possessed of less vital power than grizzly bears, or buffalo and like large animals, this cartridge, in my present opinion, would be very near perfection; even for these it would be considered sufficient by many. This is very nearly the charge used by "P." when he made such havoc among the grizzlies, killing upward of twenty in a single season; for, if I am rightly informed, he used at this time a .45-caliber rifle, with 100 to 110 grains of powder and 344 of lead.

Now comes the question, shall this charge be put in a straight or in a "bottle-neck" shell. Personally I am in favor of the straight shell as being simpler, stronger, less liable to burst and productive of less recoil. Were I accustomed to use single loading rifles I would strongly urge that it be put in a shell of this shape. But as I favor the use of a good repeater as being less "cruelly wasteful of game," all things considered, I am met with the objection that in this form the cartridge would be entirely too long, at least 3½ inches, for use in any repeating system using the lever underneath.

Very regretfully do I make this assertion. The arc described by the lever would be so long that it would be impossible to pump it with the gun at the shoulder. A 2⅛ inch cartridge is about the maximum length for comfortable use in a repeater of lever action, and this is rather too long. Now one of two things must be done, either invent some repeating system which will not be open to this objection, and which can be as conveniently and easily worked as those using the lever action, or reduce the length of the shell. The only means of reducing it to the desired limit, and maintain the same charge of powder and lead is, of course, to make the shell "bottle-necked."

Therefore, on behalf of all wedded to the use of repeaters, I hope that the above charge or one approximating it may be put in a shell of this description. But I would advise all to be careful to see that the shell fits closely and exactly the entire length, especially at the shoulder, at which place it is most liable to burst if there be an unoccupied space between the shell and the chamber. If, however, the rifle be properly chambered, so that the shell fits snugly and evenly throughout, the danger of bursting or sticking may be readily avoided.

Of course the recoil of this cartridge would be rather severe, especially if it be bottle-neck. Fortunately there is a way of overcoming this objection. Should such a cartridge be made and a repeater adopted to its use, I would recommend the use of some good permanent (not adjustable) recoil pad. There are several of these, particularly the Silver pad and the elastic heel plate, invented by Piffard, recently described in these columns. These, though they do not abolish the amount of recoil, would reduce its contusive force, or sensible effect, about one-half. By the use of such a contrivance I do not think the recoil of the proposed .45-115-350 would be more disagreeable than that of the regular service ammunition .45-70-405.

It is wrong to speak of the "unmanly fear of a little recoil." I think that the majority of men who do any amount of still-hunting will be found of physique sufficiently tough to enable them to stand up against considerable recoil, when the rifle is held properly. But excessive recoil, while attended with no serious physical injury, is productive of a very serious mental one, which is this: In a short while, one who uses a rifle which recoils greatly, becomes in a certain sense afraid of it, and involuntarily flinches when he pulls trigger. Bad shooting is the invariable consequence. I have known men to swear that they did not flinch, yet distinctly saw them do so, showing that it is wholly involuntary and does not proceed from any actual fear of the recoil. Especially is this true of men of nervous temperament.

So I have known men to make better shooting at game than they could possibly do at a target, with a rifle whose recoil was very heavy, for the reason that in their excitement the small item of recoil was entirely forgotten.

The reason I at first demanded the use of the 500-grain bullet in a .40-caliber repeater, was that I might have a cartridge with weight of lead sufficient to use against the largest and toughest animals on the continent. For all smaller game, by cutting down the bullet, I could easily have used more powder and less lead, as desired. I am convinced now that I was wrong, for the simple reason that this cartridge cannot be made short enough for use in a repeater of lever action, except possibly by those whose arms are of unusual length.

So also I see no reason why this proposed shell could not use a heavier bullet if desired, say one of 500 grains. In order that the cartridge maintain the same length as in using the 350 or 325 grain bullet, the former would necessarily extend further into the shell and beyond the shoulder, displacing something like 15 to 20 grains of powder. Greater penetration and energy—terms here nearly synonymous with higher trajectory—would be the result. Would there be any objection to this because of a certain amount of powder surrounding that portion of the 500-grain bullet, which in this way would extend beyond the shoulder? I should think not, unless, perhaps, that the fact would be productive of additional recoil. So also less lead than 350 grains could be readily used by the substitution of a bullet of the desired weight and character. The difficulty which might arise from the confusion of these different kinds of ammunition might be avoided, as before pointed out, by employing different colored shells or primers.

If it be found that this cartridge will be too long in .45-caliber even when bottle-necked, for use in a repeater of lever action, then let a cartridge be made in its stead, which, while maintaining nearly the same proportion of powder to lead, will contain 105-110 grains powder and 325 grains of lead. Without doubt this can be brought within the limit of length.

Mr. Duane has anticipated me in calling attention to the fact that as we increase the diameter of the bullet it meets with proportional atmospheric resistance, a fact seemingly lost sight of when the broad statement was made by your correspondent, Mr. Van Dyke, that the only possible way to give a ball weight without cutting down its velocity is by "widening it."

High initial velocity is not so much what we want as a high degree of velocity combined with energy within hunting ranges, say 200 yards.

I should much like to be told in some such tabular form as Mr. Duane has been kind enough to furnish us, the results following experiments with a certain charge, *e. g.*, 100 grains powder and 300 grains lead in the three calibers, .40, .45 and .50.

I am inclined to think that with an even start in a 200 yards race, while the .50-caliber bullet might start the quickest and lead at the first fifty or one hundred yards, the smaller .40-caliber bullet would win, and be less "winded," *i. e.*, have more energy left to go much further, if necessary. What we all want is a rifle which, while convenient to handle, will accurately use ammunition which will give enough penetration and bone-crushing power to always reach the vitals, and break whatever bones it encounters and will in addition give a trajectory so flat that the bullet will not fall more than six inches in 200 yards.

Though the proposed cartridge, .45-105 to 110-325, may fall somewhat short of this result, I feel sure that its introduction will be considered a good long step in the right direction. I am glad Mr. Duane has demonstated so clearly the two important conditions of accuracy and energy which, the latter especially, seem to have been somewhat lost sight of in the anxiety to get flat trajectory. I cannot as yet agree that for all-round work a bullet of less than 300 grains has enough of this quality of energy. Individual instances may seem to prove the contrary, but in the long run I am quite certain that a 300-grain bullet (I like one with 25 or 50 grains added to it even better) will prove more satisfactory than a much lighter one. Now pile on all the powder that the rifle and the man shooting it can stand, and do accurate work.

To illustrate: Although in the very large majority of instances, 250 yards is outside hunting range (it will be found to be somewhat less in the East), I have killed two bull elk, either of which was considerably over 500 yards distant, and upon ground considerably higher than that upon which I stood or rather laid. I cannot think that some of the light express bullets which have been advocated, or even a round ball, would have been so effective, even if I had been able to hit the game with them, because much more of their energy would have been lost than was the case with the heavier solid bullet, their staying power would have been less. Don't imagine that either of these elk was hit by the first shot, or the second or the third.

I confess to a considerable amount of surprise in reading

Mr. Van Dyke's sweeping denunciation of the .40-caliber, and those who favor its use. Even admitting that the caliber is not sufficient for all-round work, and that we are mistaken in its adoption, I cannot think that it is so to an extent which merits this wholesale criticism. It would seem that when his pen, which has written many good things, and given much valuable advice, wrote this, he was possessed of a certain amount of that same illiberality which he so severely criticises in others. It is hardly possible that he has given it a fair trial upon game, and I cannot escape the conviction that his objection is founded more upon theory than practice.

As I have before said, very possibly, nay, certainly, there may be better charges, better ammunition than we have at present. And moreover, I am perfectly willing to be shown that these will find best result (sufficient accuracy and energy with the flattest possible trajectory) in a larger caliber, and that, therefore, I am wrong in using and advocating a .40-caliber rifle, but not before I have said something in defense of that which is at present at least my favorite. Nor would I be a sportsman if I did not repell the insinuation that I and all who use a rifle of this caliber are so fond of spilling blood that the crippling and wounding of game is a matter of no consequence to us. Being thoroughly convinced from a somewhat extended experience that I am not that "demi-god" he properly refers to in such sarcastic language, and being tolerably well acquainted with many of the "eccentricities of lead," I feel that I am at liberty to take up the gauntlet flung down by him, and risk impalement upon the points of his propositions. He asserts that he who uses a .40-caliber solid bullet must necessarily be understood as saying that—

"First, he can hit his game just where he chooses; or,

"Second, that a ball is just as effective in one part of an animal as in any other part; or,

"Third, that the crippling and torturing of game is a matter of no consequence."

As regards the matter of accuracy and being able to hit within ".87906 of an inch" of the precise spot where it is desired to plant the ball, or to place it in the "heart of a bounding deer," let me say that, in my belief, the man who can, under all the varying circumstances likely to arise in hunting, hit within a foot of that particular spot when shooting at game standing over 100 yards distant, or within three feet of it when shooting at running game at that distance, is a better shot than the large majority of men with whom I have been brought in contact, at least, who use any sort of a hunting rifle.

A man who is able to hit a fifty-cent piece six times out of ten at 50 yards, will often miss a deer standing broadside at 75 or 100, and apparently there is little if any, more excitement in the latter case than in the former. "The ever-changing conditions of ground and light," the inability to tell just how the deer is standing, the fact of being "blown" from a hard climb or run, etc., etc., are factors which cause misses which are often so bad that, hearing of them, many a "target" shot would laugh heartily, and assure himself, if he did not declare it, that he could never score such a miss. But I have had the good luck to see them come sadly to grief when attempting shots even easier than that the possibility of which they ridiculed. Now, I have known many hunters, aye, good sportsmen, too, who prefer the little .40-caliber to any other, as being best able to assist them in bringing their game to bag.

Will your correspondent answer me why it is that so many of the pelt and meat hunters of the West, whose opinion upon a subject like this is certainly entitled to great weight, favor this caliber? It is simply because they find that it enables them to ply the abominable profession with the best results, and that they make a better livelihood by its use. It would seem to me that a bullet of this description, which is so great a favorite on the buffalo range with old hunters, would generally be found to be quite sufficient for animals so much smaller and possessed of so much less vitality as deer and antelope.

I do not doubt, however, that better results follow the making the bullet expansive, as suggested by your correspondent "D. McG.," when the shooting is to be confined to animals of this description.

The second proposition is of course preposterous and unworthy of consideration.

As regards the third, let me ask your correspondent which is the more cruel, to shoot an elk or a buffalo—for this discussion is not confined to deer alone, but extends to all large game on the continent—in the haunch with a light weight bullet of large caliber, or an express expansive bullet which will flatten out (if it does not go into splash), or to hit him in the same place with a 370 or 500-grain solid bullet of .40-caliber?

Neither of the former will do more than reach and probably fracture the bone in a majority of cases, making a larger surface wound, while the latter will rarely fail to have "energy" enough not only to crush the bone of the hip, but also to find its way to the hollow. Unless the artery be cut, in which case does he suppose the animals would longest survive the injury?

Let us suppose a "Plains" scene. Two men on foot, about equal in their ability to hit game. One armed with a .40-90 Sharps, and the other with a .50-caliber Winchester, suddenly find themselves close upon two buffalo bulls. The buffalo turn and run; one takes the left buffalo, and the other the right.

When the firing has ceased and the smoke cleared away, let us look at the result. One buffalo is down, the other, wounded in a number of places, making his lumbering way across the plain to furnish food for wolves after two or three days of painful existence. Little need to ask by which rifle the bull on his side came to be there.

I mention this case because I know that the result would be much the same in all such tests and, also, because the facts are very like a page out of my own experience.

He, of the Winchester, having tested it upon this and a large number of other occasions and "found it wanting," was very anxious to change it for the .40-caliber.

It is only fair to say that his cartridge was not loaded as Mr. Van Dyke recommends. I have no doubt that he gets excellent results from his method of loading in shooting deer; but, though they might have proved somewhat more satisfactory, I do not think the results would have been materially different in shooting larger game, unless, perhaps, the bullets were made solid and very hard.

It is proportionately, of course, more difficult to drive a light ball presenting a large surface into flesh than a heavy ball presenting a small surface.

On the other hand I thoroughly appreciate the force of the remark made by "D. McG.," that when using the .40-caliber solid ball it often took him longer to find his game after it was hit than it did to look it up in the first place.

This, of course, is the great objection, and great annoyance and vexation of spirit is apt to follow the shooting of an animal "a little too far back." I grant it is much more gratifying to see plenty of red evidence of your work on the trail, but I am not yet willing to concede that the bullet which makes a great surface wound and does not penetrate, is so surely and so quickly productive of death as that which always makes two holes in the hide. It is a sad thought to one who has any of the humane sentiment of the sportsman in his composition, to know that he has shot an animal through the paunch, and that the afflicted beast will live for hours and sometimes days, suffering intensely.

Give me a formula for driving the irregular flattened express bullet clear through bone and tissue, and also show me the rifle of a large caliber which is as handy to use and as convenient to carry, and also teach me how to shoot it with as little discomfort to myself and as accurately as I now can do with the smaller caliber, and I will adopt it at once.

Let me instance an example where I went to the other extreme. Before going to the Rockies on a prolonged trip I had Lefevre make me a double-barreled 13½-pound rifle, chambered to shoot six or seven drams of powder and an ounce and a half of lead.

I naturally expected great things of this rifle. In fact I was induced to purchase it from the fact that one of your correspondents had a similar rifle by the same maker. Probably the charge which I used—generally 155 to 160 grains (1¼ ounces) lead—was wrong, probably the sights were not so good as some others, probably it was not quite accurately or correctly made, since the balls seemed to pursue divergent courses or fly wild when the rifle got at all dirty, and it fouled very much after two or three shots.

As to the results I am quite positive it kicked tremendously, seemed to weigh a ton after a hard day's tramp in search of elk or sheep, and above all I was never able to do good shooting with it. I am quite willing to admit that when that solid ounce and a half ball struck anything, the paralyzation which followed was most satisfactory. But I missed very often when I am certain I could have killed with a .40-caliber. The result was so unsatisfactory from the use of the hollow-fronted ball that I soon gave it up.

I was very sorry not to have had the opportunity to use this rifle with about 120 grains of powder and a round ball. The truth of the whole matter is that in loading our ammunition or selecting a rifle, we must be greatly influenced by the character and variety of game we are likely to encounter, and the probable range at which most of the shooting is to be done.

But I feel quite assured that a good repeater, and one which is not liable to get out of order, adapted to the use of this proposed .45-115 to 120-350 cartridge, or if this prove too long, the .45-105 to 110-325, will be the best rifle for extended trips to those localities where we do not wish to be encumbered with more than one rifle, and want that one easy to handle and to carry, and where in a week we may possibly shoot at six or seven kinds of animals, including some of a dangerous character.

I confess that I am dissatisfied with the rifles I have at present. What we want is a rifle which one will not soon wish to exchange for something better. If we are so fortunate as to get this, let us use it exclusively and get to thoroughly to know its disposition, its capabilities and its faults. There will arise a confidence in it and a love for it which will not only give us additional pleasure in its possession, but will very greatly assist our shooting. For that confidence in it, that feeling that "the gun will do its duty," does as much as anything else to insure good shooting at game. In fact, it seems to render the eye truer and the arm more steady, and it certainly greatly enhances the sport of stalking.

Then if one misses there is a half-ashamed feeling that he has not done his part. One cannot escape having a feeling of friendliness and affection for a gun that has served him well, and has never betrayed his reliance in it. Sentiment aside, it is at least a source of great satisfaction to know that a bad shot cannot be charged to the fault of the gun, and that one must look elsewhere for the cause.

After all I am compelled to think that correspondent who intimated his regret that the breechloader had ever been invented and that the muzzleloading rifle was a thing of the past, more nearly right than any of us. Were this the case, there would be plenty of game left within easy distances, and the sport would be in every way more satisfactory. For as we all know the greater difficulties there are to surmount for him who has the courage and patience to persevere (the crucial test after all, and the rock upon which so many would-be sportsmen go to pieces), the harder he has to work for a shot the keener the enjoyment in bagging the game at last. So on the other hand it is very easy to become surfeited with too much killing.

When the game is easily found and more easily killed, it is no longer sport, and the manly art of stalking becomes butchering. Oh that many who yearly visit the Rockies in quest of slaughter could see that in this way they are killing the goose that lays for them the golden egg, and be taught that there is really much more enjoyment in following a herd of elk or sheep all day to finally get a good shot at and kill an old bull or ram, than in banging away indiscriminately as soon as within range, piling up half a dozen cows and calves, or ewes and lambs, as the case may be. But no, it is blood they want, and blood they get, but not all of them, thank heaven! A little while and there will be no game left where it used to be most abundant. Between these sportsmen (?) and the nefarious hide hunter the slaughter will soon be complete. But this is an age of progress, and I suppose we must bow to the spirit of the age.

While every true sportsman must admire the picture of our old friend "Nessmuk" clinging with fond tenacity to the use of the faithful old muzzleloader, which has served him so long and so well—and, as we all hope, will continue to do so for many years to come—I am of clay much too human not to covet something better than that which I now have, when that something can readily be had; nor do I wish to feel that I am handicapped by the fact that my rifle is not so good nor so effective as my neighbor's. I wish to be as fully and as well equipped as he. I would greatly like to soar above this, but I cannot. So, as in the good old days of the muzzleloader we would have wished to have the best that could be made, I now, in the days of the improved breechloader, have the same desire to have the best; and, having obtained it, indulge the comforting reflection that I am not obliged to admit the fact that my companion is happy in the possession of a rifle better than my own.

I fully agree with your correspondent "Greenhorn" in his preference for a butt plate similar to that used on the Springfield army rifle. I have also used the shotgun stock on hunting rifles with great satisfaction. With a butt plate of the shape of either of these, a rifle can be readily and quickly brought to the shoulder and be firmly held in proper position, especially if it be provided with a rubber heel plate, since the rubber will not allow the stock to slip from the arm as readily as the iron plate. A stock with a butt plate resembling that of the old Kentucky rifle is a nuisance. I am surprised that there has not been more discussion with regard to the effect of the various methods of rifling upon accuracy and energy. D. M. B.

PHILADELPHIA.

Editor Forest and Stream:

I am watching for the evolution of a perfect rifle out of all these "hunting rifle" articles in your paper. In 1872 I fired a Winchester rifle 1,250 times without cleaning it. Then the charge was only twenty-five grains of powder, but I found it heavy enough for moose, caribou and bear in Canada, and brought down several. Of course, a heavier load would be much better, but can't we overcharge a rifle as well as a shotgun? MANHATTAN.

NEW YORK.

A TAXIDERMIST'S VIEW OF IT.

Editor Forest and Stream:

It is not without years of consideration to strengthen my convictions that I offer the following remove from public opinion. I would further ask the careful and unprejudiced consideration of my statements, and now, while the subject of bird laws is being agitated, seems to be a fitting opportunity.

The time to shoot birds is in the spring and not in the fall. If the birds were shot at this time (spring) only, they would be far more abundant than at present. Let us begin with the ruffed grouse or partridge, and see how this change will operate in his case. The law at present is taken off Sept. 1, and the sportsman is not slow to begin hunting. The flocks of young grouse are inexperienced, and often but partially grown, and are cleaned up close with but little difficulty. Suppose these birds were left until January and then the law taken off until April 1, they would become as shy and difficult of capture as their parents, and a few years would find them a far more abundant bird than at present. The same would be the case with the quail, while for the woodcock a decided advantage would be gained. The woodcock arrives early, and could be shot until April 1, when the birds arrive that will breed with us. The summer shooting is fast annihilating this species, and it is getting to be a scarce bird in thickly settled districts. And this is not to be wondered at, when a sportsman locates a pair of birds, and on the 4th of July cleans them up and their young also.

But if we are to have any shore birds a few years hence, the summer and fall shooting must be prohibited. The former in particular is very disastrous to the species that return leisurely, and they are killed with but little difficulty almost as fast as they appear upon the marshes they frequent. In the spring it is different; the birds are then en route for their breeding grounds, and are much more shy and difficult to get at. They do not linger so long as in the summer or autumn, and although good bags are often made, yet the slaughter cannot compare with that made during these seasons. Besides all of this, there is more satisfaction in having a few spring birds than a quantity of fall ones, if one has any eye for beauty.

With our small birds the case is not different, as those know who make collections of them. It is a wise provision also that of most of our bright-colored species the males arrive first, and the best plumaged in the van, and are the individuals going the furthest north. The golden rule for all collecting is, take what birds are wanted while the migration is in progress, but as soon as the individuals appear that breed with us let them alone. If this rule is adhered to, no section will be depopulated or any decrease noticed. But few if any birds should be killed from June 1 to Sept. 1.

The decrease of small birds noticed in many localities is almost wholly on account of the shooting of resident birds. If, for instance, any of our common robins are wanted, let them be taken in March while passing by in flocks, but early in April those come which sojourn with us, and if these are not disturbed robins will not grow scarce from the shooting of them. The first to come are those which are to distribute themselves in our northern country, and a missing bird here and there will make no difference. But a man or boy can seriously impair the number of robins in a locality by shooting them between April 1 and September 15. There are birds enough for all who wish if they will use and not waste, and temper this destruction with a regard for natural laws.

The taking of birds' eggs is considered by many worse than the killing of the birds; but this is not so. I know of no birds which will not make at least three or four attempts to rear their brood before giving it up. But I would severely denounce the killing of the parent birds from the nest unless in exceptional cases, or when absolutely necessary for positive identification. If the places where birds are breeding in large numbers are not visited by the shotgun as well as the eggers, and the latter will confine themselves to the taking of the eggs twice only, and not trouble the third clutch, little if any harm will be done.

The preceding remarks, if lived up to, are practical. The author loves the birds, and does not like to kill any for which he has no use. If birds were only killed for some purpose and not merely for the sake of seeing them drop dead, the laws would need but little enforcement.

One more point, if gained, will do much to protect our beautiful birds. Our (protective) tariff on bird skins is directly antagonistic to our bird laws. Let us look at it. All of the States have laws for the protection of small birds, and the killing of them is stopped in every possible way, if they are to be used for millinery, and at the same time a duty is imposed for the protection of the same industry here. Birds, and of bright colors, too, are collected extensively in foreign countries, and sent into Great Britain free of duty. If those birds were allowed to be brought to this country free also, they would be imported at prices that would defy our collectors, and if that was done would it not largely protect our small birds? F. J. TINGLEY.

[This is only saying that instead of killing our own birds we must kill those that are passing to States north of us.]

V. C. BARTLETT, proprietor of the Sportsmen's Home, Saranac Lakes, N. Y. (the oldest hotel in the Adirondacks), died at Keeseville, N. Y., on the evening of 27th of February. His hotel has long been regarded with peculiar favor—was most home-like, and has always been for years liberally patronized by well known anglers and tourists. He will be greatly missed.

DO THOU LIKEWISE.

WE are having a very severe and protracted winter here, and I fear the few birds left over by the shooters are having a hard time of it. My shooting the past season has been more varied and over a larger extent of country than any heretofore, commencing at the foot of the Rocky Mountains on September 3, in the Northwest territory, and ending on February 23, way down in Tennessee. My first bag of the season consisted of sharptailed and ruffed grouse, duck and snipe. My last of quail, woodcock, snipe and rail, and of this I will give a short account.

I had gone to this point a month previous with three of the greenest puppies in the field that could be imagined, neither ever having pointed a bird, and scarcely knowing their names when beside you, and when a short distance off not at all. I knew they would hunt and were brave, and going there to break them, cared for nothing further. The morning was lovely, with the sun out bright and warm, and the slight frost of the previous night had entirely disappeared when I started for a large field, two miles distant from my stopping place, which I knew contained birds from previous acquaintanceship with it and them. I was accompanied by Knight, a setter, a grandson of Rob Roy, Druid and Doll, and greatgrandson to Carlowitz, and Shot, a pointer of obscure but worthy parentage.

In entering the field the dogs were cast off to hunt out a large sedge patch on a hillside, facing the sun. Knight, to the right, went off with a dash, and wheeling quickly, with his head high in the wind, walked up a few steps and became rigid, Shot backing him firmly off to the left. I knew the birds were moving from the action of the dog, and walking on in front of him, flushed the covey wild, bringing only one to bag, the balance dropping in a thicket a short distance off. After retrieving the dead bird, I turned to follow one I had marked down, and missed Knight. On whistling for him without response, I went back to look for him, and found him fast under the hill on another covey, near the place where he found the first. On flushing those, I got a brace, and marked a part of them settle by a fence on the course I meant to beat. I then returned to the location of the first which I had marked down in a brier thicket. Knight instantly pointed a bird. I crippled it only, and in searching for it, flushed a woodcock, which I got. Shot then pointed another, which I also got. I then left those birds and went to look after another covey, and of these I secured another brace. Their numbers were rather limited, owing to our former acquaintanceship. We then went on toward another likely looking field, a short distance ahead. I had scarcely entered the field, when Knight was again firm, and the pointer rigid behind him. On flushing the birds I got two with my first, and another with my left, the balance of four pitching into a thicket close by. Here the dogs flushed two; one I got, and the other I did not get, and passed on to another field. In this the pointer accidentally flushed a covey, and marking them down, I got beautiful points from both dogs, getting two birds and missing, as my old mentor used to say, other two, most inexcusably. Knight then found, in an adjoining field, a beautiful specimen of the rail family which I secured, and Shot immediately after was firm on four quail, Knight backing him some distance off with his head turned back over his shoulder. I enjoyed this performance so much that the decimated covey were allowed to go free.

In going down behind the fence dividing the next two fields to give the dogs the wind, Knight showed much anxiety to get over, and when taken over at the lower end and cast off, made a break at full speed, with his head high up, to a fine covey, and stood them in grand form, directly opposite where he wanted to get over the fence on his way down. I killed one only, missing the second. The balance went down over a steep embankment and across a creek, where I did not choose to follow them, and having as many as I cared about I started for home.

On my way back the dogs made several more points on quail and flushed a snipe, and I added to my bag enough to make a total of fourteen quail, two woodcock, one snipe and one rail; not a large bag certainly, but enough for the space of time occupied in getting it, and for amusement.

JOHN DAVIDSON.

MONROE, Mich., March 7, 1884.

PHILADELPHIA NOTES.

THE game stands of Philadelphia this week show that some one has been down the river and done execution among the snow geese, or that the Smyrna (Del.) market shooters have been more than usually successful, and shipped their fowl to this market, for at almost every poulterer's stand more or less of these geese can be seen hanging up for the first time this season. I took the trouble of making a trip to almost all the game cellars and shops on Saturday, but failed to find one man who called the bird by his proper name. Some (most of them) termed them brant, others bastard goose, and one gull goose. They did not sell at all well, and the pair your correspondent purchased were bought very cheap, and proved most excellent eating. Very few solid white fowl were among them, the majority being clad in the sooty white garb of the young bird. On inquiring where they came from, I was always answered, "Down the bay." Since the late snow fell, trapping of crows for shooting matches has been extensively going on at Bristol, Pa., and the netters have been very successful. A number of crow matches were shot during the week. Any quantity of these sable birds may be bought now for ten cents apiece, but after being caught for three or four days they become weak and do not fly well. In fact, at their best they are slow and make poor shooting from a trap, oftentimes having to be thrown into the air before they will take wing. Much floating ice is in the Delaware River at this writing, but the ducks, which were so plentiful before the present cold change in the weather, have decreased in numbers, and appear to have gone further down the river.

The shooting at Havre de Grace flats this spring thus far has been a total failure. Gentlemen I have talked to who own outfits there attribute it to the scarcity of feed, others to the bushwhackers. The truth is, however, that it is only a question of time when box or battery shooting will entirely destroy the duck shooting of a section where it is practiced, notwithstanding it may be allowed every other day only. In every instance in this sport the battery must be from necessity anchored directly on the feeding grounds where the water is shallow or of moderate depth, and the ducks become alarmed by the great number of "machines" laid out where they wish to alight. Box shooting in the fall and winter is bad enough in its destructiveness, but in the spring it is worse. I heard a very intelligent correspondent of FOREST AND STREAM state a few days ago, that in these breechloading times it would be only a few seasons more when it would not pay to own a battery outfit, so alarmed and timid were the fowl becoming. He is a part owner of a scow and double box, and takes every opportunity of using it, and is capable of knowing whereof he speaks. HOMO.

PENNSYLVANIA GAME.—Centralia, Pa., March 3.—When "snow bound" and shut in from the woods I have been greatly interested in the social chats in your paper. I listen to the speakers as they speak up from the "Rockies," from the great North Woods and from the orange groves. I wonder as I hear of bags filled without hardly a miss, and am pleased as I hear now and then one, as he tells his experience, admit that often the cunning grouse and quick-winged quail are too smart for his eye and his finger. I am pleased because I am on the same bench. Up here among these mountains—spurs of the Blue Ridge—we have not much game, although on the "Little Mountain," four miles north, there are several flocks of wild turkeys, and in the deep ravines lying among these hills a few deer hide away. In the Roaring Creek Valley, lying some ten miles away, during last autumn I had several days of grand sport among the "Bob Whites." I am afraid this cold winter and its deep snow has been too much for them, although many of the farmers I have prevailed upon to feed them. If they all winter through we shall have a great many birds the coming season. —SPICEWOOD.

MICHIGAN NEEDS A BOUNTY ON WOLVES.—The Marquette *Mining Journal* reports: John Spicer made a visit to Mud Lake, recently, and reports finding the carcasses of five deer that had been killed by wolves. Only a very small portion of each had been eaten. He stated, however, that deer in large numbers were "yarding" (staying together) near there, and that the wolves hang around, so that when they feel in need of something to eat they kill a fresh deer and take their meals warm. Something should be done to protect deer from the ravages of wolves, and, as there is but one thing to do, and that is to kill the wolves, enough bounty should be placed on them to make the job of eliminating them a short one. Every year there are hundreds of deer driven over the Pictured Rocks by these hungry pests, and are, of course, destroyed, without satisfying the appetites they fled from. Mr. Spicer said that he found twelve dead deer very close together, two years ago, that had perished in this way.

FISHER'S ISLAND CLUB.—Hoboken, N. J., Feb. 22.—*Editor Forest and Stream:* The Fisher's Island Club has received the second shipment of Western quail, about one hundred in number, in good condition. More birds are to arrive shortly and we hope the full number contracted for will be reached. We have heard from the farmers on the Island that there has been hardly any snow there this winter, and the weather much milder than on the mainland. We will liberate the birds within a month from now or as soon as the full number of birds has arrived. The New York *Herald* reporter was decidedly off when he claimed we would stock the lakes with fish as food for ducks, etc. Black bass would be an expensive diet for them.—MAX WENZEL, Secretary.

HUNTING ON THE SABBATH.—When so-called sportsmen from the North come to Florida, and our little country villages, and spend the Sabbath day in ransacking a man's land, with his guide and dogs, for game, it is about time that steps were taken to prevent it. Yesterday Northern men were banging away within less than two hundred yards of a meeting-house, where services were being held. It is a disgrace for sportsmen to hunt on Sunday; if they care not for the laws of God and man, they ought to have respect enough for our residents to do their hunting on week days. True sportsmen will not take pleasure in disobeying Sabbath laws, unless while out on a camp hunt, away from settlements, and in need of food.—RED WING (Glencoe, Fla.).

CAPTURED WHITE DEER.—Johnsontown, N. Y., March 9.—An old guide from the Lake Pleasant country has reached here. He reports that three white deer have been captured alive in that section. Two of these, a large doe and fawn, were extricated from the deep snow, near Piseco Lake, by William Courtney, an old sportsman of the vicinity. The other animal, an adult specimen, was captured in the same manner on the following day by a brother of Courtney. The fawn has since died, but the other two are doing well. They are on exhibition and awaken considerable interest on the part of the guides and hunters, who claim they are the only white deer ever known in that country.—*Morning Journal.*

DISTRIBUTION OF QUAIL IN NEW JERSEY.—Mr. Chas. H. Bernard, secretary of the West Jersey Game Protective Association, states that between Jan. 14 and Feb. 8 he made five shipments of quail, amounting to 306 birds, to the Atlantic county director of the society at Smith's Landing. We would like to hear from Mr. Bernard what proportion of birds purchased for putting out in the five lower counties of New Jersey have thus far lived. Of course the quail have not yet been put out, nor should they be liberated until spring is fairly settled, but it would be interesting to the readers of FOREST AND STREAM to learn what percentage of birds have died and from what State they came.—HOMO.

GAME IN MINNESOTA.—Dodge Centre, Minn., Feb. 28.—I should be very glad if some one would give some hints on duck and goose shooting, as they will be plenty here in a few weeks on their way to the north. Pinnated grouse, or prairie chickens, are wintering quite well, as we have had no severe storms this winter. Ruffed grouse and quail are scarce. Wolves are plenty, with $7 bounty on them; they live largely on grouse and rabbits, and are hunted but very little.—A. E. B.

MIGRATORY QUAIL.—New York, March 4.—Will you kindly say that any one desirous of importing live migratory quail this spring from Messina, Sicily, can receive information and all particulars as to price, etc., by addressing me.—CARL F. BRAUN (P. O. Box 2,487).

WHERE GAME IS SCARCE.—A Pennsylvania man sends for a specimen copy and explains: "Game is getting scarce here, and think it will be easier to buy a few hunting stories than to try the real thing. However, I hunt."

ARKANSAS.—Evening Shade, Feb. 26.—We lost no quail by the cold this winter. Deer and turkey are plentiful and in fine condition.—J. G. S.

WE HAVE received from L. C. Smith, Syracuse, N. Y., an illustrated catalogue of the Baker guns made by him.

Camp Fire Flickerings.

"That reminds me."

106.

DEAR D. B. has gone to his rest. He was the mentor of my boyhood in all that pertained to the use of the gun and the love and pursuit of the sports of the field. He was an excellent wing-shot in the days when wing-shots were few in number.

One day when he wished to go quail shooting his own gun was away, undergoing repairs. He borrowed a singlebarrel gun of a neighbor. This gun had been a flint lock a century ago, but was at the time altered to a percussion. It had the wealth of barrel that is now only seen in the guns made long since by the Arabs. My dear old mentor shouldered this gun, was gone for some time, and returned without any birds, an unusual occurrence. "What!" I exclaimed, "no birds?"

"No," in a solemn voice.

"Did you not find some?"

"Yes."

"Well, why didn't you bring them home then?"

In the same solemn voice, and with a face equally solemn, he replied:

"I put up one covey, but my gun was so long that the muzzle was far ahead of the birds; so I turned round and ran back some distance so as to get the muzzle behind the birds, and when I thought that I had accomplished that end I faced about just in time to see the birds settle between me and the muzzle, so I gave it up and came home." M.

Sea and River Fishing.

THE BEST COLOR FOR LEADERS.

Editor Forest and Stream:

Recognizing the justice of the point made by your correspondent in your issue of the 14th ult., in regard to the color of gut leaders, I have undertaken to make a few trials, proceeding as follows:

Selecting first a cloudy and dull day, then a bright, clear one, I next filled my bath tub with as much water as it would hold, and having prepared a number of pieces of gut dyed a variety of hues, all more or less light, proceeded to look at them by placing my head under water about twelve inches, if not more, and passing the pieces before my eyes as near and as far as I could discern them. This was tried facing the light, then with my back to the window, but always taking care the gut should not be in shadow.

I used Ridgewood water, which was clear, yet at a distance of twelve or fifteen inches only the very dark gut was discernible, while such as were of a dye from a dark color (such as blue slate, drab, and coffee, but in only sufficient strong color to make the gut that particular shade) stood the test very well. Clear, bright colors, will not suit, as they do not diminish the brightness or shine of the gut.

On a bright day, a much lighter shade of the same color must be used, while on a dull day darker shades will answer. I believe the principal object should be to use only such colors as dull the surface of the gut, as by so doing it also prevents the adhesion of thousands of very small air bubbles which attach to the gut and makes it very conspicuous.

In any event, I doubt if the human eye can distinguish any gut through two or three feet of water, while fish must see plainly ten times further, hence the angler, I think, will do well to see, first, the color of the water he intends to fish; next, the sky he will have for a background, and select his leaders accordingly.

For my part, of all the shades used, I select first the coffee stain, which makes the leader the color of slightly muddy water, next a light blue green drab, dulled. These two I shall try as soon as the season opens, and let the creel decide for me. Notwithstanding, I intend making further experiments in both sweet and salt water, as soon as weather permits, and I can secure a brother of the craft, equally interested, to assist me.

I hope others will continue this subject, meantime I inclose samples which tested well, and four showing too much, so you can tell me what the colors are, after allowing a good margin for the color that washed off in the test.

BROOKLYNITE.

Commenting on the above, Mr. Wells writes:

Editor Forest and Stream:

It would decidedly seem the angling column is looking upward. The issue of to-day contains two well-considered and able communications on practical fly-fishing, both of value.

And now further to encourage the hope that the fly-fishermen are, at least some of them, neither so selfish as to wish to keep their "points" secret, nor so indolent as to shirk the plain duty of making them public, comes "Brooklynite's" communication to hand.

Before considering the latter, I would most heartily re-echo "J. G. W.'s" question: "We have all read time and time again of a bass when hooked leaping from the water and falling on the leader so as to break it. How does he do it?"

I had always supposed the age of miracles was past, and that falling bodies, whether alive or dead, were governed by the laws of nature. Again and again have I been staggered by this statement, made in evident good faith. I reiterate the question, "How does he do it?"

And now as to "Brooklynite's" communication.

It would most certainly seem, at the first blush, that to immerse the eye beneath the water and then to look upward, was the surest and most direct way to determine how a leader would appear to the trout; for thus the natural conditions would seem exactly to be reproduced.

But a moment's reflection shakes this opinion.

We all know how sensitive is the human eye to any foreign body, and how instantly the slightest irritation of the exterior affects the action of the muscles which control the focussing power of the lenses within, and whose office it is to form the image on the retina.

We also know that unless these muscles perform their appointed duty, the eye is as powerless to convey to the brain a truthful imagine as is a telescope, the different lenses of which have not been relatively adjusted to distinct vision. We have all, either in frolic or from necessity, tried to see through a pair of spectacles totally unsuited to our eyes, and we all know the result; and this experiment well illustrates the case in point.

Again, though the mechanism of the eye work perfectly,

still so intimate is the relation of its various parts, so profound their sympathy one with the other, that the power of the retina to receive and transmit a perfect image, even were one formed upon it, may well be doubted under such circumstances.

A gentleman well known in angling circles, and an acknowledged authority, told me, when spoken to of the experiments on the color of leaders that I intended to try—an account of part of which appeared in your issue of Feb. 7—that it was all useless; that he had tried it when in swimming; that everything appeared black, and that I could see nothing.

It is clear, therefore, that in the unusual conditions in which his eyes were then placed they refused to act altogether. And that the same was the case with "Brooklynite's" eyes, though in less degree; and that the same will be the case with every one's eyes to a greater or less degree under such unusual conditions, I cannot doubt. In this view I am sustained by a high medical authority, whom I have consulted on the subject.

From his experiments "Brooklynite" "doubts that the human eye can distinguish any gut through two or three feet of water."

If he will again fill his bath tub, immerse a mirror in the water, incline it at such an angle that it will reflect upward any image received by it—say at an angle approximating 45°—and then insert his leaders in the water and watch for their reflection in the mirror, he will have no difficulty in seeing them at twice two or three feet, if the length of his bath tub will permit them to be so far removed.

It is absolutely certain that any image which will form in the mirror and be reflected by it, would be even more plainly seen by the human eye if it was located there and acted in its normal manner. And this, because the loss of light due to the reflection would be saved. Nothing can prevent the formation of an image in the mirror but the absorption of the light proceeding from the leader by the water, and nothing but this cause can prevent the human eye from perceiving an object so situated.

That the eye of the trout is different from ours, is a frequent remark. That it is different in size—different in color, is true. But that it is different in function, different in its relation to the reflection and refraction of light, is a mere supposition, resting, I believe, as at present advised, upon no foundation whatever. It may be more sensitive to light than ours. It may render objects visible to them through a stratum of water, which would totally obscure them to us. But even this I know no reason to believe, notwithstanding the fact that will here occur to every one of the incessant rise of trout long after the shades of evening have fallen, and after we can no longer distinguish our fly upon the water. The difference of background toward which they look sufficiently accounts for this to my mind.

It may be that some of the rays which compose the beam of light may be visible to them, which are incompetent to excite our retina, and of the presence of which we only become aware as they evidence their existence by heat, or chemical action. But if we are prepared to grant this, and I for one can see no reason so to do, it but prolongs the spectrum in one or both directions. It is too improbable even for mere surmise, in the absence of direct proof, that they can see both ends of the spectrum, while the middle is to them a blank. Their every action in reference to the color of flies negatives this.

Light is light. And by its aid all animated beings see, and in its absence all alike are blind. The laws of nature operate equally and invariably both above and below the surface of the water; and, until it is demonstrated to be otherwise, I cannot think trout see in any different manner, or by any different means, than do we. There may be a difference in degree, but I cannot believe in kind.

It is to be hoped that not only will "Brooklynite" continue his experiments, but that others will enter the field as well. Such cannot but be productive of good. Let us relegate the era of guessing to a past age, where it properly belongs, and before the coming season is over know something definite in reference to this matter so important to our interests.

NEW YORK. HENRY P. WELLS.

THE DOWEL PIN IN FLY-RODS.

Editor Forest and Stream:

Mr. Wells's article on the dowel pin in fly-rods is certainly worthy of notice; and although it is not a new idea, it is by no means a poor one. There are a good many rods made now without the dowel (or tenon) and from my own observations, they are every year gaining in favor.

I will not take room in your paper to write at length on the subject, but will ask for enough space to give in a few plain words my approval of this method of making fly-rods.

For a long time I have been trying to convince my customers that the way to construct a light fly-rod to obtain the greatest amount of strength and uniform elasticity was with short ferrules and without dowels.

When a rod is ordered from me I always suggest the idea of making it without dowels; sometimes this is looked upon as being a good thing and the rod is so ordered, but others look at it as something new, and they don't wish to try anything different from what they have always used.

I would as soon make a rod with dowels as without, and always try and satisfy any notion a fisherman may have regarding his rods, but for the last seven years I have made all rods for my own use without the dowel joint, and have found a more even spring and fewer fractures the result.

By parties for whom I have made rods in this manner I have heard them very highly spoken of, and have had many of their doweled rods brought to me for repairs, and at the same time been instructed to remove the tenons, which I do, then plug the socket with hard wood firmly glued and shorten the ferrule. A long ferrule reduces the spring of a light rod to a much greater extent than most fishermen imagine, and unless the female ferrule is long a dowel is of no use.

I have had rods brought to my shop for repairs that had the socket for the dowel bored below the female ferrule, which, of course, completely destroyed the strength of the rod.

Then again, as Mr. Wells says, to repair a rod that has been broken at or near a ferrule, it shortens and stiffens the rod to a degree that is very damaging, and in making repairs of this kind the rod often has to be worked down from butt to tip before it is a fit article for a fly-fisherman's hand.

As to the strength of a rod, if we take, for instance, a fly-rod of 6 ounces, or 7 ounces, and make it with dowels, the wood of the tip below the ferrule is worked down to receive the tapering piece of metal until it is about the size of a knitting needle and tapered to almost a sharp point. Now there is not strength enough in this piece of wood to in any way assist in preventing a breakage should the rod spring at the ferrule.

Most rod makers are now making the tenon solid with the male ferrule, and although this is stronger it is heavier, and does not prevent the necessity of a long female ferrule, which, in a measure, takes the long even bend from the wood, and having a greater amount of purchase than a short ferrule is much more liable to cause a fracture than to prevent it.

I have made a good many bass rods, after the Dr. Henshall and other patterns, and with one exception they have been made without dowels, and I have never known of a ferrule having been bent on a rod broken at the ferrule, although some of them have had very rough usage among the Thousand Islands and Lake Champlain.

I think Messrs. Abbey & Imbrie, of New York, make the Henshall rod in this manner, and Mr. C. F. Orvis makes his rods without dowels.

There is another point in rod-making which should be considered, and which I have practiced for a long time, viz.: the fitting of ferrules without cutting away the wood the thickness of the metal. The ferrule should go "over" the joint of a wood rod, the same as on the split bamboo. The enamel of the bamboo is never cut to fit the ferrule on (I speak of fine rods only), and it is almost as damaging to a wood rod to cut it around to fit a ferrule as it is a bamboo.

If we take a piece of hard wood, lancewood, for instance, ¼ inch in diameter at the middle and tapering to ¼ inch at either end, make a slight incision around the center of the rod, then fasten one end in a vise and spring the rod until it breaks, and nine times out of ten it will break at the incision, although it may not be more than a scratch around the wood.

I taper the joints of my rods to the inside diameter of the ferrule, and let the ferrule go over the whole diameter of the joint, then with a neat wrapping of fine silk, or a ring which can be put at the female ferrule of the butt and second joint; it makes when varnished over fully as nice a finish as to cut the wood away.

But I will not go into any more details, as I am afraid I have already taken too much room in your paper.

GEO. F. ALDEN.

FISHING IN CARDENAS BAY.

BEING in Cardenas, and finding that a gentleman whom I wished to see would not be at home for several days, I thought I would make time pass quickly by taking a fishing excursion, so I went down to the wharf where the fishing smacks, or *viveros* come in and asked the captain of one of them what he would charge to take me with him on his trip. He said he would not charge me anything, but that I could bring something along to eat and that would be all that was necessary. We went to the Plaza, and for $13 paper I bought a large basketful of vegetables, eggs, oranges and four or five pounds of fresh meat, for the kind of fresh fish the fishermen like best is *carne de vaca* (beef). I did not forget some cigars and cigarettes.

At 10 P. M. we set sail to catch the first of the land breeze, that commences to blow generally at that hour, in company with about eight or ten more *viveros*, so called from the fact that they have a tank on board where they keep the fish they catch, alive, there being many holes in the bottom of the same so that the sea water circulates continually through. We went down the bay, which is about twenty miles long, outside of the lighthouse on Rock Key, to the open sea, and after fishing all day we would run in behind some key or small island and anchor for the night. In the morning we would run out again, and so continue until the tank was filled. In our case this took four days. I have been on fishing excursions many times, as you well know, but I never saw so many fish caught in so short a time before. The lines we used were large and strong, with hooks about the size of bed spring wire. Still, many times the fish would get away with the tackle, so you can form some idea of their size. We used live fish about six to ten inches long for bait, hooking them through the back, and seldom would I throw out my line with a good, lively bait on the hook, without seeing it snapped up by a ten or twenty-pounder, and then would come a tussle. I tell you, they fight hard, and it takes some tact to bring to the top of the water so as to get a net under him, a big fellow, three or four feet long, with teeth like a saw. In fact there is a kind of fish they call *sierra* (saw). I found out one must keep a cool head and not get excited if he wishes to be successful at this sport.

Many times, after a long struggle, I would get my fish to the side of the boat, and then, before we could get a landing net under him, away he would go and I would have to go through the same maneuvers again before getting him safe in the tank. My hands are sore and cut by the line running through them, and from handling big fish. I won't say how many fish I caught, but I will say that I fished until I was tired out with the sport.

One thing which contributes greatly to the sport is, that the water is so clear that one can see down to a great depth, and so can always see his fish when in the act of taking the bait, which is done like a flash, and away goes the line and the fight begins in earnest. One must have blood like water if it does not surge through his veins as a big fish drags the hissing line through the water, now here, now there; perhaps toward you, giving you lots to do to pull in the slack to keep him in hand; then, again, off like a flash down deep in the water, until you begin to think he will never stop, but take all your line, and that you will have to let him go, but just before you reach the end you feel the fish getting weaker. You hold on a little, restraining him, and little by little begin to pull in. Perhaps you will get him to the top of the water, but it is much more likely that you will see him dart off again to renew the fight, and sometimes with a grand leap clear from the water, he will let you see what a magnificent prize you have hooked. Then after all is over, and he is swimming in the tank, you would say, as I did, that you never knew what it was to fish until you had played a big thirty-pounder, and after a half hour's fight brought him safe to hand.

There are a lot of sharks after the boat, great, wicked-looking objects, who would make short work of one in no time. We would often throw over dead fish, which they would snap up in a flash, fighting among themselves for the prize, and then I would give it to them with my revolver. There was one which I wounded three times in the head, and still he would keep on after the boat and look up with his wicked eyes, as much as to say, "Oh! I am here yet."

If I go again I intend to take a shark hook along for them. They would often take our bait, but of course we could do nothing but let them break our lines. The *vivero* on which I went was about the size of the clam sloops which come up the Hudson. The captain was a young Cuban only three months married, and as nice and kind a person as one would wish to see. He could not do too much to make my trip pleasant, bringing dishes and other conveniences from his house on purpose for me. I did not have a good appetite for some time before I went on this trip, and it has done me much good. I see I have made quite a long letter of this, and as I want to say a word or two on other subjects I will stop.

C. H. GALLUP.

THE LENGTH OF FLY-RODS.

Editor Forest and Stream:

In your issue of Feb. 14, Mr. R. H. Dixon had a brief article upon "Fly-Rods, Long vs. Short." I was glad to see it, because the superior success attending the use of long rods has been mentioned to me more than once. I confess that I am totally unable to see why a long rod should have any advantage over a short one, provided the user of the short one can make long casts, and I do see many reasons why a short rod is always a more convenient and manageable thing than a long one. Then, too, the constant tendency to shorten rods, for all uses except fly-fishing, which has been very manifest for some years past, and the repeated declaration of those who have used both kinds that the short rods are better, would seem to be decisive against the long rods. I can easily see that, if the angler can only cast a line twice as long as rod, he who uses the longest rod will have the most success, for it is a general rule that the longer the cast the greater the likelihood of taking fish; but the users of short rods are generally expert casters and in no way limited by the length of their rods. Still, let us have the experience of the users of both kinds of rods; let us have the matter discussed; good will come of it. Mr. Henry P. Wells, in his recent most excellent article, said: "The anglers have fallen, or are falling, into a rut, and are three-quarters asleep besides." Let us wake up; let us get out of our rut. The way to do this is to discuss and compare our various practices.

I have, in a brief way, championed the short rod, but I am willing, nay, anxious to learn the intent and value of a long one, or of any other appliance or practice in use by my brethren of the angle. I want to be taught anything that will enhance my enjoyment of my favorite recreation.

In conclusion, let me call attention to the last paragraph of Mr. Wells's letter, so that anglers may be roused to the use of the pen: "A comparison of the correspondence in your paper in reference to the art and implements of the angler with that in reference to other sports, is a standing shame and reproach to every man who handles a rod."

M.

STURGEON FISHING.

Editor Forest and Stream:

Mr. Clayton Von Culin desires me to explain. Permit me to do so.

In my story entitled "Gaffing a Sturgeon," which appeared in a recent number of FOREST AND STREAM, I had no intention of descanting on the size of the fish taken, knowing well that sturgeons reach enormous size and weight.

As to the *modus operandi*, let me say that sturgeon lines proper, range from 100 to 1,000 yards in length. These are anchored securely at both ends, and buoyed at certain distances from the shore. This fish line proper, has suspended from it at regular distances of three feet or so, smaller lines of about two feet in length, each of which is hooked and baited with perch cut up in small pieces. The position of the line proper is thus suspended from buoy to buoy, and so the hooks will be, some off the bottom at different distances, and those in the middle will lie on the bottom.

The fisherman stands in the bow of his boat, because the stern of it would fill if presented to a heavy sea. A commencement is made at the leemost buoy, and the line proper is passed along hand over hand—hooks whose baits are destroyed are rebaited, those having taken fish are removed from the line proper by jerking the slip knot that fastens the small line to the line proper as soon as the captive fish is safely gaffed. A fresh small line and baited hook then replaces the one just removed, and so on till the whole line proper has been overhauled. The boat then returns to shore, the fish are cared for by being cut up, smoked, etc., and the hooks then taken out of their mouths.

Pound nets are also used, but not in the places where the aforesaid lines are the only means of sturgeon taking.

The condition of the water as to roughness makes all the difference to the labor of gaffing, not only because it is more difficult to stand and work in the boat, but because there is nearly always a greater catch by reason of the fish both biting better and the time being longer since the lines were last gone to after a blow.

VERAX.

PORT ROWAN, Ont.

THE FISH QUESTION IN MAINE.

THE Norway, Me., *Advertiser* prints the following from an Oxford correspondent who signs himself "Mark Tapley:"

There are many rumors afloat in regard to the little disturbances of last week caused by the visit of one of the State Commissioner's emissaries to our villages. The truth as near as we can ascertain, seems to be that Leander Wardwell pleaded guilty to a charge of catching one spotted trout, for which crime he made satisfactory amends. The other-fish, a kind of mongrel, known as togue or Thomson Pond trout, don't come under any of the statutes. Mr. Wardwell is one of our most respectable and worthy citizens, and we have no idea he was conscious of violating any law at the time. Neither had the *Advertiser's* correspondent any evil intention in making the thing public. The law as it exists, is strongly disapproved by almost the entire community. Still as it is the law let us obey. We hope our next Legislature will be asked to modify this law so as to give our own people the privilege of catching a few fish now and then, and not give to a set of city grandees all the preference, who hang around our hotels at a time when the working people are so busy they can't attend to it.

The "togue" is the fish known in New York and elsewhere as lake trout, and is not a "mongrel," nor a fish peculiar to any pond. Commenting on this one of our correspondents writes:

Editor Forest and Stream:

I inclose you a little slip, cut from Norway *Advertiser*. See how they go for our hotel guests. I am trying to learn who wrote that article, but am unable. I was in hopes to see some of our Commissioners come out on this last week in answer to that article from Oxford about the trout, by which I learn there is more truth than poetry in the charges. Nevertheless this poaching ought to be stopped at once. It is a shame to destroy the fish as they do. They say they don't catch the speckled trout, only togue, or lake trout. The law is the same in both cases, if I understand it correctly.

I talked with Wardwell the other day. He will give

them a hot pill if he can only get a chance. In regard to that part where "Mark Tapley" speaks of giving a privilege to our own people of catching, etc., and his slurs on the guests of our hotels (for I happen to be in the hotel line), it is an insult, and no person who has common sense would write such trash.

It is a shame that the State would not give those poor, overworked people a certificate, allowing them to fish the whole year through with nets, snares, spears, etc. Our country stores would not be so crowded, perhaps; they do more work there than anywhere else, when, in fact, they go fishing at their pleasure, regardless of the law. But when one gets taken up and punished, why then they complain and go for the gentleman sport or true fisherman, who comes only when the law says he can, fishes in a sportsmanlike manner, and winds up his tackle and goes home the moment it goes on again; comes here at large expense, paying for board at the best hotel; gets the best guides, the best boats and, the best of all, never finds a word of fault with his bills; has had a good time, grown fat, and returns home a wiser man, with hopes to come again another year.

MAJOR LOVEJOY.

BETHEL, Me., Feb. 20.

A SNAPPING TIME.—Philadelphia, March 5.—When I was a boy of about fourteen I was accustomed to spend my summer vacation in the country with a farmer friend, where I devoted my time to the pursuit of pleasure in general. Principal among my enjoyments were the rod and line which I plied with varying success in the "raging canawl," which "raged" but a few fields distant from the house. One bright morning in August, after a refreshing rain during the night, I hied me to my favorite nook, just across the lock, in a corner of the dam formed by the overflow of the canal. It was a famous place for catfish, and I soon had a fine string. While waiting for another bite I soon saw my cork disappear slowly but surely, and something told me I had a big one, which I proceeded to land. To my astonishment, though the rod bent and cracked, I found I could not move my fish, and then reluctantly concluded that my hook was fast on a log or brush; so I pulled and switched to right and left all to no purpose, and was on the point of breaking the line when I felt it begin to yield. Slowly, very slowly I pulled my fish to shore and then, fearing it might break away, I seized the line with my left hand and drawing my fish close to shore, slid my right hand carefully down the line to get a good hold near the fish. I had scarcely got my hand under water when—great Cæsar! Christopher Columbus! Had lightning struck me, or a house fallen on me? Pain, as though pierced with ten million needles, shot through my arm, and, jerking my hand from the water, I brought with it, attached to my index finger, with his jaws set through the root of the nail, his eyes closed, his head drawn into his shell but hanging on with the tenacity of a bulldog, a snapping turtle about a foot long, but weighing fully a ton. The pain I suffered was simply agony, and I thought I felt all the tortures of Fox's martyrs boiled down. Perhaps, if there had been any one to hear me I would have yelled, but no one being near I "suffered in silence alone." However, I severed the line (how, I don't know) and supporting the weight of my captive (?) with my left hand, dashed across the lockgates (before I had crossed Oh, how carefully) up the hill, over the fences (I don't know how) and into the yard of good farmer H. As luck would have it he had just come in from the field and his shout of laughter as I danced around and implored him to help me let go the snapper, brought all the girls from the kitchen, and for a while the chances of release seemed slim. However, sympathy prevailed and, after much punching and prodding with a piece of hickory, his snappership's jaws were pried open and my finger released, and from that day I abandoned the rod and took up the gun as the less dangerous of the two. Moral—Take a bull by the horns, but never take a snapper by the jaws.—JUVENIS.

A PECULIAR FISH.—Concord, N. H., March 5. An exceedingly interesting question has arisen in Dublin, N. H., in relation to the subject of fish protection. It appears that of late persons have been catching a certain kind of trout from Dublin Pond and claiming that it is a peculiar species and is not protected by the State law. The local wardens refrained from making arrests under the circumstances, but caught some of the fish and forwarded them to the State Commissioners, who are Col. George W. Riddle of Manchester, Hon. Luther Hayes of Milton, and Col. E. B. Hodge of Plymouth. These gentlemen sent the specimens to Harvard University for examination, and an answer has been received from Prof. F. W. Putnam, Curator of the Peabody Museum. Prof. Putnam, assisted by Prof. Gannon, head of the Zoological Museum, has made a preliminary inspection of the fish and says the variety is one they do not yet make out. At present they are inclined to believe them a variety of the *Salmo fontinalis*, or brook trout, but add that a further study may change their views. In the meantime the Commissioners have instructed the Dublin Wardens to prohibit the catching of the fish under discussion, and to prosecute all persons found taking them. This action is based on the belief that they are a variety of brook trout. They are small in size and fine eating, and their general appearance is such, that if a few of them were mixed with accepted brook trout it would require an effort to separate them. There is a rumor that Agassiz once stated that he discovered a rare variety of trout in Dublin Pond, such as was found nowhere else in the United States, excepting in a small lake among the Rocky Mountains.—*Boston Journal.* [We have seen the singular trout from Dublin Pond, and think it merely a white form of the common brook trout. These silver fish, which are the rule there, occasionally occur in Caledonia Creek, N. Y.]

FINGERLING TROUT.—New York, Feb. 28.—*Editor Forest and Stream:* I am glad to notice that now and then some indignant angler "stirs up" the trout hogs who slaughter fingerlings and call it trout fishing, when they ought to be imprisoned for infanticide. And I see that the Connecticut Fish Commissioners have been endeavoring to get a law passed limiting the size of trout, "exposed for sale," to six inches. Can't our Legislature give us a law fining any one in possession of a dead trout under six inches? If we don't do something to stop this slaughter of trout babies, we'll soon have to mourn the loss of the whole species.—MANHATTAN.

"SEBAGO," OR "LAND-LOCKED" SALMON.—Cannot we get a better name than that of "land-locked salmon," for that choice fish? Why not come back to *Salmo sebago?* for the last report of the Maine Fishery Commissioners seems to show that they are again becoming plentiful in that beautiful sheet of water, and that specimens of great size are being found there. Food and water seems to determine the size of the fish, for it is a fact that those which were hatched from eggs from Grand Lake stream and planted in Sunapee Lake, in New Hampshire, have been taken last summer of over 6 pounds in weight, in several instances.—VON W.

WHAT FISH IS THIS?—Cayuga Lake, N. Y., March 1.—I wish that some of your readers would tell me what kind of a fish it is that has come into Cayuga Lake within the past two years. When small they look like trout, but when grown they can hardly be told from bullheads. My attention was called to them by John Parker, the fisherman who showed me some of the little ones a year ago. Last fall he caught full-grown ones with bullheads. It is thought that it is some fish that has been planted here by some one who has been fooled with a worthless fish.—W.

SALMON ANGLING.—*Editor Forest and Stream:* Should any of your readers be in search of a real first-class salmon river, they can have their desire satisfied. I happen to know that the Moisic, on the north shore of the river St. Lawrence is just now vacant. It can accommodate four rods and the fish run very large, looming up in the forties. Weekly steamer from Quebec and telegraph station. Early application to Mr. John Holliday, Quebec, will secure preference.—B.

Fishculture.

AGRICULTURAL DRAINING AND THE FLOOD.

IN the days of national calamity, caused by a repeated flood, it becomes the duty of every good citizen to assist in finding a remedy to prevent such disasters in the future.

Agreeing entirely with the foresters, who see the root of the evil in the destruction of our forests, I go further yet and charge it in addition to the neglect of water farming. It is astonishing what an amount of labor and capital there is unconsciously expended in this country to decrease the value of our creeks and rivers by a condemnable rude method to rid farming lands of water, not to mention other surfaces.

As soon as any way possible, the farmer drains all his land; many a dollar is spent in tile, culverts and other devices to secure a rapid and direct off-flow of the water. This is well enough if done with proper care. It is necessary to produce crops in some soils, but it can be and is overdone.

It is quite plain that after heavy rains the already full-running creeks will be overtaxed by additions of water from innumerable drains, and in consequence they will be forced to overflow and wash. What is to be done then is to retain that part of the water which is under our control as long as possible, to the great relief of the creek. This can be done by constructing ponds.

Prof. N. H. Eggleston shows how the leaf mould sucks up and retains the water for a long time, thus preventing both a sudden freshet and a sudden drought. These same faculties I claim for ponds. The remarks made by farmers that it does not pay them to replant part of their land with forest may be correct, as I hardly think that small tracts of forest could withstand the effects of dry winds in the summer to such an extent that a sufficiently thick coat of mould would ever collect to act as a sponge. Forests, therefore, to be of any service in that direction, would have to be planted in large tracts and kept up by companies or the State.

Ponds, like leaf mould collected in a forest, retain vast amounts of water; the drains of cultivated land can be led into them, and from there, after fish have had the benefits of the ingredients washed from the fields, it would gradually pass into the little run or rivulet. The latter would then be assisted during a "run," the water flow during summer better regulated, and the much-missed fish of our creeks would make their appearance again.

Contrary to forests planted by individuals, ponds pay almost from the beginning. Tracts of land which have to be drained with much expense to be suited for agriculture, can sometimes, with a trifling expense, be turned into good ponds, and made to pay far better than the best field. The desired "sponges" would thus be re-created by individuals to assist those formed by large forests under State control. The water before looked upon as waste and driven from the premises to bring devastation, would thus be made a servant; which fact is very important, since the old proverb truly says that "the water is a good servant, but a bad master."

HUGO MULERTT.

CINCINNATI, O.

DEATH OF MR. JOHN E. REARDON.—We are informed of the death of Mr. John E. Reardon, president of the Fish Commission of Arkansas, on Dec. 4, 1883. Mr. Reardon was a well-known citizen of Little Rock, and had been a Commissioner for a number of years. He was a warm friend of fishculture and had long urged his State to take a more active interest in it. He was highly respected by a large circle of friends in both public and private life.

THE WYOMING COMMISSION.

THE biennial report of the Fish Commissioners of Wyoming Territory, for the two years ending Dec. 31, 1883, is at hand. It opens with the fish laws of the Territory.

The year 1882 was devoted almost entirely to the planting of native trout and other varieties. The practical results attained from all of the plants are very successful.

Brook trout planted by the Commission have been taken from the "alkaline" (?) streams of Laramie and Albany counties, which never before afforded them. *Salmo fontinalis* weighing as much as fourteen ounces have been sent this season to the chairman of the Board, almost reaching the status of a three-year-old—which is sixteen ounces—placed under the most favorable conditions—a sufficient proof that streams flowing into the North Platte will support trout.

Concerning this planting of trout in alkaline waters the Commissioners say: "In the beginning of our work we were often informed that it would be waste of money and loss of time to place trout in an alkaline water, whose proverbially known constituents would destroy the plant. Disbelieving, however, this "well-known fact," we have gone on, meeting with flattering success. Trout will live in such waters as are found heading in the Black Hills and Rocky Mountain base. We believe they never were there, until the Commission placed them in the streams."

Carp have thriven wherever planted and promise to give good results. Directions for making ponds are given.

NEW PUBLICATIONS.

The Angler's Note Book and Naturalist's Record is again to be resumed by the editors of the "Bibliotheca Piscatoria," W. Satchell & Co., 19 Tavistock street, Strand, London, W. C. The Note Book is specially designed to promote the interests of writers, publishers and sellers of books on angling and other field sports. Bibliography will also receive a large share of attention. The "Green Series," published some three years ago, was exceedingly interesting, and many regretted its suspension. The present series will cover twelve monthly numbers.

MILLIONS OF DOLLARS WERE LOST by men who were accidentally injured in 1883, and not insured in the Travelers, of Hartford, Conn. The wise ones insured and drew $864,000 in cash benefits.—*Adv.*

The Kennel.

FIXTURES.

BENCH SHOWS.

March 12, 13 and 14.—New Haven Kennel Club's First Annual Bench Show, Second Regiment Armory. Edward S. Porter, Secretary, Box 657 New Haven, Conn. Entries close March 1.

March 18 to 21.—Washington Bench Show, Masonic Hall, Washington, D. C. Chas. Lincoln, Superintendent.

March 26, 27 and 28.—The Dominion Kennel Club's Second Annual Bench Show, Horticultural Gardens. Charles Lincoln, Superintendent. W. S. Jackson, Hon. Secretary, Toronto, Canada.

April 3, 4 and 5.—The Cleveland Bench Show Association's Second Bench Show. Charles Lincoln, Superintendent. C. M. Munhall, Secretary, Cleveland, Ohio. Entries close March 24.

May 6, 7, 8 and 9.—The Westminster Kennel Club's Eighth Annual Bench Show, Madison Square Garden. Entries close April 21. Chas. Lincoln, Superintendent. R. C. Cornell, Secretary, 54 William street, New York.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1010.** Volume I., bound in cloth, sent postpaid, $1.50.

EXPERIENCE WITH DOGS.

Editor Forest and Stream:

My experience with dogs covers a period of twenty-five years.

I believe I am as free from prejudices regarding breeds as it is possible to be. My first dog was an imported English setter, thoroughly broken, and a finer dog is seldom seen. I have since owned red Irish and Gordon setters, pointers, and Llewellins, and I candidly believe the difference between them is far more imaginary than real. Individual pointers and setters differ more widely than do the two classes. The performance of a single setter or pointer proves nothing but the merits of the individuals immediately concerned. I have worked pointers and setters side by side, day after day, and season after season, and I would not give five dollars either way as a preference.

I have never owned a pointer that would refuse to go where a setter would. With the exception of the first dog mentioned, I have broken all the dogs I owned myself, and I contend that a dog properly trained—pointer or setter—will remain so, as long as worked by his trainer or any one who understands the method by which he was trained, and that he will begin the season as steady as he closed the preceding one. Herbert set the fashion in dogs in America forty years ago, and the "Forester bathos" continues to-day, so far as dogs are concerned.

His opinion of pointers arose from a very limited knowledge of them. This is plainly shown in his works. Charging pointers with lack of affection, and hunting with a stranger as well and as readily as with their master, is not a characteristic of them by any means. I have never owned a setter or pointer that would follow a gun or hunt with any one but myself. "Hunt," in an article on the subject, states that pointers are inferior to setters in speed and endurance. This is the first charge of the kind I have seen. The setter when at work has an industrious air about him that is apt to deceive. The pointer ranges more widely and goes with a bound that does not show up as well as the other, but he will cover as much ground and pass as few birds as the setter. I have a pointer nine and a half years old that worked last season on chickens day after day in company with a son of Gladstone and an Irish gyp. They were both good ones and much younger, but the noble old fellow more than held his own. If one inclines to setters he should own them, if to pointers they are his dogs. If he has more than one let him get one of each. After using them for a number of years he will be of my way of thinking. A dog is just what you make him. Give him proper care and affection and he will come nearer anticipating your wants than a human being can. DICK.

BRAZIL, Ind.

FOX HUNTING ON OIL CREEK.

SOME six weeks ago Doc P., of Petroleum Centre, presented the Rhodes Brothers, of Pioneer, with four of his famous foxhounds—Drive, Tickler, Center and Jo B. Thursday of last week, being the first fair day for hunting, the boys crossed Oil Creek, and at the mouth of Bull Run they jumped a big red fox, whose confidence in himself was signified by the pauses he made in listening to the bay of the dogs as they made the first rush to get in. It was but a few minutes, until he understood that there was a different class of hounds in his wake from what he had been in the habit of dealing with, and with a good-bye switch of his tail he began his flight for Becker's Heights, where for about thirty minutes they poured it to him so hot and fast that he made a break for Cherry Run, up and down the banks of which they drove it to him so fast and furious that he began to get frightened, thereby losing his confidence. Crossing at Morrison's Corners the music of the dogs was glorious, double discounting any "Dutch band" in the State.

The pace was now at its best, Drive and Tickler running to catch, while Jo B., Center and Wynder, one of their best home dogs, were well up. They were now making the pace still more terrific, and reynard was fast losing his head. He tried several short turns, but the scent was good, and the dogs were running with their heads up. His twists and short turns amounted to nothing. They were now giving it to him hot and heavy, part of the time in sight. He swept in toward McDonald's Rocks, but they pushed him so hard that he took the big road back toward Oil Creek. Hokey, pokey, you ought to have heard them giving it to him now; how they cried for help, but the pace was too much for him. They were fast overhauling him, when he made a short turn into the meadow and tried to reach some thickets on Hutchinson's Ridge, but Drive overhauled him nearly in the door-yard of the Burns Mansion, his jaws just closing on him as Tickler got there, followed closely by Jo B., Center and Wynder. Time of run, one hour and twenty minutes—well done on strange ground and with strangers. But that is nothing when you have the stock. Delighted we were with the hunt and our new dogs, but our glee was great yesterday and our cup bubbled right over the brim with fox-hunting fun. Harley feeding his dogs at noon, letting them out of their kennel at the time, ten minutes after which they winded a big red fox as he was crossing Western Run. In a jiffey they were giving it to him up on Benninghoof's Point, back across the run, up by the white school house, over the Stillwagon settlement.

The music now was soul-stirring, I know reynard was enjoying it, for he made a bee line for the city of Titusville, so the hunters there could hear it too. The pace was now killing, the cry of the hounds was fast and furious, it was the anxious whining cry of dogs that were running to catch their game. At Boughton, just below Titusville, the pace was too great for reynard, he had to make a turn, taking the creek hills back; he tried every way to shake himself clear, but Drive and Tickler would not be denied while Jo B., Wynder, and Center were bound to be there at the finish. The pace was a hot one as they worked their way down the creek, the music was delicious, knocking out all the Jenny Linds that ever crossed

the sea. At Gregg's Switch they made it so warm for him that he tried to get over the sedge. It was while climbing the summit that we got the first glimpse of his impudence, tongue out, brush down, ears laid back, running zig-zag, aimless, head gone, picked up by Drive as he was crossing a clear patch, with Tickler so close that it was almost a doubt which nipped him first; Wynder, Jo B. and Center close up and getting in at the wooling match as they shook him up. Time, two hours and fifteen minutes. This is a team that you will hear from again. HOUP-IT-TO-EM.

PIONEER, Pa.

THE DACHSHUND.

Editor Forest and Stream:

In the last issue of your paper I saw an article about the dachshund and his pointing like a pointer or setter to a bird. I have never seen this done by any of them. I think it must be very uncommon. I always found that as soon as they get the scent of game they pitch in for it without stopping.

I have had a good deal of experience with these smart and spirited little dogs in Germany, where they are very common hunting dogs. Indeed, every forester and almost every sportsman keeps one or two of them. Mostly they are used to drive foxes and badgers out of their holes in the ground, while the hunter waits behind some bush or tree to lay them low as soon as they leave the dog in possession of their homes. Sometimes a fox, especially when sick, will not leave, even when attacked by a sharp dog. In one instance, I remember, the dog of a forester, a friend of mine, had got away from the chain and hunted on his own responsibility. When the dog did not return the third day after he left, his master inspected all the fox holes in the neighborhood, and in one of them he heard his dog bark and sometimes make attacks on his enemy. It was evident that the fox did not want to jump, so his warm home was laid open with shovel and pickaxe. We could not see the fox through the opening we made, but the dog came out panting and covered all over with sand. His master caressed him and offered him a nicer-piece of meat out of his pocket than he had ever tasted in his life. But the dog did not even touch it, but turned and went down again to finish his fight first. When the fox was finally killed, we found that he was sick, and that was the reason he had not jumped. As soon as this was done the dog lost all his pluck, and showed so much exhaustion that his master carried him home. He did not refuse then the meat any more.

Once I saw two puppies, which were about eight months old and out for the first time, attack an old fox which had been shot but not killed. Even after receiving several bites from the infuriated animal that made them howl they did not keep off, but killed him, and had such a hold of him that the gentleman with whom I hunted lifted fox and dogs up and swung them over his head, but they did not let go.

I have seen old dogs of this kind with torn ears and scars all over their body. They get these mostly in fights with the badger. This animal is a worse foe even against the strongest dog than a fox; these jump a great deal easier than the badger, which is generally too fat to feel like leaving his home in a hurry, but fights harder for it.

We shot a great number of foxes with one of these dogs. He went into the thicket and was sure to drive the fox into shooting distance, and he finished him in good shape when not killed by the shot. It is astonishing to see how these little bow-legged animals will run, and what an amount of perseverance they possess. They have a splendid nose, and tied to a line make excellent retrievers for wounded deer. They are used a good deal for this when there are no bloodhounds.

I always liked these bright little fellows with their beautiful heads. I remember with pleasure the days when I heard their high voices in the German woods, expecting the appearance of Mr. Fox every minute.

There is only one drawback to them. It is very hard to make them mind. If excited by the chase, you can yell at them ever so much, they will go on like fury. X. Y. Z.

OSHKOSH, Wis., March 1.

MANGE AND CANKER.

Editor Forest and Stream:

The desire of imparting to the world any useful knowledge that one may have acquired is a most laudable one, and I have no doubt but what that was the motive which prompted the communication in your last issue, from Mr. Thomas But. But it is rather aggravating, for any one who thinks he knows something about the subject, and has had some experience in the matter, to see in print that a certain combination of ingredients will cure the worst case of mange with two applications, and, another one, canker of the ear with three. Being a medical practitioner, and also a lover and owner of dogs, I have naturally paid some attention to canine pathology and therapeutics, and, although I have come to the conclusion that with the exception of cathartics, tonics, etc., the less dosing a dog gets the better, from the fact of my practice being in a great measure in the special branch of dermatology, I have taken a good deal of interest, and spent considerable time in investigating the lesions of the skin on the dog. The term mange, as used, is a most indefinite one, being popularly applied to almost any cutaneous affection that has itching as a concomitant. In many cases washing and any cooling or soothing application is all that is needed, and not a few will disappear without any treatment at all. The severe contagious power of mange is due to a parasite, which is the same that causes certain skin diseases on the human race, *i.e.*, ring worm, scald head and barber's itch, according to the seat of its development. This parasite is a fungus, known as trichophyton, which, once planted in the skin, multiplies by rapid production of microscopic sporules not very different from those of the yeast fungus. On the skin, *i. e.* ring worm, it is easily killed by any strong application, on the scalp and in the beard it is a much more difficult matter, as it attacks the hairs, and develops in the hair follicles, where external applications cannot reach it. This is the case when a dog is affected with it. The prescription Mr. But gives is composed of very excellent ingredients, but they are no more so than many other well known anti-parasitic applications, such as carbolic, phœnic or salicylic acids, and to say that that especial combination will cure every case of mange with two applications, is simply absurd.

In the same way the term canker of the ear is applied to all cases where there is an irritation of the external auditory canal sufficient to produce a discharge, and to cause the dog to shake his head and scratch his ear with his hind paw. This may be caused by many things, such as the presence of a foreign body, an accumulation of wax, a little eczema (salt rheum) of the inner ear, or inflammation of the same, which may merely affect the superficial mucous membrane, or may extend deeper so as to cause disease of the bone, destruction of the drum of the ear, etc. Practically, such cases, even the commencing ones, are very hard to handle. The only case that I have ever known of, where the disease had really existed for some time, that was cured, was in the case of a dog belonging to a friend of mine, in whom a mutual friend, a scientific aurist, took interest enough to make frequent applications and cured him. The canal of a dog's ear is quite deep and crooked, and I doubt if any body but a specialist could succeed in making applications to the deeper parts. It is only fair to say that in this case, I believe it was boracic acid that was used, but so far from three applications curing it, I doubt if, had the dog been a patient, a hundred dollar bill would have settled his account. I have no wish to criticise Mr. But's communication, as I have no doubt but that he has had excellent results with the two prescriptions he has published, but he claims too much for them, of which fact time will convince him. We have now several men in the country who have taken hold of veterinary medicine and surgery with a thorough and scientific education, and it is to be hoped that their influence will be able to lift horse and dog doctoring above the use of empiric mixtures.

However, when I remember how often, when on my annual trips for rest and sport, I have, when some native found out that I had a Dr. before, or an M.D. after my name, been asked, "What will cure a headache?" or, "What is good for a cough?" I ought not to be surprised to see that a certain mixture would cure mange, or canker of the ear. MIC. MAC.

BOSTON, Mass., March 8, 1884.

CINCINNATI DOG SHOW.

THE bench show held this week at Cincinnati, O., has proved an immense success. There were in all 289 entries, exclusive of the specials. The attendance was very good, in fact, the hall could not at any time conveniently accommodate the crowds which literally packed every corner.

The sporting classes, especially the Irish setters and pointers, were well represented; also the non-sporting, in pug, Yorkshire terrier, and toy terrier classes. Mastiff, St. Bernard, and Newfoundland classes did not fill so well, but the greyhounds were a fine collection.

Major J. M. Taylor judged the setters and pointers. Mr. J. Mortimer all other classes.

MASTIFFS.

There were three entries in the mastiff class. Lion, a fine dog, with good legs, back and loin, won easily. Leo, who won second, is a fine dog, with a good mask, but his ring tail is against him. Gulnare, who was given an hc., is only five months old. She may develop into a good one.

ST. BERNARDS.

The St. Bernards were a poor class. Rex, who won first, is a fair puppy. Finette, who won second, is too small. The others were a poor lot.

NEWFOUNDLANDS.

The first prize was rightly withheld for want of merit. Nig, who was given second, got full as much as he deserved; he is a large well shaped dog, but is too curly in coat.

GREYHOUNDS.

The greyhounds were much above the average. Parvin's Major, who won first, is a very fine animal with lots of quality, he will compare favorably with any that we have seen. Smith's Major, who won second, was shown in bad form; he has a racing-like look that is very taking; he has excellent shoulders, legs and feet. Pedro, who won vhc., is short in neck and heavy in shoulders. Gypsy, hc., is well formed, but was shown too fat; had she been in condition she would have beaten Pedro.

SCOTCH DEERHOUNDS.

The first prize winner, Ray, is a very fine animal; he has good head, ears and coat, he is a trifle weak in loin and quarters, which is probably owing in part to lack of proper work. Dick, who won second, is also a fine specimen, of good form, but a little undersized. Queen, who won vhc., is a fair animal with a capital coat.

SETTERS.

In the champion English setter class, Lava Rock, the only entry, was absent. In the champion bitch class, Dido II., owned by Gen. W. B. Shattuc, had a walk over, there being no other entries. She has wonderfully improved since we saw her at New York in 1883, having let down and lost the tucked up appearance which then characterized her. She is an extremely handsome bitch and fairly earned her honors.

In the open dog class, Dick Bee, a smart little dog, was first, and deservedly. Count Gladsome, with wonderfully good chest, legs and feet, came next, his weak point being his badly placed ears. Royal Lothair, vhc., is a very powerful dog, rather coarse in head, and with loaded shoulders. Maxwell, vhc., is rather a commonplace dog, he looks like a good mover. Rocket, hc., ought have changed places with Royal Sultan, c., who was all out of condition, being quite sick. In bitches, Nellie B. won first over Flora Bee, second. Joan of Arc, a very handsome bitch, but with a bad stern, was vhc. Lucy D., hc., and Faustina Lava Rock, vhc., were all good ones. The puppies were a very fair class, Dan winning over Rex, a Count Gladsome puppy who inherits his father's badly carried ears but is otherwise a very promising puppy. In champion black-tan or Gordon setters Rupert II. had a walk over. Mr. Thayer's entry being absent. In the open class, for dogs or bitches, Mr. John E. Long's Hugo won an easy first, Mack, second, showing age. The others were scarcely worthy of special mention. There was but one entry in the puppy class.

In champion Irish setter dogs, Biz was conspicuous by his absence. In champion Irish bitches, Lady Clare had a walk over. She was shown in wonderful good coat, but a bit fat and soft.

In the open dog class, Norwood (Elcho—Rose), the property of Mr. Overman, of this city, won easily. He is a magnificent specimen, and will compare very favorably with the best. Barney, second, we did not so much fancy, and thought Brag, vhc., might have exchanged places with him. This was a good class and well filled. In bitches, Clara Bell won well; Effie, second prize, being also a very superior bitch, but showed cares of maternity. Clytie, vhc., Virginia Reel, hc., all local bitches, made up a very good class. In puppies, Lotta (Norwood—Nellie) was first, another Norwood puppy being second.

POINTRRS.

In champion pointer dogs, Bravo easily disposed of King Tom and Knickerbocker. In champion bitches, Marguerite II. won over the W.K.C.'s Lassie, Rhona being absent.

In the open class for dogs, over 55lbs., Mr. Munson's Meteor had an easy win. Joe, a dog without a pedigree, being second, he has a grand chest and loin, good legs and feet; but we cannot overlook his bull-terrier head, bad eye and illy carried ears and think Bang (commended only) should have been second. Lamplighter, vhc., was a useful looking dog. Donald II., vhc., is too stilty and straight at the shoulders. Icicle, hc., did not fulfil our expectations, we thought him well placed.

In dogs under 55lbs. Perry won the pride of place. The class was a very poor one.

In bitches, any weight, Vanity was a good first, Lady Croxteth second, Flash and Spinaway vhc. The latter is a very good bitch, in fact the quality of this class was second to none in the sporting division. Trinket, the property of Mr. Stoddard, vhc., and Moonstone, c., showed age. In puppies Rapp and Doncaster first and second, by Croxteth, are a very symmetrical pair. Glen and Dora, both vhc., give promise of future excellence. This class was also well filled, there being fourteen exhibited, and but few bad ones. This finished Major Taylor's duties, when Mr. Mortimer commenced with

SPANIELS.

In field spaniels, Hornell Rattler, a very useful dog with good legs and feet, but rather short in body, and in poor coat, was first, the heavy Clumber-headed Success being second. This is a grand-bodied and coated dog, but his heavy head and forelegs will always prevent him getting in the front rank. The others hardly deserve special mention. In cockers, Hornell Daisy, a good liver-colored bitch, won easily, Hornell Silk second. A workmanlike, merry little fellow, he is too high on his legs and too curly in coat. Black Bess, vhc., had nothing but her profuse feathering to recommend her, as she was out of condition, and her coat was faded. Hornell Dinah, a useful bitch, was badly shown. The other entries were of a nondescript character.

FOXHOUNDS.

In foxhounds, D. O'Shea's Ringwood was much the best of a poor class.

BEAGLES.

Beagles saw four entries, three of which came to the ring, Mr. John Brass's Rattler II. being absent. Rattler was first. Music II. second, and Major T. vhc. These are three good ones, Major T. being short of leather and light-colored eye, but good in body, legs and feet.

DACHSHUNDE.

There were only two dachshunde, both fairly good ones, the young one a trifle the best in bone and crook, also color.

FOX-TERRIERS.

Lyra had a walk over in the champion class. In open dogs, Lancelot won over Flippant, who was shown badly. He has a timid manner in the show ring. In bitches, the Surrey Kennel's Jill far out-classed the others, but a protest was lodged against her, a veterinary surgeon called in, and she was disqualified for mange. This also was the case with her in the puppy class in which she competed. Clover Belle, a seven months old puppy, by Akely Joe—Guilty, taking first. Mr. Thayer's entry being absent.

COLLIES.

In champion collies, dogs, Robin Adair had a walk over, he was in grand form, but is a trifle soft in coat. In champion bitches, Effie won. Open dogs introduced a very nice young dog, Mac, eleven months old, who deservedly was first. Cheviot II., a very strong, but rather heavy skulled black and tan being second. In the open bitch class, the prize was withheld.

BULLDOGS.

This class did not fill well. Mr. Thayer's entries in this class, as in all others, being absent. The winner, Mr. Livingstone's Boz, wrongly entered as Boy in the catalogue, is a very good one and won easily, as did Sweet Briar in bitches. The others were a poor lot.

TERRIERS.

Young Bill, the ever green, won an easy first in bull-terriers, Mr. Livingstone withdrawing his fine young dog Grand Duke, who had unfortunately broken out in blotches all over. Of the others, Chip, vhc., and Fanny, hc., were gamy-looking animals, but scarcely up to bench show form.

Black and tan terriers were poorly represented. Spring, first, is just an ordinary one.

There were no entries in Bedlingtons, and only one Skye terrier of very moderate pretensions.

In hard-haired Scotch terriers, Tam Glen was first. He is a typical little dog, but could do with a better head. Boxer was second, and Lady vhc.

In Irish terriers, Erin beat Norah, second, in texture of coat and color.

Yorkshire terriers were well represented, the local pets being far above the average.

PUGS.

In champion pugs, Joe, now the property of Mrs. Hill (Cincinnati) won easily. In the open class, which was a large and good one, Bo Peep, a nice little bitch with good mark and color, was first, Sambo second. Judy III., who is immensely fat and refused to show herself in the ring, had to put up with a vhc.

TOY TERRIERS

were a numerous and good class in which Lotta, a diminutive black and tan, weighing 1¼lbs., was adjudged the winner, Flora second. Charlie, a pretty white, black and tan toy spaniel, had a walk over.

MISCELLANEOUS.

The miscellaneous class as usual was a large collection of all sorts, from an immense Great Dane down to the tiny and elegant Italian greyhound, which latter breed was well represented. There were three prizes in this class, which went to a Caniche poodle, a Dandie Dinmont, a good, one and an Italian greyhound.

Following is a full list of the

AWARDS.

Class 1. Mastiffs.—1st, James H. Lynch's Lion, fawn, 2yrs. 3mos. Salisbury—Tigress II.; 2d, Geo. H. Ingall's Gulnare, fawn, 5mos.

Class 2. St. Bernards.—Harry D. Emerson's Rex, orange and tawny, 6mos., Sultan—Finette; Louis Cook's Finette, orange and tawny, 1½yrs., Fox— ——. Very high com., Louis Cook's Barri, white and lemon, 1½yrs., —— —Finette, and W. H. Sutherland's Bruno, white, 4yrs.

Class 3. Newfoundlands.—1st, withheld; 2d, Charles Jacquemin's Nig, black, 15mos., Frank—Nell.

Class 4. Greyhounds.—1st, Geo. S. Parvin's Major, mouse, 1¾yrs., Prince—Gipsy; 2d, William G. Smith's Major, white and fawn, 1½yrs., —— —Lady. Very high com., William H. Campbell's Pedro, black, 2yrs. High com., Edward Wooldridge's Flora, black, 11yrs., and M. Schrank's Gipsy, fawn, 4yrs. Com., Bayard Taylor's Cricket, liver, 5mos., —— —Fanny.

Class 5. Scotch Deerhounds.—1st, Clover Nook Kennel's Ray, brindle, 2yrs., Paddy—Lassie; 2d, J. M. Taylor's Dick, gray, 2½yrs. Very high com., Henry C. Spellman's Queen, light brindle, 3yrs.

Class 6. Champion English Setters, Dogs —Absent.

Class 7. Champion English Setters, Bitches.—1st, Dido II., black, white and tan, 3yrs., Druid—Star.

Class 8. English Setters, Dogs.—1st, J. Kline's Dick Bee, white, black and tan, 2yrs., Paris II.—Romp; 2d, John Overman's Count Gladsome, white, black and tan, 2yrs., Gladstone—Leila. Very high com., C. B. Phips's Royal Lothair, black, white and tan, 3yrs., Racket—Kelp, and Thos. L. Martin's Maxwell, black, white and tan, 5yrs., Luke—Rene. High com., W. R. Traver's Rocket, A.K.R. 118. Com., Hugh Hill's Royal Sultan, blue belton, 3yrs., Racket—Kelp. A. G. Wetherby's Dick, lemon and white, 16mos., Rex—Kate, and L. G. Hanna's Don, black, white and tan, 2½yrs., Foe—Pach.

Class 9. English Setters, Bitches.—1st, John E. Long's Nettie B., black, white and tan, 2yrs.; 2d, Ontario Kennel Club's Flora Bee, black, white and tan, 2yrs., Paris II.—Romp. Very high com., John Shrink, Jr.'s Joan of Arc, blue belton, 4½yrs., Leicester—Pearl, and Geo. W. Law's Faustina Lava Rock, white and lemon, 1yr., Lava Rock—Lady Beaconsfield. High com., Wm. C. Howard's Lucy D., blue belton, 5yrs., Paris—Coomassie. Com., W. E. Mitchell's Brownie, black, white and tan, 1½yrs., Dorman's Racket—Rose, and Ontario Kennel Club's Dinah, black and white, 18mos., Mark—Betsey.

Class 10. English Setter Puppies.—1st, P. B. Spencer's Dan, black and white, 10mos., Chief—Nancy Lee; 2d, G. W. Schulter's Rex, black, white and tan, 7mos., Count Gladstone—Melissa. Very high com., J. A. Oskamp's Lady Nonpareil, black, white and tan, 6mos., Count Noble—Rosalind. High com., H. L. Kyler's Slip, black and white, 10mos., Royal Lothair—Nonie.

Class 11. Champion Black-Tan or Gordon Setters.—1st, Franklin Kennel's Rupert II., 4yrs., Rupert—Queen.

Class 12. Black-Tan or Gordon Setters.—1st, John E. Long's Hugo, 8yrs.; 2d, Alex Jeffrey's Mack, 9yrs. High com., Geo. C. Miller's Rube, 8yrs., Rip—Nell.

Class 13. Black-Tan or Gordon Setters, Puppies.—1st, Phil Trottner's Frank, 8mos.

Class 14. Champion Irish Setters, Dogs.—Absent.

Class 15. Champion Irish Setters, Bitches.—1st, J. S. McIntosh's Lady Clare, 5yrs., Elcho—Rose.

Class 16. Irish Setters, Dogs.—1st, Henry Overman's Norwood, 3½yrs., Elcho—Rose; 2d, A. S. Knoblaugh's Barney, 3yrs. Very high com., John C. Sherlock's Brag, 7yrs., Bob—Duck. High com., W. P. Biddle's Bob, Jr., 2yrs., Bob—Flash. Com., Geo. C. Walker's Joe, 2yrs., Kent—Dance.

Class 17. Irish Setters, Bitches.—1st, E. F. Weiss's Clara Belle, 2¾yrs., Bob—Flash; 2d, J. A. Sullivan's Effie, 3½yrs., Tollstone—Ruby II. Very high com., Dr. Chas. I. Keely's Clytie, 7yrs., Elcho—Fire Fly. High com., J. Shelley Hudson's Virginia Reel, 3yrs., Kent—Dance.

Class 18. Irish Setters, Puppies.—1st, H. C. Bradley's Lotta, 9 mos., Norwood—Nellie; 2d, J. P. Heister's Beauty Belle, 8 mos., Norwood—Clara Belle.

Class 19. Champion Pointers, Dogs.—1st, Norbury Kennel's Bravo, A.K.R. 559.

Class 20. Champion Pointers, Bitches.—1st, H. W. Fawcett's Marguerite II., liver and white, 4½yrs., Faust—Devonshire Lass.

Class 21. Pointers, Dogs (over 55lbs.).—1st, John W. Munson's Meteor, liver and white, 3yrs, Garnet—Jilt; 2d, Dalliba & Munhall's Joe, liver and white, 2smos., unknown. Very high com., Mrs. John Schrink, Jr.'s Lamplighter, liver and white, 5yrs., Ranger—Queen, and C. M. Munhall's Donald, liver and white ticked, 18mos., Donald—Devonshire Lass. High com., Geo. W. Fisher's Icicle, A.K.R. 82, and A. A. Thomas's Bolus, liver and white, 2yrs., Bodine—Dare. Com., John W. Munson's Bang, liver and white, 4yrs., Bang—Luna.

Class 22. Pointers, Dogs (under 55lbs.).—1st and 2d, A. A. Thomas's Perry and Riot, liver and white, 18mos., Lort—Lass.

Class 23. Pointers, Bitches.—1st, John W. Munson's Vanity, liver and white, 3yrs., Bang—Pinette; 2d, B. F. Settner's Lady Croxteth, liver and white, 2yrs, Croxteth—Lass. Very high com., John W. Munson's Flash III., liver and white, 2yrs., Bang—Pride; and Spin-

away, liver and white, 3yrs., Garnet—Keswick; and E. F. Stoddard's Trinket, liver and white, 5yrs., Tory—Jaunty. High com., B. F. Seitner's Lass, lemon and white, 3yrs., Sensation—Rose. Com., John R. Daniel's Fan, lemon and white, 3yrs., Duke—Nell; Chas. Rule's Margaux, liver and white, 18mos., Faust—Musette; and Westminster Kennel Club's Moonstone, liver and white, 5yrs., Bang—Luna.

Class 24. Pointers, Puppies.—1st and 2d, B. F. Seitner's Rapp and Doncaster, liver and white, 11mos., Croxteth—Lass. Very high com., Dalliba & Munhall's Dora, liver and white, 11mos., Sensation—Devonshire Lass, and E. F. Stoddard's Glen, white and liver, 9mos., Bodine—Lady. High com., Luck & Thornton's Bob L., liver and white, 7mos., Bodine—Bell. Com., J. A. Oskamp's Grace, liver, 4½mos., Sport—Corley, and Luck & Thornton's Bowlander, liver and white, Bodine—Bell.

Class 25. Irish Water Spaniels.—No entries.

Class 26. Field Spaniels (over 28lbs., any color).—1st and very high com., Hornell Spaniel Club's Hornell Rattler, chestnut and tan, 11mos., Dandy—Dinah, and Hornell Baroness, black and tan, 2¾yrs., Baron—Queen; 2d, Surrey Kennel's Success, black, 3¾yrs., Bachelor—Salus.

Class 27. Cocker Spaniels (any color).—1st and 2d, Hornell Spaniel Club's Hornell Daisy, liver, 2yrs., Benedict—Flirt, and Hornell Silk, black, 1½yrs., Obo—Chloe II. Very high com., Hornell Spaniel Club's Hornell Dinah, A.K.R. 66, and Dr. J. S. Niven's Black Bess, A.K.R. 516. Com., Mrs. J. Frank Wilson's Rose, brown, 9mos., Colonel—Belle.

Class 28. Foxhounds.—1st, Dan O'Shea's Ringwood, black, white and tan, 4yrs., Forester—Lady; 2d, Louis Rinninsland's Girl, black and tan, 2yrs. Very high com. and com., A. B. Whitlock's Lot, white and lemon, 3yrs., Dick—Cloudy, and Clara, white and lemon, 2yrs., Dick—Patti.

Class 29. Beagles.—1st and 2d, Dan O'Shea's Rattler and Music II., black, white and tan, 1½yrs., Rover—Music. Very high com., Mrs. Alice N. Taylor's Major T., black, white and tan, 3yrs., Rattler—Flora.

Class 30. Dachshunde.—1st, B. F. Seitner's Prince, fallow red, 1yr., Bergman—Gretchen; 2d, Harry L. Goodman's Waldine III., red, 2yrs., Bergman—Gretchen.

Class 31. Champion Fox-Terriers.—1st, Frank C. Wheeler's Lyra, white, black and tan, 14mos., Fennel—Fay.

Class 32. Fox-Terriers, Dogs.—1st, Chas. E. Wallack's Lancelot, white, black and tan, 2yrs., Tweezers II.—Olive; 2d, Surrey Kennel's Flippant, 2¾yrs., Royal—Tussle.

Class 33. Fox-Terriers, Bitches.—1st, Dan O'Shea's Tip, black, white and tan, 2yrs.; 2d, withheld. Com., H. F. Wood's Nancy, black, white and tan, 1½yrs., Trickster—Fanny.

Class 34. Fox-Terriers, Puppies.—1st, Clover Nook Kennel's Clover Belle, white, black and tan, 7mos., Akeley Joe—Guilty; 2d, withheld. High com., Herman T. Groesbeck's Judge, white, black and tan, 10mos.

Class 35. Champion Collies, Dogs.—1st, Thomas H. Terry's Robin Adair, A.K.R. 892.

Class 35½. Champion Collies, Bitches.—1st, Thomas H. Terry's Effie, red sable, 4yrs., Trefoil—Maude.

Class 36. Collies, Dogs.—1st, Edith M. Fasig's Mac, black, white and tan, 11mos.; 2d, R. Folsom's Cheviot II., black and tan, 1yr., Cheviot— ——. Very high com., Chas. Leggat's Major, black and tan, 8mos., Collie—Fanny.

Class 37. Collies, Bitches.—1st and 2d, withheld. Very high com., Chas. Leggat, Jr.'s Gypsie, black and tan, 8mos., Colhe—Fanny.

Class 38. Bulldogs.—1st, R. & W. Livingston's Boz., A.K.R. 443; 2d, J. J. Walker's Pungo, fawn and white, 4yrs., Cure—Meg. Very high com., J. P. Barnard's Hamlet, brindle, 16mos., President Garfield—Pearl of Fortune.

Class 39. Bulls, Bitches.—1st, R. & W. Livingston's Sweet Briar, A.K.R. 444; 2d, withheld.

Class 40. Bull-Terriers.—1st, Frank C. Wheeler's Young Bill, A.K.R. 196; 2d, Geo. Keller's Chip, white, 3yrs. High com. and com., J. J. Walker's Beauty, white, 1½yrs., Spring— ——, and Senator, white, 3½yrs., Jack—Daisy.

Class 41. Black and Tan Terriers (over 7lbs).—1st, Mrs. A. Kistemann's Spring, 2yrs; 2d, withheld.

Class 42. Bedlington Terriers.—No entries.

Class 43. Skye Terriers.—1st, J. J. Walker's Creeper; 2d, withheld.

Class 44. Hard-haired Scotch Terriers.—1st, John H. Naylor's Tam Glen, dark gray, 18mos., Wallace—Flora; 2d and very high com., Dan O'Shea's Boxer, wheaten, 2yrs., Major—Lady, and Lady, red, 5yrs.

Class 45. Irish Terriers.—1st, Dan O'Shea's Erin, red, 2yrs, Rock—Norah; 2d, Dr. J. S. Niven's Norah, red, 4yrs, Spring—Nettie.

Class 46. Yorkshire Terriers.—1st and 2d, Mrs. A. Kistemann's Hero, 4yrs., and Sandy, 3yrs. Very high com., Mrs. A. Kistemann's Lillie, 2yrs; Miss Maggie Burke's Robert Bonner, 3yrs, Tom—Bess; and Miss J. A. Skinner's Sir Robert, 5yrs. High com., Thos. Axworthy's Tiny, 2yrs, and Carrie Flock's Tiny, 1yr. Com., J. Englehart's Lena, 15mos., Bab—Minnie.

Class 47. Champion Pugs.—1st, Mrs. Geo. H. Hill's Joe, 4yrs., Comedy—Clytie.

Class 48.—Pugs.—1st, J. Englehart's Bo Peep, 2½yrs, Fritz—Minnie May; 2d, Mrs. A. Kistemann's Sambo, 1½yrs. Very high com., Herman J. Groesbeck's Lady Elmore, 10mos., Andy—Lady Willoughby; Mrs. A. Kistemann's Punch, 2yrs., and Harry L. Goodman's Judy III., 3yrs., Royal Dandy—Judy II. High com., Miss Ida Englehart's Minneapolis Sooty, 3½yrs., Sooty—Dinah; A. W. Whelpley's Lady Digby, 10mos., Andy—Lady Willoughby, and Robert Wright's Polly, 5mos., Andy—Cora. Com., R. C. Anderson's Burnie B., 1yr., Sooty II.—Judy.

Class 49. Toy Terriers (under 7lbs.).—1st, Nick Mackley's Lotta, black and tan, 1½yrs.; 2d, Mrs. A. Kistemann's Flora, tan, 2½yrs. Very high com., Mrs. G. Gandolfo's Busy, black and tan, 1yr., and Miss Minnie Farrell's Bunnie, blue and tan, 2½yrs. High com., Frank Seifert's Bill, black and tan, 1½yrs. Com., J. Englehart's Fanny, black and tan, 2yrs., Zac—Fanny, and Mrs. J. Englehart's Skye II., blue and tan, 1yr., Tony—Skye.

Class 50. King Charles, Blenheim and Japanese Spaniels.—1st, Mrs. A. Kistemann's Charlie, black, white and tan, 2yrs.

Class 51. Miscellaneous.—Equal 1st, J. Englehart's Gyp, white and fawn Italian greyhound, 1½yrs.; Peter Schwein's Hans, black Caniche poodle, 2yrs., and R. Neff's Jack, blue and gray Dandie Dinmont terrier, 9mos.

SPECIAL PRIZES.

Class A.—For the best setter or pointer, W. B. Shattuc's Dido II.

Class B.—For the best English setter, W. B. Shattuc's Dido II.

Class C.—For the best matched brace of English setters, Ontaria Kennel Club's Dinah and Pearl.

Class D.—For the best Gordon setter, John E. Long's Hugo.

Class E.—For the best Gordon setter dog in open class, John E. Long's Hugo.

Class F.—For the best Irish setter, Henry Overman's Norwood.

Class G.—For the best Irish setter puppy owned in the counties of Hamilton, O., and Campbell and Kenton, Ky., H. C. Bradley's Lotta.

Class H.—For the best pointer bitch puppy owned in Cincinnati, J. A. Oskamp's Grace.

Class I.—For the best pointer, John W. Munson's Meteor.

Class J.—For the best pointer sired by Beaufort, Charles Rule's Sylph.

Class K.—For the best kennel of five pointers, John W. Munson.

Class L.—For the best brace of pointers, John W. Munson's Meteor and Vanity.

Class M.—For the best pointer dog, owned by a lady in Cincinnati, Mrs. John Schrink's Lamplighter.

Class N.—For the best kennel of five field and cocker spaniels, Hornell Spaniel Club.

Class O.—For the best cocker spaniel dog or bitch, Hornell Spaniel Club's Hornell Daisy.

Class P.—For the best cocker spaniel dog, Hornell Spaniel Club's Hornell Silk.

Class Q.—For the best collie, dog or bitch, Thos. H. Terry's Robin Adair.

Class R.—For the best pug, owned by a lady in Cincinnati, Mrs. Geo. H. Hill's Joe.

Class S.—For the best small non-sporting dog, owned by a lady in Cincinnati, Miss Maggie Burke's Robert Bonner.

Class T.—For the best non-sporting dog, owned by a lady in Cincinnati, Miss Maggie Burke's Robert Bonner.

Class U.—For the best black and tan terrier, Mrs. A. Kistemann's Spring.

Class V.—For the largest and best display of non-sporting dogs owned by a resident of Cincinnati, J. Englehart.

Class W.—For the best pug owned by a lady in Cincinnati, Mrs. Geo. H. Hill's Joe.

Class X.—For the best Yorkshire terrier owned by a lady in Cincinnati, Miss Maggie Burke's Robert Bonner.

Class Y.—For the best Italian greyhound owned by a lady in Cincinnati, Mrs. S. B. Kelly's Daisy.

Class Z.—For the best terrier owned by a lady in Cincinnati, Miss Maggie Burke's Robert Bonner.

Class AA.—For the best pug in the open class, J. Englehart's Bo Peep.

Class BB.—For the best fox-terrier, Nick Mackley's Lotta.

Class CC.—For the best terrier, Frank C. Wheeler's Young Bill.

Class DD.—For the best decorated kennel, Geo. W. Pickard.

Class EE.—For the best pointer dog entered by a resident of Cincinnati, Newport or Covington, Mrs. John Schrink, Jr.'s, Lamplighter.

Class FF.—For the best large pointer dog entered by a resident of Cincinnati, Newport or Coviugton, Mrs. John Schrink, Jr.'s, Lamplighter.

Class GG.—For the third best dog or bitch in the mastiffs, St. Bernard, pug, Yorkshire, toy and two in the miscellaneous classes, Geo. H. Hill's Guinare, Louis Cook's Barri, Harry L. Goodman's Judy III., Miss Maggie Burke's Robert Bonner, Mrs. Gandolfo's Busy, Geo. Ellis's Charlie and J. Englehart's Pedro.

Class HH.—For the best pug that has never been exhibited, owned by a lady in Cincinnati, Miss Ida Englehart's Minneapolis Sooty.

Class II.—For the best small pointer dog, owned by a lady in Cincinnati, Mrs. Thos. T. Gaff's Fred.

Class JJ.—For the best large pointer, owned in Cincinnati, that has never won a prize, J. A. Oskamp's Sport.

Class KK.—For the best pointer, owned in Cincinnati, J. A. Oskamp's King Alphonso.

SETTERS AND POINTERS AT CINCINNATI.

THE dog show opened on Tuesday morning, the 4th inst., with 289 entries. Melodeon Hall, where the show is held, is in all probability the worst place in America for a dog show, but it was the only available hall to be had at this time. It is a sort of concert hall or theater—on the third floor—and the approach to it is up two and a half flights of stairs from a side street. The room is very small, and the kennels are so closely packed in it that two persons can hardly pass in the aisles. There is no yard or lot attached to it for exercising the dogs, and such as are taken out, must be carried into the public street. I wonder how Mr. Lincoln has done as well as he has under the circumstances. Everything moves on with the good order which he alone could bring out of such a condition of things. The judging is done on a raised stage, where it is so dark that gas is kept burning all the time. When the crowd stands around the front of the stage the dogs have to be handed on and off the stage over the heads of the spectators. I noticed the hall was very warm all during the show, and I fear that many of the dogs will be made sick. Financially the show will be a success. On the first day there were over seventeen hundred paid admissions at the door, and a good crowd has been in daily attendance.

Major Taylor and Mr. Mortimer judged a few of the classes on Tuesday, but most of the judging was done on Wednesday. The quality of the setters and pointers is far above the average, and the classes filled well. I can't say a word as to the quality of the other sporting and all the non-sporting classes, for I don't know enough about any of them to dare to comment. My report must, therefore, cover setters and pointers only.

Champion English Setter Dogs.—Lava Rock, the only entry, was absent.

Champion English Setter Bitches.—Gen. Shattuc's Dido II. was the only entry, and won the prize. It will be a very cold day when the little lady gets left if the General shows her.

English Setter Dogs—Had sixteen entries. First went to Dick Bee, owned by the Mohawk Kennel of Chatham, Canada. He is a very taking black, white and tan, by Paris II., out of Romp, and well deserved the prize. Count Gladsome, owned by John Overman of Cincinnati, won second. He is white, black and tan also, by Gladstone out of Leila, and a very handsome dog. Royal Lothair, owned by C. B. Phipps of Winton Place, O., by Racket out of Kelp, and Maxwell, owned by T. L. Martin of Lexington, Ky., by Luke out of Rene, both good show dogs, won vhc. Rocket, owned by W. R. Traver, Washington, D. C., another black, white and tan, by Wagoner out of Nell, got hc. He is a fair dog. Royal Sultan, blue belton, by Racket out of Kelp; Dick, a lemon and white, by Rex out of Kate; and Mr. L. G. Hanna's (Cleveland) Don, a black, white and tan, by Joe out of Patch, each got c. Major Taylor seems to be fond of the black, white and tans, or may be I only thought so, because with two exceptions the honors in this class went to dogs of that color, but I think they were all properly placed. The fact is black, white and tan is the fashion among setter men now, and there are more of them to be shown than of other colors.

English Setter Bitches.—In this there were thirteen entries, and they were an excellent lot. Maj. Taylor had his little field trial champion Lit "for exhibition only" in this class, but he need not be ashamed to show her for competition under any other judge, for she is a little beauty. First prize went to John E. Long's (Detroit) Nettie B., a black, white and tan, no authentic pedigree. Mr. Long bought her from a butcher in Detroit and thinks he traces her pedigree to a dog over in Canada, but as there is an uncertainty about it, he declines to manufacture a pedigree for her. She is evidently a blue blood, for she is full of quality and style, and deserved her first. The Ontario Kennel Club's (Chatham) Flora Bee won second. She is a sister to Dick Bee, the dog that won first in the preceding class, and is by Paris II. out of Romp. Vhc. went to Joan of Arc, a blue belton, by Paris out of Pearl, and to Faustina Lava Rock, a lemon and white, by Lava Rock out of Lady Beaconsfield; both are good bitches. Hc., was won by Lucy D, a blue belton, by Paris out of Coomassie, and c., by Brownie, black, white and tan, by Racket out of Rose, and Dinah, black and white, by Mark out of Betsy, both fair.

English Setter Puppies.—First to Dan, entered by P. B. Spencer (Newport, Ky.), a black and white, by Chief out of Nancy Lee. He is by far the best puppy in the class; second went to Rex, a black, white and tan, entered by G. W. Schuler (Hamilton, O.), by Count Gladstone out of Melissa. His head is poor, otherwise a good pup. Vhc., to Lady Nonpareil, a black, white and tan, by Count Noble out of Rosalind. She is a poor-looking young one with no apparent substance, and bad, sore eyes. Hc., to Slip, a black and white, by Royal Lothair out of Nonie.

Champion Black and Tan Setters.—First to Rupert II., entered by Franklin Kennel, O., a dog I don't fancy, and certainly not a Malcolm standard dog. Argus, the only other entry, was absent.

Black and Tan Setters.—Seven entries. No good ones, and no Malcolm standard dogs in the lot. First to John E. Long's Hugo, the best in the lot; second to Mack, an old ugly looking dog. Major Taylor wisely withheld other notices from the class except one hc. to Rube, a poor dog.

Black and Tan Puppies.—Only one entry and a poor one, Frank, who won first.

Champion Irish Setter Dogs.—Only one entry, Biz, who was absent.

Champion Irish Setter Bitches.—Only one entry, J. S. McIntosh's Lady Clare.

Irish Setter Dogs.—Fourteen entries and a very fair class. First to Norwood, entered by H. Overman, Cincinnati, a very handsome dog, by Elcho out of Rose, fit to show in any company; second to Barney, by Dash out of Clee, entered by A. S. Knoblaugh, Cincinnati, a fair dog. Vhc. to Brag, by Stoddard's Bob out of Duck, better to my mind than the winner of second. Hc. to Bob, Jr., by Stoddard's Bob out of Flash. C. to Joe, by Kent out of Dance. Major Taylor failed to notice Wagg, a very handsome big dog, by Snipe out of Fan, who should have had a place.

Irish Setter Bitches.—Seven entries. Only a fair lot. First to Clara Bell, entered by E. F. Weiss (Cincinnati), by Stoddard's Bob out of his Flash. She was the best in the class. Second to a very good-looking bitch, Effie, by Tollstone out of Ruby. Vhc. to Clytie, by Elcho out of Fire Fly. I liked her for second. Hc. to Virginia Reel. Not a good bitch.

Irish Setter Puppies.—Four entries, and they did not amount to much. First to H. C. Bradley's (Cincinnati) Lotta, by Norwood out of Nellie. Second to Beauty Belle, by Norwood out of Clara Bell. I predict that Norwood will prove a good stud dog if allowed a fair lot of bitches.

Champion Pointer Dogs—Had three entries, first going to the Baltimore dog Bravo, over John E. Long's King Tom and the Knickerbocker Kennel Club's Knickerbocker. The award was correct, though neither dog is particularly good, to my mind. I don't mean that they are bad, but that they are not good enough to win in the best company.

Champion Pointer Bitches.—Had three entries and only two present—the Westminster Kennel Club's Lassie, and Mr. H. W. Fawcett's Marguerite II., by Faust out of Devonshire Lass. The latter took the prize deservedly. Lassie is not a good show bitch, and is not now in show form.

Pointer Dogs (over 55 pounds)—Had fourteen entries, and I heard Major Taylor say it was one of the best classes he ever judged. With two or three exceptions, I thought the lot very much above the average of large dogs. First went to imported Meteor, exhibited by me, and I don't think I misstate it when I say Major Taylor selected him for first as soon as he looked him over. To my mind he is ahead of anything in the show. I have only had him ten days—from his winter quarters in Texas, where Col. Hughes has had him at work daily—and he was not in good show shape, but he won his place with ease. The choice for second was a hard job for the Major, and took him a long time to decide. It finally went to Joe, a liver and white dog entered by Dalliba & Munhall, of Cleveland. He is a dog that was bought for $20, and has no pedigree. With the exception of his head, which looks like a bull-terrier's, he is a splendid looking dog. His chest is the deepest I ever saw on any pointer. He was sold after the award for $100. C. M. Munhall's Donald II., a liver and white ticked dog, by Donald out of Devonshire Lass, got vhc., which is as much as he deserved. He is too straight up and down in front to win in good company, but was shown in the pink of condition, thanks to Lewis, his handler. Lamplighter, a liver and white dog, by Dilley's Ranger out of Dilley's Queen, got vhc. also. He is a good looking, big dog, but very coarse, as are the general run of Ranger dogs. The much-advertised Icicle got hc., probably because Major Taylor did not want to break his owner's heart, but had I judged the dogs, he would not have been noticed. He is a big, ungainly looking dog, without a sign of quality to him. Bolus, a liver and white dog entered by A. A. Thomas, of Dayton, Ohio, got hc., and Bang, by old champion Bang out of Salter's Luna, entered by me, got c. Bang's breeding is all right, but he don't "show up" well. He is too stocky and thick, and lacks quality.

Pointer Dogs (under 55 pounds)—Had four entries. First went to Perry, a liver and white dog, entered by A. A. Thomas of Dayton, by Lort out of Lass. He is good, except his chest, which is entirely too thin. It is deep enough, but very thin. The owner of second, Riot, a brother of Perry and entered by same gentleman, with the exception of his nose, which is short, is to my mind the better of the two.

Pointer Bitches (any weight)—Had nineteen entries, and was a splendid class. First went to my imported Vanity, by old champion Bang out of Pride. I am vain enough to think the selection was easily made, for I like her better than any bitch I ever saw. Second was taken by Lady Croxteth, entered by B. F. Seitner, of Dayton. She is liver and white, by Croxteth out of Lass. I preferred her dam, Lass, who got hc. to her, though she is a showy, taking bitch, and handles well. I thought Trinket, entered by E. F. Stoddard, of Dayton, a better bitch; but she was shown in very bad condition, and would not have deserved to beat her as she now is. I also think my two bitches, Spinaway and Flash, third, better than Lady Croxteth—but I am very vain of my entries. They were given each a vhc. as well as Trinket. Seitner's Lass, hc., is a very handsome lemon and white bitch—better far than the average. Westminster Kennel Club's Moonstone, by Bang out of Luna, got c., and I don't think deservedly. She is not at all a show bitch. Their Polly failed of a place, though I like her better than Moonstone.

Pointer Puppies—Were a fair lot, only the winners of first and second, B. F. Seitner's Rapp and Doncastor, both by Croxteth out of Lass, deserved their places. They are a pair of very fine pups. Dalliba & Munhall's Dora, by Sensation out of Devonshire Lass, got vhc. She is also a handsome pup, liver and white. E. F. Stoddard got vhc. for his Glen, by Bodine out of Lady. The others were a fair lot.

The special prizes were numerous if not valuable. Special A was the best of the lot. It was a massive silver dog collar, with solid gold lock and trimmings, donated by the Cincinnati *Enquirer*. It was for the best setter or pointer, dog or bitch in the show, and brought out Dido II., Dick B., Nettie B. and Dan, all English setters, winners of first prize; Rupert II., champion Gordon; Hugo, first prize Gordon; Norwood, Clara Bell and Lotta, first prize Irish setters, and Bravo, champion pointer; Marguerite II., Meteor, Perry, Vanity and Rapp, all first prize pointers. The choice narrowed down to Dido and Meteor, and I can say unselfishly that no man in the show was more glad to see the prize go to Dido than I. She deserved it, and it is worth a fortune to her big-hearted owner.

Special B, for best English setter dog or bitch, a pair of leather leggings, donated by B. Kittridge & Co., went to Dido.

Special C, a picture for best matched brace of English setters went to Dinah and Lucy, the only entries.

Special D, for best Gordon setter dog or bitch, a pair of leggings donated by Kittridge & Co., went to Hugo. Rupert and Frank showed against him.

Special E, for best Gordon dog, bronze tobacco case went to Hugo.

Special F, for best Irish dog or bitch, a pair of leggings, went to Norwood, beating Lady Clare, Clara Bell and Lotta.

Special G, for best Irish puppy, went to Lotta, the only entry.

Special H, silver cup donated by Cincinnati *News Journal*, for best pointer puppy owned in Cincinnati, went to Grace.

Special I, pair leather leggings, donated by Kittridge & Co., for best pointer dog or bitch, went to Meteor.

Special J, for best pointer puppy sired by Beaufort, went to Sylph.

Special K, for best kennel of pointers, Ligowsky clay pigeon trap and barrel of clay pigeons, went to my kennel composed of Meteor, Bang, Spinaway, Vanity and Flash, beating Lady Croxteth, Rapp, Doncaster, Perry and Lass.

Special L, for best brace of pointers, went to Meteor and Vanity.

Special M, for best pointer dog owned and entered by a lady of Cincinnati, went to Lamplighter.

Special EE, silver medal for best pointer dog entered by a gentleman resident of Cincinnati, Newfort or Covington, as owner or agent, went to Lamplighter.

Special FF, same as preceding, a meerschaum pipe, went to Lamplighter.

Special II, for best pointer dog under 55lbs., owned by a lady of Cincinnati, went to Fred.

Special JJ, for best pointer dog owned in Cincinnati, and winner of no other prize, went to Sport.

Special KK, for best pointer dog puppy owned in Cincinnati, winner of no other prize, went to King Alfonso.

The show has drawn together a very nice lot of dogs for a beginning, and no doubt hereafter Cincinnati will have an annual show, and a good one. Quite a number of prominent owners and dog show patrons are here, too many to note in this letter. The judging seems to have given entire satisfaction, from all I can learn. The weather has been bad all during the show, but for which more money would have been taken in, but it is a success nevertheless.

Jno. W. Munson.

Cincinnati, March 6.

EASTERN FIELD TRIALS DERBY.—The annual Derby of 1884, of the Eastern Field Trials Club, open to all setters and pointers whelped on or after Jan. 1, 1883, promises to be the most important event of the kind that has yet taken place in this country. Nearly all of the prominent breeders throughout the country will send the pick of their kennels to compete for the honors of victory. The purse is $300, with $250 to first, $150 to second and $100 to third. In addition to this, there will also be several valuable specials offered. The entries will close May 1. For further particulars address Mr. Washington A. Coster, Box 30, Flatbush, Kings county, N. Y.

THE NEW HAVEN SHOW.

[Special Dispatch to Forest and Stream.]

NEW HAVEN, Conn., March 12.—The dog show commenced to-day under very favorable auspices. There are 385 entries. The arrangements for benching the dogs will compare favorably with those of our best shows. The building is roomy, well lighted and ventilated. There are a large number of local entries that make a good showing. The attendance is good for the first day, and there is no doubt that the show will be successful.

MR. D. C. SANBORN.

Editor Forest and Stream:

Please publish the inclosed resolutions of sympathy from the party who have often spent a very enjoyable time on the prairie with "Uncle Dave:"

It has pleased an all-wise Providence to take from among us our dear friend and beloved brother sportsman, D. C. Sanborn, of Dowling, Mich., and while we bow in reverent submission to the Divine will, we feel that one has been called away whose place will be hard to fill. His sterling qualities endeared him to all who enjoyed his acquaintance. He was kind to a fault, just though it were to his hindrance, and full of that ready wit and humor which always made him a welcome guest. To the family of our friend in this, the day of their sorrow, we offer the most respectful homage of our sympathy. B. F. WILSON,

EDWARD GREGG,	HOWARD HARTLEY,
J. W. ORTH,	E. B. GODFREY,
JOHN O. PHILLIPS,	S. L. BOGGS,
O. F. WHARTON,	W. A. NICHOLSON.

PITTSBURGH, Pa., Feb. 12.

N. A. K. C. DERBY.

Editor Forest and Stream:

I inclose a list of entries received to date for the sixth annual Derby of the National American Kennel Club. Purse, $500—$250 to first, $150 to second, $100 to third. Entries close April 1, with $5 forfeit. I will mail entry blanks free to all applicants. Will furnish you list of entries as fast as I receive them. D. BRYSON, Sec. N. A. K. Club.

MEMPHIS, Tenn., March 5.

N. A. K. C. DERBY, 1884.

ENTRIES.

DAISY BELTON.—J. R. Henricks, Pittsburgh, Pa., blue belton English setter bitch, Jan. 3 (Belton III.—Countess).

RODERIGO.—Gates & Merriman, Memphis, Tenn., black, white and tan English setter dog, April 11 (Count Noble—Twin Maud).

HAYDEE.—Gates & Merriman, Memphis, Tenn., blue belton English setter dog, April 11 (Count Noble—Twin Maud).

CAL COOL.—Gates & Merriman, Memphis, Tenn., black, white and tan English setter dog, June 30 (Gath—Lit).

NOT NAMED.—Gates & Merriman, Memphis, Tenn., black, white and tan English setter bitch, July 20 (Gladstone—Carrie J.).

QUEEN BESS.—B. F. Price, Memphis, Tenn., black, white and tan English setter bitch, June 28 (Gladstone—Donna J.).

LILLIAN.—P. H. & D. Bryson, Memphis, Tenn., black, white and tan English setter bitch, Aug. 21 (Gladstone—Sue).

GLADSTONE'S BOY.—Dr. G. G. Ware, Stanton, Tenn., black, white and tan English setter dog, Jan. 10 (Gladstone—Sue).

BILLY GATES.—Dr. A. F. McKinney, Forest Hill, Tenn., black and white English setter dog, Aug. 21 (Count Rapier—Kate B.).

SURREY.—W. B. Mallory, Memphis, Tenn., black, white and tan English setter dog, June 10 (Gath—Juno II.).

LADY LEE.—W. B. Mallory, Memphis, Tenn., black, white and tan English setter bitch, June 10 (Gath—Juno II.).

LEXINGTON.—W. B. Mallory, Memphis, Tenn., black, white and tan English setter dog, June 10 (Gath—Juno II.).

BASKET (OR FOOT) BEAGLES.

THE beautiful little basket beagle, ranging from twelve down to nine inches in height, who has heretofore been exhibited at bench shows together with their larger brothers of thirteen to fifteen inches in height, in one class, will at last have a separate class provided for them at the coming New York show, if the number of entries will warrant the making of such a class.

The necessity of two classes for beagles at our shows has been a want long felt, and as a friend, one of our best judges of beagles, said to me in a letter of recent date: "The best judge was in a quandary when called upon to award a prize to one of two beagles, respectively ten and fourteen inches in height, and of equal merit. If he was prejudiced against the one, he felt that he was doing injustice to the other, or *vice versa*. Two classes would abridge this difficulty, etc., etc." I quote from memory. Having consulted the opinions of several of our most prominent beagle men, and finding them all coincide with my own convictions, I laid this matter before the managers of the Westminster Kennel Club Bench Show, and the following is the reply I received:

NEW YORK, March 6, 1884.—*A. C. Krueger, Esq., Wrightsville, Pa.:* Replying to your favor of the 3d inst., the managers of the W. K. C. Bench Show request me to inform you that if there are enough entries of beagles under twelve inches to warrant making a separate class, they will do so and will award to the best of that class an extra medal.—CHAS. LINCOLN, Superintendent.

Now all ye owners of this admirable breed, it lies in your own hands to bring about this new era in beagle history, and I sincerely hope that you will add your mite by entering your little pets at the coming New York show, and thereby make this class a permanent fixture at all future shows. If this is done I think we can, with certainty, look for a champion, two open and a puppy class for beagles under twelve inches, in the near future.

The Westminster Kennel Club have also consented to accept and hand to their judges the standard of the American English Beagle Club, which will be ready about April 1, when it will appear in FOREST AND STREAM.

A. C. KRUEGER,
Sec'y and Treas. American English Beagle Club.

WRIGHTSVILLE, Pa., March 7, 1884.

A CANINE TRANSFORMATION.—*Editor Forest and Stream:* My family rejoices at present in the possession of two dogs; Nep, a Newfoundland, huge, black and curly; and Leo, likewise large and black, but straight-haired (both as to his coat and his treatment of his fellow creatures). Little two-year old Mabel and her mother were our guests the other morning at breakfast, and the child was much interested in Nep, who chanced to be in the house. After a time he departed, but to the astonishment of Mabel, the same dog, as she supposed soon walked in, with never a curl in his hair. "Why!" said the child, addressing Leo, "where's all you turls."—K. (Central Lake, Mich.)

CHAMPION DIDO II.—*Special Dispatch to Forest and Stream:* Cincinnati, O., March 10.—Please announce that Champion Dido II. will not be entered for competition this year. I do this in the interest of brother sportsmen, as I wish them to enter in the champion class, which they appear not willing to do while she is in competition.—W. B. SHATTUC.

ST. LOUIS DOG SHOW.—*Special Dispatch to Forest and Stream:* St. Louis, March 11.—It has been decided to hold a bench show of dogs here about the middle of April, under the auspices of the St. Louis Gun Club. The cash and special prizes will be sufficiently liberal to attract prominent dogs from a distance. Competent judges will be secured and the show properly managed. Every inducement will be offered to exhibitors to bring their dogs. Will send full particulars by mail.—J. W. MUNSON.

PHILADELPHIA DOG RACES.—Dog racing or running is coming to the front in Philadelphia. Dogs bred for this particular purpose with a certain amount of greyhound blood in their veins are employed. Two or three runs take place weekly, but the owners of these fleet-footed canines as a rule are those who patronize the prize-fighting ring, rat-killing matches, and bull-terrier fights, and the amusement will hardly ever be upheld by the refined sportsmen owing to the general surroundings.—HOMO.

CLEVELAND DOG SHOW.—Cleveland, O., March 8.—*Editor Forest and Stream:* We have extended the time for closing of entries till March 24. We do this on account of the Washington show, hoping that we may get many entries of the winners there.—C. M. MUNHALL, Secretary.

DOG LOST.—Mr. E. L. Mead, of West Winsted, Conn., has lost his orange and white English setter dog Mac. He weighs about 45lbs., his head is evenly marked and he has dark eyes and nose, there is more orange on one side than the other. Any information as to his whereabouts will be thankfully received by his owner.

CLUMBER SPANIELS.—Any gentleman owning a well bred Clumber spaniel will confer a favor by sending his address with description and pedigree of dog to this office.

SHOW ENTRY BLANKS.—Secretaries of bench shows should send premium lists and entry blanks to us as we frequently have calls for them.

KENNEL MANAGEMENT.

☞ **No Notice Taken of Anonymous Correspondents.**

C. S., Falmouth, Mass.—Feed your dog with mutton broth and well cooked rice, and give after each meal lacto-pepsin.

F. P. C., Exeter, N. H.—Dogs are often troubled with warts in the mouth. Cut off the largest with scissors and touch with nitrate of silver daily until they disappear.

J. C. E., St. Catherine's, Ont.—Your dog is probably troubled with worms. Give on an empty stomach a dose of finely powdered areca nut, two grains for each pound of his weight; follow in two hours with a dose of castor oil.

C. B. M., Madison, Ga.—Write us a description of the trouble. Your puppies may have the mange, but we are inclined to the belief that they are only afflicted with a breaking out that is very common to puppies and that will disappear as they grow older.

READER, Williamsport, Pa.—1. We presume that your puppy has dew claws. If so we should advise you to take them off. 2. Your bitch can be hunted up to within a week or ten days of the time she is due to whelp if used carefully. 3. There is no work that treats exclusively upon training hounds.

W. W. C., Topeka, Kan.—Distemper assumes so many forms that it is impossible for any one to intelligently prescribe without an examination. It is always safe, however, to recommend careful nursing, a warm kennel, where plenty of pure air can be had, and in case of debility, tonics may be given.

Rifle and Tray Shooting.

FIXTURES.

First International Clay-Pigeon Tournament, at Chicago, Ill., May 26 to 31. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

RIFLE POINTS.

Editor Forest and Stream:

I was much interested in the "Rifle Queries," by "J. J. P.," of Worcester, Mass., in your issue of Feb. 21, and somewhat disappointed in finding that no one had undertaken to answer any of them in the following issue. I may not be able to answer any of them, but hoping to stimulate a discussion I will venture a few remarks. First, in regard to the comparative effect of moving the wind gauge one-hundredth of an inch, or raising or lowering the peep sight the same distance, I believe there is no difference. The raising or lowering of the rear sight will make the same vertical variation on the target as the moving of the wind gauge will cause laterally. Theoretically it should be so, and my experience has taught me that it is so. Any one doubting it can easily test it by taking a rifle with sights 36in. apart, and after getting it sighted for the center of the bulleye at 200yds., set the wind gauge two points (one-twentieth of an inch) to the right, and fire a few shots, and note where the shots strike. Then raise the elevation five points (one-twentieth of an inch) and fire again, and see if the bullets do not strike as much above the center of the bullseye as they did to the left of it in the first trial. If the gun is held steady, and the wind does not change, the variation should be ten inches in either case. In practice I always set my wind gauge two points, and my elevation five points for ten inches at 200yds. The scale on the wind gauge being in fortieths of an inch, and on the peep sight in hundredths, makes the variation the same in either case.

Question Second.—In regard to the air space, my experience is this: A large air space will reduce the recoil, and cause the bullet to "upset" to such an extent as to bulge the barrel at the point the ball started from when struck by the exploded powder. I used a long-range rifle with 115 grains of powder, an air space of 9 inches and a 520-grain bullet, firing off-hand at 200-yard target. The recoil was very light, and the bullet struck the ground 180 yards from where I stood. I presume that a small air space would have the same effect, only in a lesser degree. An air space of one-eighth of an inch would not damage the gun, and its disadvantages might be more than offset by the advantage of having the bullet in front of the chamber when struck by the exploded powder. My theory is that the larger the air space up to a certain limit, the harder will be the blow on the base of the bullet.

Fourth Question.—I think it is best to lubricate the barrel, as I believe I can keep the barrel in a more uniform condition in match shooting in this way than in any other. If the barrel could be thoroughly dried after cleaning every time, then it would probably be better to use no oil; but I believe this is impossible in match shooting, especially in damp weather. In match shooting you are expected to fire promptly when your turn comes, and you do not have much time to dry your gun barrel with a multitude of consecutive swabs. In cloudy weather your swabs become wetter and wetter as the match progresses, and finally there is a sudden halt. Some one has challenged a shot. The flags are stuck up, and the markers appear on the embankment in front of the target, apparently mere pigmies at the distance of over half a mile. Finally they all disappear as suddenly and mysteriously as they made their appearance a few minutes before. Down go the flags, and Farrow gets his bullseye as usual. Now it is your turn to shoot. Your gun has been drying out slowly but surely. Where will the next bullet strike? You do not know. You screw up your elevation one point and fire. You take a long look through your friend's telescope, but no welcome signal greets your eye. The scorer calls out in a loud voice, "Miss for Mr. Blank." You do not pretend to hear him, oh, no, you are too busy cleaning your rifle. This is not a fancy sketch, but an actual experience at Creedmoor.

How different would have been the result if you had been oiling your rifle. You may argue that in that case your rifle would have contained oil and water, and the water would have dried out. So it would. But the oil would have stayed there, no matter how long the delay, and it is a matter of small consequence whether the small quantity of water stays there or not.

My plan is this: In damp weather I pass the wet brush through once; in hot, dry weather twice. Then follow with three linen wipers, in the same order every time; then a woolen rag saturated with pure neat's foot oil (not too much oil), then a woolen rag to wipe out the superfluous oil. As the match progresses, your oil rag becomes depleted gradually, but the last swab takes up a portion of the oil, and your barrel remains about the same throughout the match.

Fifth question—If the wind gauge were on the grip or heel, in shooting in strong cross wind the peep sight would be so much to one side as to necessitate an unnatural position of the head and spoil the shooting.

Sixth.—If the bullet fits the gun it may be pushed in from the breech with a plunger, and must take its proper position, but if it be a little too small to fit the bore snugly, I do not believe that accurate shooting can be done with it by any possible style of loading, whether it be pushed in at the breech, rammed down from the muzzle, or forced into a small mouthed shell, and shot in the form of fixed ammunition. I have experimented considerably with this style of bullet, and never obtained any satisfactory results from it. A bullet that is a little too large to be an accurate fit may give good results, but a bullet that is a trifle too small is an abomination.

Seventh.—If you lubricate the bore, the patch is not liable to strip in loading from the muzzle or breech, if ordinary care is exercised. If the bore is wet, or dry, and not lubricated, the patch may strip partially, or entirely off the bullet, before its proper time, especially when loading at the muzzle. If no lubricating disc is used I think the patch will leave the bullet close to the muzzle of the gun, but I have known a lubricating disc and part of a patch to follow a bullet for a distance of 200yds. I believe that a thick pasteboard wad between the lubricator and bullet will prevent this.

Eighth.—I have questioned several experts on this point, and never found two to agree. Neither have I ever succeeded in finding a man who seemed to be sure that he knew much about it. If any long-range expert knows anything about it, will he be kind enough to tell us what he knows?

Ninth.—I use the Hazard Kentucky rifle, sea shooting, FG powder, and have always been of the opinion that it gave uniform results. All the powder taken from one keg would shoot the same place, but every time I got a new keg, I found it was stronger than the preceding keg, and I was compelled to make out a new list of elevations. This has been the case until recently, say the past two years, I have found no material change in the strength of the powder. The powder of to-day requires a much lighter elevation at 200yds., and a much lower elevation at 1,000yds., than the powder of five yeaas ago, although it is the same identical brand, Hazard FG. I am quite positive on this point, as I am using the same rifle and the same flask, and a reference to my old score books must be considered positive evidence. I have no desire for a stronger powder than the Hazard FG of recent manufacture. It gives a reasonably flat trajectory, and the recoil is quite sufficient to enable marksmeh to know for a certainty whether or not his gun has missed fire. I believe that a heavy recoil is very damaging to close shooting, for the marksman will always involuntarily brace up to such an extent every time he is about to pull the trigger, that his rifle will be deflected from its proper position just at the critical moment when it is absolutely necessary that it should remain immovable as a rock. E. A. L.

NORRISTOWN, Pa., March 7.

RANGE AND GALLERY.

SARATOGA RIFLE CLUB, March 6.—Following please find the highest score of each member of the Saratoga Rifle Club, shot during their regular Wednesday and Saturday shoots last week; Massachusetts target; off-hand; 200yds.:

H Wheeler	11	11	11	10	10	11	10	10	12	12	—108
Wm B Gage	12	11	10	12	10	11	9	9	11	11	—106
S Hays	10	10	12	12	8	12	10	10	10	11	—105
I Davis	11	11	11	9	11	11	10	11	10	9	—104
F D Wheeler	12	10	8	10	11	11	11	10	10	11	—104
F A White	12	11	8	12	10	8	12	11	9	11	—104
H Wellington	8	9	11	10	12	10	12	10	10	11	—103
W B Gibbs	12	8	11	10	11	10	9	8	11	10	—100
Ira D Roods	12	11	12	8	10	6	7	10	9	11	— 99
W Allerdice	9	9	10	7	11	10	11	10	11	10	— 98
A F Mitchell	8	9	11	11	9	10	9	10	10	10	— 90
Mr Barrett	5	5	8	12	7	7	10	10	10	8	— 82
S F Corey	5	3	9	8	7	12	7	6	5	10	— 72

A. G. H.

FORT D. A. RUSSELL, Wyoming.—Record of two best scores made by members of Company E, 9th U. S. Infantry, in February, 1884, at gallery practice with the Springfield rifle, indoors, 3½ grains powder, round bullet lubricated, distance 50ft., Creedmoor target reduced to 8x12in., 15-16in. bullseye cut out; to show what some of the regulars are doing in the way of rifle firing indoors this winter:

	Best Scores.			Pr. ct.
Lieutenant Hofman	5 5 5 5 5—25	5 5 5 5 5—25		100
First Sergeant Louder	5 5 4 5 5—24	5 5 5 4 5—24		96
Sergeant Meerholtz	5 4 4 4 4—21	5 4 4 4 4—21		84
Sergeant Fendlon	4 5 4 4 5—22	5 5 5 4 4—23		90
Sergeant Griffin	5 5 5 5 5—25	5 5 4 5 4—23		96
Sergeant Roeshner	5 5 5 4 4—23	4 5 5 5 5—24		94
Corporal Werner	5 5 5 5 5—25	5 5 4 5 4—23		96
Corporal Hodson	5 5 4 5 5—24	5 4 5 5 5—24		96
Corporal Johnson	4 4 5 4 5—23	4 5 3 5 4—21		86
Corporal Erfurth	4 5 5 4 5—23	4 4 4 5 4—21		88
Musician Nolan	4 4 5 4 3—20	4 5 4 4 4—21		82
Musician Ames	4 4 5 4 4—21	5 5 5 3 4—22		86
Private Adams	4 5 4 4 4—21	5 4 4 4 4—21		84
Private Bendorf	4 5 4 4 5—22	5 4 5 5 5—24		92
Private Bothem	5 4 4 4 5—22	4 5 4 5 5—23		90
Private Dooley	4 5 4 5 4—22	4 5 4 4 4—21		86
Private Dowity	4 4 5 5 5—23	5 4 4 5 3—21		88
Private Fuley	5 5 5 4 5—24	5 4 5 5 4—23		94
Private Hagerman	4 4 4 5 5—22	5 4 4 5 5—23		90
Private Hannon	5 4 5 5 5—24	5 5 5 5 5—25		98
Private Hunter	5 5 4 4 5—23	5 5 4 4 5—23		92
Private Keane	3 4 4 5 4—20	4 5 3 4 4—20		80
Private Kenney	4 4 4 5 4—21	4 5 5 5 5—24		90
Private Koerting	4 5 4 4 5—22	4 5 4 4 4—21		86
Private Lusk	5 4 4 4 5—22	4 5 5 5 4—23		90
Private Marks	5 4 3 5 5—22	4 4 4 5 5—22		88
Private Massey	4 3 5 5 5—22	5 5 4 4 4—22		88
Private Morrow	5 5 5 5 3—23	5 4 5 4 5—23		92
Private Mount	4 5 5 4 5—23	4 4 5 5 5—23		92
Private Muir	4 5 5 5 3—22	5 4 5 5 5—24		92
Private Owens	5 5 3 3 5—21	3 4 5 4 5—21		84
Private Quackenbore	5 4 5 5 4—23	5 5 4 4 4—22		90
Private Rafferty	4 4 5 5 5—23	5 5 5 5 4—24		94
Private Robinson	4 5 4 4 5—22	5 4 4 4 5—22		88
Private Schienbine	4 5 5 5 5—24	5 5 5 4 5—24		96
Private Seymoore	5 5 4 4 5—23	4 5 5 5 4—23		96
Private Staff	5 4 4 5 5—23	4 5 5 4 4—22		90
Private Vaughn	4 4 4 4 5—21	5 4 5 5 4—23		88
Private Zimmer	5 4 5 4 4—22	4 5 5 5 4—23		90

39 men firing: Company per cent. 90.2.

THE N. R. A.—At a meeting of the Board of Directors of the National Rifle Association, held March 4, Colonel John Ward was chosen as secretary and Colonel John G. Scott was elected an honorary director for life. The following committee for the ensuing year were appointed: Finance, Colonel H. L. Cooper (vice, Captain Ackerman and Major Fincke; On Ranges, Colonel J. G. Story, General Charles S. Robbins and Captain E. L. Zalinski. At the suggestion of Mr. J. H. Brown a resolution was passed that a committee be appointed to draw up plans for five matches, to be known respectively as the President's match, the Governors' match, the Merchants' match, the Bankers and Brokers' match and the Manufacturers' match; that this committee be directed to appeal to the Governors of the different States, merchants, bankers, brokers and manufacturers throughout the country asking them to interest themselves in the matches and donate prizes therefor by way of suitable encouragement to the citizen soldiery "who are the great protectors of the general safety and property;" that the committee be further directed to make arrangements for the public presentation of the prizes and seek to induce the President of the United States and the Governors of as many States as possible to take part in the presentation. After it had been decided that the Executive Committee, in conjunction with Mr. J. H. Brown, the proposer of the resolution, should attend to this matter, the meeting adjourned.

NEW YORK GALLERY SHOOTING.—The White Elephant Rifle Range, Broadway, between Thirtieth and Thirty-first streets, has become famous for remarkable rifle shooting, and the old-time shooters have been left far in the rear by the marksmanship of some of the experts of to-day. This gallery has all the modern improvements, and is the most complete the veteran Conlin ever constructed. Following are a few of the scores of many similar ones since the opening of the year:

Off-hand, 200-yard target, 10 shots; possible 50.—Wm. Hayes 50, Fred Kuhnle 50, Chas. W. Minon 49, Wm. Blake 49, Dr. O. Adelberg 49, F. T. Broun 48, Col. H. F. Clark 50, E. E. Tiffany 50, Foxhall R. Keene 49, M. J. McGrath 49, John H. Gregg 48, C. S. Johnston 48.

Off-hand, 200-yard target, 7 shots; possible 35.—R. B. Coleman, M. D., 35, A. B. Smith 35, Fred. J. Allien 34, D. Piole 33, H. G. P. McIlage 35, G. W. Grenzer 35, Wm. S. Young, Jr., 31, D. G. Young 33. Lieut. F. P. Fremont 30 bulls in 35 shots, with 32 cal. rifle.

200-yard target, 10 shots, rest.—G. N. Bliss, Chas. Matthews, T. E. Soule, J. S. Tucker, R. Lockhart, C. A. Lummis, F. S. D. Forest, full score each.

300 yards, 7 shots, rest.—Thos. Doolittle, F. E. Moser, Chas. Lynch, Chas. S. Cohens, C. A. Tucker, A. Robbins, Dr. L. McNamara, A. F. Wendt, C. H. Barnes, Dr. F. N. Boynton, Walter E. Livingston, P. Rhinelander, W. C. Popper, H. Dunman, J. G. Robertson, W. Arnold, D. J. J. Robertson, W. G. Nesson, J. H. Mathews, full score each.

At 500-yard target, rest; possible 35.—F. A. Aramayo 35, Thos. Doolittle three full scores, W. J. Barker 33, W. J. Hughes 33, P. E. Merritt 35, A. Salvini 34, H. P. Gardner 33. E. E. Tiffany 50, possible 50.

COLLINSVILLE, Conn., March 5.—Canton Rod and Gun Club Riverside Range, 3lbs. pull, 10 shots, Mass. target.

D R Lewis	11	7	7	11	9	8	9	10	10	7—89
O B Hull	11	11	11	11	10	12	9	10	8	11—103
B I Dwell	11	10	10	10	10	12	9	10	7	9—98
J D Andrews	8	11	10	11	10	10	12	9	11	11—103
S J Lyon	9	11	9	11	10	9	9	8	11	9—97
B O Higley	9	10	7	10	8	9	9	3	7	9—81
J Laubastein	8	11	10	9	10	9	7	5	9	9—87
G Barbour	8	11	10	12	12	10	10	10	9	7—99
J B Flint	10	9	9	9	11	5	10	10	12	8—93

Tie: O B Hull, 10 10 12—32; J D Andrews, 9 9 12—30.

AN INDOOR TOURNAMENT has been arranged by the Seppenfeldt Rifle Club, open to teams of five men from any organized rifle club or military organization in the United States. Entrance fee, $1 per man. Entrance fee to be made to W. Seppenfeldt, No. 15 East Houston street, New York, at any time prior to Monday, March 31. Two teams to shoot each evening, and the choice of evenings to be drawn by the captains. The team prizes to be a fine gold medal to the first, and a medal to the second team as extra prizes presented by the Seppenfeldt Rifle Club. Entrance fees will be divided with all the teams who enter. The money prizes will be arranged on the night of meetings of captains of teams. Each captain will be notified of the night of meeting. Weapon, any .22-cal. rifle, 3lbs. pull; 10 shots per man, with the privilege of two sighting shots, at 10-ring target. Other conditions those of the N. R. A. The contest to be shot at Judson's Rifle Gallery, 1373½ Broadway, New York. In case of ties in the aggregate, the teams tying will shoot off. All disputes that may arise shall be decided by a referee appointed by the captains, whose decision shall be final. Distance, 100ft.

A DOUBTING READER.—Springfield, Mass.—*Editor Forest and Stream:* In your issue of Jan. 31 I notice a communication from "H. H." that is so smooth and mild, and yet so full of rifle talk, that I had to read it over and over again. It came from Florida, and its assertions seem to almost carry the fragrance of the orange with them. We must all take off our hats to "thirty years ago." Then the muzzleloader was in its prime. This is the assertion that forces my obeisance: "At 200yds., with a reclining rest, I could put all my shots in a 2in. bullseye," and this with round ball and linen patch in a .38-cal. muzzle-loading rifle. How Major Merrill would like to see that target and put his calipers on every bullet, rub his hands in glee and shout again, "Muzzleloaders to the front." But I have to notice a question in "H. H.'s" letter. It is this, "Has the increasing twist been applied to any of our breechloaders?" This question throws a shadow of weakness over the communication that I much regret, for the uncharitable will say that "H. H." is not posted enough in rifle matters to make the assertion that he put all his bullets into a 2in. bull at 200yds.—REST SHOOTER.

ALBANY, Feb 28.—At the Rensselaerwyck range to-day the shooting was on Massachusets target, 3 scores of 7 shots. The best scores were as follows:

Wm E Fitch	11	12	9	12	10	11	11—77
	11	10	11	11	12	11	11—77
	11	12	10	11	11	12	12—79—233
Chas H Gaus	10	10	10	10	11	11	12—74
	12	11	12	10	12	10	11—78
	11	10	11	11	12	12	11—79—231

March 6.—The first competition in the American decimal match 200yds. was shot. We give the best scores:

Wm E Fitch	9	9	9	10	9	10	10	9	9	9—93
C H Gaus	8	9	8	9	10	9	9	9	9	9—89

BOSTON, March 8.—There are at the Mammoth gallery three solid silver, hand made badges, valued at $25, to be shot for by amateurs during the month of March. In three classes, rounds 10, the best five scores to win in each class or possible 250. Position off-hand, distance 150ft., Creedmoor targets. Following are scores made in first class the past week:

A B Loring	44	44	44	44	45—221
R Ford	44	44	44	44	45—221
R W Gardner	43	45	43	43	43—217

NEWTON RIFLE ASSOCIATION.—Newton, Mass., March 1.—The regular annual meeting of the Newton Rifle Association was held Saturday, March 1. The following officers were elected for the ensuing year: President, T. W. Stevens; Vice-President, Geo. Linder; Treasurer, J. E. Hills; Secretary, F. W. Stevens; Directors—J. G. Wildman, Geo. Strong, W. O. Edmonds, Jr., Dwight Boyden, Dr. E. Hitchcock, L. Edwin Chase, Geo. Linder, F. W. Stevens, J. E. Hills and M. C. Laffe. The club is a live one, and ready at all times for friendly contests with neighboring clubs, at either targets or clay-birds. Regular shoots will be held on club grounds every Saturday, at 2 P. M. Correspondence on club matters solicited.—TOM ALLEY.

BULL'S HEAD RIFLE CLUB.—Regular weekly shooting, Feb. 28; 12-ring target; possible, 120: M. Dorrler 119, G. Zimmerman 117, C. Rein 116, H. Holzmann 115, H. Hachmann 111, J. J. Schneider 110, A. Lober 109, A. Stolzenberger 107, J. F. Campbell 104, J. J. Jordan 103, S. Mehrbach 102, B. Walters 99, D. Holland 97, S. F. C. Weber 96, H. Zubiller 87, D. Louinskie 81, H. A. Wasmuth 78.—A. LOBER, Sec.

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

THE BOSTON GUN CLUB.

THE fourth tournament of the Boston Gun Club brought out a large array of shooters, representatives from the Brunswick Club, Maine; Manchester Sporting Club, Exeter; Sportsman Clubs, New Hampshire; the Worcesters Sportsman, Malden (Mass.) Rifle, Suffolk Sportsman, Clinton, Brockton, Maynard and Watertown Gun Clubs, Massachusetts, being present to do justice and prove their skill. The gold badge team match, of course, attracted the most attention, visitors and sportsmen crowding in and round the spacious platform to witness each shooter doing his best for the honor of their respective clubs. The wingless messengers of peace were incessantly peppered at, though the traps being worked to their best made fine scores the exception. A southeast wind gave from the easterly trap stands very strong left-quartering birds, after the shoot, birds being recovered fully 80yds. from trap. Of course the right-hand birds were much shorter fight. The general distance being 45yds., shooters seemed agreed that no gun could be built to shoot too close, or powder thrown too strong for the birds thrown from these powerful traps. The wind, though varying little in strength, became a little colder through the day, necessitating a frequent visitation to the steaming hot coffee provided in the club-house. The scores are as follows, singles being from 18yds. rise, doubles 15; ties shot at straightaway 21yds, rise, miss and out; ties on doubles 18yds., one pair miss and out:

First Event, 7 single birds.

C H DeRochemont	1101100—4	J Decker	1111110—6
W J Perry	1111110—6	A Houghton	0011110—4
H W Eager	0111111—6	C A Gerrish	0111111—6
W H Allen	1111010—5	B F Johnson	1111010—5
A H Perry	0011101—4	L G White	1100001—3
O J Jenkins	0010110—3	T C Field	0101011—4
L Evans	1110011—5	J Nichols	1000001—2
C B Holden	0001100—2	H Severance	0010010—2
G A Sampson	0101011—4	A F Cooper	0011100—3
J Hart	0101010—3	D Kirkwood	1110111—6
R Schaffer	1111110—6	J S Sawyers	1111101—6

Ties—Eager and Gerrish first, Allen, Evans and Johnson second, Sampson and Houghton third, Jenkins and Cooper fourth.

Second event, 7 single birds.

De Rochemont	0111111—6	Hart	0011111—5
Evans	0101010—3	Nichols	0011011—4
Schaefer	1111111—7	A H Henry	1110000—3
White	0101000—2	A Sampson	0111100—4
Holden	1111101—6	Houghton	1110010—4
Decker	0101101—4	Kirkwood	1011111—6
Eager	1110111—6	Field	0011011—4
W Perry	1011101—5	Severance	0100101—3
Jeffness	0000 w—0	W Emerson	0001000—2
Johnson	1000101—3	G F Cutting	0001011—3
Cooper	0111010—4	G Williams	1101100—4
Allen	1100000—2	Curtis	1001110—4

Schaefer took first, Rochemont, Eager and Holden second, Perry and Hart third, Curtis fourth.

Third event, 3 pairs double birds.

Holden	00	01	10—3	Field	01 01 00—2
Evans	01	10	01—2	Gerrish	01 11 10—4
Rochemont	11	10	00—3	Williams	11 11 10—5
Kirkwood	11	11	00—3	Schaefer	11 11 10—5
White	10	11	11—5	Nichols	11 10 10—4
Eager	11	00	10—3	W Perry	11 11 10—5
E T Smith	10	01	10—3	Jenkins	00 11 11—4
Houghton	11	01	00—4	W Lane	11 11 10—5
Sampson	00	10	00—1	Sawyer	10 11 10—4
Johnson	11	11	10—5	R Perry	10 10 00—2
Decker	11	10	10—4	Cutting	10 10 11—4
Hart	10	10	11—4	A H Perry	11 10 00—4
Cooper	11	1	11—6		

Ties—Cooper took first, Schaefer and W. Perry second, Sawyer, Houghton and Nichols third, Eager fourth,

Fourth event, 5 birds from five traps kept re-pigeoned.

Field	00100—1	Decker	01001—2
W Perry	11111—5	A H Perry	10110—3
Jenkins	11101—4	Johnson	10100—2
Rochemont	11010—3	Williams	01100—2
Hart	01010—2	Houghton	00110—2
Schaefer	11111—5	Cooper	01001—2
Evans	11111—5	Holden	11011—4
Eager	11000—2	Sampson	11111—5
White	10100—2	Curtis	11111—5
Gerrish	11001—3	D Chambers	10111—4
Law	00111—3	H G Taylor	11000—2
Smith	11010—3	Nichols	01111—4

Ties—Evans, Curtis and Schaefer first, Jenkins, Holden and Nichols second, De Rochemont and Law third, Williams and Houghton fourth.

Fifth event, 7 single birds.

DeRochemont	1111100—5	Decker	0110111—5
Schaefer	1111111—7	Cooper	1011110—5
White	1011100—4	Hart	0111110—5
Jenkins	1111011—6	Johnson	1110111—6
Houghton	0111010—4	W S Perry	1110001—4
Smith	1011011—5	Sampson	1011011—5
Gerrish	1001110—4	Emerson	1010111—5
Field	1011000—3	A H Perry	0110110—4
Evans	1101011—5	Allen	0111101—5
W Perry	0011011—4	Howard	0100111—4
Eager	1111011—6	Sawyer	1000111—4
Nichols	1100111—5	C F Steele	1010100—3
Curtis	1001111—5	G F Locke	1110111—6
Williams	0000011—2	H Dunton	1110100—4
Holden	1111111—7	Taylor	1111111—7
Cutting	1000101—3	H C Warren	1101110—5
D Chambers	1000101—3		

Schaefer and Taylor first, Jenkins second, DeRochemont, Curtis and Warren third, W Perry fourth.

Sixth event—New England clay-pigeon, three men team badge, championship match. The Boston Gun Club giving a magnificently finished solid gold medal, of the value of $50. to the club getting the best aggregate of two scores out of six shoots. Conditions—A team to consist of three men from any organized club in the New England States, each club entitled to send two teams' scores, to consist of five singles from five separate and constantly re-pigeoned traps, three pair doubles from two traps, and ten single birds from a constantly altered trap, each team's score to be thus: 63 birds, singles to be shot from 18yds. rise; doubles, 15yds. rise; ties each day to be shot at one pair doubles and one single straightaway bird, meaning nine birds per team. If any tie exist on the total of two best scores, the teams shall shoot off at five straightaway birds and three pair doubles, or 33 birds per team. Entrance, $1 per man, the money on each day to be divided, 50, 35 and 15 per cent. to the clubs in usual rotation. One man can be changed if by sickness or inability to shoot on different days, but no change can be made by members from one team to another of same club. Not less than six teams to constitute a shoot.

First Worcester Team.

Five Traps.	Doubles.	Singles.
Eager 10101	10 11 11	1010010111—14
Holden 11110	10 10 01	1111111110—76
W S Perry 01011	10 11 00	1100001111—12—42

First Massachusetts Rifle Team.

De Rochemont 01110	10 00 10	1101111011—13
Emerson 01011	11 10 10	0100111011—13
Schaefer 11110	01 11 11	1011110111—16—42

Second Massachusetts Rifle Team.

Curtis 01101	00 11 01	1111011111—15
Dickey 11100	11 11 10	0111111101—16
Nichols 00011	01 00 10	0010101110— 9—40

Boston Gun Club Team.

Kirkwood 10010	00 01 00	0111001011— 9
Johnson 01110	11 11 01	1101111011—16
Field 10110	10 11 10	1101111011—15—40

Exeter Club Team.

Taylor 00100	00 10 00	1111111111—12
Cooper 01001	11 00 11	0110111101—13
Jenkins 11110	01 10 01	1101001111—14—39

Second Worcester Team.

Smith 01000	00 00 11	1100001110— 8
Sampson 11111	10 10 00	1011111011—15
Houghton 10110	00 10 10	1101101111—13—36

Wakefield Sportsman Team.

Dalton 11011	10 10 10	1100111111—14
Miles 01110	10 10 00	1101001101—12
Goodman 09000	00 00 00	1010101011— 6—32

Ties for first were only decided on the fifth tie, when the Worcester first team took first money, Boston Gun Club and Massachusets Rifle divided second, the Exeter taking the third. A large number of visitors were present during this match, and exciting the greatest interest.

Seventh event, 5 single birds.

Eager	11111—5	Chambers	01001—2
Schaefer	00011—2	Emerson	11111—5
Sampson	11001—3	Nichols	01111—4
Jenkins	11011—4	White	11110—4
Sawyer	10111—4	W S Perry	01110—3
R Perry	01110—3	Curtis	01101—3
Evans	01111—4	Cooper	01111—4
Hart	11110—4	De Rochemont	11111—5
Field	11010—3	Decker	11011—4
Steele	00001—1	Cutting	11000—2
Johnson	11111—5	Gerrish	11001—3

Eager, Johnson and Emerson first, Decker second, Sampson and Field third, Chambers, Cutting and Schaefer fourth.

Eighth event, 5 birds.

Jenkins	11101—4	Sawyer	10111—4
Hart	00111—3	Evans	01111—4
Sampson	11011—4	Field	10111—4
Cooper	11101—4	Emerson	01100—2
Decker	11101—4	Chambers	01100—2
Nichols	11000—2		

Decker and Evans first, Hart second, Nichols and Emerson third.

Ninth event, 5 birds.

Sampson	11111—5	Nichols	11000—2
Emerson	11101—4	Evans	11111—5
Hart	01110—3	Decker	11111—5
Cooper	11000—2	Sawyer	10110—3
Jenkins	01111—4	Field	00010—1

Sampson and Decker first, Emerson and Jenkins second, Hart and Sawyer third,

During the progress of the latter matches a large number of miss and out matches were shot at double birds from five traps; these events concluded a splendid day's sport, the evidences being that the next shoot on March 19 will, should weather indications be favorable, one of the largest events yet held by this club.

UNION GUN CLUB.—The first annual meeting of the Union Gun Club, of Pawtucket and Central Falls, was held Tuesday evening, March 4, and it was shown by the report of the Executive Committee that the club was in a good and prosperous condition. They have recently moved to new grounds, which are easy of access, being situated about half way between Pawtucket and Providence, and within 400yds. of the line of horse cars running between the two places. The opening shoot of the season was held on Feb. 22, and was a very enjoyable day, members from the Narragansett Gun Club, of Providence, and Watchemoket Gun Club, of East Providence, being present and taking an active part with us. We shall shoot this season from five screened traps, placed five yards apart, and Friday of each week will be our regular field day. We are always pleased to see members of other gun clubs, or those interested in shooting, at our grounds.

The following is the list of officers elected for the ensuing year: President, Charles B. Payne; Treasurer, C. Fred Crawford; Assistant Treasurer, Thomas H. Eaton; Secretary, Samuel F. Dexter; Executive Committee, John Ramsbottom, W. F. Salisbury, C. M. Carpenter.—SAMUEL F. DEXTER, Secretary.

MAPLE GROVE GUN CLUB.—Lancaster, Pa., March 4.—The sportsmen of Lancaster have organized the Maple Grove Gun Club. The officers are: President, Herbert H. Anderson; Treasurer, Charles Francisens; Secretary, John Snyder.

KNOXVILLE GUN CLUB.—The officers of the Knoxville, Tenn., Gun Club for 1884 are: President, M. G. McLang; Vice-President, S. B. Dow; Secretary and Treasurer, Chas. C. Hebbard.

WELLAND, Toronto, March 6.—To-day Capt. Ritter shot against Anderson and Seigelhurst for $20 a side, the Captain to break as many balls out of 30 as the others did out of 50—that is, 25 each. The Captain won, breaking his 30 straight. Anderson and Seigelhurst also broke 30 out of 50. A match was made to-night between Capt. Ritter and George Rogers, the noted shot from St. Catharines. The terms are two matches, one at 21 pigeons each, and the other at 50 glass balls each, for $50 a side, on Friday, 14th, to be shot here.

Yachting.

FIXTURES.

May 24.—Oswego Y. C., Opening Cruise.
May 24.—Boston Y. C., Opening Cruise.
May 30.—Knickerbocker Y. C., Spring Matches.
May 30—Atlantic Y. C., Opening Cruise.
May 31.—Boston Y.C., First Match, Connor and Commodore's cups.
June 9—Portland Y. C., Challenge Cup.
June 10.—Atlantic Y. C., Annual Match.
June 12.—New York Y. C., Annual Matches.
June 14.—Hull Y. C., Club Meet.
June 14—Seawanhaka Corinthian Y. C., Annual Matches
June 16.—East River Y. C., Annual Matches.
June 28.—Boston Y. C., Ladies' Day.
July 9.—Beverly Y. C., Marblehead, First Championship.
July 12.—Hull Y. C., Club Meet.
July 12.—Boston Y. C., Second Club Match.
July 26.—Beverly Y. C., Nahaut, Second Championship.
Aug. 9.—Hull Y. C., Club Meet.
Aug. 9.—Boston Y. C., Open Matches, all clubs.
Aug. 16.—Beverly Y. C., Swampscott, Third Championship.
Aug. 23.—Beverly Y. C., Marblehead, Open Matches.
Aug. 23.—Boston Y. C., Third Club Match.
Sept. 6.—Beverly Y. C., Marblehead, Special Matches.
Sept. 13.—Hull Y. C., Club Meet.
Sept. 13.—Boston Y. C., Second Ladies' Day.

ET TU, BRUTE!

WE announce with pleasure that Mr. Lawton's sloop Gleam is to be improved by the addition of 1,500lbs. lead on the keel, which will no doubt make the Gleam an abler craft than she now is in lumpy water. This is like a stab at the sloop in the back. The jig is nigh up when depth, keels and outside lead invade the classic regions of Bay Ridge, the last spot on the globe where the patriots have collected to resist the onslaughts of common sense by a frantic waving of the flag, drawing the while upon Danes and Swedes for their weapons in battle. And now even Bay Ridge gives lively signs of regeneration. Outside lead is the first step, the rest follows as a natural sequence. When the truly good and great patriot can so far yaw from all that is holy in the hoary traditions of American yachting as to plaster chunks of lead on the keel "allee samee cuttee," the remainder is only a question of time. Probably Gleam with her outside lead will be found rather hard in a sea, and demand an unwieldly rig. The boat which follows her will be given "just a little" less beam and "just a little" more depth, by which ye sloop of old slowly evolves herself into the cutter now capturing the public's attention.

So long! Gleam, old-time trap. All hail! Gleam regenerate, one more penitent gathered into the fold. There is the difference between the naval architect and the good patriot. The former throws over the ancient, and with the true American spirit of progression accepts the new at a bound. The latter, good soul, fights into the last ditch, but bows to the inevitable, just so he can delude himself fondly with the belief that he is inventing for himself and not swallowing bitter doses emanating from base, bad "foreign" sources. So the Gleam is to "lug" a chunk of outside lead. Whither are we drifting?

HINTS TO LOCAL COMMITTEES.

IF regatta committees of the various local clubs existing in ports frequented by yachts on their summer cruise would so arrange dates for open matches it would further a systematic making of "the rounds," which would contribute immensely to the interest and ends of yacht racing in enabling records of broad meaning to be made. Cruising to the Eastward up the Sound and along the eastern coast as far as Mount Desert is becoming quite general during the summer months, especially in July, August and September. But it is still done in a desultory manner. Now, if committees of clubs from Larchmont to Portland would arrange a series of fixtures for public matches open to all comers, offering good cash purses, the cruisers would quickly learn to reduce their movements to some system, so they could put in an appearance from port to port in time to take in the races mentioned, and thereby add to the importance of all contests and the meaning of their records. It would lift racing from local to national dignity, which is what we now most need. Thus the near-by ports should fix upon early dates in July, the Eastern coast upon August and early September, and the Sound and New York ports again for the latter part of September and October. In this way a yacht, after starting in the local events, could weigh for the rounds along the coast in midsummer on the passage east, and likewise enter for the fall races during the passage home again, winding up the season with some October matches in New York waters. We commend such a scheme to the New Haven, Newport, New Bedford clubs, the various organizations in and about Boston, Salem, Newburyport, Portland, etc. A little correspondence among the secretaries of the clubs would settle upon suitable dates.

ALL IN DUE TIME.

Editor Forest and Stream:

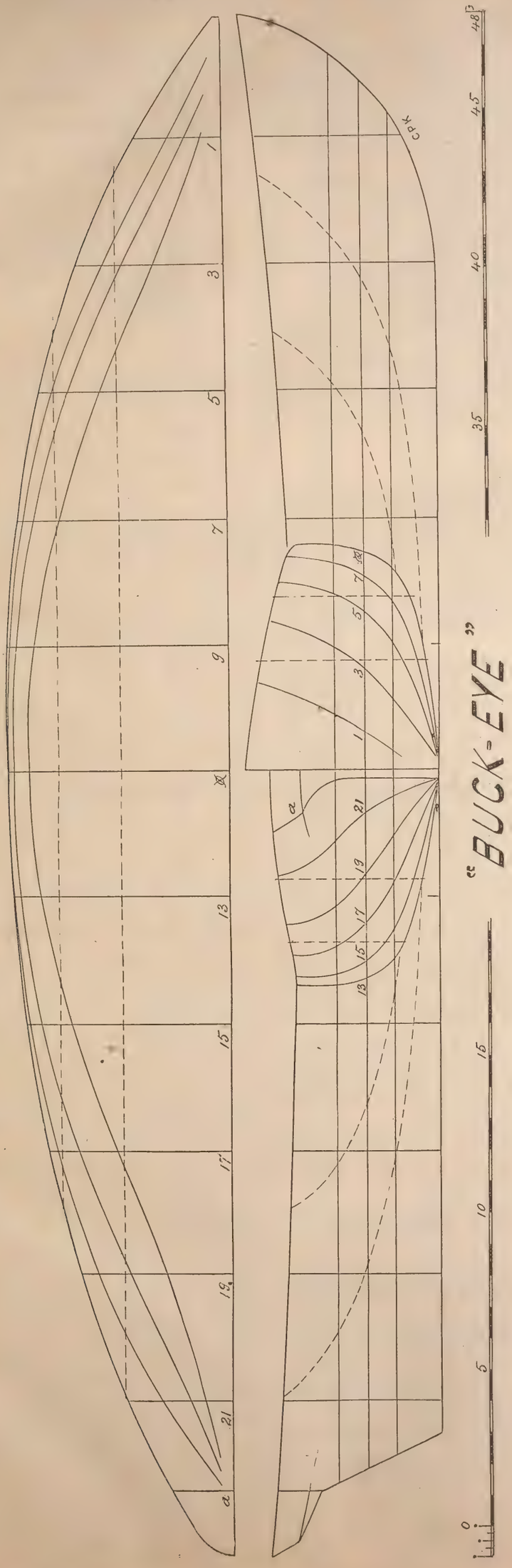
I have been a reader of the yachting columns of your paper for a long time, and fully appreciate your efforts in disseminating ideas in the direction of increased draft and seaworthiness in our yachts.

Enough has been said on that subject to convince any one who desires or is willing to be convinced, and any further arguments will be both useless and superfluous. There will be enough cutters afloat here during the coming season to enable them to speak for themselves, and if their actual performance does not sustain their claims, arguments will be of no avail. I would suggest that you give us the designs of other types as well, of which we certainly have a large and interesting variety on this side of the Atlantic. Why not give the lines of some of the Eastern yachts, some of which greatly resemble the Daisy? Also those of some of our pilot boats, which have a reputation for speed and staunchness. Such a series, together with reports of the performance of the craft shown, would be most useful in affording the general information as to the different theories and practice in construction on which a thinking yachtsman could base a valuable opinion, and without which any statement of preference is not worthy consideration.

I therefore submit the above suggestions in a desire for wider information on yachting subjects generally. H.

[We cannot do more than possible. We have illustrated and described keel sloops of Boston, centerboard sloops, compromises, beamy cutters and narrow cutters, besides sharpies, canoes, buck-eyes, steam launches and engines, yawl rigs and cutter rigs of all kinds. We have in preparation some schooners, the Petrel as an example of a very fast yacht, a modern Boston sloop, iron work of schooners and much other practical information. It is our claim that we have published a greater number and variety of designs than all other periodicals. But everything must wait its turn. More than that cannot be expected. We can fairly say that FOREST AND STREAM has done more to further precise information and instruction in the past years than all its contemporaries put together. The field is a very large one, and the future lies before us to cover what has not yet been reached. Our object is to supply the most pressing, practical and available material within the imposed limits of commercial success, which no periodical can afford to disregard. We have naturally neglected dead issues, and for that reason have given the old-fashioned light displacement centerboards little attention. There is no object in giving publicity to boats of a style soon to become obsolete, nor to practices and customs which we condemn as fraught with harm to the best interests of the sport. We must have time to fill the whole bill. Having received several letters similar to the above, we hope this will explain the policy pursued. It is easy to ask for this or that design, but a much more difficult matter to supply the want. Most yachtsmen and yacht builders cannot furnish accurate particulars, and many are still selfish enough to assert proprietary rights for fear of giving away for the benefit of others what they deem a good thing. Considering the difficulties to be contended with, the public is to be congratulated upon having more pertinent material offered through FOREST AND STREAM than through all other sources.]

ATLANTIC Y. C.—Annual match fixed for June 10. Officers for the year: Commodore, H. H. Hogins, schooner Agnes; Vice-Commodore, George B. Moffat, cutter Enterprise; Rear Commodore, H. C. Wintringham, sloop Nomad; Recording Secretary, F. C. Swan; Corresponding Secretary, J. L. Marcellus; Treasurrr, Richard C. Field; Measurer, J. J. Pierrepont; Regatta Committee—George D. Mackay, C. T. Pierce and George W. Chauncey. The club has 204 members and 103 boats, probably a larger proportion of boats to members than any other, as some of the yachts are owned by several persons. There are 16 schooners, 65 sloops, 12 cats and 8 steamers. The club does not owe a dollar of debt, and has a bright future, possessing the best inducements in its harbor and accessible club grounds. The prosperity of the club is the direct result of pursuing a well defined policy. If the mean length rule could only be modified so as not to exclude yachts with the long overhangs which taste and practical convenience demand in boats of modern style, accessions to the fleet would take a further bound ahead.



"THE BUCKEYE."

TO supply information to many inquirers the building lines of a Chesapeake buckeye are produced herewith. The plans in question are from an original model of the Cynthia, a boat famous as abler and faster than the general run of the family. She represents the latest improvements, and it is not difficult to find good reason for her comparative success in the extra depth of one foot given her beyond the custom, the Cynthia drawing 2½ft. or the depth of 5. She is distinguished likewise by more deadrise, an easier turn to the bilge, and rather longer and finer entrance. She is another illustration of the fact that boats "grown" to a certain locality to meet certain ends are after all only in the first stages of development reviewed from a purely critical standpoint, making no allowances for the special limited work the boat is intended to cover, nor for the restrictions due to the lack of material, money or skill under which she is brought forth. For the moment the original buckeye took on a form one step nearer to the regular yacht, as in the case of the Cynthia, a marked improvement in performance resulted; and it is reasonable to suppose that still further approximations to the standards observed in yacht modeling would contribute, step by step, to a corresponding development of qualities for the better until eventually the pristine buckeye finds herself transformed into a veritable yacht, not deviating radically from a yacht in any respect. There is then good ground why any one seeking the qualities of a yacht can save himself trouble and certain disappointment in declining to be driven back to primordials of any kind. The various stages of experiment and the gradual evolution from the extemporized accidents which have "grown" to certain localities, have already all been gone through extensively by others whose experiences and labors have led up to the modern yacht as the climax to the evolution. Going back to early forms for a fresh start involves only a tedious and profitless repetition of what the world has already acquired, and it is much sounder policy to take the initial from the latest development and attempt to improve upon that.

But there are cases in which a return to first efforts is fully justified when a yacht is not wanted, but a contrivance to fulfil in the readiest and cheapest way that particular duty to which the existence of the "grown" or indigent boats owe their origin, though even then the structural and mechanical attributes will generally admit of considerable amelioration through the application of funds and greater skill than were at the command of the originators of the type. Thus we find that where the peculiarities of the buckeye are sought to be preserved, their build has undergone great change nevertheless. The Cynthia and her sisters are no longer the clumsy dugouts of yore, but are built with a frame and regularly planked. The crude creation hewn out of a log has been replaced by a more pretentious construction, both in regard to perfection and refinement of form as well as in methods of manufacture.

This stage of the evolution is fittingly represented by the buckeye. Sportsmen and others on the lookout for a boat which will carry them and a load at good speed on the conditions of cheap first cost, light draft and small rig with fair behavior in troubled waters, will find in the plans produced this week one more excellent addition to the collection of useful substitutes for full-fledged yachts. As the sharpie displaced the dugout on Long Island Sound with the scarcity of large logs and the advent of the sawmill, so has the framed buckeye come to the fore in Chesapeake Bay and Southern waters as the substitute for the improvised canoe.

That she is a swift boat, gauged by a rational comparison of size and not by the empyrical length standard set up out of hand by yachting cliques without reason or considerations of justice, few need to be told. With a long body, easy ends and fore and aft sections, with deadrise and slow bilge and a fair allotment of ballast to the bulk, boats like the Cynthia ought to be capable of excellent behavior and speedy on all points, falling short only in turning to windward in lumpy water. This the sportsmen may be willing enough to forego for the sake of the economical inducements and light draft held forth. For his purposes the buckeye can certainly be favorably commended. He will find it quite possible to improve upon her present equipment, and thus exact a higher degree of efficiency by attention to details of ballasting and rig.

The Cynthia is 49ft. on deck between rabbets, the plans being to outside of moulds only. Her beam is 14ft. and draft 3½ft., with keel in ordinary trim, or about 2½ if fitted with board. Owing to her ballast she has good weight for working, some ability in a sea, and shows well in climbing to windward, where lighter boats fail. She has a round stern, which is locally a matter of pride and style obtained at an extra cost of about $300. The buckeye is built in all the ports along the Chesapeake, and a fifty foot boat, hull and spars, is said to cost about $1,000, iron work, sails, gear and joinerwork in cabin being extra, which $500 may cover. The usual rig is similar to the sharpie, and was illustrated in this paper for Feb. 14. The schooner rig is, however, coming into vogue as more efficient.

SOME GENERAL REMARKS.

REFERRING to Mr. Franklyn Bassford's letter published last week, these remarks are made in reply and explanation:

Weight in itself without consideration of form is not productive of resistance, but form without regard to weight certainly is. Hence great weight on a good form of sufficiently narrow beam may be driven as economically as less weight in a broader form. Though more water is moved, it is moved to a less distance, hence at a less speed and expenditure of power. Proof to be found in the fact that with like sail area, Bedouin drives 106 tons practically at the same speed the Gracie drives her 64 tons. We referred to beam in proportion to loadline, as fantail overhangs cannot be included in the boat proper from a naval architect's standpoint any more than a cutwater reaching half way out on the bowsprit. A look at Lloyd's Register will show a vast majority of cutters under 4½ beams and a mere handful of 5 beams and over. For the rest it seems to be only a dispute as to what can be called a sloop and what a cutter. No hard and fast line can be drawn, for one type gradually merges into the other, and if it is any consolation to call a sloop so modified as to possess in a greater or less degree the principles of a cutter by the term sloop, no one will seriously object. They may be called frigates with a fore and aft rig, or steamers without an engine, for all the difference the name will make. Just so our yachts are built with enough depth and weight and shipshape equipment to earn respect from seamen and professional people instead of being looked upon as childish toys or silly machines. A centerboard will draw less water than a keel, though the difference in deep boats is reduced often to a nominal amount, and it remains for every one to determine for his own purpose whether the advantages of either overbalance the disadvantages. The cost of a yacht is regulated by the amount of material and labor used in construction and the completeness of equipment, and not by the empty name her type goes by. All this may be more in a sloop or in a cutter, according to their individual shape and outfit. With the exception of excess in ballast, there is nothing in a cutter which, quality for quality, cannot be as cheap and even cheaper than in the sloop. It is certain, however, that a cheap and nasty job will cost less than a good piece of work, regardless of type, in the first place, though, taking depreciation into account, the costly job will often be found the cheaper in the long run. Mentioning prices of yachts out of hand is no more a fair comparison than citing a Chatham street suit of hand-me-downs for $10 against a $50 suit from a reputable tailor. The notion that a boat and a boat ought to cost alike simply because they are two boats ought to be overcome by this time. A tin watch and a gold watch are both watches, but there is a difference in price. The construction and outfit of the Bedouin and the Gracie differ in just the same manner, and long after the Gracie is broken up for firewood the Bedouin will have fair market value. The modern beamy Boston sloops are not only as expensive but more expensive to build than cutters, for the simple reason that there is more of them on the length in the way of material, more rig and equal or more displacement and draft. The Gracie is an old-fashioned light draft. Such yachts are no longer built. Dr. Barron's new sloop of 52ft. loadline has more than the actual depth of the Gracie on 70ft., and within a few inches the same draft. We are well aware that under length rules very narrow beam cutters may not come into vogue, but the signs of the times all point to moderate beam at least, coupled with the depth, draft, low weights and equipment of the cutter. All this may be only old experience. It may all have been tried long ago. In fact, the ancient Phœnicians knew all about cutters and outside lead long before the English developed the modern yacht. There is nothing new under the sun anyway. But the fact remains that in spite of previous experience we drifted off at a tangent here in America into the universal construction of flat, shoal, light displacement traps and declined to listen to anything else until the "cutter agitation" again opened the public's eyes to the possibilities in directions for a long period refused the slighest recognition. That period is now closing. There will be no more schooners built like the Grayling and no more sloops like the Fannie or Gracie. How far we will proceed in the opposite path, how nearly we will approximate the extreme type of cutter is a question no newspaper controversy can settle. It can safely be left to future experience. Forest and Stream has labored for a full understanding of both sides and equal recognition to various systems, so that intelligent selection would result. It must be readily understood by every one that as long as "cutter principles" could not obtain a hearing in this country, as long as everything in the way of change or improvement was damned without trial or evidence, yacht designing was nothing but groping in the dark, a matter of stumbling on the right thing in place of intelligently appreciating the problems to be worked up to as nearly as limiting conditions would allow. No better

proof of the utter absence of trustworthy knowledge among the classes accepting the responsibility of modeling our yachts can be asked than the capsizing of the Grayling, a schooner which had been proclaimed absolutely uncapsizable while on the stocks because the so-called "practical" eye was mislead by her beam into a false assumption, the few who foresaw the probability of the disaster being laughed to scorn for their temerity in proclaiming the likelihood of that which subsequently happened. We have again fairly started on the right path with the practice of more depth and weight and better rigs, and for that only FOREST AND STREAM, with its few coadjutors, must be thanked. Our course has been opposed at every step by every conceivable agency, but in spite of prejudice, false witnesses, and malice, the cutters steadily increase in numbers, and the whole of American yacht building has entered upon a revolution, circling about the cutter in a spiral gradually piloting up to the ultimate center of perfection. And in the knowledge that no agency has contributed to this great change more than our pen lies our reward and satisfaction, be the upshot of it all "improved so-called sloops," "American cutters," or exact copies of the foreign craft under our flag. We care not which, so the trap has been forever ousted and the dawdler transformed into a veritable amateur shellback, with irresistible salt water longings. The question of type has been so fully discussed in this journal, that we refer to our files rather than give more space to a reopening of generalities not specific enough to lead to a point. It is certain that the ball of innovation has been started rolling. It is certain that it has not yet stopped rolling, for successive yachts represent fresh departures from their predecessors. The ball may now be allowed to roll out its course, then we will know upon what it has brought up. We are entitled to thanks for having inaugurated this new era in the overthrow of warped and narrow conceptions which monopolized attention before our advent upon the scene. To that extent we have earned the favorable recognition even of those who still resist the inevitable evolution from the makeshift of American yachting in its infant days to the regular vessels of yachting, ripened into the dignified occupation of men.

NEW ENGLAND YACHT RACING ASSOCIATION.

BY-LAWS.

ADOPTED at meeting of delegates from New England yacht clubs, held at Parker House, Boston, Feb. 20, 1884. Compiled by W. Lloyd Jeffries, Beverly Y. C.; C. A. Perkins, Hull Y. C.; L. M. Clark, Dorchester Y. C.; John Bryant, Eastern Y. C.; Parkman Dexter, Dorchester Y. C.; C. F. Loring, Boston Y. C., *ex-officio*, committee.

ARTICLE I.

NAME.—The name of this organization shall be The New England Yacht Racing Association.

ARTICLE II.

OBJECTS.—The objects of the Association shall be: To encourage yacht building and yacht racing; to establish and enforce uniform rules for the government of all races in which the yachts of two or more clubs compete.

ARTICLE III.

MEMBERSHIP.—The following yacht clubs may become members of this Association by accepting the by-laws: Beverly, Boston, Bunker Hill, Dorchester, Eastern, Hull, Jeffries, Lynn, Portland, Quincy, Salem Bay, South Boston, West Lynn and Yale.

Any other yacht club of New England in good standing, having fifty members, or twenty-five yachts measuring more than ten feet in length on the water line, shall be eligible to membership. Applications for membership must be made in writing to the secretary of the Association, must be signed by the commodore or secretary of the club applying for membership, and must contain a correct list of the members and yachts of the club. The executive committee shall act upon said application, and shall admit all clubs eligible under this article. The decision of the committee shall be final.

ARTICLE IV.

REPRESENTATION.—Each club shall be represented in the Association by one delegate.

ARTICLE V.

OFFICERS.—The officers of the Association shall be as follows: President, vice-president, secretary (who shall also be treasurer), and an executive committee consisting of five members, of which the president and vice-president shall be *ex-officiis*. These officers shall be elected by ballot at each annual meeting, and shall hold office for one year or until their successors have been duly elected. Vacancies may be filled at any regular or special meeting. A majority of the votes of the members present shall be necessary to elect.

ARTICLE VI.

DUTIES OF OFFICERS.—*President.* The president shall preside at all meetings and enforce all regulations of the Association. He may call a special meeting at his pleasure, and shall so do at the written request of any club of the Association.

Vice-President. The vice-president shall assist the president in the discharge of his duties, and in his absence officiate in his stead.

Secretary. The secretary shall keep a true record of the proceedings of all the meetings of the Association in a book provided for that purpose; shall keep a correct roll of all the clubs and delegates; shall notify each club of its election to membership; and shall notify each delegate of every meeting and of the purpose for which it is called.

Treasurer. The treasurer shall collect all money due the Association and pay all bills contracted by it, keeping a correct account of the same in a book provided for that purpose. He shall make a report at each annual meeting of all the receipts and expenditures, and of the amount of money remaining in his hand.

Executive Committee. The executive committee shall act as a membership committee, shall establish and enforce penalties for the infringement of the racing rules of the Association, and shall settle any dispute arising out of the construction of racing rules which shall be referred to the Association.

ARTICLE VII.

MEETINGS.—There shall be an annual meeting on the fourth Wednesday in April of each year, at which the reports of the secretary and treasurer shall be read, and officers for the ensuing year shall be elected. Special meetings may be called by the president. Notice of each meeting shall be issued by the secretary at least ten days before the date thereof. Representatives from five clubs shall constitute a quorum. Voting by proxy shall not be allowed, but in case of the absence of any delegate, his place at that meeting may be filled in such manner as his club may have provided.

ARTICLE VIII.

ASSESSMENTS.—Funds for defraying the current expenses of the Association shall be raised by an annual assessment on each club of ten dollars, which shall be due and payable in advance, and the financial year shall begin at the date of the annual meeting. No other assessment shall be levied except by a two-thirds vote of all the delegates present at a meeting called for that purpose.

ARTICLE IX.

RESIGNATIONS AND EXPULSIONS.—The membership of any club in the Association shall be forfeited by voluntary withdrawal, or by a two-thirds vote of all the clubs of the Association at a meeting specially called, at which said club shall have an opportunity of being heard in its own defense.

ARTICLE X.

AMENDMENTS.—These by-laws may be amended by a two-thirds vote at any meeting of the Association, provided, however, that the notice of such meeting shall have contained the proposed amendment in full.

First meeting at Parker House, Boston, April 23, at 7 P. M.
P. O. Box 1381, Boston. PELEG ABORN, Secretary.

THE BUGBEAR OF DRAFT.

Editor Forest and Stream:

Ever since the cutter became an element in yachting, a great deal has been said and written by sloop men about the cutter's great draft in relation to our shoal waters and harbors. Here is a list of the principal waters and harbors used by the yachts of this port. We find that with one or two exceptions, wherever vessels of the Gracie's draft of water could be accommodated there would be water enough for the largest cutter.

Horse Shoe, Sandy Hook Bay, 16ft. to 8fms. The channels from the ocean contain from 14ft. upward, Gravesend Bay, 12ft. close up to the beach. Upper Quarantine and Bay Ridge anchorages 4fms. and 6fms. respectively. Kill von Kull 3½fms., lower Hudson 4fms. From Governor's Island to Whitestone, the East River is narrow, but deep. Whitestone anchorage 3½fms. Along the north shore of Long Island we find the following anchorages; Cow Bay, 12ft. to 5fms.; Sand's Point, 12ft to 16ft.; Glen Cove dock, 3½fms.; Oyster Bay, 10ft. to 5fms.; Cold Spring, 15ft.; Lloyd's Harbor, 10ft.; Northport Bay, 10ft. to 5fms. Port Jefferson harbor can only be entered by large vessels during certain conditions of wind and tide. A yacht that is being repaired at that port now draws 11ft. Orient harbor, 15ft.; Greenport, 3½fms. close to dock. Through Shelter Island Sound and the greater parts of Little and Great Peconic Bays, a vessel drawing 15ft. could be carried. Sag Harbor, 10ft.; Napeague Harbor, 12ft. On the lower shore of the Sound comes first in order City Island Roads, 10ft. to 6fms.; Larchmont Harbor or Delancey's Cove, 6ft. to 11ft.; Captain's Harbor, 3½fms.; abreast of Morton House, Greenwich, 9ft.; Stamford Harbor, not much frequented, 9ft.; Black Rock, 10, 12 and 15ft.; Charles Island Harbor, east of the island of the same name, recently purchased by the American Y. C., 10 to 16ft.; behind the breakwater in New Haven Harbor, we find 3½fms.; Morris' Cove, 10 to 14ft.; 13ft. may be carried up to the city through a very narrow channel; the rest of the upper harbor falls almost dry at low water. Thimble Island's harbor, 15ft.; Connecticut River bar, 7½ft. This would shut out our big cutters and sloops at low water. Inside the bar there is plenty of water as far as the chart gives soundings opposite Lynn Ferry. New London Harbor, 10ft. to 5fms.; Noank 13ft.; Mystic Bridge, 11ft.; West Harbor, Fisher's Island, 10 and 14ft.; Stonington, 10 and 12ft.; East of the Race we have Block Island Breakwater, behind which we find 8 to 16ft.; Newport, 10ft. to 3½fms.; Wickford, 14ft. Providence is approached by a very narrow dredged channel 20ft. deep; the rest of the harbor falls dry. Bristol, 16ft.; Fall River, 13 and 15ft.; New Bedford, 15ft. to 8fms.; Upper Harbor, 9 to 14ft.; Cutty Hunk, 14ft. The other harbors in Buzzard's Bay are little used by New York yachtsmen, but with the exception of those situated in the extreme northern portion the chart shows anchorage in 10ft.

In Vineyard Sound, Tarpaulin Cove 15ft., Wood's Hole 14ft., Vineyard Haven 8fms., Edgartown 16ft. and over, Hyannis Port 13ft. to 3fms., Stage Harbor, Chatham, 18ft., but there is only 3ft. on the bar at the harbor's mouth; Nantucket Harbor 9ft. to 15ft., but the bar shows only 5ft., and as the tide only rises 2ft. or so in this locality vessels of comparatively little draft are shut out of the last two harbors mentioned. These figures are all taken from the chart and indicate the depth at mean low water spring tides. HAND LEAD.

[The fear of draft is in practical yachting life a bugbear and nothing else. The same kind of aversion once existed in Eastern waters, but now nearly all yachts built East are keel boats of as great and even greater draft than regular cutters. New Yorkers are fast overcoming their aversion to draft. Those owning keel yachts invariably acknowledge that their draft does not bother them in the least. It is, of course, possible that by deliberate selection a spot here and there can be found too shoal for a deep draft. The same can be said of every coast in the world. We are far better off for depth of water than our English cousins, many of the English harbors being artificial and drying out at low water. Our harbors and channels are also easier to navigate, and our system of buoyage and lighting superior and simpler than similar provisions abroad. There are isolated instances where a flat trap will make shelter in some small cove to which a deep draft could not follow. But such cases are so few and far between that they cannot be taken into consideration as having any weight upon the choice of proper design. We deem the question of draft clap-trap pure and simple. "Our shoal waters" are much of a myth, and no longer influence any sensible people who know what they want a yacht for.]

THE NEW HERA.

Editor Forest and Stream:

You stated in last week's paper that the new Hera will displace 14 tons on 36ft. loadline against the 16½ of Madge on 38ft. I think the Hera will run nearer 16 tons than 14, and in proportion to length will displace more than any cutter, fully justifying your position that the new length sloops will cost more than cutters, and be more expensive to keep in commission and more difficult to manage. We have not reached the limit yet, and I think we will see Heras with 18 tons displacement, and 36ft. hoist to mainsail as the natural consequence to length measurement. My choice would be about 12 tons displacement with say three and a half beams, and about 25ft. hoist to loadline of 36ft., as a good average for all purposes, but such a boat would start with a disadvantange for racing as you have often explained, so there seems nothing to do but to build the largest boats in the hope that the trouble will correct itself by bringing into prominence the evils of the length rule. It seems a pity to me that a better rule cannot be adopted at once without, so to speak, going through an experimental purgatory to cleanse the cobwebs from our under standing. SEMI-CUTTER.

FRIGHTFUL ANARCHY.—Our cousins abroad are at their wits' ends on the measurement question, and we are not much better off here in America. One thing the English are fast realizing. The Y. R. A. rule must go. It is killing yacht racing not because of the cost of the modern narrow beams as often assumed, but because it outclasses all other styles in handicapping them so heavily with a fictitious tonnage. Remove this unjust discrimination and the beamy yacht will come to the fore if she proves the equal of narrow deep heelers in speed. If she cannot match the narrow flyers of the latest proportions on a fair rule, no rule can alter the present state of affairs unless in the nature of a penalty upon the narrow beams in turn, and that no fair rule should seek to accomplish, for no fair rule should dictate how we are to model and how not. That handicaps upon fast boats will never become popular stands to reason, because diametrically opposed to the very nature and objects of allowing time. Last week's *Land and Water* says: "As handicapping is equivalent (or, at any rate, is intended so to be) to bringing the merest old tub and the smartest vessel to an equality, it seems as if no good results could be derived from this curious style of racing, and as yacht racing was originated and is still supported with a view to the improvement of naval architecture, it seems illogical and even ridiculous to encourage it. Were handicaps to become general, there would be no inducement to build fast vessels, and it is by no means improbable that the designing and construction of yachts for racing purposes would altogether cease. Fortunately, however, if we may judge from bygone experience, this kind of racing will never become common, and it is not likely that it will influence genuine sport one way or the other."

SUCCESSFUL SCHOONER.—Last winter a gentleman living on the Chesapeake built a schooner on the lines of the Penzance lugger, illustrated in Dixon Kemp's popular book on "Yacht and Boat Sailing," but gave her one foot more depth. She has proven a success, being quite fast, a good, comfortable and wentherly sea boat, with large accommodations. Loadline, 36ft.; beam on same, 10ft.; freeboard, 3ft.; draft, 4ft. 9in. Inside iron ballast. Rigged as a pole schooner, with single jib and large yard lug foresail for light winds. Hoist of mainsail, 26ft.; bowsprit outboard, 10ft. Base of three lower sails, 55ft. Headroom in cabin, 6ft. Floor, 3½ft., and sofas 32in. wide. For general cruising the yacht has shown herself well adapted. She is already in commission on Chesapeake Bay. We will soon publish lines and details.

PORTLAND Y. C.—Has 147 members. 6 schooners, 14 sloops, 5 cats, 1 steamer, and 1 catamaran—27 in all. During the past season 118 "foreign" yachts put in to Portland harbor, of which 11 were steamers. Challenge Cup race fixed for June 9. Officers for the year: Commodore, William Senter, Jr.; Vice-Commodore, Geo. C. Owen; Fleet Captain, Edward Woodman; Secretary, George Doane Rand; Treasurer, Harry R. Virgin; Measurer, Joseph H. Dyer; Regatta Committee, Com. Wm. Senter, Jr., ex-officio, Frank L. Moseley, H. P. Larrabee, H. R. Virgin, W. H. Stevens.

THE NICE INTERNATIONAL.—The great international races at Nice, April 15, 16 and 17, promise good sport this year. The famous cutter Annasona has shifted for yawl rig, and will appear as such, the rules having been altered to allow mixed rigs to compete for same prize. The English schooner Gladys, 80x15.7x9.1, built in 1876 by Harland & Wolff, of Belfast, has been entered. The American schooner Dauntless was at Algiers Feb. 14, bound for Nice, and the Gitana, of Boston, may also appear at the start.

ANNASONA.—This cutter will, after all, sail under her regular rig at Nice, owing to late change in the rules. Her cutter spars will be sent out after her. The performance of this modern narrow beam on the passage will be full of interest. Judging by the recent cruise of the fleen down our own coast, she ought to prove a fine, able sea boat, in spite of the misgivings of the old school.

LAST NEWPORT RACES.—A gentleman writes that Captain Joe Ellsworth, who sailed the Montauk for the Goelet Cup in the matches of last August, acknowledged in person that Fortuna had the race in hand, and lost only by trying to carry unproper sail on the wind. This by way of reply to assertions of correspondents giving different explanations.

RARITAN Y. C.—*Editor Forest and Stream:* The election of officers of Raritan Y. C. resulted as follows: Commodore, N. D. White; Vice-Commodore, E. H. Hall; Secretary, F. W. Kitchel; Treasurer, F. A. Greenly; Measurer, C. F. Hall. The treasury is in a flourishing condition, and a good time is anticipated the coming season.—F. W. K.

JERSEY CITY Y. C.—Officers for the year: Commodore, H. C. Roome; Vice-Commodore, F. C. Brower-Ancher; Secretary, George Hawes; Measurer, G. H. T. Doggett; Regatta Committee, Charles G. Gardner, F. E. Coles, and John Linegrove.

HUNT'S MAGAZINE.—The February number contains a very fair design for a four-beam yacht, 26ft. loadline and 6ft. 6in. beam, with 4.8 tons displacement and 4½ft. draft. Also a variety of cruises, some of which are quite interesting.

THE MIGNONETTE.—The rig illustrated last week, and the calculations are for sails unstretched as they come from the sailmaker's loft. Carmita's rig is her cruising suit. For racing she has a larger plan.

THE SEASON.—The reader's attention is directed to our advertising columns, in which bargains in tonnage are often offered, and other announcements which will save many inquiries.

THE NEW RULE ABROAD.—The London *Field* says the Royal Thames Y. C. proposes to substitute the sail area and length rule in place of Y. R. A. tonnage for trial.

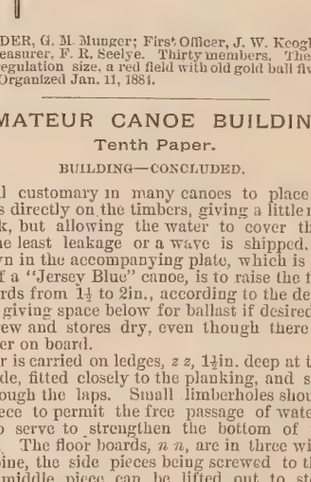
DAUNTLESS.—Mr. Colt's schooner returned to Gibraltar with boat gone and bulwarks smashed. Repaired and resumed voyage to Malaga.

MERLIN.—The rig of this new cutter measures 50ft. bowsprit hounds to mainsail clew, and 45ft. deck to topmast shoulder.

PORTABLE BOAT.—Communication on this subject has been received, but no name was attached

Canoeing.

CHICAGO C. C.



COMMANDER, G. M. Munger; First Officer, J. W. Keogh; Secretary and Treasurer, F. R. Seelye. Thirty members. The club burgee is A. C. A. regulation size, a red field with old gold ball five inches in diameter. Organized Jan. 11, 1881.

AMATEUR CANOE BUILDING.

Tenth Paper.

BUILDING—CONCLUDED.

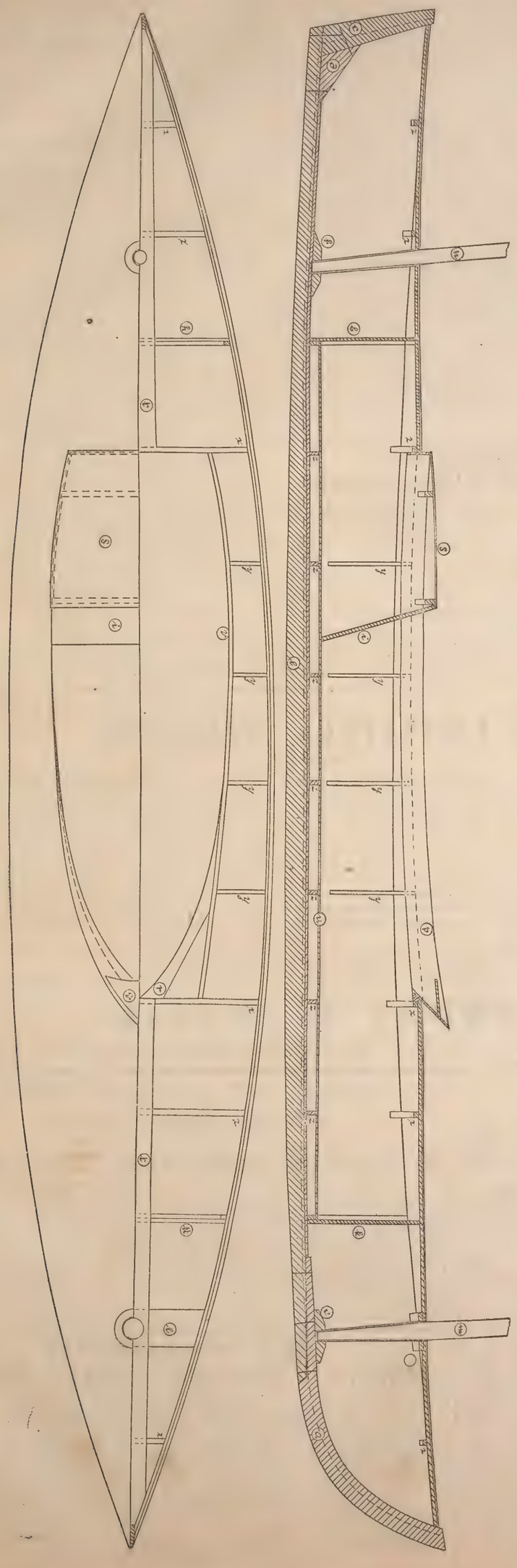
IT is still customary in many canoes to place the floor boards directly on the timbers, giving a little more space below deck, but allowing the water to cover the floor if there is the least leakage or a wave is shipped. A better plan, shown in the accompanying plate, which is a working drawing of a "Jersey Blue" canoe, is to raise the floor above the garboards from 1½ to 2in., according to the depth of the boat, thus giving space below for ballast if desired, and also keeping crew and stores dry, even though there is considerable water on board.

The floor is carried on ledges, *z z*, 1½in. deep at the middle by ⅜in. wide, fitted closely to the planking, and secured by screws through the laps. Small limberholes should be cut in each piece to permit the free passage of water. These pieces also serve to strengthen the bottom of the canoe materially. The floor boards, *n n*, are in three widths, ⅜in. thick, of pine, the side pieces being screwed to the ledges, while the middle piece can be lifted out to stow ballast below. An oval hole in the latter piece, about under the knees of the crew, holds a sponge for bailing. The deck beams—of pine, spruce or hackmatack—are marked out from a beam mould, which is made from the large drawing. The amount of crown to be given to the deck must be decided on by the builder. From 3 to 3½in. is not too much for a 30-in. boat, as the space below, for air and stowage, is much greater than with a flat deck; the boat will free herself from a wave quicker, and there is nothing to be said against it. Before putting in the deck beams the timbers must be cut off level with the gunwale, and the latter planed down until the sheer is perfectly fair from end to end, the beam mould being used at the same time as a guide by which to bevel the gunwales to suit the deck beams. The latter are spaced about as shown in the drawing, being fastened by a 2in. brass screw through gunwale and upper streak into each end. The beams will be 1in. deep and ¼in. wide, except the partner beam that supports the mainmast, which will be 4in. wide, so as to take a 2¼in. hole for the mast tube, and the beams under the butts of the deck, which will be 1¼in. wide.

Canoe decks are sometimes laid in but two pieces, with one seam only down the center, but while this makes a very handsome deck it is necessary to take off the entire half deck every time that repairs or alterations are to be made. It is often desirable to open one of the end compartments, and to do this quickly the decks are now very often laid in six or more pieces, one joint being over the forward bulkhead and one over the after one. At these points the beams are made 1¼in. wide and but ⅜in. deep, each piece of deck lapping ⅝in. on the beam. After the beams are in, ridge pieces are fitted down the center of the deck fore and aft of the well. They are from 2 to 4in. wide, according to the size of the masts, and ⅜in. thick, being halved down into the deck beams and bulkheads and nailed to them. The holes for the mast tubes are now bored, the steps of oak are fitted and securely screwed or riveted to the keel and the mast tubes put in place. These are of copper or brass, the ends soldered up so that they are perfectly watertight. The upper ends are slightly flanged over the ridge pieces, with a little lamp wick and paint under the flange to make a tight joint. Plugs are sometimes put in the bulkheads to drain off any leakage, and the holes for them should be bored now, as low down as possible. The frame work of the well consists of two fore and aft pieces of spruce, *v v*, ⅜x1½in. sprung partly to the shape of the well, the ends nailed to the deck beams and bulkhead, and also of two curved chocks, *r r*, at the forward end, completing the pointed form of the cockpit. The side decks are also supported by four knees, *y y*, on each side, sawn from oak ⅜in. thick and screwed or riveted to the planking, a brass screw 1½in. long passing through the gunwale into each, while the side pieces, *v v*, are screwed to the inner ends.

Before putting in the coaming, the decks, which will be of ¼in. mahogany or Spanish cedar, should be cut and fitted roughly to the outline of the well, the final fitting being done after the coamings are in. These should be of clear tough white oak, ¼in. thick. Their shape is taken by means of a thin staff sprung into the well, the upper and lower edges of the side pieces being marked on it. The pointed coamings now generally preferred are from 3 to 3½in. high forward, sloping to 1½in. amidships and aft, the after end being either round or square. The coamings are riveted to the side pieces and the after piece to the deck beam or bulkhead, a piece of ⅜in. mahogany, *q*, being fitted in the angle forward, to strengthen it, and also to hold cleats and belaying pins.

The other fittings, described in the following chapter, such as side flaps, footgear, tabernacle, etc., are now put in, then the boat is turned over and the outside smoothed down, using fine sandpaper and a file on the nail heads; the stem band, of 1/16in. half-round brass, is drilled and put on, the rudder braces



are fitted and riveted fast, and sometimes bilge keels, which are strips of hard oak ⅜in. square and about 4ft. long, are screwed to the bottom about over the second lap, protecting the boat in hauling up.

The outside of the boat and the inside of well has now a coat of raw linseed oil, and the inside of the compartments, the bottom, under the floor, and the deck frame, is painted with white lead and oil, sufficient black being added to make a lead color. Now, the bulkheads should be tested, to do which the boat is securely blocked up a short distance above the floor, and each bulkhead in turn filled with water, the leaks, if any, being carefully noted and marked. After the ends are tested, the water may be bailed into the middle of the boat, and the leaks there marked also. When these have been made tight, the decks may be laid, the pieces being first fitted, and then the under side of them being painted, and the edges of the gunwales, ridge pieces and bulkheads being also covered with thick paint or varnish. While this is fresh the pieces of deck are laid in place and fastened with ⅝in. No. 5 brass screws, placed 3in. apart, along the gunwales, ridge pieces, deck beams, bulkheads and side pieces of the well. In all the older canoes the screw heads were countersunk and puttied over, but it is customary now only to screw them flush with the wood, allowing the head to show. If puttied over it is difficult to remove them, and the decks will be more or less defaced in clearing out the hard putty in order to do so.

After the deck is on, enough quarter-round heading of mahogany must be got out to go around the well, and also some half-round, to cover the seam down the center of the deck. These are nailed with half-inch brass or copper nails. The decks are next oiled, the mast plates, cleats, screw-eyes, and other fittings screwed fast, the rudder, hatches, etc. completed, and all the outside of hull and inside of the well is varnished with some variety of wood filler, of which there are several in the market. This first coat is merely to fill the grain of the wood, and has no polish of its own. After it is thoroughly dry, a coat of spar composition should be given, and allowed full time to dry before using the boat.

REFERENCES TO DRAWING.

a, stem.	*i*, shifting bulkhead.	*s*, hatch.
b, keel.	*k*, forward bulkhead.	*tt*, ridge pieces.
c, sternpost.	*l*, partner beam.	*u*, floor boards.
d, chock.	*m*, mainmast.	*v*, sides of well.
e, mainmast step.	*n*, mizzenmast.	*x*, deck beams.
f, mizzenmast step.	*p*, coaming.	*y*, knees.
h, after bulkhead.	*q*, chock.	*z*, floor ledges.
	rr, frame of well.	

THE LAKE GEORGE C. C.

THE third annual meeting of the Lake Geore C. C. convened at the residence of Mr. S. R. Stoddard, 22 Elm street, Glens Falls, N. Y., on the eveuing of Feb. 21, to elect officers for the ensuing year. Dr. Charles A. Neidé was re-elected captain of the club, Mr. James Knight was chosen mate, and Mr. F. F. Pruyn was elected purser, which last office covers the duties of a secretary and treasurer. The members of the club, who must be active canoeists and canoe owners, are known as skippers, this being the American title for the commander of a fore-and-aft schooner or coasting vessel. Messrs. W. F. Ranger and Charles Oblenis were elected members of the club.

Dr. Néide spoke of his desire to encourage local camps of canoeists throughout the country, as many A. C. A. members cannot attend the annual Association meetings. These local meets would do much to encourage local canoeing; and as there were some old members of the A. C. A. and many new ones, who desired to visit the birthplace of the A. C. A., Lake George, he proposed that a committee, consisting of Messrs. E. W. West James Knight and W. F. Ranger, be appointed to arrange for a local meet of canoeists, at the Canoe Islands, Lake George, to take place after that of the Newburgh-on-the-Hudson and before the A. C. A. gathering on the river St. Lawrence in August, 1884.

The above named gentlemen were appointed to draw up a call to be issued, inviting canoeists to camp upon Lorna Island, Lake George. Skipper N. H. Bishop, in the name of the owners of the Canoe Islands (Messrs. Longworth and Wulsin, of the Cincinnati C. C., and N. H. Bishop, of the L. G. C. C.) offered the free use, under sanitary conditions, of Lorna Island for the local meet.

It was understood that the above meet was for the purpose of strengthening the ties of brotherhood among cruising canoeists, and also for the encouragement of independent camping. At the late Canadian canoe meet the Lake George Canoe Club was credited with being the only party of canoeists present which did its own cooking and catering. The local meet to take place at Lake George is intended to make canoeists independent of hotels, restaurants and other inappropriate aids to successful canoeing.

It is hoped that all cruisers who gather at our "Sacred Lake" next summer will exert themselves to come as independent cruisers with means at hand to cruise and live as far as possible by their own exertions. There will be no hotel racing at the lake the coming summer under the auspices of any canoe organization. Canoeists, however, can act independently and individually in this matter, according to their own wishes after the local meet at the Canoe Islands has ended.

The committee may be addressed at Glens Falls, Warren county, N. Y. Its chairman will soon issue, through the usual organs, all information that may be needed by those who expect to aid us in putting canoe-cruising upon a substantial and independent basis. Parties who are not canoeists, but desire to join the brotherhood, are invited to come.

When not canoe owners, but owners of cruising boats, they will be received as brothers of the cruising fraternity, and will be invited to connect themselves with the meet. McGreggor, Baden, Powell, and other English canoeists, were boatmen or yachtsmen; and from this large class of experienced watermen we hope to fill our A. C. A. register, which now numbers about 600 members. Three thousand canoes have been sold by the American builders to Americans. The A. C. A. membership should increase to 1,000 during the next yaar. Let each canoeist contribute his mite to attain this object. To do so, help the local meets and increase the local clubs.

After the members of the Lake George C. C. had completed the business of the meeting, the newly re-elected captain ordered the members present to cook a supper for those in attendance. It was a most encouraging sight to see five cooks at one time around the stove in Mr. Stoddard's kitchen, working industriously, without confusion, in preparing their individual dishes. As one set of cooks retired from the large stove, other took their places. In an hour's time the meal was upon the long dining-room table, and the club sat down to feast upon their own cooking without fear of injury to stomach or temper. All this good menu was the result of a determination on the part of the members to fit themselves for the duties of cruising canoeists; and it is expected that every gentleman who hereafter connects himself with the club will learn to cook.

Cannot an educated man learn to accomplish what an ignorant Irish girl can do?

LORNA.

AMERICAN CANOE ASSOCIATION DUES.

DR. NEIDÉ writes that he will have to drop many names from the roll before the publication of the Association book, which will be ready next month. Most of these men are active canoeists, and men to whom a dollar is no great sum, but who neglect year by year to pay their dues. While they will be a loss in one sense to the Association, some means must be taken to put an end to the evil.

Canoeists, even at such a distance that they cannot attend the meets, should take a pride in the Association, and not only join it, but use every effort to extend its influence in their immediate localities. There is no limit to the valuable work within the scope of the Association in the way of collecting information concerning our vast water courses, and this work must be done, not by a few officers, but by the mass of American canoeists. Each man, in return for such information as he can collect with little time and trouble, has at his disposal accurate data concerning almost any waters he may desire to cruise on, and in addition, if a member of A.C.A., he may obtain the addresses of fellow members ready to aid him on his cruise.

Since the executive meeting in October, nearly thirty members have joined, and there is every prospect of a large increase of membership as soon as the season opens.

Not only should the officers of a canoe club, above all others, be members, but it devolves on them to secure as many from their club as possible. The expense is but nominal, and nothing more is needed to become a member than to send $2.00 to Dr. C. A. Neidé, Schuylerville, N. Y., $1.00 for initiation fees and $1.00 for dues for current year, the further expense being but $1.00 per year, no assessments being allowed.

THE GALLEY FIRE.

MILK TOAST—COOKING FISH.

IF you have any stale bread in the locker, what is better for breakfast than coffee and milk toast? Allow a small cup of milk, with a good pinch of salt added, to come to a boil. While heating, brown the bread nicely over the stove or hot coals. Pour some boiling water over the browned bread and drain. Butter the bread plentifully, cover it with boiled milk, and you have a dish fit for a crowned head.

In frying fish have the pan hot and the fat boiling (with emphasis on the present participle) when the fish are first put in; afterward they require less heat to cook them completely through without burning on the outside. That is the secret of nicely browned fish. The hot fat cooks the outside instantly, and prevents the soaking in of the fat. All fish should be rolled before cooking on a plate of flour or meal.

To broil fish, split so that the backbone shall be in the center, sprinkle with salt and hold over a clear fire on greased broiler, open side down, until it begins to brown, then turn. When done, butter plentifully.

Fish Chowder—Wash and dress fish. Cut up one-quarter pound lean pork into small pieces and fry brown in bottom of kettle. Pare and slice one-half dozen good-sized potatoes and two onions. Place a layer of potatoes and onion in kettle then a layer of fish; dredge in a little salt, pepper and flour. Put in alternate layers as described and cover with hot water. Cover tightly and boil thirty minutes. Add one pint milk and half dozen broken crackers dipped in cold water. Cook ten minutes longer.

For a fish roasted in clay as before described in FOREST AND STREAM a simple stuffing is made thusly: Take some bread and a couple of slices of fat pork, cut up finely and season with salt, pepper, sage and savory, moisten with warm water and fill fish. Q.

NEW YORK C. C.

Editor Forest and Stream:

The annual meeting of the N. Y. Y. C. for the election of officers for 1884 was held on Feb. 28, resulting in the unanimous election of Wm. Whitlock, Commodore; C. K. Munroe, Vice-Commodore; J. F. Newman, Secretary and Treasurer; C. B. Vaux and H. O. Bailey, Executive Committee. The report of the secretary for 1883 showed an increase of ten regular and three associate members for the year, with the loss of three members by resignation and one name dropped for N. P. D.

The treasurer reported the payment of all bills against the club, as also the payment of the building debt, together with a balance of cash in hand. The club accordingly begins the year free from debt, the owner of a commodious club house, with a membership of thirty active and six associate members, and a fleet of thirty-four canoes.

It was unanimously resolved that, "in the opinion of the members present, any change in the titles of officers of the New York C. C. is inexpedient."

A vote of thanks was tendered to Mr. W. P. Stephens and friend for their successful efforts in securing the conviction and sentence of the parties arrested for attempting to rob the club house. Much interest is already evinced in preparations for the coming season. Several members are building new boats, and others are making improvements suggested by experience upon old ones. We expect to send a good representation to the local meet at Newburgh, and also to the A. C. A. meet at the Thousand Islands.

Altogether, we look forward to a very enjoyable and successful season. J. F. NEWMAN, Secretary and Treasurer.

TORONTO C. C.—The annual meeting of the Toronto Canoe Club was held on Tuesday evening at the office of Mr. Hugh Neilson. The following officers were elected for 1884-85:—Commodore, Hugh Neilson (his third term); Vice-Commodore, John T. R. Stinson; Librarian, Frank M. Nicholson; Secretary-Treasurer, Robt. Tyson. Messrs. John Hague, Charles Wesley Busk, and Erastus Wiman were elected honorary members. Mr. Stinson presented three new books to the library, and Mr. Neilson presented eight photographs of the American Canoe Association meet, at Stony Lake. The Treasurer's report shows a balance in hand of $11.75 when all liabilities are paid. The Secretary's report detailed the proceedings of last year, stating that among the prizes given for sailing and paddling races were a $25 camera, a $20 aneroid barometer, a $7.50 medal, and several other prizes of value. It was arranged that the sailing canoes of the club should in future carry a distinguishing signal on the peak of the mainsail, in the shape of a large, red ring, sixteen inches in diameter. This can be seen at a great distance. Arrangements were also made which will enable the members to participate more generally in the sailing and combined races. The smaller canoes cannot go to windward nearly as well as the larger ones with heavy centerboards, and this fact has enabled the two canoes of the latter class to monopolize the sailing class. It is now intended to give another cup exclusively for races in which there is to be no beating to windward or close-hauled sailing, with a time allowance for the smaller canoes if necessary, thereby giving a fair chance to every sailing canoe in the club. On the same principle the sailing portion of the combined paddling and sailing races will consist of one or two reaches across the wind under sail instead of the triangular course as before. A majority of the club will go to the meeting of the American Canoe Association at the Thousand Islands next August. Following the examples of other clubs, the T. C. C. will this year go in a simple and serviceable uniform, consisting of stockings, knickerbockers, and plain boating shirt, all of gray. Votes of thanks terminated a pleasant and cordial meeting.—*Toronto Globe.*

CLUB NOTES.—The Rob Roy C. C., of Indianapolis, holds meetings every two weeks for the discussion of all pertaining to canoeing.—— The Whitehall C. C. has now 11 members and 9 canoes, besides one small cutter, one yawl, and a deep catboat.——A club has been formed at Warren, Pa. They expect to be represented at Grindstone Island. ——Mr. R. W. Bailey, Pitsburgh C. C., has sold his Everson Shadow and will use a Lansingburg canoe. Mr. A. K. Nimick, of the same club, is having a 14x28 canoe built by Stephens, with patent centerboard and Albany lateens.

NEW YORK C. C.—The two young men, John Burns and Edward Styles, who were caught robbing the New York C. C.'s club house at New Brighton, were tried at Richmond on Feb. 25. Messrs. Stephens and McMurray, who made the capture, appearing as witnesses against them. Both pleading guilty to burglary in the third degree, they were sentenced to the Reformatory at Elmira. The prompt and energetic manner in which the club have followed up the matter, and the resulting conviction, will add to the security of all the boat clubs in the vicinity.

PERSONAL.—Mr. Orange Frazer has lately moved to Wilmington, Ohio. Mr. N. H. Bishop expects to be in New York about March 19.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

R. E. S., Afton, N. Y.—See article on the Dachshund this week.

T. R., South Bend, Ark.—We know of no bloodhound puppies for sale.

S. W. A., New York.—Write to Victor Hesse, 154 Market street, Newark, N. J.

H. R. S., Boston.—See note on the lamp in our issue of Dec. 20, 1883, canoeing column.

G. A. S., Marysville, Kas.—Write to Messrs. J. & W. Van Wyck, New Hamburg, Dutchess county, N. Y.

G. H. B., Derby Line, Vt.—A dispute has arisen among the sportsmen of this place in regard to the rearing of the young opossum. Will you please to tell us if the young are raised on the teat in the pocket or are they born as other animals and the pocket used as a home until they are able to run about? Ans. The young are born in the usual way, but very slightly developed, and are transferred to the teat by the mother. They remain attached to this for a long time, and after letting go their hold continue to use the marsupium, or pouch, as a refuge.

J. W. K., Marietta, O.—We do not know where you can obtain the oil-tanned buckskin pants that you desire.

F. W. G., Hartford, Conn.—We will communicate with our correspondent "Adios," and advise you of his reply.

W. A. A., Kansas City, Mo.—The pointer Donald is seven years old, by Bob out of Sappho. Le Guy is six years old, by Bang out of Juno.

F. W. B., Lynn, Mass.—You can build a canvas canoe from the drawings, though the scales are incorrect. She will be heavier than a wooden canoe.

C. F. C., Waupaca, Wis.—Please give me the address of the *Ark* and subscription price. Ans. Care Estes & Lauriat, Boston, Mass. Three dollars per annum.

BOUND VOLUMES of the FOREST AND STREAM (six month's numbers) cost $3.50 each. The charges for binding volumes, subscribers furnishing the numbers, is $1.50.

S. W. A., Jr.—We are informed by J. W. K., of Marietta, O., that he has the picture of pointer Dan, by A. Pope, Jr., and that it is published by S. E. Cassino of Boston, Mass.

SUBSCRIBER.—Can you give me receipt for cement used in fastening ferrules to the joints of a rod? Ans. Have ferrules fit perfectly and heat shellac in the ferrule and push home.

C. W. W., Boston.—Will you kindly inform an old reader when the time expires for shooting quail in Virginia and North Carolina? Ans. Virginia, February 1; North Carolina, January 1.

W. P. U., Peabody, Mass.—It was a dog that took first prize at New York in the Siberian or Ulm class in 1879, instead of a bitch. Lilly, who took second prize, was entered as pedigree unknown.

L. H. W., Pavilion, N. Y., March 5.—Quail are nearly extinct in this part of Western New York, owing rather more to severe winters than to the number served on toast. Would a few dozen from Tennessee, if shipped this month, breed so to afford us shooting next fall? Ans. Probably. But if you put them out it would be a wiser plan to forego shooting next season.

ROCK AND RYE, New York.—Fairly good trout fishing may be had along the line of the Erie Railroad. Narrowsburgh or Port Jervis, or Lackawaxen are among the places near streams that afford fair fishing. The Shohola often yields moderate sport, but the fish are not large. There are also fair trout streams in Sullivan and Ulster counties, N. Y. The Long Island streams are mostly preserved.

LIVE QUAIL, St. Catharines, Ont.—Can you inform me where I can obtain some live quail upon reasonable terms and give me the address of a reliable shipper. These birds having been pretty well thinned out in this neighborhood, some gentlemen here have formed themselves into an association for the importation and protection of them. Ans. Address Chas. Reiche & Bro., Chatham street, New York. The market price fluctuates.

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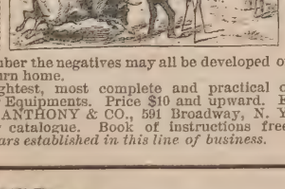
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A WEEKLY JOURNAL OF THE ROD AND GUN.

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THE FOREST AND STREAM is the recognized medium of entertainment, instruction and information between American sportsmen. Communications upon the subjects to which its pages are devoted are respectfully invited. Anonymous communications will not be regarded. No name will be published except with writer's consent. The Editors are not responsible for the views of correspondents.

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PROTECTION OF PSEUDONYMS.

A MATTER which gives some of our readers and ourselves no little trouble ought to be settled now. Many of the contributors to FOREST AND STREAM prefer to append to their letters and sketches initials, or pseudonyms, rather than to sign their full names. The true names and addresses of such writers are known only to us, and cannot be disclosed by us, without the express permission of the writer. This is an unvarying rule not only of newspaper offices, but of common decency as well. The names having been given to us in confidence, we cannot reveal them. The matter is not one in which we have any option at all. If a writer signs his contribution with a pseudonym, the inference is that he has a reason for not wishing to be known, and if he desires to conceal his identity in this way we must respect his wishes.

Every week we receive a large number of letters asking for the full names and addresses of certain correspondents, and the answering of such letters takes up a great amount of time. We therefore wish to say publicly, what we have so many times written privately, and what we supposed was known to all our readers, that the names and adresses of such of our contributors as write over pseudonyms cannot be given them. If any one wishes to correspond with any contributor the best plan is to send a letter addressed to his assumed name to this office. This letter, if accompanied by the necessary postage stamps, will be forwarded by us to the person addressed. This having been done, it remains for the contributor to determine whether or not he desires to enter into correspondence with the person addressing him. We assume no responsibility in the matter. We merely perform the clerical act of addressing the envelope, and see that it goes to the post-office.

If those who desire to communicate with our correspondents will remember this and govern themselves accordingly, we shall be greatly obliged to them.

"THE WOLF CRY IN MAINE."

UNDER the above caption a writer in your issue of Feb. 28 says "that wolves have been a thing of the past for at least thirty-five years; that the cry is the sheerest nonsense in the world, and has not a particle of foundation in fact;" and again, "there are no wolves in Maine." Having had considerable to do with the animals of Maine for the past forty years, I will state what I can prove to be facts. In 1853 wolves were very plenty, and for the next five years were not scarce, plenty could be found within sixteen miles of Bangor in 1857 and 1858. They seemed to leave quite suddenly, the last I know of positively being taken was killed by Frank Fairbanks in 1860 at Munsengun. I know the wolves were not exterminated, as from the time they were quite plenty till the time they disappeared, very few skins were brought in. They left of their own accord, just as the caribou left us. There were rumors of occasional wolves being seen from 1875 to '80, but the first real proof I can give is that in 1880 I bought the skin of a freshly killed wolf, taken at Union River. The one who brought it, said it had a mate, and they had been heard at times for several years in that vicinity. The skin is in use as a mat now in Bangor. From that date occasional wolves have been heard from, till this year they seem to have received new additions. Reliable parties report seeing them on St. Croix waters. In a recent trip to Chesuncoock I saw six different persons who had either seen wolves, or fresh tracks. Two had seen the wolves. These people were at points far apart, and did not know of what the others had told. On March 5 I saw the fresh tracks of a very large one. On my return, a man in every way reliable, told me of just seeing the tracks of three, and where they had just killed a deer near Cheno bog, within less than twenty miles of Bangor. While I consider wolves comparatively scarce, still I know they have lately gained in numbers faster than the natural increase. The Game Commissioners have done a good thing in increasing the bounty. Still wolves would have to be plenty for any one to think of hunting them much for a bounty of $10; as that can be got for an otter, and nearly that for a beaver. The writer of the article from which I have quoted says, "the poachers and pot-hunters have taken up the cry of protect the deer, and the wolves will follow." I believe he is entirely wrong there, as he is in about every other statement in his article. Of those who have reported about wolves to me, it so happens not one is, or ever has been, a deer hunter. There is no more propriety in saying that a cry about wolves has been started by the parties he names, than that the Irish have started a cry of Egyptian war to annoy England. People far apart have simply told the facts of seeing wolves, and immediately this writer charges it upon pot-hunters and poachers. If, for a man to say he has seen a wolf, is good ground for calling him a pot-hunter, poacher, crust-hunter, etc, I for one think it is time that those words became obsolete, as has been proposed for "speckled beauties," and other words. Why the man from another State, who pays no tax here, and comes in August and September and kills and wastes our game, is not as much a poacher, etc., as a man who kills a deer and eats it after the law expires, is a very hard thing for common people to see; yet some writers always see fit to call one a gentleman and the other a poacher, and are ready to charge all kinds of sins to the latter without a shadow of proof, as in the present instance. Now such a course as this does great harm. The greater part of our hunters are in favor of game laws, and are helping to sustain them, and when they are doing this, to have a thing charged to them which they never thought of, and be called hard names besides, is not pleasant, to say the least. Men not in the woods in winter have no idea of the temptations to break the laws, and still less of how well they are kept. I have this month been in two camps belonging to one concern, numbering fifty men. They had moose within two miles, they had snowshoes and guns, and were hauling beef over bad tote roads more than seventy miles, and still had not killed a moose. Can any camp of city sportsmen show a like record? And yet one of these men had seen a fresh wolf track, and so is included among those who have "started the cry." If the gluttons who are so fond of using the words poacher and pot-hunter, etc., could change places with many of those whom they call by these names, they would take a different view of things. If you wish to help protect the game, do not call those who are trying to do the same hard names.

BREWER, Maine, March 17. M. HARDY.

We presume that our correspondent scarcely intended to give us credit for the statement that there were literally no wolves in Maine. We think that if he will take the trouble to reread our remarks carefully, he will see that what we intended to say was that there are practically none. To make the bald statement that there is not a single wolf in a State as large as Maine, which has a frontier of more than two hundred miles of forest bordering on Canada and New Brunswick, is something that we presume no man of average intelligence would do.

A celebrated mineralogist once remarked in the office of a Boston assayer that "there is no gold in Massachusetts." The assayer quickly raised the point that there was some in the banks and some in men's pockets, though precious little in his. But the mineralogist answered—claiming that the assayer knew his meaning—no native gold in the soil of the State. The assayer again raised exceptions to his friend's statement, and offered to get a few bushels of the soil of Boston even, and by close chemical analysis to obtain pure gold from it. Both were right.

There are practically no wolves in Maine, notwithstanding the tracks seen by those who "know wolf tracks," mentioned by our correspondent. They were practically exterminated years ago. Our correspondent has seen tracks that were tracks, and others have seen them, and yet the only actual wolf he brings to our attention is the one killed in the spring of 1881, and heralded at the time in all the newspapers of the State, since which time they have made little note of wolves killed in that State. Our correspondent brings us no other practical wolf, only tracks, and until he sends us an authentic account of another wolf, killed in Maine, we shall take no back tracks in our position on the wolf question.

We are glad to learn, from what Mr. Hardy writes, that the sentiment in Maine is now against killing deer, moose, and caribou out of season, and that the practice of crusting is becoming obsolete. If this is so, it is a matter for congratulation to the inhabitants of Maine first, and afterward to all those who are interested in the protection of game. Men who kill game out of season are poachers, and we are anxious to see all violators of the law, not only in Maine but in all other States, punished; and we do not see how it can make a particle of difference whether these violators are natives of Maine, New York, Siberia, or New Guinea. A law-breaker should be punished, no matter what his State or county. The game must be protected in the close season from Maine men, Rhode Island men, South Africans, or Chinamen.

This protection is what we are all working for, Mr. Hardy as well as others, and we presume that he will assent to our propositions.

FISHING THROUGH THE ICE.

A BILL introduced into the Legislature of New Jersey forbiding fishing through the ice failed to pass. We think this a move in the right direction, and one that might be followed by several States. In the vicinity of the Great Lakes winter fishing is a legitimate mode of supplying the markets with many species of fish, and in Maine the smelt fisheries are so prosecuted. But in the small lakes of the Eastern States, where the fish are protected in order to furnish angling, all winter fishing should be stopped.

In winter some fish take the bait, and fishing through the ice for pickerel is one mode of exterminating them, which yields a greater or less supply of fish, but nothing that can well be classed as sport. The fish do not fight vigorously, and are ignominiously lugged in by main strength on a short hand line, after hooking themselves and raising a signal, warning the attendant, who often has from thirty to fifty lines set. When winter locks the waters the fish should have a rest, and it is only the commercial fisheries mentioned which should be prosecuted at that time. All waters which afford good fishing and are within easy distance of any city, now attract a class of anglers which leaves with the hotels and guides ten times the value of the fish caught, and therefore such lakes and streams are of more value than they were a generation ago, when a fish was thought to be worth more when dead than alive.

We have fished through the ice in schoolboy days, and watched the "tip-ups," while frigid feet and tingling fingers made it doubtful whether we were having much fun or not, but we would have no doubts on that question now. We hope the New Jersey bill will come up next year and pass.

RIFLES OF TO-DAY.—In our rifle columns we offer a series of articles in which the several rifles now upon the market will be illustrated and described. The intention is to give the readers of FOREST AND STREAM a clear idea of what is now offered in the way of breechloading rifles. By means of cuts and cross sections of the breech mechanism, the characteristics of each arm may be easily studied. What the arms have done in the way of records; what is especially claimed for them; what they cost in the various models, and in general all the questions which a careful purchaser would put, will be answered as far as may be, leaving it to those who read to make their own comparisons.

MIGRATORY QUAIL.—An item in the Rutland, Vt., *Herald* of March 10, says: "A correspondent writes us from Manchester as follows: 'We have seen several flocks of Mr. Everts' quail, and they are looking finely.'" The introduction of this species has not been markedly successful, but if those turned out by Mr. Everts have done well, we are very glad to hear of it. It is now seven or eight years since the first of these birds were imported, and for the last two or three but little has been heard of them. We understand, however, that Mr. Braun has orders for some additional importations this spring. The birds can only be obtained in Sicily during the month of April.

LOOK OUT FOR THE SNIPE.—If this weather holds English snipe may be looked for in this latitude before very many days. They do not usually make their appearance in any numbers much before the first of April. We shall be glad to hear of the first arrivals.

The Sportsman Tourist.

BETWEEN THE LAKES.

Seventh Paper.

ODDS AND ENDS.

JEROMEVILLE is a splendid illustration of the adage "There is nothing in a name." To one acquainted with the region it would suggest at least the beginning of a town with a primitive, cheap and dirty hotel, slab cabins, a nasty "doggery" and a strong smelling store. But Jeromeville is not even that. It contains but one house—a station house made of pine boards, in which a section boss and his family live, and two or three section men are lodged. There is a switch close at hand enabling the trains to pass each other, and a red flag belongs in the house with which certain trains may be flagged and stray fishermen, hunters or lumbermen be taken on board. A mile west of Jeromeville is a recently abandoned lumber camp, Camp No. 1, and a half mile east is another—a remotely abandoned one. The time was, and that no longer ago than the past winter, when there was a great show of business at Camp No. 1. Probably sixty men—choppers, sawyers, "road monkeys," haulers, skidders, cooks, clerks and bosses—made that camp their headquarters while engaged in the work of forest destruction. And there were other destructionists there also. The deer hunters congregated there and at one time during the past winter a hundred and fifty carcasses of deer were piled up in the camp warehouse. And the slaughter was kept up from early fall till late in the winter, and what was the grand total of butchered deer in that neighborhood? I am sure I do not know, but probably not far from a thousand.

At this rate how long will the game last? Jeromeville is in the midst of the woods. Hemlocks, maples, balsams, pines grow skyward all around save in the hundred-foot strip chopped out for the railroad track. Standing in the center of that track in front of Jeromeville, and looking east, one has an unobstructed view of thirty-four miles. The railroad track lies upon the section line that distance as nearly as the engineer could fix it. This entire distance leads through the Manistique region—the *Onominitik* of the red men, which means bog iron ore. Much of this mineral, I am told, can be found in this region. The Manistique, rising in springs from the great Potsdam sandstone ridge, in the north side of which the chafing waters of Lake Superior have cut those stupendous cliffs known as the Pictured Rocks, flows southeasterly till it crosses the railroad at a point twenty-six miles east of Jeromeville, where it soon strikes the western flanks of the Niagara limestone beds, of which the southeastern part of the Peninsula is built up, and thence it meanders southwesterly along the valley, between the limestone outcropping and the Potsdam sandstones, and finally enters Lake Michigan about seventy-five miles west of the Straits of Macinac. All its northern tributaries have their sources in the same great sandstone ridge, and all flow southeasterly or at right angles with the valley between the two rock systems through which the main river runs, and all are trout-bearing. The Manistique region lying north and west of the river contains in round numbers about one thousand square miles, most of which is quite level and much of it swampy.

Vast forests of timber cover the greater part of the Manistique slope, a great deal of which is valuable pine timber; but it is so interspersed with hard wood timber and swamps, that fires do not sweep through the woods, blackening and blasting the country, as is the case in the Lower Peninsula.

From Jeromeville to the Manistique the railroad crosses ten tributaries to the Manistique, every one of which, so far as I have investigated, is found to be a trout stream. I know that two or three that meander through swampy plains west of Seney do not contain trout near the railroad, but these, as well as all the other tributaries, flow from the sandstone lying to the north, and I venture the assertion with the utmost confidence, that every stream rising in the Potsdam formation, will be found at some point along its course, a trout-bearing stream.

The eastern tributaries of the Manistique running down from the limestone hills, are short and insignificant. Trout will not be found in them. But to Manistique Lakes—North Manistique, Manistique and South Manistique—are reputed to be excellent bass waters. North Manistique is about four miles from McMillan, on the railroad, from which a good wagon road leads to it, and the lakes are connected by small streams, so that the voyager may float from one to the other. Or the sportsman can descend the Fox from Seney to the outlet of the lakes, and row up that two miles and enter the largest one of the three.

It is unfortunate that the tributaries of the Manistique having their source in the highlands between the two lakes should all be designated on the maps as branches—the East branch, the North branch, the Northwest branch, the West branch, and the like. Three of these, the East branch, the Northwest and the West, have local names. The East, on which Seney is located, is known as Fox River. The Indian name was Neenah, and it is a pity that name has not been kept alive. The Northwest branch is locally known as Stuch's Creek, and the West branch is generally known as Indian River, from the fact that upon its banks and along the shores of the quite extensive island lake into which it widens, the Indians in former times had numerous wig wams.

From time immemorial the Ojibwas inhabited the Upper Peninsula, and a feeble remnant of that once powerful tribe have a foothold there yet. But for some reason they have signally failed to leave the record of their existence as the once lords of the land in the names of its geographical features. The Tequamenon and Manistique rivers and Munising are about all the names that occur to me now of Indian origin. The only places named are along the shores of the great lakes and along the line of the railroad. Elsewhere there are no permanent residents, and names are unknown. For the present we must be content with the branches.

The Fox River abounds in the pike-perch or jack salmon. A revolving spoon is cast into the swift waters and proves to be a killing bait. The headwaters of the Fox and of the Manistique itself are capital trout streams, but of this hereafter. Let us return to our camp at Jeromeville.

The last was an unprecedentedly wet summer in the woods, which not only aggravated the insect pests, but sadly interfered with trout fishing. By reason of the gradual descent of the Manistique slope, its streams remain swollen many days after a heavy rain. A stream affording excellent trout fishing one day may not show a rise to a fly for a week after. One day the Greek Professor went to the west branch of the North branch, two and a half miles east of Jeromeville, and caught twenty-five trout—fine ones at that—in three hours. Within a day or so a heavy rain fell, and returning soon after he could not get a rise, notwithstanding he painstakingly went over the entire ground.

The summer before the Judge had tried the Southwest branch, or Stuch's Creek, at a point a little west of south from Jeromeville, with such success that he determined to try the same stream again, but at a different place. This stream takes its rise a little south of Munising Station, as we have seen, and runs southeastwardly. From the map it appeared that a tramp two and a half miles due west from camp, the first mile of which was on the rail, would take one to the creek at a point where it turned its course southward. The Judge struck for that point, and after crossing a thick woods and then a tamarac swamp, he came to the stream he sought for. It meandered through an ancient beaver meadow, intersected by frequent beaver canals and covered by an almost impenetrable growth of black elders.

The day was mild, with a soft breeze from the southwest occasionally coming in gusty puffs and rippling the surface of the pools, while the sky was clear, save wisps of white clouds here and there, hanging apparently motionless in the blue ether. Tying a red handkerchief to the top of one of the tallest alders, to mark the place, the Judge deposited his gun and lunch at its roots, and jointing his rod and tying on a brown hackle—his favorite fly—he quietly parted the alders and dropped the lure lightly on the stream. Floating swiftly down to a bunch of grass and dead twigs clinging to a depending alder branch, there came a splash and a tug, and presently a beautiful trout lay gasping on the bank. During the three ensuing hours the fisherman knew nothing—thought of nothing—save the trout that gave little rest to his hooks. No one had ever been there before him. Not a tuft of trodden grass save by deer hoofs was to be seen, and not an alder had been broken by man. He was fishing on primitive ground, and in virgin waters, and so absorbed did he become as he slowly pursued his way up stream, casting here and casting there, and in quick succession lifting from the pools their gamy denizens, that, when a very red doe came from out the thicket to slake its thirst and crop the tender grass, the Judge was all unconscious of its presence, till he heard its repeated stamps of defiance less than twenty yards away. Less than three hundred yards he fished along the Stuch that day, and when he found his load was made up, he counted thirty-five trout, twenty-five of which weighed from eight to fifteen ounces each. When the afternon train passed Jeromeville for Marquette, the red flag was hung over the track, and when the train was brought to a stand, the twenty-five trout were consigned to the care of the conductor with instructions to hand them over to Mr. Frank Milligan, an officer of the road, who never failed to show us a favor when opportunity presented.

That night there came a tempest of rain, and a few days thereafter the Judge with his daughter set forth on a visit to Stuch's Creek at still another point. Within the past year a wagon road had been cut through from the railroad at Camp No. 1, one mile west of Jeromeville, south to the town of Manistique, at the mouth of the river by that name, and five miles from the railroad it crossed Stuch's Creek. Rumor said trout were to be taken there of large size; but when the two reached the long bridge crossing the stream and low ground on either side, they found the waters so swollen from the recent rain that it was with difficulty that the banks of the stream could be reached and never a trout raised to fly or took a bait.

Some distance below the bridge the land-lookers say there are some ancient beaver dams and much deep water. In this water, trout may be caught which kick the beam at two and a half and three pounds, so the said land-lookers say. No one has ever voyaged down the Northwest branch however, that remains a thing for a couple of patient, plucky anglers to accomplish. This the Judge expected to attempt when in the country the past summer, but the sickness at home deranged his plans and he had to abandon it.

A branch of the West branch runs within a stone's throw of Jeromeville, and a mile above the railroad it gives excellent fishing. We went up stream one day and found it open and comparatively free from brush. Below the bridge the fishing is not so good because of the brush, but even there I caught a nice basket of trout one day.

From the abandoned lumber camp half a mile east of Jeromeville an old "tote" road runs south half a mile, where it crosses the Jeromeville branch, and at that point there is said to be excellent trout fishing. A glance at the map disclosed to us that if we would go half a mile east of Jeromeville and, leaving the railroad, travel through the woods two and a half miles north, then go half a mile east again, we would strike the west branch of the North branch, where we had no doubt trout fishing would be found to be first-rate. The railroad crosses this west branch of the North branch two and a half miles east of Jeromeville, and we know from actual experiment that the stream here contains many and fine trout. Pounders are not infrequently taken. Half a mile further on the North branch is crossed, and here, too, the trout fisherman will find his pleasure. And so, it is to be seen that Jeromeville is a trout center.

Our camping days at this place passed all too swiftly by. With a little hunting and a good deal of fishing, we soon found that the time of our stay in the woods was nearing its close. Our tent stood in the edge of a grove of beeches and maples and hemlocks, whose drooping branches were covered with a mantle of green. High overhead a gigantic white pine held out its short arms and whispered to us sweet lullabys in the night breezes. Near its base we built our camp-fire, and around that we loved to gather of evenings and watch the wavering flames and clouds of sparkles that soared into the green foliage and to recount the incidents of each day.

But let us linger here no longer. The time has come for us to break camp and go home. The Greek Professor has forgotten that he ever had a "lump" in his throat, and my "dizziness" is a thing of the past. It is time we return to the busy work-a-day world.

* * * * * * *

Since the FOREST AND STREAM began the publication of the "Between the Lakes" papers, I dropped in one evening to have a friendly chat with the Greek Professor. On the table before him was open paper. He had been reading of his exploits in the woods, and his brows were knit. In one corner of his room stood a brand new breechloading rifle of approved pattern. Over his head, Bryant looked benignantly down, and from the further side Longfellow smiled complacently. The Quaker poet was not there. The Greek Professor was evidently in a warlike mood. "Don't you remember," said he, "the day you stuck fast in the bog, and I had to fish you out?"

"Well," said I, "I do have a slight recollection of something happening at some time to somebody something like that," and in turn I knitted my brows.

"Well, why didn't you tell that?" he asked me.

"I forgot it," I boldly said.

"I have it, and what is more, I am going to write to the editor about it myself."

"Do!" said I; "and don't forget to tell him about the experiment you and Oscar made with our half pint of whisky and the birch sap."

And then he rubbed his hands and laughed genially.

But he is going to write to the editor, nevertheless. He is bound to have his say, and I am glad of it.

D. D. BANTA.

ROPING THE BLACK-TAILS.

"WE'LL drive in all the horses we can find on the range to-day, boys," remarked Mr. French, or, as he is usually known, "Pete," one of the most popular cattle men in Oregon. He whistled to the hounds, and, followed by us boys, headed toward the long, gradual rise forming the north end of the Stein Mountain range.

From the starting point on the flat to the summit is fifteen miles. For the first half of the distance the ground is covered with low sage brush and bunch grass, and dotted with juniper trees. But the latter half, over which a few inches of snow lay, is without sage brush, while there are dense thickets in every little hollow on the hillsides, here and there a patch of small quaking asps, and along the banks of the numerous creeks a scattering of cottonwoods.

There are sufficient rocks and stones scattered about to render riding a little dangerous, and the sides of the cañons are steep enough to assure one at a glance that, once fairly started down the incline, there was no chance of stopping till the bottom was reached. No place I have seen seems so natural a deer park, and, judging from the number to be seen at all times, the deer are evidently of the same opinion.

We were all well mounted, each had his *reata* or lasso, and displayed the usual number of colors that a collection of cowboys or *vaqueros*, Spanish and American, always can boast of, which is every shade. The long wool Angora *chaperos* or leggings, and the elaborately-stamped heavy Mexican saddles, the stirrups covered with leather *tapaderos*, long and pointed, almost touching the ground, increased our somewhat picturesque appearance.

Two fine Scotch stags, three or four greyhounds, and as many more a cross between the two, scampered round us on all sides as we rode up a slight hollow.

A sharp bark, followed by a one-line chorus, and Pete's "There he goes" was answered by a volley of "*Caramba*s" and a free use of spurs. The deer was off to the right, out of view for the first few jumps, but a gentle rise soon brought in sight a splendid pair of antlers, and another shout burst from every one. He wavered an instant and turned toward the hollow we had just left, thus shortening by almost a half the little intervening distance. Four bounds into the hollow, and he was in view of all. Three hounds were together, almost within springing distance, and Pete, close on them, was swinging his rope and shouting "*reata*," followed by us. The yelps of the dogs as they got out of the way of the horses, which, all alive to the sport, needed no spurring to do their best; the whir-r of the rawhide lassoes which every man swung, all eager for an opportunity to throw them, altogether made up a scene to make the most sober excited, and cause his blood to tingle for many a minute after. Two more springs and he would be among the sage brush and rocks. The dogs seemed to know it. They sprang together, and as they brought him to the ground three loops dropped over his horns, and a loud hurrah rang through the clear frosty air.

It was hardly ten minutes after we had swung our buck over a juniper limb, that a pair of long ears were outlined against the sky, then another, and another, not two hundred yards away. The dogs were soon in full cry, and away the deer started at a gentle trot, thirteen head followed by two fine bucks.

It was a pretty stretch of level country for half a mile, and they were making straight across it to a cañon. Scarcely a minute elapsed before the hounds were within a few yards of them, and we were following closely. Again the shouts of "*reata*" was echoed on all sides, as the boys formed and swung open the loops of their trusty ropes.

"We'll lose them if they reach the cañon," said Pete, and he shot ahead of us, but only for a few seconds, as he stopped his horse with a jerk, and just in time. There was a "jump-off" of quite a height, and down the deer all went, Bluey, one of the crosses, fastening to the last, a yearling buck, and together they rolled into a dense tangle of small brush. Half of us scrambled down, for "where a dog can go a horse can," is nearly true of the cow ponies of the West. Not a sign could we see, when not thirty feet from us, the two bucks cleared a clump of willows, and crashed their way through the dead brush and rocks, down the cañon. Pursuit was almost impossible, but away went the pups and a couple of Spaniards.

"There are more yet; surround that thicket and look sharp, boys. We'll have them yet," said Pete excitedly. Hardly had he spoken when six jumped up, and over a rocky ledge left unguarded, and away. "Stay with them boys, more yet; I'll start them. Look out," and he dashed into the brush. "Now, you have 'em, Gov'nor." "Lass' a-lay" and "*reata*" re-echoed from the rim rocks, as if there were five score voices. I could see but a dozen yards up a small trail leading out of the brush, but heard barks close at hand. My *reata* was ready, when, like a streak of light, a fawn came in sight, sprang aside at seeing me, and rolled over with Bluey firmly attached again, while following came a boy so close as almost to take part in the tumble. It was a doe, and more frightened than hurt, so driving off the dogs and calling her "poor, little girl," and other endearing terms, we cut an "under bit out of the left" (Pete's well-known ear mark) and let her go.

There were several other dashes 'cross country, and not after horses! We did come across two of the latter by accident toward the end of the day, and drove them before us, the result of our horse hunt.

"Strange we saw so few," said Pete at supper. "We saw a few deer, though, sir," remarked a vaquero. "Yes, and as nearly as I can judge fully three hundred." And he did not overstate the number.

GOV'NOR.

STEIN MOUNTAIN, Oregon.

LIFE AMONG THE BLACKFEET.

BY J. WILLARD SCHULTZ.

Fourteenth Paper—Folk-Lore.

[*Concluded.*]

THE CAUSE OF SPOTS ON THE MOON.

LONG ago there lived a man, who had a wife and son, and his wife was not faithful to him. She ran away with another man. But the woman loved her son, and would often disguise herself in men's clothing and go and talk and play with him. Now one day, after the woman had visited her son, the little boy said to his father, "I think I know my mother. It is she who comes often, dressed in men's clothes, and plays with me and tells me stories." Then said his father, "When she comes again ask her to make you some arrows and a bow."

Not long after she came again, and the little boy said, "Oh, my friend, please make me a bow and some arrows so I can shoot the little birds," and his mother commenced to make them. When she had finished an arrow, the boy's father came in and looked at the arrow and knew that no man made it, and he said to the woman, "You are my wife," and she was afraid, and did not deny it. Then the man took his knife and cut her to pieces, and threw the pieces out of the lodge; but instead of falling to the ground they went way above and stuck on the moon. You can see them yet, the spots on the moon.

THE WOLF-MAN.

There was once a man who had two wives. They were unfaithful. Very bad were their hearts. So the man left the main camp and lived way out on the prairie with his bad wives. And one of his wives said to the other, "Let us kill our husband and go back to the main camp, where we may see our lovers." Now, near where they were camped was a tall butte, and every night when he came home the man would go up on it and sit and look all over the prairie to see where the buffalo were feeding and to see if any enemies were coming. And on top of the butte was a buffalo bull's skull, upon which he would sit.

One day, when he was out hunting, the women went up on the butte and dug a deep pit in it. Then they covered the mouth of it with small sticks, earth and grass, and placed the buffalo skull on top. When the sun was almost down they saw their husband coming home, the dogs loaded down with the meat he had killed. "There he is, there he is," they cried, "let us hurry and get his supper." And when he had finished eating he went up on the butte, and when he seated himself on the buffalo skull the slender sticks gave way and he was thrown to the bottom of the pit. When his wives heard him cry, they looked, but could not see him, so they knew he was in the pit, and they quickly packed the lodge on the dog *travois* and moved into the main camp. "Where is your husband?" the people asked. "Three days ago he went out to hunt, and has not returned. We fear he is killed," they replied.

Now when the man fell down into the pit he cried, and a wolf heard him. The wolf said, "I hear a person crying," and looking about he soon discovered the man in the pit. Then the wolf howled, *Ah-h-w-o-o-o-o-o-o-o, ah-h-w-o-o-o-o-o-o-o!* And when the other wolves heard him they came running to see what was the matter. There came also many coyotes, black wolves, red foxes, kit foxes, badgers and mice; the little mice came too. And when they were all come, the wolf who had found the man said, "Here is my find. In this hole is a fallen-in-somehow-man; let us take pity on him and dig him out, and we will have him for a brother." Then all the animals commenced to dig, and soon had a hole almost to the man. And when they had dug very close to him, the find-him wolf called out, "Hold on; I want to say something," and when all the animals were listening he said, "Now I found this man. We will all have him for our brother, but I claim that he ought to live with us big wolves, for I found him." All the animals agreeing to this, the big wolf went down in the hole, and tearing down the rest of the dirt dragged the almost dead man out. And when they had given him a kidney to eat, the big wolves took him to their holes; and they brought him to the hole of a big blind medicine wolf, and the medicine wolf made wolf paws and a wolf head on him. The rest of his body was like a man's.

Now, in these days the people caught buffalo in pĭs-kans,* and all around these pĭs-kans they made openings and set nooses in them, so when the wolves came to steal meat they were caught by the neck. One night the wolves all went down to steal meat, and when they had come close to the pĭs-kan the man-wolf said; "Sit here all of you, and I will go first and fix the places so you will not get killed," and he went first and sprung all the nooses. Then he went back and called all the wolves and the others, the coyotes, foxes and badgers, and they all went in the pĭs-kan and feasted, and took meat to carry home.

In the morning, the people were surprised to find all their nooses drawn out, and they said, "Perhaps it was what?" Many nights were the nooses drawn out and their meat stolen by the wolves. One night when the wolves came they found only bad bull's meat and the man-wolf was angry, and he howled out, "Ah-bad-you-give-us-o-o-o-o-o," and the people heard and said, "It is a man-wolf who has done all this." So they put dried meat, pemmican and tongues in the pĭs-kan, and many people hid in there.

The next night when the man-wolf came he saw the good food and ran to it, then the men all jumped up and caught him with ropes, and they took him to camp. When they took him into a lodge by the fire they knew him, and said, "Here is the man his wives said was killed," and they brought his wives into the lodge. Then the man-wolf told what his wives had done, and they were immediately killed.

THE THUNDER BIRD.

None of the people knew what the thunder was, and the people often talked about it, and said, "Perhaps it is what?" Now, once the people moved toward the Sweetgrass hills after buffalo, and one day when they were traveling two boys found a queer bird on the prairie, and caught it and carried it to their father's lodge, and many people came in to look at it, for no one had seen a bird like it, and while they were talking it suddenly arose and flew out the smoke-hole of the lodge, and a great thunder shook the lodge, and knocked the people down, and they knew then that it was the bird which made the thunder.

The rainbow is called Năp'-ĭ-ō-tō--kăh-tchĭs, Old Man's lariat; or, more correctly, Old Man's catching instrument. When he wishes the rain to cease he throws out this lariat and catches it all.

The constellation Pleiades is termed the E-kĭt-sĭ'-kûm, even, and the legend is, that a woman once had seven bad children, and that one day she threw them up in the sky, where they were changed into stars.

Sun-dogs are said to be fires lighted by the sun to warn the people that danger is near. "When you see the signal fires, watch, for the enemy is coming."

The foregoing legends are all that the writer has learned thus far, which may with propriety be printed in a public journal.

The Blackfoot language is an exceedingly difficult one to master, and the writer has decided to omit any remarks upon it, for as yet he is not sufficiently versed in it to give any very valuable information regarding its peculiarities. Below is an interlinear translation of the story of the "Wind-maker," which will give some information regarding the structure of the language.

Ō-mĕks'-ĭks-ah	săm'-ĭ-au	ĭt-sĭn-ō'-yō-au	ĭ'-so-pōm-stan
They	hunted	saw they	wind-maker
ĕ-tăh-wah'-kwō-e-au	e-tōt'-eks-sō-pwō'-e	e-tō-mût'-up-	
chased him they	came very wind	commenced	
sō-pwō-e	e-tûn'-ûk-ō-pō-pō-kĭ-yĕk-au	ah-wah-kwō-ye	
wind	blown off they	chased him	
ō-mĕ'	ō'-mûk-sĭ-kĭm-ĭ	e-tûh-pûs'-kwō-e-au	ĕt-sū'ō-mûk-ĭ-yĕk
That	big water	chased him toward	under ran
ĭt-sū-ō-wût-sĭn-ĭ-yek-au	ĭt-sĭk-sō-pwō-e	KĭN'-yĭ-yĭ	
saw him no more they	ceased wind	That's it	
ĭt-sĭn-ō'-ye-au	ĭ'-sō-pōm-stan	ĭ'sō-pōm-stan	Kish-tsĭ-pek-se
saw him	Wind maker	Wind maker	Spotted animal
năt'-ōt-sĭ-nûm	ĭn-ō-yo'	ŭhk-sō-yĭs	ĭn-ō-yĕ'	ō-tō-kĭsts
like color	long	his tail	long	his ears
ĕt-sĭn-ûs'-tse.				
down hang.				

Free translation: Some hunters once saw the wind-maker and chased him; there came a strong wind which blew them off, but, persisting, they chased the animal into the lake, and as soon as he disappeared under the water the wind ceased blowing. Then they knew that they had seen the Wind-maker. He was a spotted animal, and had a long tail, and long ears which hung down.

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*The following account of the Blackfeet pis-kan was given by Mr. Schultz in FOREST AND STREAM of June 1, 1882:

Not so very long ago I happened to be camped with a gens of the Pe-gun-ny, at a place called Willows Round, situated some fifteen miles above here, on the Marias River. Early in the evening I saw old Po-kah-yah-yi, in whose lodge I was stopping, ascend a steep bluff not far off, and, giving him time to reach the top, I followed, and was soon seated by his side. Directly opposite us across the river were the remains of pis-kan, or, as the white men out here call it, a "buffalo pound." Why so called I cannot say, the literal translation of the word "pis-kan" being "falling off place." "Now, my friend," said I, after I had regained my breath, "tell me all about that pis-kan. How did you make it; how many buffalo did you catch in one day; and how many winters ago did you use it?"

The old man's story was as follows:

"In those days we had no guns, but used to kill many buffalo with bows and arrows; and sometimes we used the pis-kan. When we made a pis-kan, we first found a little open glade by the river where the prairie came down and ended in a cut bank as high as a man. From this cut bank we built a strong fence clear around the edge of the glade. We used big trees to make the fence—logs and sticks, and anything that would help to keep the buffalo from breaking out. Then we built two lines of stone piles far out on the prairie, two lines that ever diverged from each other. Then the pis-kan was built.

"The night before we intended to make a drive we always had a buffalo dance. All the people danced. The medicine men all wore buffalo robes, and sung the buffalo songs. Every one prayed to their secret helpers for good luck. Early the next morning the people went out, and hid behind the stone piles on the prairie. The medicine man who was going to call the buffalo put on a buffalo robe, hair side out, and sitting down smoked one pipe to the sun. Then he spoke to his wives and all the women of his lodge, saying, 'You must not go outside until I return. You must not look out of the doorway or any hole. Take this sweet grass,' giving it to his head wife, 'and every little while burn a small part of it so that the sun will be glad. Pray that we will have good luck.' Then he mounted a dark colored horse and rode out on the prairie. When he came near a band of buffalo he began to ride quickly in circles and cried out to the buffalo, saying, '*E-ne-uh! E-ne-uh!*' (meaning buffalo). The buffalo were first a little scared; then they began to follow him slowly, and soon ran after him as fast as they could. Then the medicine man rode into the shoot, and after the buffalo had also run in he jumped out to one side of the stone piles, and the herd passed by. The people behind kept rising up and shouting, which made them run all the faster. The buffalo in the head of the band were afraid of the stone piles, and kept right on in the middle of the shoot; those in the rear were scared by the people continually rising behind them, and so pushed the leaders ahead. When the band had got close to the edge of the pis-kan, all the people closed in on them and with a great shout drove them over the cut bank into the inclosure. Then with their bows and arrows, the men killed all the buffalo; even the old bulls were killed. The fattest cows were then marked for the chiefs and medicine men by placing sticks on the tails, and the rest were divided up among the people."

The above narrative is true in every respect. As late as 1865 the Pe-gun-ny used these pis-kans on the Upper Marias. Mr. Jos. Kipp, the well-known Indian trader, tells me that in 1864 he saw the Pe-gun-ny capture over seventy-five head of buffalo in this manner. Sometimes three or four drives were made in one day. About seventy-five buffalo were the average drive, though sometimes more than a hundred were taken.

MAJOR JOSEPH VERITY.

SOME OF HIS SPORTING ADVENTURES, AS MODESTLY SET FORTH BY HIS OWN HAND.

Chapter VII.

ADIRONDA, a vast tract of primeval forest in the midst of a country that has long been settled and "improved," as it is the fashion to term those portions of the earth which have been spoiled by the hands of civilized man, is such a delightful resort for the tired dwellers in cities, for invalids and for those who desire to season their dull lives with a spice of mild adventure, that it is altogether desirable that it should be set apart as a State park, and henceforth saved from the destroying axe of the tree-murdering lumberman. A more important consideration than these from the utilitarian point of view, is the dependence of the lives of great rivers on the preservation of this great tract of land-shading and water-staying woodland. If it were not for this danger to awaken the power that rules, the lovers of the grand old woods might prepare their garments of sackcloth and gather their ashes while there are yet ashes to be gathered, and be ready for the day of mourning.

It was brought to my mind in speaking of the lake of the singing fishes, what countless beautiful and curious lakes lie in that region, many of which, I doubt not, have never yet mirrored the form of a white man, while there are many more that but few white men have beheld. One of these in particular I remember, which I never have heard mentioned nor seen one word written of till now. It is a small body of very salt water lying in a rock-rimmed bowl of mountains in the very heart of Adironda, and is very beautiful; but its beauty is outdone by the singularity of its saline character, and its cause. It is not fed by salt springs on its shores nor in its bottom, in fact, it has no inlet of any sort; the small trout brooks of the surrounding mountains discharging elsewhere, and it has no visible outlet—probably has none.

Three hundred years ago, as nearly as Indian tradition indicates, the basin that now holds the lake was a dry valley. On a certain time a great horde of Adirondacs and Abenakis on the one side and as great a one of all the nations of the Iroquois on the other, met here in a deadly conflict that lasted for several days. Heaps on heaps were slain of both wild armies, but neither was victorious, and both withdrew, leaving their dead upon the field. A month later all the women of the nations engaged repaired thither to weep over their slaughtered braves, and abode there, so doing, for many days, and at the end of a fortnight their tears had filled the little vale with salt water. And every year, for hundreds of years after, about the anniversary of the battle, the mourning women came there and wept for nearly a month, thus keeping the lake full. I should be inclined to relegate this tale to the realm of fabulous tradition, if I had not myself seen hundreds of squaws sitting upon the shores and raining down showers of tears for their moldered ancestors, little salt rivulets trickling down from each group to the lake, through the white sand, composed almost entirely of the crumbled bones and flint arrows and spears of the long-slain warriors. Therefore I have no doubt the lake owes its origin to this source. Yet these later comers, not feeling the poignancy of grief which affected the earlier mourners, may have contributed something in a way which is given to those who are denied many tears.

Some sea fish are found in its waters as well as oysters, clams and the like, the spawn of which was doubtless brought by the seafowl that frequently visit it. I thought once that I had discovered seaweed there, but found, upon inquiry among my Indian acquaintances, both Iroquois and Abenakis, that once upon a mourning time there outbroke a battle between the squaws as to which sorrowed most, when many scalps without skin were clawed off, after the fashion of civilized women, and my seaweed was only the water-soaked trophies of that Amazonian conflict. As the mourners grow fewer with the rapid passing away of the Indian race, the lake shrinks, but becomes no less salt, except in seasons of exceeding wetness, and for those who would have the heart of the wooods in large and the seaside in miniature in conjunction, I know of no more delightful resort than this sheet of water, which the Iroquios call Kanyatare-Keaheya, the Lake of Death, and the Abenakis, Nebisi Waldam-Wogan, the Water of Sorrow, or Lake of Tears.

If one would visit it from the East, let him leave Lake Champlain at Westport, Essex or Plattsburgh and go toward it till he comes to it, upon doing which he cannot mistake it for any other lake in Adironda, either by the tests of sight, taste or smell. If one would come to it from any other point I cannot give him better instructions for doing so.

It freezes much later than other lakes of that region. I have seen it open at the end of October, when as all know, winter reigns there supreme and undisputed. I have seen in November a polar bear traversing its frozen surface, and have killed more than one seal there, as well as the blue Arctic fox. Is it not strange that these animals of the far North should have been led to it so far from their wonted abode? By what light intangible ethereal thread were they drawn? Of this and things akin I hope to say something further on. MAJOR JOSEPH VERITY, U.S.H.M.

ADIRONDA.

Natural History.

THE DEER OF THE OTTAWA VALLEY.

BY WILLIAM PITTMAN LETT.

[Read before the Field Naturalists' Club of the City of Ottawa, Ontario, Canada, on the 18th day of March, 1884.]

[*Continued from Page* 124.]

THE MOOSE.

THE moose deer (*Alces americana*) or *Alces malchis*, according to Linnæus, is the largest of all deer now existing in the world, although much inferior in size to the ancient Irish elk, which must have been an animal of gigantic proportions, if we are to judge from the size and weight of the ponderous antlers found occasionally in the bogs of Ireland. Some of those great horns have been discovered with a spread of twelve feet, which fact will give some idea of the magnitude of the animal which carried in the old days of the powerful wolfdog such enormous horns.

The American moose, according to the conclusions of all scientific naturalists, is a true elk, identical with the Scandinavian and Asiatic elks. A full-grown moose of the largest size, when fat and up to its heaviest weight, will weigh upwards of fifteen hundred pounds. A bull moose of this description is as tall as the largest horse. The body and neck, for so tall an animal, are short and stout—the neck unusually so—and is covered with a thick mass of strong, bristly hair rising into a stiff mane, which, when the animal is irritated, stands on end like the mane of a lion, and gives the infuriated beast a frightful and formidable aspect. The legs are long and bony; and although ungainly in appearance, are as clean cut and as compact as the limbs of a racer. The head is enormously large, and altogether deficient in the points of grace and beauty peculiar to nearly all the other branches of the deer genus. The fleshy part of the upper jaw terminates with a long, flexible upper lip, with prehensile powers, used by the animal in seizing the twigs and branches of trees upon which it feeds. The nostrils are long and wide, and the eyes somewhat small in proportion to the size of the animal. The hoofs are large and shaped like those of the common deer. The colour of the hair in the summer coat is a dark brown, nearly black, particularly about the head. At this season the coat is short and glossy. In winter the animal is covered with long, coarse hair, of a brittle nature, and the colour is lighter in hue, a sort of grayish brown tinge prevailing on the sides, with the belly of a somewhat lighter colour. A tuft of hair nearly one foot long hangs under the jaws in the young moose. Moose is an Indian name, derived from the Algonquin word *mousse*, the eater.

I quote the following description from Billing's "Canadian Naturalist and Geologist":

"The gigantic horns of the moose are well known in almost every town in Europe or America where there is a museum. It is difficult to believe that these enormous solid appendages are the growth of a single season, and yet the fact is too well established to admit of a doubt. Only the males are provided with them, and no matter how large they may be, they grow to their full size in about twelve or fourteen weeks. On the young moose, one year old, they are merely short knobs; they increase in size after each annual shedding, and after the fourth year become palmated,

and may be termed full-grown about the fifth year. The palms are, on the widest part, on a moderate-sized male, about eleven inches wide. The space between the roots, six or seven inches. A very large pair measures over five feet between the tips, and will weigh sixty or seventy pounds. They begin to sprout in April and fall off in February. It is said that their growth is complete in August, when the velvet peels off, and they are then white, but afterwards become brown or yellow. From one to three points or short prongs are added to the palms each year, so that the age of the animal is not indicated by the number of these prongs, as is generally supposed.

"In fighting with each other they use both horns and feet, but in contending with dogs, only the latter, with which they strike tremendous blows. Their pace is a long swinging trot which they can keep up for several hours in succession."

A wounded moose is a very dangerous animal to approach, unprepared with the means of finishing him. From an eye witness, I was told of a case in point. A shantyman, I think on the Black River, at any rate at some place above Pembroke, ran out in sight of a number of his comrades close to the shanty, with a single-barreled muzzleloader and fired at and severely wounded a large bull moose. Seeing the animal wounded, he ran up to him with an empty gun, when the moose rushed at him, knocked him down with a blow of one of his fore feet; and before any of his friends could effectually interfere, the furious animal trampled and pounded the unfortunate man to death. I have also heard instances where hunters have been treed by wounded moose; and of one incident where a hunter escaped by dodging round a large tree until he was enabled to get a charge into his muzzleloader to administer the quietus. To shoot a moose in December, or in the middle of January, when he strides proudly along beneath the weight of his lordly crown, and when he is fat and heavy, is something that a sportsman may be proud of; but to slaughter the unfortunate animals in the latter end of February and March amid snow five feet deep, when the females are heavy with young, and the males are hornless and lean, is a species of assassin work which ought to be put a stop to by the strong arm of the law, if men are not ashamed of such improvident butchery.

The moose, which at one time was found in abundance in all the Northeastern States of America, at the present time "holds a precarious and short-leased existence," says Parker Gilmore, "in the northern portions of Maine." They are also, in decreasing numbers, however, still to be met with in Nova Scotia and New Brunswick. Although diminishing every year, they are comparatively plentiful on the north side of the Ottawa River throughout its entire length, and in some localities far west, on its southern side. In the country lying to the south of Jame's Bay and stretching west to Lake Winnipeg, "this giant deer can be found in greater abundance than in any other portion of the American continent." Mouse are also found in considerable numbers in the country bordering on the St. Lawrence below Quebec, particularly in the Labrador region.

Audubon says the moose grows to the height of twenty hands. Others who have made the subject a study, say that they grow even much larger than that. The moose of Labrador are smaller than those of the State of Maine or Canada, owing doubtless to the severe winter weather and the sparse vegetation of the former locality.

The moose, when captured young, is easily domesticated, and grows quite tame and docile; but the confinement of civilization does not seem to agree with them, and after a few years' confinement they pine away and die. With a park of sufficient size, well supplied with hardwood trees and swamp, and well watered, doubtless the animals would thrive. In a state of domestication the moose has been trained to harness, but he does not like it; but when he pleases to stretch out in a trot, the animal is exceedingly fleet. I have frequently seen the young bull moose owned by our late excellent Governor-General, the Marquis of Lorne, harnessed to a carriage; but, although he could be made to go at a pretty decent trot with a little touching up with a whip, he did not take kindly to the slavery, and sometimes used to lie down flat and stretch out his neck at full length, to show his repugnance to the idea of being turned into a horse, a transformation, however, scarcely possible in an animal so much resembling a gigantic ass. The male and female moose owned by Lord Lorne have been taken to the highlands of Scotland by him, and I have been sorry to hear that they are not doing well in their new home.

No member of the deer genus produces finer venison than does the moose. The flesh, although somewhat coarse in grain, is juicy, and has a fine gamy flavor; and the fat, which is abundant when the animal is in good condition, is beautifully clear and white. A delicacy which only the moose hunter can enjoy, is the marrow from the shank bones cooked immediately after the animal has been killed. I shall finish with the moose, with a quotation from Parker Gilmore. He says: "The Virginian deer, the fallow deer, the wapiti, and the red deer, are to me perfect in shape, graceful in their movements, and ornamental to the landscape; but the moose, on the other hand, with his short, thick neck, asinine head, protruding eyes, heavy, broad ears, tremendous antlers, long, awkward, powerful legs, and disproportionate withers, looking even higher than they are from the mane that surmounts them, can never be considered by an impartial judge, but an awkward and clumsy brute.

"Of all the ruminants on the American continent, the moose is the tallest. I doubt not a stall-fed ox can be made to weigh as heavy, but not to attain the stature; and on this continent, as well as others, it is really a duty that the legislatures of the various States and Provinces, of which he is an inhabitant, owe to the country at large, to pass and enforce such laws as will prevent his ultimate annihilation."

Before leaving the moose, I may mention that in any section of country in which the Virginian deer abound, moose are seldom found. It is said, and I believe truly, that the moose, large and powerful as he is, is unable to withstand the lithe and vigorous attack of the active and sharp-horned buck of the smaller species. In the fall of the year, under the natural impulses incidental to the season, desperate battles take place between the male moose. Such conflicts, however, rarely terminate so fatally as the struggles between the males of the lesser breed; the broad, blunt horns of the great elk not being so well adapted to the purpose of inflicting dangerous and fatal wounds as are the sharp-pointed antlers of the former. In like manner the red fox originally imported into the United States (then British colonies) by Sir Guy Carleton, exterminated the smaller native grey fox. The red squirrel, also, makes his hunting ground too hot for his larger and stronger congeneric brother of the black species.

[TO BE CONCLUDED.]

BIRD NOTES.

I HAVE been over the same grounds not less that half a dozen times since the day reported, and with about the same success. Two days later, in the evergreens, I saw a flock of about a dozen pine linnets (*Chrysomitris pinus*), the first I ever found here, and secured five specimens. A week after observation reported I saw just one snowbird (*Junco hyemalis*), and near by I found a field mouse impaled on a limb of a pear tree, but did not see his executioner, the great northern shrike. I was told by a friend who is better posted on birds than I am that he had seen a shrike in his yard a few days before. Since then I have visited the evergreens four times, and have not seen *Junco*, and came to the conclusion that he had shared the fate of the field mouse, as the latter was missing from the branch. To-day I went over the same route, passing through cornfields, potato patches and wheat fields, where I have always, until this winter, found snow buntings, horned larks and tree sparrows, and examined the weeds on which they feed, and only in the cornfield, where the weeds were best protected from the frost, did I find any seeds, and then but very little. When the weather permits, I always make such an excursion every Sunday afternoon, and always examine birds' nests in winter as well as summer. I reported only what I did and did not see. Probably no man in Lockport does more tramping about the country than I do. My business is such that I have many leisure hours, and I derive much pleasure in this way. I usually go alone and across lots. In a December number, I think, of the FOREST AND STREAM I read the report of the American Union in regard to bird migration, and offered my poor services to Dr. C. Hart Merriam to report observations from this vicinity, and they were cordially accepted. I have just made my report for February, and it was an exceedingly meagre one. I will inclose a copy, and if you think it of interest you can publish it.

Feb. 22 being a holiday, I was out from daylight until dark, and probably traveled from ten to twelve miles, and you will notice the observations were few and only three of them winter visitants.

The golden eagle reported was sent to my son to be mounted. I had never examined one before, and was very much surprised at the size of the body after being skinned, and I sent it to one of your correspondents to see if he could identify the bird. His reply was "that he could not be deceived by coloration—"the bird is all of one color"—"had no bird skeletons at hand for comparison and would give his opinion offhand"—and say of the bird—"h'its not an 'en, an 'awk nor a h'owl, but a h'eagle." It was an immature bird, and the body was no larger than a great horned owl my son skinned to-day. The feet of the eagle were full of porcupine quills, which was probably the last animal he had dined off and about as hot a meal as he ever had.

Birds seen at Lockport, N. Y., during February:

PERMANENT RESIDENTS (P. R.)

Feb. 22. Downy woodpecker—*P. pubescens.*
Feb. 26. Great horned owl—*Bubo virginianus.*

WINTER VISITANTS (W. V.)

Feb. 19. Pine linnet—*C. pinus.*
Feb. 22. Herring gull—*L. argentatus.*
Feb. 22. Black-capped chickadee—*P. atricapillus.*
Feb. 22. Tree sparrow—*S. monticola.*
Feb. 24. Snowbird—*J. hyemalis.*

TRANSIENT VISITANTS (T. V.)

Feb. 20. Wild geese—Heard them in the evening.

SUMMER RESIDENTS (S. R.)

Feb. 16. Robin—*Turdus migratorius.*
Feb. 22. Cedar waxing—*A. cedrorum.*
Feb. 22. American goldfinch—*C. tristis.*

Note.—The wild geese were reported to me from a competent party, a golden eagle (*Aquila canadensis*), was sent to my son to be mounted, from Plessis, Jefferson county, N. Y.

LOCKPORT, March 4. J. L. D.

During the past winter our most abundant bird, save always the black snowbird and tree sparrow, was the white-bellied nuthatch. Next to these were the cardinal grosbeaks and bluejays in about equal abundance. Numbers of the latter birds were trapped by the boys and sold in neighboring towns at twenty-five and fifty cents each. The following species were also rather abundant throughout the winter: The song sparrow, tufted titmouse, Carolina wren, American goldfinch, red-headed woodpecker, flicker and Carolina dove. I saw the bluebirds and a crow or two in January with the mercury at zero. The first general appearance of the crows was Feb. 4; that of the robins Feb. 11, and of the bluebirds Feb. 12.

Many of your correspondents have remarked about the unusual occurrence of certain birds, as the robin, blackbird, bluebird, meadow lark, snipe, etc., within their districts the past winter, and when the ground was covered with snow and the weather unusually severe. I believe it to be capable of explanation, and would assign as the indirect cause the very general and very extensive snowfalls in the month of January, almost without a parallel in our country. For nearly a week in that month, the ground was covered with from six to thirty inches of snow, from the Atllanic to the Mississippi, and from the Lakes to Georgia; and much the larger portion of all this vast territory was under snow during nearly the whole month of January. Now, it is well known that many of our birds, as those mentioned, are but partially migratory, and that the question of food supply is the chief factor in determining their winter habitation; hence it is the great bulk of them ordinarily are found wintering in the "Carolina" districts, where their food supplies are rarely cut off by snows. But during the period spoken of above, these districts being almost universally under snow, the birds, in seeking suitable feeding grounds, were necessarily more widely and generally dispersed, which to my mind sufficiently accounts for their appearance in certain more northern districts at the time, and under the circumstances, noted by your correspondents. REV. W. E. HILL.

FAIRVIEW, Hancock County, W. Va., March 3.

Since the last cold snap and snowstorm our birds have again made themselves scarce, excepting the plucky bluebird. Hawks have been unusually plentiful the past winter. In my last I wrote you I was expecting the ducks, but since then the cold put a stop to their coming, as everything is frozen. However, it will not be long before they will be here in full force. Quite a number of rabbits were left over from last fall's shoot, and I noticed a great many tracks in the snow lately. It's surprising how rabbits keep up their numbers, since they are constantly hunted in season by men and boys, and in summer by hounds and curs, and I can readily believe the dogs kill more rabbits, when they are young, than hunters. To-day is warm and spring-like once more, although enough snow has fallen to insure good sleigh riding. No one in these parts feeds or shelters quail; perhaps the quail are so scarce they can't find them. Some years ago quail were here in goodly numbers, but of late years it's pretty hard to find a bunch. Partridges are a bird of the past with us almost; one being found occasionally a few miles from here. 16-BORE.

MADISON, N. J.

I herewith send my mite of information concerning the appearance of our spring birds. I saw robins and bluebirds for the first time on Feb. 13; saw several meadow larks in January, but that is nothing unusual here; saw the first red-shouldered blackbirds about the 15th of February; also saw a few pintail, mallard and dusky ducks. The robins are here yet and seem inclined to stay. The others mentioned appear to come and go, according as the weather is warm or cold. I shot two specimens of what I called rusty grackle (*Scolecophagus ferrugineus*), but am not certain. Length, nine inches; color, head and neck of male black, shaded on tips of feathers with gray or russet, and traces of russet among the feathers on the shoulders; general color black changing to green. The female had a great deal more russet and gray on head, breast and shoulders; otherwise same as the male; iris light yellow; bill three-quarters of an inch in length. I never shot any birds like them before, and thought they were common blackbirds when I first saw them. Am I right in my conjectures or not, and is their appearance at this season of the year (February) anything unusual? S. E.

SEVILLE, Ohio, March 5.

[The birds mentioned by "S. E." were rusty grackles, as he supposed.]

There is deep snow on the ground here everywhere, and yet one of our taxidermists shot a meadow lark out of a flock of eight or ten March 5. Saw the bird and it was a beauty. The pine grosbeaks appear to have left for the most part. A flock of female and young purple finches have been here during the latter part of February.

AMHERST, Mass., March 7. W. A. STEARNS.

We have had a severe winter here. Snow covers the ground yet to the depth of several feet. Grouse and quail have about all disappeared within the last few years from these parts, owing to their wholesale destruction by pot-hunters and foxes. Pine grosbeaks have been quite numerous in the towns, feeding on the berries of the mountain ash. Rather an unusual number of crows have wintered here, considering the severity of the weather. A few shore larks and downy woodpeckers and a few solitary chickadees constitute our winter birds. CANUCK.

OSHAWA, Ontario, Can., March 10, 1884.

We have been visited since the 1st of February by a large number of pine grosbeaks, which enter our city without any fear, being very tame; indeed, a friend of mine caught one under his hat. The birds mostly are females and young birds. I have seen only one male in full plumage. Is not this queer? F. W. G.

HARTFORD, Conn., March 7.

CROWS.

A GERMAN friend related the other day a novel method of capturing crows, that was practiced in the "Old Country," when he was a boy. They sewed some strong horse hairs to the grains of corn, and tied them securely in a place the crows were wont to frequent. The crows would come and eat the corn without observing the hairs attached to it, and thus would be held fast, much against their will. It would doubtless be ludicrous, and perhaps a little pathetic to see some grave old sentinel give the warning signal, and endeavor to fly away as one approached, only to be held down in this ignoble manner. But it was very ludicrous and not at all pathetic to see our old friend (who ought to be sedate, as he has children grown) try to imitate them. He would jump, flop his arms, ca-wa-ik, ca-ca-rawk, ca-awk-aw, duck his head as though it were being held down by the bait, jump and flop until his head was drawn quite beneath him; then exhausted he would lift a very red face, which would grow redder with laughing at the remembrance. He said that he, with his brothers and sisters, owned a tame crow of which they were very fond; but one day while they were away, their mother saw it deliberately walk up and "spike" a gosling in the head, killing it instantly. This enraged the good "frau," who ran out and picking up a small stick, flung it at him; when, to her astonishment, the crow, with a faint caw, toppled over and expired.

She had her punishment, however, when the children returned and filled the house with wailings and lamentations, and could not be comforted for the loss of their pet. Papa W. had some fancy poultry in which he took great interest; but he found that the young chickens kept disappearing in a very unaccountable manner, until one day he discovered *Corvus frugivorus* flying away with one in his beak. A charge of shot put an end to his career, and after that there were no more missing chickens. VIOLET S. WILLIAMS.

CORALVILLE, Pa., March 4, 1884.

BULLETIN OF THE NATURAL HISTORY OF THE STATE OF MASSACHUSETTS.—We have received from Mr. W. A. Stearns a circular setting forth that it is proposed to establish under the above title a monthly periodical devoted to the natural history of Massachusetts. The periodical is to be published at Amherst, Mass., is to contain from twelve to sixteen pages, 6x9 inches, of brevier type. It will be conducted, we understand, by Mr. Stearns. Price is to be $1 per annum.

CURIOUS.—On March 6 a specimen of the mottled owl (*Scops asio*) was brought to me that had been killed by the person throwing a club at it. Upon dissecting it I found the stomach contained wheat, buckwheat and seeds, nothing else. This is the first instance that I have ever found grain in the stomach of an owl.—C. F. CARR (Waupaca, Wis., March 12.

EARLY BREEDING OF HORNED LARK.—For several weeks horned larks (*Eremophila alpestris*) have been with us, and some time since I noticed the males chasing each other as they are wont to do during pairing season. I paid no particular attention to the circumstance, as my earliest clutch of eggs were taken March 23, 1883 (the chicks were nearly ready to come forth). This morning a friend brought for identification a young bird he frightened from the nest yesterday, which proved to be a young male of the above mentioned species. How he managed to survive the late cold

wave is a mystery. Larks (*Sturnella magna*) robins (*Merula migratorius*) bluebirds (*Sialia sialis*) have been here since the first of the present month. Partridge (*Bonasa umbellus*) have wintered well, what few are left. Many were shot the past season, and reynard, who is an unmerciful pot-hunter, keeps up the slaughter the whole year through. I am glad to learn that some of the readers of the FOREST AND STREAM are awaking to the fact that a bounty on his head is the only way to save the birds from total extermination.—BAR LOCK (Virgil, N. Y., March 13).

Game Bag and Gun.

PROTECTING SONG BIRDS.

A BIRD never flutters unless it is hit. The taxidermists of Massachusetts have taken alarm at the proposed legislation giving the power to license them into the hands of the Fish and Game Commissioners. Heretofore any boy of sixteen years could obtain a certificate from the curator of the Museum of Comparative Zoölogy at Cambridge, the president of the Massachusetts Agricultural College at Amherst, the Boston Society of Natural History, the Worcester Lyceum and Natural History Society, the Peabody Academy of Science at Salem, or from any incorporated society of natural history or college in the State, and become a full-fledged ornithologist, with power to hunt and kill, and take the nests and eggs of as many birds as he could find. The effect of such a law has been disastrous to the birds of the State. Not only have the real taxidermists scoured woodland and field, but boys more in love with killing something than with any sort of study, have been let loose with a certificate in their pockets and a gun in their hands, till the song and insectivorous birds we loved so well in boyhood have begun to disappear.

A lady of Taunton, Mass., writes the Fish and Game Protective Association a letter of congratulation that something is at last to be done to stop the destruction of our native birds under the name of science. She remarks the rapid decrease of the more common birds during the past three or four years in her immediate vicinity, and easily traces their skins into the taxidermist's shop, and, worse than all, their eggs into the collections of pretended young students of ornithology. The lady is able to point out a number of such collections in her immediate neighborhood—eggshells enough to have made the birds scarce in any tract of country from which they were taken. She very aptly illustrates the real state of the case when she shows how a boy thirty or forty years ago would have been reproved by his mother with tears in her eyes for taking a single bird's nest or egg, and have perhaps received a whipping from his father. But to-day the boy's collection of a few badly mounted bird skins and hundreds of eggshells is put into the mother's best parlor, labelled "Ornithology," often badly spelled and worse written, and the mother points out the collection with pride when visitors call, with a look which says, "See how much our boy knows." Perhaps the young ornithologist, at the very moment, is behind the woodshed reading Indian stories in a dime novel.

When we remember the earnest researches of Wilson and Audubon, the many days of patient study they devoted to live birds, and take into account what true and devoted bird study has already given us, really such pursuit of ornithology as the lady reader mentions looks tame and ridiculous. The institutions of learning which have granted thousands of certificates to boys to follow out so false a line of study have not done a work to be proud of.

But the taxidermists of the trade have taken alarm, and the Legislature is being besieged with communications, and members are being interviewed and urged to vote down any bill which shall interfere with the study of bird science. A member of the Legislature made a good reply the other day to one of these lobbyists.

"Well," said he, "you want the law to stand as it is?"

"Yes; the law is good enough."

"You want to kill birds and take their eggs, in order to study them, don't you?"

"Yes, sir; we are obliged to have collections of dead and mounted birds in our study of ornithology."

"Well, perhaps you are right; but would you expect a traveler, sent out to a far country to study the habits of the people, to take a shotgun with him and kill and stuff the skins of all the people he could find? He would come back with a full knowledge of the habits and customs of the people, wouldn't he?"

The taxidermists retreated from the force of such reasoning. X.

THE OLD GUN.

ONE of my neighbors, a few years ago, showed me a big 10-bore flint-lock gun, which, in the hands of his ancestors, had done some tall duck shooting. They used to run their own shot in a mould with sixteen chambers, and used flax tow for wadding. To overcome the recoil they wore a pad on the shoulder, and fired heavy charges. It was used for a training gun in the old militia days.

Finally, one day I told him if he would let me target it I would buy it. I don't shoot flint locks since I fired one a number of years ago at a flock of blackbirds up in the elms and singed my winkers by the pan powder; but I have a vise in my shop that holds them and a hot iron sends them off. After making a few trials that way I found that the old gun stood by its record, and the result was a trade. I had a government percussion fixed on and the very first shot that I had at ducks I got four mallards. The paced distance was between nine and ten rods. I think the best target shot I have made with it was when it had been loaded for a while and was somewhat rusty in the muzzle. At eight rods it put four center large shot inside of a two-inch ring, the rest a good pattern. Query—Did the slight rust act as choke? if so, what is the best choke for heavy shot?

I have since taken off the heavy brass heel plate, crooked the stock, shortened stock under barrel, and cut off six inches of the barrel, and it makes a handy, reliable gun that we can turn round on an ordinary sized lot. The original length of barrel was 3 feet 6 inches. There are two crowns struck on the barrel near the breech, and Amsterdam is plainly lettered on the lock plate.

Such is a brief history of the old gun that has brought many a duck and gray squirrel to hand since I bought it.

I will write some time how to crook a gun stock to make quick sighting and have the stock strong.

COUNTRY.

GLASTONBURY, CONN.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

Like "Backwoods," in your journal of Feb. 28, 1884, I am "tempted to put in my oar" on the "performance of shotguns."

We will premise by saying that no sized bore, no length or weight of gun, no amount of powder, nor any charge of any sized shot can be made to attain a greater initial velocity than about 2,000 feet per second; that with a given charge of powder, the velocity falls off as the weight of shot is increased; that as great an initial velocity can be attained with a 20-gauge as with a 4, or 6, 8, 10 or 12-gauge gun; that a 4, 6, or 8-gauge weighing 10 to 20 pounds can project shot of the same size no further, or attain to any greater initial velocity than one of 12, 16, or 20-gauge weighing 7 to 8 or 9 pounds.

If these assumptions be true, it only remains for us to find out the quantity of powder, quantity and size of shot, and that medium of weight and gauge of gun that will handle the easiest, and that will kill the game we are after the best.

This will bring you to repeated trials to test the "performance of shotguns."

In these "tests" something like the following may be found to be true, and aid in making choice of the gun we are looking for:

TEST OF DIFFERENT CHARGES OF POWDER.

12-Gauge Gun—40 Yards.

Charge.		Pattern.		Force.		Recoil in Lbs.	
Powder No. 1.	Shot No. 7.	R.	L.	R.	L.	R.	L.
3drms.	1⅛oz.	126	170	12⅛	13⅜	87	86
3½drms.	same.	147	170	14⅛	14⅛	92	90
4drms.	same.	131	170	15¼	16	96	93
4½drms.	same.	117	172	16⅜	16⅜	100	100

10-Gauge Gun—40 Yards.

Charge.		Pattern.		Force.		Recoil.	
Powder No. 1.*	Shot No. 7.	R.	L.	R.	L.	R.	L.
4drms.	1¼oz.	156	200	14⅛	15	94	95
4½drms.	same.	146	170	15	15⅛	98	100
5drms.	same.	157	191	16	16¼	10⅜	103
5½drms.	same.	140	208	16	16	105	105

* Oriental powder is numbered No. 1 fine to No. 4 coarse.

TEST OF DIFFERENT SIZES OF POWDER.

12-Gauge Gun—40 Yards.

Charge.		Pattern.		Force.		Recoil.	
Powder, 4 drs.	Shot, No. 7.	R.	L.	R.	L.	R.	L.
No. 1.	1⅛oz.	134	170	15¼	16	96	94⅛
No. 2.	same.	135	167	14⅛	14⅜	91	87
No. 3.	same.	152	194	14	13⅞	90	88⅜

10-Gauge—40 Yards.

Charge.		Pattern.		Force.		Recoil.	
Powder, 4½ drs.	Shot, No. 7.	R.	L.	R.	L.	R.	L.
No. 1.	1¼oz.	146	170	15	15⅛	98	99
No. 2.	same.	139	181	14⅛	14	95	90
No 3.	same.	157	210	13	13⅛	91	90⅜

TEST OF DIFFERENT CHARGES OF SHOT.

12-Gauge Gun—40 Yards.

Charge.		Pattern.		Force.		Recoil.	
Powder, No. 1.	Shot, No. 7.	R.	L.	R.	L.	R.	L.
3½drms.	1oz.	125	160	15⅜	16	84	85
same.	1¼oz.	127	174	14⅛	14⅛	89⅜	89

10-Gauge Gun—40 Yards.

Charge.		Pattern.		Force.		Recoil.	
Powder, No. 1.	Shot, No. 7.	R.	L.	R.	L.	R.	L.
4½drms.	1oz.	149	154	17⅛	18	90⅛	90
same.	1⅛oz.	133	149	16⅛	16⅜	91⅛	92
same.	1⅛oz.	175	191	15⅛	15⅜	90⅜	100

6-Gauge Gun—40 Yards.

Charge.		Pattern.	Force.	Recoil.
Powder, No. 1.	Shot, No. 7.	One Barrel.	One Barrel.	One Barrel.
5drms.	1¼oz.	287	14 1-6	117
same.	2⅛oz.	551	12½	125

Each test given above is the average of six shots with Oriental powder.

Suppose an initial velocity of 2,000 feet per second can be attained, then No. 7 shot in any gun will be projected up 206.71 yards, or 37.58 rods, in 3½ seconds of time; No. 8 shot, 176.20 yards, or 32 rods, in 3.27 seconds; No. 5 shot, 234.45 yards, or 42.63 rods, in 3.85 seconds; No. 3 shot, 268.10 yards, or 48.75 rods, in 4.17 seconds.

It is not claimed that all guns of the same gauge, loaded with the same charge, fired at the same distance, will produce exactly the same pattern, but it will be found that the force or penetration will be substantially the same, because the initial velocity will be substantially the same.

The variation in the pattern and force of guns of the same gauge will arise from the quantity and size of the powder used in loading, the quantity and size of shot and, to some extent, the manner of loading when fired at the same distance, and the choke of the bore. For instance: A 10-gauge gun charged with 5 drams of powder (No. 2 Oriental) and 1 ounce shot, the initial velocity will be very near 1,817 feet per second; with 1⅛ ounces shot, 1,716 feet per second; with 1¼ ounces shot, 1,628 feet per second; with 1⅜ ounces shot, 1,550 feet per second; with 1½ ounces shot, 1,482 feet per second.

All the tests show that an increased quantity of shot will give a better pattern, at medium range, say 40 yards, but it will be at the sacrifice of force or penetration.

The large gauges will carry more shot, be more likely to hit, while the force will be about the same as in smaller gauges, and at short range will be more liable to kill; as the impact of ten shot hitting a bird the size of a ruffed grouse would knock the life out of it without a single shot penetrating a vital part, while one, two or three shot at much greater velocity might go through the bird, and yet it might not fall until it had flown out of sight.

In the light of these facts which I have only touched upon without elaboration, it seems pretty clear to me that the days of heavy guns and big bores are about numbered. That in choosing a gun for ease in handling, for pattern and penetration, for economy in loading, and convenience in the field, a 30-inch, 8¼ to 8½, 10-gauge breechloading double-barreled shotgun loaded with 4¼ drams No. 1 and 3 powder (mixed half and half) with two pink-edged wads over the powder, and 1¼ ounces shot, one wad over shot, will be found such a medium as to answer all reasonable purposes, and give daily and increasing satisfaction. Next to it a 12-gauge, 30-inch, 7¾ to 8¼ pounds, double-barreled breechloader, especially for field shooting will be found adequate, and a great favorite where one can afford to keep two guns. Load, 3 to 3½ drams powder No. 1, and 1 ounce shot.

As to the choice between the muzzle and the breechloader I can only say "there is no accounting for tastes." For thirty years I owned and shot two muzzleloaders, which I then thought were good guns. When breechloaders came and were thoroughly tested, I gave one of them away and had the other altered over into a breechloader, and have it yet.

It is my opinion that there is but little difference in the force or penetration between them. But in pattern and convenience there is a wide difference, especially if the breechloader be choked and metallic shells are used. With metallic shells wads over the powder can be used two sizes larger than the gauge of the gun. This enables you to get the same initial velocity, and consequently the same force or penetration that you can possibly get from the muzzleloader, while the choke in the breechloader, which you cannot have in the muzzleloader, will most certainly give uniformly the best pattern. But suppose their penetration and pattern were equal, would not the muzzleloader have to yield to the greater convenience and rapidity of loading of the breechloader? D. W. C.

CLEVELAND, O., March, 1884.

Editor Forest and Stream:

My experience with, and opinion of breechloading shotguns, is about as follows: I own a 12-bore, 28-inch, 8¼-pound chokebored Colt gun. The tag which came with the gun said, "3 drams Hazard powder, 1¼ ounces No. 8 shot, 2 pink-edge wads over powder, 1 over shot, for paper shells same size as shell, and for brass shells 2 sizes larger;" while the pattern given was "298 right barrel, and 302 left barrel, 40 yards, 30-inch circle, No. 8 shot." Result of test. Made a score of paper targets, 30-inch circle, loaded brass shells, 2⅞ inches long, as directed, and the best pattern was about 250. Then tried paper shells with about the same result, which was not satisfactory, as the gun was "warranted to make pattern on tag." Had been using Winchester pink-edge wads, and slow-burning powder. Was told to get finer powder, and Eley's pink-edge wads. Procured some FFG dead shot powder, and Eley's wads, and paper shells 2⅞ inches long—length of chamber in barrel—and the result was a pattern of 324, with 3 drams of the fine powder. This result was quite pleasing, in fact very satisfactory; but I concluded to do a little better if possible. Procured cardboard wads to use over shot, with the brass star wad which banishes crimping and holds the cardboard wad securely, and tried again. Eureka! count up 424 in 30-inch circle, 36 in 6-inch circle, and 11 in 3-inch bullseye. Good enough. Try same charge, 3 drams, wood powder, about 300; increase the charge to 4 drams, and over 400 again. At 100 measured yards with 4 drams of quick, strong powder, 1¼ ounces No. 4 shot, can stick in a pine board from 1 to 5 shot in a 6-inch circle every time. Cannot do it with wood powder, the shot will dent but will not stick. As to penetration, that must follow a good pattern, the two are inseparable.

Conclusion of the whole matter: A 12-bore, chokebored, 28-inch gun, loaded with a shell length of chamber, 3 drams strong, quick, black powder, 1¼ ounces No. 8 shot, 2 Eley's pink-edge wads over powder, cardboard and star wad over shot, will put over 400 pellets in a 30-inch circle at 40 measured yards. Probably a 10-bore would do better still. This whole question hinges on one essential point—loading. The best chokebored gun now made, if improperly loaded, will give unsatisfactory results. NEXT.

NEW MARKET, N. H.

Editor Forest and Stream:

In your issue of March 6, 1884, I notice a communication from "Hammerless," in which he says: "Tell your correspondent "Octo" that if his gun will average 440 out of a counted charge of 500, I will give him five times as much as he paid for his gun."

I would not feel called upon to answer "Hammerless" concerning this extremely liberal offer on his part, except that in other parts of his interesting article he seems, and I believe with good reason, to condemn the want of uniformity in targeting guns; and I do not want to appear among those who "heap" the measure and use "trap shot" also, or who shoot at a range of 35 yards and call it 37 or 40, or who have "guides" to direct the scattering pellets to the target. If "Hammerless" will examine the squib "I wrote in the issue of Feb. 21," he will discover that it reads as follows: "In answer to his (Buckeye's) inquiry as to the proper performance of a good breechloader, I would say that at 40 yards, with 1¼ ounces of No. 8 shot (Tatham's 400 to the ounce) and five drams of powder, *a good 10-gauge gun should put from* 375 *to* 440 *pellets* in a 30-inch circle," etc. The italics are mine. "Hammerless" will notice that I do not even claim to own a gun at all, nor do I claim that even a *good* gun will *average* 440 pellets with the charge and range given. Not wishing to arouse the ire of "Hammerless" at

all, nor to enter into any controversy with him, I merely write this to put myself right before your readers. I propose, in a few days, to do some experimenting with different charges and manner of loading shells, and if of sufficient interest, will send you an account of the same. OCTO.

JOHNSTOWN, Pa., March 7, 1884.

Editor Forest and Stream:

I have owned nine different breechloading shotguns in the past ten years, made by various firms, and ranging from 7 pounds to 11 pounds in weight, and from 14 to 10-gauge, with length of barrels from 28 inches to 32 inches. My present guns are 8 pounds hammerless, and 10 pounds cheaper grade of English gun. I think I am pretty well "fixed" now for guns. Both my guns are 10-bore, and I prefer to have them alike on account of ammunition. I have spent a great deal of time and some money in testing these different guns with varying loads. By nailing on the side of a shed a package of large wrapping paper, and at forty yards, firing at the paper, in this way I get distribution and penetration.

It may surprise some of your readers when I tell them that a 14-bore, 30 inch length of barrel, Greener gun, has the best record for penetration of any gun I ever used, and I will surprise them further by saying that there is a muzzle-loading gun owned here which could be bought for twenty dollars, I think, that, after what I saw it do in the way of game killing at long distance, I would no more think of shooting either of my guns against it than I would of loading one of them with ball and shooting it against a rifle. In my opinion, the gun makers will have to manufacture their breechloaders with a different kind of point at the breech from what is now used before they can make guns of equal weight to carry shot with those loaded at the muzzle. STRAIGHT HAND.

Editor Forest and Stream:

I have been much interested in the "Performance of Shotguns." I once tried the very experiment suggested by "California." I had just received a —— B. L., 12-gauge, 8½ pounds' weight, of which I had dreamed and thought for some three months. In my haste to test the gun I forgot to take the powder charges from the store, and so loaded (with the advice of a friend [?]) by guess. I wondered the shells were made so short, as I had difficulty in squeezing the last wad in. However, I started out and fired at a mark. A government mule couldn't have kicked harder than that gun. I fired again at a strawberry box at seventy paces. This time "the retreat partook of the nature of a panic," but I hit the box. A friend happening along with a flask having a charger on top, I unloaded and measured my charges. I had loaded with 6 drams of powder and 1½ ounces of shot. His measure was, perhaps, not accurate, but was probably as much so as the general run of measures. I have since experimented a little, but never could obtain the wonderful targets I have seen made—on paper. I now use 3 drams of coarse powder and 1 ounce of shot, and the gun performs perfectly satisfactorily. I believe with careful loading I can, by shooting 3 drams of powder and 1⅛ ounces of shot, place 240 pellets in a 30-inch circle at 40 yards. And, by the way, I would like to ask if "L. H. H." is always as original as in his last communication. It seems to me I have read the same opinion, expressed in the identical words, in "Hallock's Gazetteer." It may be only a remarkable coincidence, though. SIALIA.

BRADFORD, Pa., March 7.

Editor Forest and Stream:

I would be pleased if there were some one among your readers who will answer the following: I have a breechloading gun .12-80-7¾ that will put 175 No. 8 shot in a 24-inch circle at 45 yards, using 1¼ ounces Le Roy shot. What I wish to know is this: Is that a good shooting gun, and how does it compare with a "full choke?" I have no trouble in killing game with it, and have cut down a ruffed grouse at 57 yards, and a rabbit at 61 yards, yet persons have seen it shoot and do not call it a good one, still they won't shoot their muzzleloaders against it. Also, I have seen on paper targets away ahead of mine so that I had begun to think my gun was only ordinary.

We have plenty of ruffed grouse, and rabbits or hares, and our fall shooting was very good. One party of fox hunters, Hearty Farrar and Will Dyer, have killed sixty-five foxes in front of their hounds, and did it with .12-80-8 breechloading guns, and they rarely had a fox get away. In this section the old muzzleloader is gradually giving place to the new breechloader, and the best makes have shown their ability to hold the place they have taken.

"D. H. S.," in your last issue, may rest assured his gun can't be excelled, because, when a gun puts 53 more shot in the target than there is in the gun, I do not think it can be improved, and at 40 yards the gun puts 148 more shot in the target than there is in the gun. I used Tatham & Brother's table to find number of shot in an ounce, and of No. 3 shot it is 106.

Perhaps "D. H. S." was mistaken, if so, will he explain. SNIP SNAP.

VERMONT.

Editor Forest and Stream:

In your issue of March 6, your correspondent "D. H. S." inquires if his target as published can be excelled. Well I should say not; when a gun loaded 1¼ ounces of shot that weighs 106 pellets to the ounce (No. 3) puts into a target 280, why I don't know of any way of bettering it, as according to my figuring there would be but 133 pellets in the charge. If "D. H. S." has that kind of gun, I know a man that wants to buy it. A friend of mine in the hardware business here who is an enthusiastic sportsman and has handled guns in his business for years, says tell that gentleman that he has a fine Colt gun, a red Irish setter and a small farm to trade for such a gun. If "D. H. S." had said No. 8 instead of No. 3 his target would have seemed a little nearer my idea of a first-class performance of a first-class gun.

Now a word of information for "Backwoods." In my opinion a 12-gauge, 30 inch, of from 7½ to 9 pounds weight, is as good a style of gun as can be used for all general purposes, and a gun that will cut down a quail at forty yards every time if properly held will be found to be about as good a shooter as is necessary, or as is likely to be found. All this talk about shooting game at extraordinary distances is all fudge. Of course any gun of good shooting qualities will kill occasionally at long ranges, but to demand that a gun shall perform miracles, is unjust to the maker, and will probably result in disappointment to the shooter. If "Backwoods" wants a gun for general use on all kinds of game, I think one such as I have described will suit him, and for my own part I should prefer one of American manufacture, as in case of accident broken parts can be more readily replaced. I have a light gun that I can feel pretty certain of doing a quail justice with at from 30 to 40 yards, if I hold on the bird, but should not expect to kill many at 60 or 70 yards. It will shoot heavy shot hard enough at 80 yards to go through a duck, but the next thing is to hit said duck; possibly by shooting at a large flock, some might be killed, but I consider such ranges beyond the scope of a shotgun, and would not advise any one to strain himself or his gun in attempting impossible feats. CHIPPEWA.

SEVILLE, O., March 10.

Editor Forest and Stream:

Referring to "California" in issue of 6th inst., under the head of "The Performance of Shotguns," if you want to ascertain the true inwardness of your barrels when clean, look through them, and if you find the circles true, and that they fit each other like the joints of a telescope, *i. e.*, the lines equal distances from each other all round, your gun is "as straight as a gun barrel" if otherwise you know something is wrong. This wrinkle, perhaps, the makers may not thank me for. Take any of the cheap shop guns, and depend on it you won't find the circles as above in one among a thousand. Try it for yourself. R. P. I.

PICTON, Canada, March 9.

Editor Forest and Stream:

I think the idea in regard to properly loading shells, suggested by you, a good one, and if any one has a better way than mine I shall be very glad to know what it is I am ready to try any plan that promises to be any improvement. I use an 8¾-pound gun 12-gauge, 30-inch barrels, modified choke, chambered to take 2½-inch shells. I use two felt wads on powder, and one (felt) on shot.

A. E. B.

DODGE CENTER, Minn.

Editor Forest and Stream:

Will you ask "D. H. S." what make of No. 3 shot contains 185 pellets to the 1¼ ounce? Saying nothing of the "280" as mentioned by him in issue of March 6.

Also please tell "Ogeechee," Feb. 21, if he has a gun that with 1 dram powder and 13 buckshot kills bucks 120 yards, and wishes to know about having something done to the barrels, I should say—don't. REVIEW.

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

I have agreed with some of the letters on "The Choice of Hunting Rifles" which have appeared in FOREST AND STREAM, and with some I have not, but I like to know every one's opinion in regard to the matter, and therefore will give mine. It seems to me that with as many different rifles as are now being manufactured in the world, all ought to be suited. Just step into a gun store and there you can find everything in the shape of firearms. What will suit one will not another, and you may take the best rifle ever made and somebody will find fault with it; but let us be content with what we can find in the rifles already made.

But now comes the tug. Some like repeaters best and some prefer the singleloader. I have used for the past twelve years a single breechloading rifle for all kinds of game, from a deer down to a little red squirrel, the size being .44-caliber, 48 grains powder, 240 grains lead and 30-inch barrel, central fire. I can take the head off of a ruffed grouse every time, and for all kinds of game shooting such as we have down in old Maine I would not exchange for any repeater that I have yet seen. The .44-40 and .45-60 repeater seems to be the leading rifle among sportsmen just now, but there are points about it that I do not like, not saying a word against its accuracy, for no doubt all repeaters will shoot as fine as any kind of breechloader.

In the first place, I want a gun that after using I can pass a cleaning rod (I prefer one made of wood to all patent ones) through from the breech, and then have a good chance to look through the barrel and see when it is clean; and I don't like so much machinery to keep watch of. It gets out of order and does not always work just right. This I have seen take place with the Winchester in trying to show how quick an empty shell could be thrown out and a full cartridge placed in the chamber ready to fire. In regard to rapidity of fire, I think that any of the single breechloading rifles now in use are safer, and will do their work plenty quick enough to answer all general purposes. For a hunter that is easily excited I suppose the magazine rifle would be better, for when they see a deer they will not stop to take a decent aim, but bang away three or four shots at him, and then when found, they will find only one bullet hole in the carcass. Every one for his fancy, but I do not think we Down-Easters will need a .40-90 repeater, as we are not troubled with the grizzly or any of the other large ferocious beasts of the West. SINGLE LOADER.

MACHIAS, Me., March 10.

Editor Forest and Stream:

In your issue of the 6th inst., I find a letter from "J. L. DeH.," who is traversing ground I attempted to explore some fifteen years ago, and on having a preliminary examination made at the Patent Office, I found that earlier inventions had been there and one Gen. Cochrane of New York had patented the same thing, only he had arranged it for rifle balls, where it was not so much needed, and my experiments were with the shotgun alone.

In the experiments I made with various proportion of inner tube, I found a tube of 20 per cent. area of shell to give the best results, and the results were remarkable. Using in a 12-gauge gun, 5 drams powder and 1¼ ounces of shot, I found the recoil lessened greatly, the report changed to nearly that of a rifle, the pattern doubled, and the penetration increased 50 per cent. This was the mean of five charges from shells with inner tubes and five charges from plain shells, fired from the same barrel.

On finding my way stopped by a patent I tried to reach the same results in another way, but could not equal the results given by the shells with the tube in them.

In the latter plan, I used No. 7 Laflin & Rand OL in the first half of the charge, and No. 3 Laflin & Rand OL for the last part, using stiff cardboard and one thick felt wad over powder, and as thin cardboard over the shot as I could work there. I have used this method for years for duck shooting and am satisfied that the increased velocity and pattern of shot pays for the trouble in using two grades of powder. ING.

CANTON, Ohio.

Editor Forest and Stream:

I have been much instructed in the correspondence in the FOREST AND STREAM relating to the choice of hunting rifles. What is applicable for hunting rifles I presume will in a measure answer for target rifles. I cannot understand in all this correspondence why such a heavy charge of powder is required to do effective shooting at short range. I belong to a club of amateur marksmen who meet occasionally for recreation, and while none of our number have had much experience on the range with a rifle, and are as yet poor rifle shots, we still sometimes manage to do very fair shooting with charges much less than stated by nearly all your writers.

I use a 32-caliber rim-fire Remington rifle, and find since I have been using this make my scores have shown a very decided improvement, even with a small charge of powder. Our range is 200 yards, and we use the Union cartridge, .32 long.

Some time ago I was at the range, and running out of the .32 long, I used the .32 short at the same elevation, and made four, with an occasional five, every shot, there being no apparent difference in the score. I have seen thousands of the Union cartridges used (we have discarded all others), and have never had but one that did not explode at the first trial.

To test the rifle and the cartridge, I measured off 166 feet, and using the Union .32 short, rim fire, open sight, Remington rifle, off-hand, I placed ten consecutive shots (without any sighting or preliminary shots) within a circle less than four inches in diameter.

This might not be any "great shakes" for an experienced rifleman, but for an amateur like myself, I felt highly encouraged at making a score of 45 out of a possible 50 without the use of any improved sights, and with a charge of powder so much less than is generally used. PASSYUNK.

PHILADELPHIA, March 11.

Editor Forest and Stream:

Have carefully read communications as to "best hunting rifles," "shotguns," "express rifles," etc., and of this last allow me to say there is not a genuine express rifle made in this country (my opinion). JOHN BOYDEN.

CHATHAM, Mass., March 9.

A PLEA FOR OLD-TIME CRUDITIES.

Editor Forest and Stream:

The average reader of the hunting rifle discussion is in a maze of perplexity; for what are these desolating arms wanted? Not for purposes of war, for the country is at peace, and if she were not, with dynamite bombs exploding at the distance of five miles, and the hidden torpedo connected with electric wires, small arms, shooting bullets, need no improvements—leaving out the humanity of the thing, for in these civilized days a foe placed *hors de combat* is as good as a dead man.

Surely increased destructiveness is not wanted to kill game, for the only formidable animal in America is the grizzly bear; and from the interesting and instructive letters in the FOREST AND STREAM from sportsmen who have traversed the frontiers of the far West, and the gorges and defiles of the Rockies in search of big game, we draw the conclusion the grizzly is scarce, and hiding in the thickest chapparals; so that it is a task of infinite trouble and patience to ever come across them. One of your correspondents wrote that for years he has hunted for the *Ursus horribiles*, and ridden thousands of miles in the wild West, and has never caught a glimpse of one yet.

I hazard the assertion that any sportsman who wants a more deadly weapon than the modern breechloading rifle to meet the grizzly bear or any other animal in a fair fight, is a timid sportsman, to say the least of it. I have had no experience with dangerous game, my sole shooting being wild cattle, with a Winchester of 1876 model, but what I saw of the terrible results of the bullets showed me as plain as day, that a ball with a velocity of 1,500 feet a second striking any animal, crushes its way with such instantaneous force that it paralyzes the brute for a second or two, which gives ample time for the shooter to pump in another shell and fire. He who could not save himself from any beast with his fifteen shots, well deserves to die the death.

A cool, brave man, with a modern repeating magazine rifle, could face with safety any animal that ever walked the earth. The royal Bengal tiger, the African lion, the horned rhinoceros, the Indian elephant, nay the great mastodon itself would stand no earthly chance against a rain of balls that crushed through bone, muscle and flesh at every two or three seconds.

Look at that king of sportsmen, Gordon Cummins, who confronted in their jungles the lordly lion, and the huge elephants, with nothing in his hands but a double barreled rifle; and yet while he counted his trophies by the score, here are so-called sportsmen of the day, who, with firearms so improved, that science and art have reached their limit, are crying out for a more deadly weapon, something that will conduce to more destructive results.

The truth of the case is, that the very perfection of firearms has been a curse to this country. The more destructive the sporting weapon becomes, the scarcer the game. Had human ingenuity stopped at the muzzleloading shotgun and rifle, the plains of the West would be filled with buffalo and deer to-day, and the Atlantic coast alive with wildfowl.

The selfish race of to-day seem to desire to leave nothing for their posterity in the sporting line except the mounted antlers of the stag they killed, or the buffalo or deer robe that they were once so proud of. Fifty years from now—nay in twenty-five—there will be no shooting in this country except in favored localities held by private clubs. And the breechloader is the cause.

There are some sybaritic sportsmen—God save the mark—who love to witness the dying agonies of the game without the trouble or danger of hunting it. These men would shoot all day in a herd of buffalo, and joy in seeing the staggering form sink to earth. The more the merrier. Like the brutal populace of Spain, their pleasure is not in the final triumph of skill, patience and marksmanship, against brute cunning, instinct and wildness; but rather the delight of seeing the pouring red blood gush out fresh from the heart, crimsoning all around.

These are the class who would have a grand battue if possible, and kill, kill, kill, until not a beast of the field or bird of the air was left alive.

I expect to live to see the period when some of these sportsmen will have a battery of doublebarreled guns covering the decoys, and they a mile off in a warmly heated room with an electric wire in their hands connected with the triggers and a spy glass to their eyes, will touch off the battery, and annihilate a flock at each discharge.

With breechloading shotguns, from No. 16 to No. 4, that can be loaded and shot five hundred times an hour; with repeating rifles carrying explosive bullets that can be fired fifty-

two times a minute (see Greener, "The Gun"), there are yet men who crave something that will give still greater odds to the slayer and reduce the chance of any game escaping with its life to a minimum.

Personally, perforce, I keep up to the times and have two high-priced English breechloaders and a small armory of rifles. Yet with all my heart I wish we could go back a half a century, and return to the old muzzleloader that gave fur and feather a fair chance of life, and would not destroy everything that runs and flies in a few brief years, and force us for the balance of our lives to hang up our guns and sigh for the sport of our youth.

Another correspondent, signing himself "Dorkin," says he don't like a gun with hammers, and gives the following astounding reasons: That the hammers slip from cold thumbs; they spoil canvas covers by the chafing; bark one's knuckles on the hammers, and—oh, shades of Nimrod!—get the whistle cord and watch chain snarled up with the same.

Many an old sportsman will grin on reading this, and picture in their mind's eye "Dorkin," gotten up regardless of expense, clad in new corduroy, with embroidered whistle cord, to which is attached a silver whistle, and a big watch chain hanging pendant on the outside of his coat.

That puts me in mind of a dude sportsman I saw down at Cobb's Island about ten years ago. All the girls gathered on the porch to see him off. His valet had to get a cart to carry his traps down to the landing, where a boat lay, with Warren Cobb as commander, to carry him snipe shooting.

Arriving at the blind just off Wreck Island, Warren set the decoys, and if the sportsman was not made comfortable, it was not the valet's fault. A large camp chair was placed within the blind, and then the valet held an umbrella over his master's head to keep off the torrid rays of the August sun, and actually fanned him as the heat grew more intense. A big block of ice had been brought along, and with it a half a dozen bottles of champagne, a few of beer and a quantity of old rye, and then the fun commenced. A few young birds came up to the decoys, in spite of the strange appearance, and Warren Cobb swears that after the sportsman fired he would hand his gun to his Jeems Yellowplush to be reloaded; and, said Warren, "Bust my breeches if we didn't have a drink around over every bird that he kilt. And when the water riz and come on the blind, he makes me take him on my back and carry him to the boat, and then pack out for home."

The party must have had a high old time, for long after nightfall the trio got back, every one of them three sheets in the wind; and the spoils were only ten snipe.

The prospect for partridges in this State is, as far as I can learn, quite a good one, the birds standing the winter very well. The Virginia Legislature has passed several good laws relating to game protection, which, it is to be hoped, will have its effect. Still, no legislative enactments can keep the game from steadily decreasing; and it is a sad, yet a true fact, that every sportsman can bear witness to as regards the Old Dominion. CHASSEUR.

VIRGINIA.

SPRING SHOOTING AT ST. CLAIR FLATS.

LAST night a thunder storm swept over Detroit. To-day a southerly wind prevailed, and there are other signs that the long winter is finally approaching its end. Within a few days the first flights of ducks from the south will reach Lake Erie, the Detroit River and Lake St. Clair. Already a few pioneers have been seen passing up the river. And the duck hunters, who have no scruples against spring shooting, are getting their traps together, loading shells, and making arrangements for a sojourn at their favorite ducking resorts. Several well-known shots start on the morrow to take advantage of the first flights, and scores of other sportsmen will soon follow to the various club houses at St. Clair Flats and along Lake Erie.

Did you ever do any spring shooting? No! Well you have missed some rare sport. We won't argue as to its being the correct thing as respects the preservation of game; but it is legal in this State, and is intensely exciting.

Splendid duck shooting at this season of the year is to be had in the vicinity of the Lake St. Clair Fishing and Shooting Club's house, at the Flats. It is better at that point in the spring than in the fall. For the house is accessible only by water, and as navigation will not open for several weeks, one must journey over the ice on Lake St. Clair from New Baltimore to the club house, a distance of at least ten miles. Not many sportsmen care to do this, so the number shooting there in the spring is insignificant when compared with the army of guns in the fall.

If the weather be soft, the trip over the ice from New Baltimore is oftimes fraught with danger, and a flat bottom boat shod with runners, so that it can be pushed over the ice, is necessary for safety. But once at the club house, any one will be amply repaid for his arduous journey, and especially if there in time to meet the first flights of the ducks. For, when they usually commence, the ice is strong and the air holes are small, so, if you select an air hole of the right size, there is no chance for the ducks to decoy or drop down just out of range. They come right over the hole; and oftentimes you can shoot and kill them over the further edge of the open water from your blind.

It may be said that there are three flights of ducks. First and very soon, we shall see the redheads, and with them will come the canvas-backs. Next, in a few days after, the broadbills (or large bluebills) will come flocking in, and after that the little bluebills bring the pilgrimage to a close. And as the latter swarm into lake and river, marsh and creek, the hearts of the small boys with the Zulu guns, wax glad. The shooting lasts from now until about April 15, commencing with the redheads and canvas-backs, and winding up with the little bluebills. So you see, by being on the spot ready to welcome the vanguard, you not only get better shots but the better birds as well.

It is pleasant sport. Putting your decoys, gun, ammunition, etc., into a duckboat shod with two low runners, you push or drag it over the solid ice to an air hole or bit of open water, perhaps some seventy yards across. Launching the boat, you put out the decoys in the water, which being accomplished, you push the boat some distance off upon the ice. Then, if not already appareled, you don your suit of white, and the duck must be wary indeed who discovers you upon the snow-covered ice. Often the white suit consists of a night cap and night shirt drawn over your regular clothing, and they answer the purpose well. Thus garbed in white, if you stand motionless upon the gleaming snow, the circling ducks will rarely see or fear you. The weather does not chill as in the fall, the reason being, perhaps, that a long winter has inured you to the cold. You sit in your blind, which is formed of ice and snow, or, better yet, of boards painted white, with never a chilly thought.

As for the shooting, I cannot describe it. If you are a good shot, virtue shall have its own reward. If but a passable shot, you can burn lots of powder and bag a goodly number of birds, but you will be ashamed to tell the number of shots you fired. Large bags are made in the spring shooting. Last spring a number were reported of over one hundred redheads to a single gun per day. That is too many. I should not care to be able to boast of such a bag.

One advantage of the season is that it is not necessary every little while to pick up the dead birds lest they float away. Again, as noontime comes, you can walk to the club house for a hot dinner. And who can appreciate a hot dinner more than our duck-shooting brother? All other classes of sportsmen, I verily believe, must yield the palm to him.

Toward night you pull in your decoys, all being fastened to one line, pick up the dead birds which have drifted to the edge of the ice, and, all told, there is a heavy load in the boat that you push back to the house. Then comes the jolly supper, the most enjoyable meal of the day to any sportsman. Then the after supper cigar or pipe, and the after supper chin music follows, as a matter of course. Then guns are cleaned, and then, perhaps, a game of cards, and then to bed for restful sleep.

Not many canvas-backs are shot at the Flats. They will not decoy readily, like redheads or bluebills, who quickly head for the open water upon which the decoys are sitting.

Any one who makes the trip across the ice from New Baltimore, should not be limited to a few days' time. He cannot count upon getting back to the mainland in the same manner. Indeed, it is more than likely that the ice will break up suddenly, and he will be obliged to wait for the first trip of the river boats before he can get home. Such unforeseen (?) occurrences seem to be rather common to certain enthusiastic sportsmen I know of, who run up there "for just two or three days, you know," and who "couldn't get back for two or three weeks, you know."

I happen to remember, just at this moment, a pleasant episode in the experience of a popular hunter at the Flats. He is a representative Canadian Frenchman, noted for his knowledge of the haunts of the black bass and the wild duck. Owning a house near the Lake St. Clair Fishing and Shooting Club, our jolly Frenchman thought it would be a great scheme, some winters since, to move his building across the ice to Johnson's Channel, a distance of good ten miles; and his friends and patrons in the club approved the plan and subscribed the necessary funds, for Johnson's Channel, be it known, is both a favorite angling place for black bass as well as a fine duck shooting locality, and many were glad that soon they could eat and sleep over there, where then there was no house. Our Frenchman was sure of much patronage. He began to discount his future riches, and great was his talk. With the providence of his race, he tarried. The days went by. His friends urged him to move while he had nothing else to do, but still he tarried.

At length he went to work; he cut his house in two parts, the whole being too heavy to move at once. With a couple of teams of horses drawing one half he finally started, four or five other Frenchmen aiding in the work, and each one of them bossed the job. In two days they got the first part safely to the selected site, and, leaving it there upon the ice, went back for the rest of the house. All were jubilant at their grand success. Each claimed the honor of engineering the mighty work. Then they started with the second half of the house, and all went well for two or three miles; and then the south winds blew, and the warm rains came, and there were signs of an immediate breaking up. Then there was hurried running to and fro, and the air was blue with strange oaths peculiar to our Frenchmen. Verbose despair and excitement reigned supreme. Strange, unknown sounds similar to the Tower of Babel noise, were heard twenty miles away. Prayers were profusely uttered, but the ice melted still, and the south winds blew, while the vehement Frenchmen and the horses hastily pulled the section of the house back to the shore. The ice went out. Our Frenchman had a split residence—half on the old site and the other half at Johnson's Channel. Peace to the remnants of the Johnson's Channel half! It was shattered by the ice and the storms and the floods.

Just now the owners of houses and those who have made costly improvements at the Flats are on the anxious seat; the inclosed clipping from the Detroit *Free Press* explains the reason why. Many thousands of dollars have been expended there in buildings, docks, dredging, etc., within the last few years. It was supposed that a squatter's right would hold good for improvements made upon apparently worthless land, or rather water. Land there is none to speak of, except what has been dredged up at great expense. The houses are built upon piles as a rule, and it will be a delicate question to decide who has a right to titles and also to properly describe the area named. It can hardly be called land, water, or marsh. However, as the Flats are daily becoming more valuable it is to be hoped that some decision will be promptly reached, settling the question—who do they belong to? DELTA.

DETROIT, Mich., March 12, 1884.

The article above referred to is as follows:

WASHINGTON, March 12.—Mr. Maybury's bill to give the title to Harsen's Island and Dickinson's Island to the respective heirs and grantors of Harsen and Dickinson is found to cover claims to about all the hunting and fishing grounds of the St. Clair Flats. Don M. Dickinson, of Detroit, is one of the heirs. An outline of the bill was telegraphed Monday. It is learned to-day that the claimants urged the French custom of granting title to the center of the channel, and set forth that the tracts in question when passed over to British domination after the Wolfe and Montcalm campaign of 1754 were reorganized by the treaty stipulations to follow the French custom. The boundaries as given in the two bills comprise the thousands of acres of alluvial land, submerged accretions and vast fields of bulrushes from the ship canal on the south to the mainland on the north and up the usual ship channel of the St. Clair to the head of the island at Algonac. It takes in all the club houses, the Star Island Hotel, the summer villas, and hunting and fishing cabins on land or water. On the North, Middle, Eagle, or South Channels, Anchor and Muscamoot Bays and Lake St. Clair out to deep water. All the habitations of the Little Venice at the mouth of the river go with it.

Members of the St. Clair Hunting and Fishing and North Channel Clubs now here express alarm at the all-comprehending terms of the two bills. Years ago no claim was made to the lands, as they were supposed to be valueless. The general government never caused them to be surveyed, and the only records on file here are those of the lake survey which simply show the shore line and give the depth of water. Now, however, since people from all over the world begin to resort to the St. Clair Flats to hunt and fish, or to seek recreation in the summer, speculators are beginning to look with eagerness on the tract. One of two results are likely to come of the agitation of the subject before Congress. The bills, if passed, will probably be amended so as to reopen the National Boundary Commission of 1822, which will be charged to see in whom the title lays. If not, the control of the whole submerged and bulrush-covered region will be assumed by Congress with a view to making the district a sort of national hunting and fishing ground. If the latter project, which is already formed, should be received with favor, the idea is to allow the right of location where improved by buildings, to lease upon nominal terms privileges for building, and allow freedom of hunting and fishing under such regulations as the laws of Michigan for the preservation of fish and game may direct, or such other regulations in the nature of co-operating with the Canadian game laws as may be thought best.

There are scores of members of Congress who have visited the region—who pronounce it the greatest place on the continent for fish and water fowl—who are in favor of taking it under national control for the purposes mentioned.

Detroit people, who find their best recreation in a summer's day visit to the Flats, should not be slow in asking their senator and representative to take action in this matter. It is as much of a resort for the people as is their island park.

ANOTHER TAXIDERMIST SPEAKS.

Editor Forest and Stream:

Allow me to express my hearty appreciation of the views of your correspondent, F. J. Tingley, in your admirable issue of March 13, page 127. Having been an earnest student of zoology for more than forty years, and humbly instrumental, I hope, in doing away with the old-fashioned "fast day massacres" of all our small birds and mammals in New England, I am constantly laboring to assist all lovers of natural history and earnest sportsmen. We believe that the comparatively few taxidermists and naturalists of our Eastern States should be unrestricted in their pursuits, save by the general conviction that breeding animals should always be spared except in cases of very great emergency. We have attempted in Massachusetts to protect by laws (which require annual tinkering, however) the birds and other animals which serve the farmer by destroying herbivorous insects, and are steadily laboring toward this end, but we license all avowed students of nature, and even those who make taxidermy a livelihood, at a mere nominal fee to procure at any time of the year such material as they may require. And we hope that this liberty in the pursuit of scientific knowledge will never be done away with in any part of the United States. As you very justly say in your foot note, we are killing the birds in their migrations northward. That is to say, when they are unpaired, have no young to protect and care for, and are in their finest plumage for the use of the taxidermist. I suppose few of your innumerable readers have ever considered the very limited number of professional naturalists, taxidermists and other students of zoology or animal life that exist at present in proportion to the vast army of persons of other vocations. A glance at the figures of your various city directories show scarcely one in two thousand—at least—who is likely to assist in the extermination of our beloved native birds and little mammals.

WORCESTER, Mass., March 14. F. G. S.

SUMMER WOODCOCK SHOOTING.

WOODCOCK are here in fair numbers, and as the season draws near, and the law allows them to be shot, perhaps it will be well to once more agitate the matter concerning summer woodcock shooting.

Last July, in company with a friend, we started for a fine piece of summer ground, and, as we expected, soon had a staunch point from our dogs, and on flushing the bird we killed it—a nice female. Going on some distance my friend's dog made a staunch point, and upon going up to her we thought it queer no bird could be found. All this time the bitch was holding her point nicely, but upon examining the ground in front of the dog's nose we found three young woodcock about a week old, which goes to prove what slaughter it really is to shoot woodcock in July.

A woodcock's flight in summer is slow and awkward, so much so that a boy who can keep from shutting both eyes finds it no very great thing to bag his bird in quite thick cover.

Fall birds, however, fly swifter, and it takes a fair shot to make a decent bag where underbrush is any way thick, and besides, just think of how much more you enjoy shooting a fall bird, with its slick overcoat on, than to drop a poor, weak summer bird, half undressed.

If New York, New Jersey and Pennsylvania would pass laws prohibiting the shooting of woodcock until Oct. 1, we would have splendid fall shooting; but as the law stands now, we see the woodcocks' numbers fast growing less. The shooting of woodcock in the summer, too, has something to do with the diminishing ranks of the partridge. I am sure all the sportsmen would be contented in peppering clay-pigeons during the summer months, instead of banging away at weak woodcock. Such, at least, is the opinion of

MADISON, N. J., March 14. 16-BORE.

A HINT TO FLICKERERS.

Editor Forest and Stream:

I voted on the "Flickerings" and, aside from the fact that my vote polled well up toward the winning list, I derived much pleasure from reading the "Flickerings" for their own sake. But also I fear you have killed the goose that laid the golden egg. Judging from the length of the stories published since the vote, very few will have the fortitude to go through ninety-six of them in case of a vote for next year. And further, I think a sportsman who would attempt yarns of like length beside a New Brunswick camp-fire, would have a lonesome time of it. I appreciate the difficulty you are in. In view of the prospect of there being another vote next year, all sorts of mouldy old stories will be sent to you by all sorts of contributors, who, of course, will all feel sure of first prize, and who will feel aggrieved if you exert the ordinary prerogative of an editor in choosing matter for the waste basket. My opinion only will go for what it is worth, but can't "Flickering" contributors boil down this matter more? And it also seems to me that to restore the naturalness of the camp-fire column and take away the mercenary aspect, you will have to abandon the prospect of a vote for the current year. ARBY.

NEW BRUNSWICK, Canada.

THE PROPOSED MASSACHUSETTS LAW.

SECTION 1. It shall be unlawful to wilfully take or kill any woodcock, or any ruffed grouse, commonly called partridge, or any pinnated grouse, commonly called prairie chicken or heath hen, or any quail, between the 1st of January and the 13th day of September following.

Sec. 2. It shall be unlawful to buy, sell, offer for sale, or have in possession any woodcock, or any ruffed grouse, commonly called partridge, or any pinnated grouse commonly called prairie chicken or heath hen, or any quail between the first day of January and the 15th day of September following, whenever or wherever the birds aforesaid may have been taken or killed. Except that any person, firm or corporation, dealing in game, may buy, sell, or have in possession quail and pinnated grouse, also deer, hare or rabbit, in January, February, March and April, if not taken or killed, bought or sold contrary to the provisions and statutes of Massachusetts, or any other of the United States or territories from which said birds or animals are, or may have been received.

Sec. 3. It shall be unlawful to wilfully take or kill any wood or summer duck, black duck, or teal, between the first day of April and the 15th day of September following, or within said time to buy, sell, offer for sale or have in possession any of said birds.

Sec. 4. It shall be unlawful to wilfully take or kill any plover, snipe, sandpiper, rail, or any of the so-called marsh, beach, or shore birds, between the first day of April and the 15th day of July following, or within said time to buy, sell, offer for sale, or have in possession any of said birds.

Sec. 5. It shall be unlawful to wilfully take or kill any wild passenger pigeon, or to take, kill, or have in possession, any crane or heron, bittern, herring gull, tern, sea swallow or mackerel gull, between the first day of April and the 15th day of September following.

Sec. 6. Any person violating Secs. 1, 2 and 3 of this chapter shall be punished by a fine of $20 for every bird or animal taken, killed, bought, sold, had in possession, or offered for sale, in violation of the provisions of this act, and any person violating Secs. 4 and 5 of this chapter shall be punished by a fine of $10 for every such offense.

Sec. 7. Whoever takes or kills any undomesticated bird not named in the preceding sections, except birds of prey, crows, crow blackbirds, English sparrows, jays, wild geese, and such fresh water and sea fowl as are not named in the preceding sections, or wilfully destroys or disturbs, or takes a nest of eggs of any undomesticated birds, except birds of prey, crows, crow blackbirds, English sparrows and jays, shall be punished by a fine of $10 for each such offense; provided that any person above the age of twenty one years having a certificate from a committee of not less than three persons who may be appointed for the purpose of granting such certificates by either the Boston Society of Natural History, the Worcester Lyceum and Natural History Association, the Massachusetts Agricultural College, or Williams College, to the effect that said person is engaged in the scientific study of ornithology or collecting in the interest of a scientific institution, may take the nests and eggs of, or at any season of the year take or kill, any undomesticated birds, except woodcock, ruffed grouse (commonly called partridge) or quail in the close season, or their eggs; but in order to obtain such certificate the applicant must give a bond in the sum of $200 to the committee to whom he makes application for said certificate, said bond to be forfeited in the interest of the commonwealth upon conviction of having killed birds, or taken their nests or eggs, for other than scientific purposes, and shall further present to the committee an indorsement from the mayor of the city or the selectmen of the town where said applicant may reside, to the effect that he, or they, believe him to be a person duly entitled to hold such a certificate. And it is further provided that the said certificate shall not be valid until indorsed by at least two of the Fish and Game Commissioners, and the said Commissioners may, in their own good judgment, exempt and prohibit the shooting of any one or more species of the birds of Massachusetts.

Sec. 8. Whoever takes or kills a gray squirrel, hare or rabbit, between the first day of March and the 15th day of September following, shall be punished by a fine of $10 for every such offense.

Sec. 9. Whoever at any season of the year takes, kills or destroys a game bird, hare or rabbit, by means of a trap, net or spring, or by the use of a ferret; or whoever, for the purpose of taking or killing a game bird, hare or rabbit, constructs or sets any trap, snare, net or spring, or uses a ferret; or whoever shoots at or kills any wildfowl, or any of the so-called shore, marsh or beach birds, with or by the use of battery, swivel or pivot gun, or by the use of a torch, jack or artificial light, shall be punished by a fine of $20 for every such offense; provided, the provisions of this act shall not apply to the trapping or snaring of ruffed grouse, commonly called partridge, or hare or rabbit, by owners of land upon their land, between the 15th day of September and the first day of January following.

Sec. 10. Whoever, with or without a dog, hunts, chases or kills a deer, except his own tame deer kept on his own grounds, shall be punished by a fine of $100 for every such offense; and any person may kill a dog found chasing or hunting deer, if the dog is used for that purpose with the knowledge or consent of his owner or keeper.

Sec. 11. The possession of any deer, or of any of the birds or animals mentioned as protected in sections 3, 4, 5, 7 and 8 of this chapter during the time in which the taking, killing or selling of the same is forbidden, shall be *prima facie* evidence of the unlawful killing of the same.

Sec. 12 Whenever the owner of any land shall conspicuously post on the same notices that shooting or trapping thereon is prohibited, it shall be unlawful for any person to enter upon such land for the purpose of shooting or trapping without permission of the owner thereof; and the presence of any person not having such permission with the implements of shooting or trapping, shall be taken as *prima facie* and presumptive evidence of wilful entry within the meaning of this act. But nothing herein containep shall be construed as conflicting with the provisions of section 11, chapter 91, of the Public Statutes.

Sec. 13. Game artificially propagated and maintained upon lands posted as above shall be the exclusive property of the person propagating and maintaining the same, but such person shall not sell such game for food at seasons when their capture is prohibited by law.

Sec 14. All payments or compensation for game or birds, sold in violation of law shall be held to have been received without consideration, and against law, equity and good conscience. No action of any kind shall be had or maintained in any court for the price of any game of either this or such other State, for the purpose of being brought into this commonwealth to be here kept or sold in violation of such law, under such circumstances that the vendor would have reasonable cause to believe that the purchaser entertained such illegal purpose; and all bills of exchange, promissory notes and other securities for, and evidence of, debt whatsoever, given in whole or in part for the price of game or birds sold in violation of this chapter, shall be void against all persons holding the same with notice of such illegal consideration, either direct or implied by law.

Sec. 15. Whoever offends against any of the foregoing sections of this act, to which a penalty is not applied, shall be punished by a fine of $20 for each offense.

Sec. 16. The Commissioners of Inland Fisheries shall be Game Commissioners also, and their authority, personally or by deputy, shall extend to the protection and preservation of birds and animals in like manner as to fishes.

Sec. 17. It shall be the duty of every officer qualified to serve criminal processes to arrest without warrant any person whom he shall find violating any of the provisions of this act, and bring such offenders before a magistrate. Any officer neglecting or refusing diligently to enforce the provisions of this act, upon information and complaint, shall be punished by fine or imprisonment, or both.

Sec. 18. All fines accruing under this act shall be paid, one-half to the complainant and one-half to the city or town wherein the offense is committed.

Sec. 19. Chap. 92 of the Public Statutes, chap. 199 of the acts of 1882, chaps. 36 and 169 of the acts of 1883, and all acts and parts of acts inconsistent herewith are hereby repealed.

Sec. 20. This act shall take effect on and after May 1, 1884.

The bill reported by the Committee on Agriculture of the Massachusetts Legislature is very satisfactory to those most deeply interested in fish and game protection, and the preservation of song and insectivorous birds in that State. The clause forbidding the buying and selling and having in possession game when unlawfully killed either in Massachusetts or any of the States or Territories of the United States, is a good one. It is the strongest step yet taken toward helping other States in fish and game protection. The marketmen or others who have objected to this clause, saying, "it will kill our trade," have simply convicted themselves of having been doing, and desiring to continue in an unlawful business, beneficial to themselves only, but detrimental to the whole country.

That provision of the bill which requires those who would take birds and eggs under the name of scientific research to give bonds in the sum of $200, is admirably designed to put the power to destroy song and insectivorous birds out of the reach of irresponsible persons. The clause also further provides that although permission may have been granted by an institution of learning to take birds and eggs, yet it shall not be valid till indorsed by the Fish and Game Commissioners. These Commissioners may also exempt altogether the killing of any of the birds of the State. The clause compelling officers to arrest without warrant persons found violating the game laws, is what the Massachusetts Fish and Game Protective Association has long struggled for. Its members have always found great difficulty in procuring warrants in districts remote enough to be the home of game birds. Section 12 of the proposed law empowers the owner of lands to protect the game on such land at all times by properly posting. This provision is believed to be equitable. It was asked for by the farmer, and not opposed by the friends of game protection.

Altogether the proposed law is a powerful one. It is believed to be very likely to become a part of the statutes of the commonwealth. SPECIAL.

HARD WEATHER FOR THE BIRDS.—We have just had a storm that will no doubt kill the grouse that escaped being shot or snared. A rainstorm which lasted several hours and froze as fast as it came, left trees and bushes encased in ice three-fourths of an inch thick. No grouse, unless they had a bill manufactured to order, could pierce this mass of ice. Their food might as well be locked up and the combination forgotten. It is now an impossibility for these birds to get buds or leaves. It has cleared away cold, and the prospect is fair that the trees will be robed in ice for a day longer at least. What can these birds live on? The snow covers the ground, and now their only hope is completely destroyed. It certainly seems strange that our finest game bird has so many enemies. Owls, hawks, skunks, foxes, weasels, squirrels, ticks, and last, but not least, man with his deadly snare. Now, with all their other troubles, their food in a condition that is as impossible to get as it would be to get nourishment from a barbed wire fence. No wonder grouse are scarce; are there any birds that fly that have more enemies? If there are, they should have our sympathy without delay. We shall at no distant day use clay grouse, unless something is done to protect this noble bird from being snared. The law now allows a man to snare on his own land, and privilege to snare is rented to the highest bidder. We have the greatest respect for the farmer, and certainly do not think this law is just as it works now. The usual howl is, the "kid gloves" want all the birds. I do not believe that the average has been one grouse a day for any sportsman in this city during the last season. One man who owns a farm sublet the privilege to snare on his land, and received one pair of grouse each morning. Cannot some of your readers let us know how this ice storm left the grouse (dead or alive) in their section. Pine grosbeaks, bluebirds, snow buntings, song sparrows, tree sparrows, purple finches, ruby-crowned kinglets, robins, were here before this storm. It must be hard for cedar birds, purple finches and pine grosbeaks to get their food now.—FLICK FLICK (Hartford, Conn., March 8).

GAME IN MISSISSIPPI.—*Editor Forest and Stream:* As it has been quite a while since you heard from "Davy Crockett," I will let your army of readers know how hunting is down here. During the severe winter, which we hope has just passed, game, such as ducks, quail and rabbits, have been very plentiful, with now and then a wildcat or a wolf pitched in for a counter. A party of half a dozen went out a mile or two from here during one of the late snows, and bagged over 300 rabbits. In a large yard in the heart of the town—not more than one hundred yards from the court house—some boys killed seven rabbits in the snow; the yard has a large number of forest trees in it, besides many small evergreens and rose bushes. I talked with a gentleman from South Lake, twelve miles southwest of here, last week. He told me he did not shoot ducks by number, but by the acre, having killed all he could back the day before, at three shots. A gentleman living about three miles from town has killed three large wildcats this winter, and says he is just waiting for me to join him to catch the "boss cat" of the brake. He has some splendid dogs, and when they start a cat, all you have to do is wait until it makes a circle, and go near where it has once passed, sit down and be quiet and you can have a wildcat come sneaking along within ten feet of you. Three large wolves were seen crossing a public road not a mile from town, in the broad light of day, not more than three weeks ago. The small boys are shooting robins in the meadows around town now, especially after the birds have become intoxicated on china berries, as is the case when they eat too many.—DAVY (Sardis, Miss., March 8).

SNARING ON LONG ISLAND.—I think Wm. N. Lane's article in your issue of March 6 is about the "last straw." If State Protector Whittaker takes no notice of such violations of the law, whom have we to apply to for the protection of game? I hope this article will so arouse the sportsmen and others who desire the law respected, as to compel the performance of his duties by our game protector. If he refuses, what is the proper remedy? The writer of this hopes to see some one having authority to enforce the laws give Manor and adjoining stations his special attention. I am credibly informed that over two thousand partridges were sent from the above station alone in about ten weeks, and all of them snared. Would like, if the bill now before the Legislature, making the open season for partridges the same as for quail, so far as regards Suffolk county, meets your approbation, to have you lend it your powerful support, and oblige all whom I have conversed with.—C. (Manorville, Suffolk county, March 10). [Our correspondent must remember that the game protectors' salaries are very small, and that they are allowed little or nothing for expenses. We should like to see this subject thoroughly agitated.]

WASHINGTON NOTES.—Washington, D. C., March 15.—A dispatch from the local gunners at Havre de Grace to the Philadelphia owners of ducking outfits last Thursday, that a flight of canvas-backs and redheads had come on, started many of the sportsmen of the Quaker City to the flats. But the rain which visited the country interfered greatly with the comfort of shooting, although fowl were plentiful. I have learned while here at Washington that similar flights of ducks have come to the different grounds in this section. This will be doubtless the last arrival of ducks previous to the general spring migration, and we will no doubt have more open and springlike weather hereafter. Snipe have begun to show themselves in the meadows below Washington, and bunches of five and six together were seen to-day, but the birds were wild and uncertain in their actions.—HOMO.

THE DEADLY MINK.—Cold Spring Harbor, N. Y., March 15.—One night this week a mink killed my entire flock of wood-ducks, fourteen in all, and carried them off. The next morning we found ten of them in a pile of refuse wood under the fish hatchery, with their necks torn, and in three cases the heads off. Two terriers started the mink from the pile, but it escaped in the loose stone foundation, but was captured alive in a trap at night, when the dogs shook some satisfaction out of it, in the absence of Mr. Bergh. The birds had paired and a fine flock was anticipated. I had written to all the sportsmen and market gunners, whose address I could get, for green-winged teal and other beautiful wildfowl for domestication, and have promise of some, which fortunately had not arrived. A pair of Chinese mandarin ducks ordered from France would undoubtedly have gone also, as I have no doubt that the beast would have killed a hundred ducks had they been in the little 6x12 house. Of course I have "covered the well since the calf was drowned," and am sadly in want of more birds to breed from.—FRED MATHER.

THEY STOPPED IT.—The Kent County Sportsmen's Club, of Grand Rapids, Mich., secured the arrest of F. J. Dettenthaler on the 26th of February, 1884, for selling and exposing for sale wild game out of season. His defense was that the birds were not killed in Michigan. They were bought in St. Louis and killed in Tennessee. But we gained our case and stopped the sale. Our law, as now worded, proved too much for the pettifogging efforts of both bar and bench. This shows again the importance of having all laws so worded that they cannot be misconstrued. If language is capable of misconstruction, it will always get it in court. All laws are too wordy and ambiguous, and this is especially true of game laws. Bills for legislative action are too often drafted or amended by lawyers for the express purpose of leaving loopholes for the defense and to encourage litigation. This can and should be avoided by wording them so that they can have but one construction.—OIKOI (Grand Rapids, Mich., March 8).

GAME IN TEXAS.—Our plover shooting opens soon, and depends largely upon the amount of rain falling between this and May. The pot-hunters here destroy more antelope, deer and turkeys than they are worth, in the teeth of our statute made to protect these animals *ferœ naturæ*. Wagons loaded with turkeys killed on their roosts are hawked about the streets here, at the pitiful sum of 25 to 60 cents each. Every kind of duck can be found on the upland lakes here that are found on the prairies of Western Texas and on the Staked Plains. They give our running streams a wide berth because of the alkaline waters.—P. (Colorado, Texas, March 10).

NEW YORK.—Barre Center, March 18.—Weather very cold and stormy. Was out in the woods yesterday and flushed a woodcock. There are a great many partridges left over in the swamps south of here. I have not seen any snipe yet, for which, by the way, we have the best spring shooting in Western New York. We have fine duck shooting in the spring, but none in the fall, as the marshes dry up. We are very much opposed to the passing of any spring law, for we get no fall shooting here. The birds only stay a few days in the spring, and if they change the law we shall have to lay by our guns.—H.

MONROE COUNTY SPORTSMAN'S CLUB.—Rochester, N. Y., March 7.—The following officers were elected for the ensuing year by the Monroe County Sportsman's Club, at the annual meeting last night: President, M. M. Hollister; Vice-President, James H. Brown; Secretary and Treasurer, L. A. Pratt. Committees were appointed as follows: Finance—H. B. Hooker, Edmond Redmond; Vigilance—G. W. Crouch, Jr., Homer Jacobs, H. H. Fleischer; Bird—J. H. Brown, H. B. Hooker, Frank Chaffey. Treasurer Pratt's sixteenth annual report shows $377.05 on hand and no debts.—EDMOND REDMOND.

DUCKS AT ONEIDA LAKE.—Hon. Max B. Richardson and our President, O. S. Osterhout, have just returned from a trip to the wild duck resort at Oneida Lake. They did not forget to take their breechloaders along. They report having a very pleasant time, although the ducks are not as plenty as they were a week or ten days ago.—DAN (Oswego, N. Y., March 11).

WILD TURKEYS NEAR WASHINGTON.—A prominent sportsman of the capital, on whom I can depend, tells me to-day that wild turkeys are yet quite numerous within ten miles of the city. Few are killed, however, owing to the difficulties the rocky and rugged nature of the ground place in the way of successful hunting.—HOMO.

WISCONSIN.—Rosendale, March 5.—Our winter has been a severe one, but the pinnated grouse have come through so far all right; ditto ruffed grouse; but what few quail there were have perished, as it was impossible to care for them in their scattered localities.—S. B. D.

COLORADO.—This is one of the finest game countries I was ever in. Deer, elk and antelope without numbers, many bear, and in spring and fall myriads of geese and ducks. I shall try and send you something very soon about this region.—F. D. G. (Hayden, Routt county).

GRAY SQUIRRELS PROTECTED IN CONNECTICUT.—Only one game act has passed the Connecticut Legislature during the past winter. This was a bill to protect the gray squirrels, and permits them only to be killed between Oct. 1 and Jan. 1.

COLORADO.—Denver, Feb. 20.—Jack rabbit hunting is great sport here now. Geese and ducks have made their appearance to-day. I have seen a large flock of geese flying very low.—I. H. S.

MR. HEATH.—In speaking last week of Mr. Heath's "burst guns" photograph, we stated that he was "with J. C. Grubb & Co." We should have said he can be addressed in care of that firm.

TO F. M. P., NEW YORK.—If this correspondent will write to E. T. Sepe, Nottoway county, Va., he can probably obtain the information he desires.

MICHIGAN.—Linden, March 1.—Quail seem to have stood the hard winter very well in this section.—W. H. J.

BIRDS MOVING.—Heard the first flock of geese going north.—C. B. (Davenport, Iowa, March 18).

MEN HAVE NO RIGHT to expose their families to the risk of being thrown helpless on the world, when they can prevent it at small cost by taking a policy in the Travelers, of Hartford, Conn.—*Adv.*

Camp Fire Flickerings.

"That reminds me."

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AN early hour of a morning in the spring of 1876 found a clerical party of four, including the writer, on their way over a ten-mile drive to the L— Reservoir on a fishing excursion. The waters were safely reached, the weather was all that could be desired, and our fishing success and sport were most promising, until our boat struck a hidden log and there stuck. To dislodge the skiff was now the work before us. The writer had the oars, Bro. E. got a "purchase" with a third oar on the log, and the other brethren were to rock the boat. "Now, boys," cried Bro. E., "all together!"

Well, although the fishing of the good brother out of the water was but the work of a moment, not a hair of his reverend head came up dry. By the way, the brother was not of the Baptist persuasion, and he always regarded his involuntary immersion as a disaster. We now made use of him to lift the skiff from its accidental moorings, which he was enabled to do by standing in the water on the log. We then hastily landed him, and he at once stripped himself to the skin, and, donning a linen duster, loaned him by one of the party, proceeded to wring out his various articles of clothing, and spread them upon the grass and bushes to dry. This done, he wrapped around him a blanket that had served as a cushion to one of the wagon seats, seated himself with some newspapers, and endeavored to make himself comfortable. In the meantime the rest of us had resumed our fishing.

In the course of an hour or so we heard a yell, and then a series of excited cries, "Hoi, there!" Looking up, it required but a glance to take in the whole situation. A six or eight weeks' old calf had got hold of the unfortunate man's pants, and, in a playful way, was making off with them. Throwing off his blanket, and hastily stepping into his shoes he started in pursuit, but the faster ran the parson, the faster flew the calf; the former's buttonless duster—well, to say the least of it, it was a poor apology for a covering. But there was an end to the painful scene as both disappeared behind a distant thicket.

I think it was the work of the devil, when, months after, while the aforesaid Bro. E. was occupying the pulpit of the writer, there flashed before the mind of the latter the spectacle of a nude, flying preacher, racing after a skipping, bawling calf, with a pair of breeches flying from its mouth like a streamer. The recollection threatened, for an instant, to produce some sort of atmospheric explosion which, whatever might have been the effect upon the congregation, would doubtless have blown up their pastor. He escaped the imminent peril, but the inward sufferings of that moment, and the outward chills and cold sweats, were his reward for letting the devil get that momentary advantage of him. If the reader can but catch the moral here, the writer will not rue giving this truthful sketch to the readers of FOREST AND STREAM.

HEWILL.

Sea and River Fishing.

FISHING RODS AND DOWELS.

I AGREE with Mr. H. P. Wells, whose letter appeared Feb. 21, on one point, that is, that a rod is best in one piece, but this is impracticable, owing to the difficulties of transportation. To remedy this, get a two or three-joint rod spliced, and abolish the dowels and ferrules. With a little practice it can be put together almost as quickly as a ferruled rod, and even if it does take a minute or two longer; why trout do not require breechloading rods to catch them with before they move off. If the splice is inclined to slacken, dip it into the water and it will get tight enough, but a rod properly spliced will not come apart. I have used one and would not want a better, and never had it separate while fishing.

The best fly-fishing in Canada is in my vicinity, and the rods most used are three-joint with butt of ash; joint and tip of lance wood with only the tip spliced. A good butt will not break at the ferrule, unless subjected to extremely rough usage. A good serviceable rod twelve or thirteen feet long in three pieces as above, will take a half inch counter ferrule three and one-quarter inches long on the butt, with a dowel one inch long, and will weigh about twelve ounces. With this rod a good fisherman need not fear a smash-up with a seven pound two-ounce fish, or a twenty-pound salmon. Tarpons are of course excepted. The style of rods used south of the line 45° seems to tend to extreme lightness and fancy get-up, all very pretty, but unserviceable. A man who cannot fish all day with a sixteen-ounce rod must be weak indeed. These light rods had a run here, but now fishermen are returning to those I described above.

The ferrule Mr. Wells mentions as only holding at the top must be one too much tapered. A rod with properly tapered ferrules and well-fitted dowels feels more like a rod in one piece, and much stronger than his with the very short counter ferrules without dowels. This short ferrule will work loose, and burst open with a sudden strain coming on it. A rodmaker, who is a practical fisherman, told me that he has repaired rods innumerable, and never came across a doweled ferrule broken. And no cemented ferrule or metal dowel end is secure; they must be pinned to give satisfaction. Mr. Wells's experience of smashes must have been frequent and terrible, perhaps owing to cheap material, and he does not seem to possess much genius for emergent repairs. No good fisherman will lose his fishing by breaking his rod, unless perhaps it has been made into match wood by a cart wheel passing over it, or some such accident. Even then he would cut a rod in the bush, and catch as many fine trout as our friend who has not been so unfortunate.

If the joint breaks below the ferrule, and there is nothing at hand to bore a hole for the dowel, cut off said dowel and get a new piece on returning to civilization. If Mr. Wells's joint breaks above the counter, the counter would be too large to move further up on the piece, that is, if the rod has been properly made and the ferrules and counters not sunk into the wood.

Get a rod made of the best of wood and fittings, pay a reasonable price for it, and your expeditions will be enjoyable. A cheap fishing rod is like a cheap gun, most unsatisfactory, and often the dearest in the end.

P. Q., March 6, 1884. MONTMORENCI.

Were it not that the inclosed communication formulates the current objection to the short dowelless ferrule, it would call forth no reply from me.

It is the standing and only objection of those who still favor the doweled ferrule, and if answerable, it should be met.

This objection has one weak point about it. *It is absolutely devoid of truth.* What man who forms his judgment on the merits, and not from prejudice—and it is only to such that it is worth while to appeal—will for a moment think of taking a poorly fitted dowelless ferrule of inferior material (when perfect fitting and good material are easily to be had), as a standard from which to form a true opinion of its merits. Would the writer of the above think it fair play should a visitor to his country judge its inhabitants from the most debased of the population; and declare that all were of that stripe, and that the people of Canada were the scum of the earth? I think not. And, as he would justly protest against such an expression as an outrage, so do I protest against his conclusions and for the same reason.

Besides quite a number that I still retain, there are some dozen or more of rods of my own make in use, presents to friends. The ferrules of all these are short and without dowels, and all made from German silver tubing drawn inside and out. Never in twelve years or more of my own experience, nor I believe in that of those using my rods, has either a ferrule split or a joint thrown apart. And yet I am but an amateur maker, a professional man without mechanical training, resorting to rod making merely as an amusement. It stands to reason that a trained mechanic could do better work. Therefore we have not here the best possible either of work, or material, as a criterion of the merits of the simple ferrule.

These rods have not been used solely against the small fish of the ordinary mountain brook, but much more largely in those waters of Maine where, I believe, it is admitted that the American species of brook trout attain a size not elsewhere found, or, at any rate, only in the Nepigon River of Lake Superior.

In an article in reference to the best color for leaders, which appeared in your issue of Feb. 7, I said: "With thinner gut than this, last September, a friend fastened a trout of 4¼ pounds (weighed to the ounce, and not guessed at) in a dangerous place, and not only held him without giving an inch of line, but hung to him until his guide took the boat into clear water and towed the fish after."

The rod used on that occasion was a greenheart, with split bamboo tip, 9 feet 8 inches long, and united by simple ferrules made by me and in the manner described. The rod and its ferrules, as far as the eye and constant subsequent use could determine, were as good as new.

It will be admitted, I think, that this was a pretty fair test. But it by no means stands alone in my remembrance. I could instance dozens of other occasions where these ferrules have withstood the severest and most sudden strains, and always without damage.

Should I assert that if a man fell from a window he would not reach the ground, but fly off into space and forever after gyrate in an orbit around the moon, you would unhesitatingly assert that it was not true. You have seen bodies fall before, and are familiar with the course they will take. For the same reasons, I assert emphatically *that it is not true.* that the simple ferrule, if properly made (and this is a much easier matter than to make a good dowelled ferrule) will either throw apart or split when subjected to any possible practical strain. A ferrule of leaden material, and the fitting of which is a botch, will give a like result, whether dowelled or simple in construction.

There are men who prefer the muzzleloader to the breechloader, or the heavy plain ash to the light spruce spoon oar, and your correspondent may prefer a pound single-handed fly-rod to one of half that weight. It is a matter of taste, concerning which it is useless to dispute.

The experience of "frequent and terrible smashes" to which he alludes, have not occurred to my own rods, or to rods handled by me, but to the rods of others using dowelled ferrules broken at a distance from home and brought to me in the hope that I could repair the damage so that its owner could continue his sport. But if a rod so broken is a fine and expensive one, it seems one might well hesitate before resorting to so radical a remedy as cutting off the dowel, or endeavoring to bore the hole to receive it with the crude appliances generally at hand on such occasions. My remedy (if the broken rod has been of such character) has been to supply the temporary want from my own outfit.

No angler of experience will question your correspondent's assertion that a spliced rod is better in use than if it were joined with ferrules. But at the same time the liability of the thin ends of the splices to accident, from the many contingencies which will occur in the course of years, and the care necessary to their protection, must not be lost sight of.

His remarks as to the greater proneness of cemented ferrules to become loose is just. But this occurs only in the winter time, and if the angler will take the trouble to examine his rods, before inaugurating a new season (as most do), he can remedy this defect, if found, in less than ten minutes.

This life here below is made up from a judicious selection between unavoidable evils, and of these our constant endeavor is to choose the least.

In the exercise of this discretion, I reject the splice and the fastening pin.

The idea that a simple ferrule will not fit when reset above its former location, is also a delusion. To give that perfect curve, which indicates to the initiated that the strain is equally distributed over a fly-rod, the material should not be evenly tapered from ferrule; but must, for a few inches, be cylindrical and of the same diameter as within the ferrule.

HENRY P. WELLS.

WHERE IS THE BIGOSH?

YOUR correspondents have been telling you where the "Bigosh" is located. Of course they are all wrong; it exists only in the imagination of Mr. Mather, and he has used this pleasant fiction to give your readers a most charming series of sketches, and to convey a deal of information upon the art of fishing. I trust he will continue his delightful papers indefinitely.

If I am wrong, and the "Bigosh" has an objective existence, let me beg Mr. Mather to keep its location a secret. If he tells it, depend upon it the place will be overrun, so that he and his friends will no longer find any enjoyment in visiting it, it will be rendered worthless to them and to all others. It is his secret, let him keep it. May the original party long enjoy its pleasant places.

"Percyval" deserves thanks for his article on "Ferrules." As he invites criticisms, I venture to make two suggestions: First. If the plate or wad of brass, I, were soldered in its place the protection against water would be perfect.

Second. If the ferrules are of sufficient length and carefully made, there is no possible need of the "little brass cleat, C." Three of my own rods are made with ferrules that have no dowels and no cleats. I have never had any trouble with them from "throwing away a joint or two." I have seen this accident occur, but always and only when the ferrules were much worn and ought to have been replaced by new ones. The cleat requires time to whip and unwhip, and is apt to catch, besides it mars the good looks of a handsome rod.

M.

PENNSYLVANIA

A DOMESTIC TROUT POND.

I NOTICE in FOREST AND STREAM of March 6, an account of a successful trout pond (by "W. T.," East Saginaw). It is the first instance of the kind that I ever heard of, and I have visited a good many similar ponds and have actually received hundreds of communications from parties who have tried trout culture in this crude manner, and I do not recall a single instance which has resulted successfully.

Now, Mr. Editor, I will not be so rude as to question the word of any one in relation to fish matters, but I notice that some thirty years have elapsed since "W. T." constructed this $30 fish pond, and it is possible he has grown old some in that time and perhaps his memory may be slightly at fault, though he tells us almost to a pound how many trout he took out of that pond in the four seasons; seven hundred and sixty-three pounds! And this from an original stock of two hundred and fifty young fry! And now right here, "this reminds me," that thirty years ago and thereabouts, I sometimes visited Michigan, not to fish, but on gunning expeditions. I heard them tell how they weighed their hogs before Fairbanks's scales became fairly abundant there. They laid some poles across a log, placed the hog across one end of the poles and piled stones on the other end till they just balanced the hog, then they guessed at the weight of the stones! I remember on one trip killing a deer and a turkey, the ground being covered deeply with snow they could not get at the stones and so guessed directly at the weight of my game. They laid the deer at 200 pounds, and the turkey at 30 pounds. When I got them down to Cleveland the deer weighed 165 pounds and the turkey 21 pounds. Did "W. T." weigh his trout by Michigan methods?

I will now skip the brush work, which if properly done for such a surface would cost about $25, and pass to the embankment, taking "W. T.'s" figures and making allowance for such contours as would admit of the work described (team and scraper); there was not less than one thousand cubic yards of earth moved and placed in this embankment. Now, estimating at the usual cost of such work and at one-third less for man and team than "W. T." allows, it would cost $125 to construct the embankment alone. It will be noticed that this work was firmly rammed, and finally the entire surface was heavily coated with coarse gravel and over this again covered with a layer of as large boulders as they could handle. Now, here is a class of work fully understood by farmers throughout New England, New York, upper New Jersey, all over Pennsylvania and other rocky regions. Would any farmer take the contract for gravel and boulder work alone for $50? Not since I can remember. Well, my main items now foot up $400, and there are extras for spikes, nails, wire netting, planting of willows, etc., which includes a network partition of wire across the pond, one-third the way from the head to the foot; eight large cedar logs stretched across the ravine and weighted with more large boulders (this cedar is not counted), all of these incidentals of which would cost another $50 easily.

Now, Mr. Editor, ask any experienced hydraulic or civil engineer in the country to review my figures, and see if I am not within the practical limits.

I have for several years, at suitable seasons of the year, been quite busily engaged in constructing carp ponds, and am frequently superintending this work in two or three States at the same time, rapidly passing back and forth from point to point and constantly coming in contact with ever-varying locations, on all of which I make hydraulic (instrumental) surveys with mathematical exactness. It is probable that I do more of this work than any ten other men in this country, and it should be conceded that I ought to know with a tolerable degree of certainty what such work costs, even though done in the comparatively crude manner stated by "W. T." He has gone into details and given sufficient figures to enable an engineer to make an approximate estimate. In the first place, I find that his cedar bulkhead must have contained at least 1,000 square feet of surface. Multiplied by four, the thickness in inches of the split plank, would make 4,000 feet of cedar, independent of the fifteen posts, varying from 6 to 34 feet in length, which, if of a size to hold an embankment thirty or more feet in height, it is safe to say contained another thousand feet, making 5,000 feet, independent of the braces. I have handled considerable lumber during the past forty-five years; have been for two or three terms official measurer, and I have never seen the time or place that cedar was not worth at least $20 per thousand feet, more often $30. It will be observed that the cribwork was thoroughly puddled, concreted, and further secured with large boulders. No two men living could get out the stuff and put up such a crib-work bulkhead, with foundations as stated, for $100.

It will, doubtless, amuse practical trout culturists to think how admirably that screen must have worked with two-year-old trout on each side of it, as must have been the case, because the fry introduced could readily pass through it, and they were left undisturbed for two years.

There are a number of other interesting points which I could give in connection with this matter had I the time and you the room. I begin to surmise that "W. T." is an unconscionable, practical joker. He reminds me of one of our leading Philadelphia physicians. A few years ago, when we were having considerable excitement here about our bogus medical colleges, unqualified pharmacists, etc., the physician referred to one evening called at a druggist's and left a prescription, saying he would call later in the evening for it. He called perhaps two hours later, and as the druggist handed him the prescription he inquired if he intended to administer it according to directions, "a dose every two hours." The doctor replied in the affirmative. The druggist then remarked that one dose would be sufficient, as any human being taking it would be dead within two hours. By this time the doctor had removed the wrapper and found the prescription prominently labeled "Poison." The doctor then remarked that he had been riding among drug stores the entire evening leaving this identical prescription, that this was the fifteenth one collected and he the first druggist to notify him that the four simple ingredients formed when combined a deadly poison. Readers can make their own application.

MILTON P. PEIRCE.

PHILADELPHIA, Pa.

TROUTING ON THE BIGOSH.

FISHERMAN'S LUCK.

THE Doctor's preference for fishing up-stream has been stated, and as we laboriously forced our way over logs and through thickets along the shores of the lake, it was decided that he should strike in at the mouth of the brook, while I would keep on up the valley as far as was found practicable or convenient, and then fish down until we met. It may be remembered that he chose to wade in low shoes, the best of all things for a man who does not object to having his feet in cold water while the sun broils down upon his head, while I had elected to wear wading pants with boot attachment as a precaution against possible rheumatic twinges in the near future. These appliances for wading dry-shod were slung on my back, for it would have been impossible to have climbed over logs with them on, and, in fact, they are cumbrous even in water. If the little grasshopper becomes a burden, how much more does a stiff pair of trousers, which hamper the knee action and, ending in a heavy pair of boots, handicap a man who is more than knee-deep in water and on the unsteady footing of mossy stones? So on we trudged over logs and around tree tops, and such other obstructions as are well known to those who love to frequent forests which have never known the axe, and are in reality the pathless woods whose pleasures have been poetically mentioned.

Arriving at the upper end of the lake, I showed the Doctor where Jack and I struck in and found the stream, not over two hundred yards from the edge of the swamp where we stood, and wishing him luck kept along the edge of the hill for dry walking, and forced my way up the valley, intending to strike the stream as high up as an hour's walk might bring me.

"The green trees whispered low and mild;
It was a sound of joy!
They were my playmates when a child,
And rocked me in their arms so wild!
Still they looked at me and smiled,
As if I were a boy.

"And ever whispered, mild and low,
'Come, be a child once more!'
And waved their long arms to and fro,
And beckoned solemnly and slow;
O, I could not choose but go
Into the woodland's hoar."

And so, mentally repeating Longfellow's lines, I pushed on,

"Through tangled juniper, beds of reeds;
Through many a fen where the serpent feeds,"

until my watch, which I had often consulted, to see if my hour were not up, and the mile covered, which we reckoned would take that time, said that full sixty minutes had passed since the Doctor was left near the junction of stream and lake. I was on the south side of an east and west ravine, but the trees were so thick that I could not see how far it was to the other side, or form any idea how far it might be to the creek. It occurred to me that there might be a valley coming into this one from the north, and that the stream might come down that, in which case there would be no fishing for me that day. This horrible suspicion must be set at rest, and, climbing the hill, I looked about for an opening from which I could see across the hollow. No such place was found, and then a tree which could be easily climbed was sought and found; and from half its height a view above the tree tops of the valley was obtained, which showed it to be about half a mile wide, and gave the cheering assurance that no valley came in from the north between the lake and the point opposite. Descending the tree, I started down the hill due north into the bottom of the valley, in order to strike the stream.

It was hard work to push through the tangled grasses, cat briers, and undergrowth in the swampy bottom, and the stream seemed a long way off. My watch showed that three-fourths of an hour had been consumed in crossing the half mile of valley, and the severe labor in the close atmosphere was the cause of a suspicion that while wading a stream for trout might be sport, there was less pleasure in wading a swamp in search of a stream. The ground began to rise! Where was the brook? I had expected to find a rapid stream which changed into the deeper and more sluggish one below, but there was nothing of the kind. I sat down and did two things at once, and did them well. Some one has said that two things cannot be done at once and done well. Like most "old sayings" there is little truth in it, for I rested and lunched in the most thorough manner, at the same time. After this I essayed to do three things at once and accomplished it as easily as the two; I rested, smoked and thought. Carefully reviewing the field it seemed certain that the "Little Bigosh" must rise between where I lay and the lake. The ravine had no branch to the north and I had not crossed a stream on the south side of it. The result of the thinking, which was arrived at just as the pipe was finished was, that if I traveled back east for half an hour and then crossed the ravine there would be a chance of finding the stream.

Shouldering the boots I started, and when the watch showed that I had labored for full thirty minutes, I changed the course to due south, again to cross the valley. The growth here was denser, and the footing was worse, as the ground was more springy and soft, often quite marshy. Twice the boots and I sat down on a log to rest, and at last the springy nature of the ground made it necessary to put on the boots in order to keep dry. This was not a thing to be done without cause, for, if it was as much as a man could do to get through the undergrowth without the encumbrance of wading boots, it promised to be more than he could perform to travel with them. They were put on and the wet shoes slung to the creel strap, and another start made. Each step seemed to be made on softer ground, and the heavy wading boots pulled harder and harder, until it was a question whether it would not be best to turn back. While considering this I stepped on a stick and broke it, and a few steps further in I heard the Doctor say in a low tone, "You appear to be traveling, sir!"

"O, no," said I, "the day is pleasant and I am merely walking for exercise. It is the height of pleasure for me to pull wading boots out of a swamp, and I have enjoyed it at the rate of half a mile an hour for about three hours. There is nothing like exercise for getting rid of superfluous flesh, and if, like Falstaff, I have 'larded the lean earth' as I marched, and it is pleasant to know that the alders and the skunk-cabbage will be enriched thereby. Any grub left in your creel? I devoured mine two hours ago."

"No, I took a lunch about half an hour ago," replied the Doctor, "and afterward stepped on a log that was under water and the bark peeled off, and I decided to sit down, and I not only wet my luncheon but my tobacco and matches. That is a trifle, however, for I have had rare sport on a virgin stream. See here!" and he lifted the cover of his creel and showed a glowing mass of ruby-flecked trout, that under different circumstances would have made an angler's heart throb five beats to the minute more than usual, but when his heart has been doing double duty in pulling wading boots out of the muck for several hours, it is hard to stimulate his aorta to extra duty by glimpses of fish, unless they are fried. I had tobacco and matches, and we sat on a log and smoked.

After the ashes were knocked from the briarwoods the Doctor said, "You have had a hard time and are entitled to some fishing; take the stream down and I will follow the swamp around and meet you at the lake where we parted."

"Doctor," said I, "you mean well, but if you love me let me get into camp as soon as possible. I have climbed logs, crawled under tree-tops, been mired, climbed trees and worked like a stevedore, in the hope of striking a stream of which I knew nothing when I started, only to learn now that its head is not half a mile from its mouth. I don't want to fish, I only want to get in camp and stretch out on the hemlock boughs and have fun."*

"Pshaw," exclaimed the Doctor, "the head of the brook is just there beyond that big cedar, it rises from a big spring, and you must take a trout or two before we go back, and it can be done from the spring. Then we will return to camp and you can lie on the hemlocks and 'have fun.'"

I yielded, and took his rod and line, which he had not unjointed, and said I would try for a trout or two, and approached the pool, which was the head of the stream, with great caution, in order not to disturb the trout by jarring the bog, which shook with a heavy tread. After a few casts of thirty feet, as long as the bushes would allow, I stepped into the pool and waded down a short distance. There was a "likely place" under the roots of a sycamore, and a cast there was rewarded with a rise. I had him, I fought him according to rule, and against it, for all I know now, and as I put the landing net under him a slippery root sent my boots up and even my ears obtained a free bath. The trout was still in the net, and the Doctor remarked, as he unscrewed the top of his life preserver and handed it to me, "We might as well go back to camp, but I'm glad you have one trout, and a big one."

I emptied the water from the big boots, and shouldering them, we went homeward. It was late in the afternoon when two tired, wet and hungry fishermen tramped in and devoured everything eatable in the camp, which appeared to be deserted. By the time that the last bone was polished, the boat, with the Colonel, Jack and Uncle Ben, drew up on the beach, and they crowded around to see the results. The Doctor's creel showed up well, but when the Colonel heard the story of the day's tramp and my misfortune, he repeated a couplet containing some allusion to "fisherman's luck" and his being wet and hungry, which I have forgotten.

FRED MATHER.

*This has long been a favorite expression of mine for sleeping, but as it is not generally understood, I explain. With Sancho Panza I can say, "Blessed be the man who invented sleep; it covereth one all over like a blanket." My idea of jolly, hilarious fun is a sleep of insensibility. I know that I will enjoy that last sleep that knows no waking, no printer howling for copy, and no boots to pull out of the mud. If the fishing in the Styx is all done from a boat, I know I won't care to get out on the other side. There is no fun like that which one enjoys.

HOW THE LEADER IS BROKEN.

HAVING already re-echoed "J. G. W.'s" question in your issue of March 6, I am now tempted to answer it myself, and, as human nature is weak, I yield to the temptation.

He says, "We have all read time and time again of a bass when hooked leaping from the water, and falling on the leader so as to break it. How does he do it?"

We have all read it again and again. But for a bass to so break a leader, is as impossible as it is for a man to lift himself by the straps of his boots.

Perhaps the following explanation may not be quite so severe a draft on our credulity.

That the leader is in peril under such circumstances, is undoubted. Why?

The bass leaps from the water, throwing into the movement every ounce of his immense muscular strength. His momentum then equals his weight multiplied by his velocity. But the weight which here enters into the problem is not his weight in water (which is less than nothing since a dead bass will float), but his weight in air—we will say four good solid American avordupois pounds. When, therefore, the angler seeks voluntarily or involuntarily to check or control this gyration with a tight leader, he subjects it to a strain that no fish of four times the weight could begin to impose if beneath the surface, and it not unnaturally parts. What the angler then does I will not say. HENRY P. WELLS.

NEW YORK.

BUT IS IT TRUE?—Boston, March 13.—I clipped from Saturday night's *Transcript* the following: "Hon. Hannibal Hamlin and party have returned from Moosehead Lake with a fine catch of trout." It speaks for itself. If a poor devil was camping out at any of the many desirable places in the State of Maine, and tried to vary his bill of fare or eke out his provisions by shooting a solitary deer or caribou before Oct. 1., the Great American Game Warden was pretty sure to find it out and to "sock" it to him accordingly. But the honorable gentleman makes his annual trip, and comes home with a "fine catch of trout," caught, as I understand it, through the ice, against the law of the State. Where was the Great American Game Warden, of whose zeal in enforcing the law (principally against non-residents) we have read so much in FOREST AND STREAM lately? Where was he?—C. G. G.

THE TROUT OPENING.—Mr. E. G. Blackford has issued his annual invitation to inspect the many varieties of wild and cultivated trout. It is a beautiful card with an original picture of a trout rising at a fly, by the well-known artist, W. Holberton. Mr. Blackford's display will comprise fish from many of the States and also from Europe, and Fulton Market will be crowded, as usual, by lovers of the beautiful fish.

STRIPED BASS IN CONNECTICUT.—On the 12th inst. John Wilber caught 800 pounds of striped bass in the Thames, at Norwich, Conn., the largest catch in many seasons.

SMELT FISHING IN MAINE.—I read in your issue of Feb. 20 an account of smelt fishing in Saco, and I think an account of the same in another town in Maine may be of interest. I left Waldorough, Me., seven weeks ago. There were then about sixty shanties on the river. They are neat little houses of ¾-inch stuff, and vary from 4x6 feet to 6x10. A cousin and myself fished in a shanty 6x10, and we used twelve lines. From Dec. 26 to Jan. 20 we took from fifteen to forty pounds every day, usually averaging in size about nine to the pound. We fished about four hours each day, just before and after low water. I left for home Jan. 22, but I have learned that there has been not more than a week since when the smelts did not bite. We use a great variety of bait, but nothing attracts them like marine worms or clam worms.—GEORGE W. SINGER.

Fisheulture.

THE SHELLFISH COMMISSION OF CONNECTICUT.

WE have the third report of the Shellfish Commissioners of the State of Connecticut, to the General Assembly, January session, 1884. Before the passage of the act of 1881, placing the State grounds in charge of the Commissioners, all designations were made by town committees. With few exceptions these committees were more familiar with the water and its industries than with law, and their work was defective and incomplete. The boundaries of grounds were not well defined. This has complicated the work of mapping old grounds and made changes necessary. These have been accomplished to the general satisfaction of the oystermen.

During the three years of their service the Commissioners have sold 38,548 acres, which netted to the State the sum of $42,403.79. Besides this 12,539 acres more have been allowed, and deeds ordered therefor, which will net the further sum of $13,793.78. Rejected applications have generally been owing to the fact that the grounds applied for were on natural beds, or had already been designated to others. Taxes were laid upon the oyster grounds within State jurisdiction for the benefit of the State for the first time during the past year; $3,681.47 was collected without resort to legal measures. By law all owners are required to file with the Commissioners a statement under oath, wherein they shall not only give the number of acres owned by them, but also the value thereof per acre.

The report is very interesting and gives much information about starfish, natural beds and the laws relating to the shellfisheries. It is time that New York did something in the way of systematizing the leasing of oyster beds and placing the whole matter in the hands of the State and ending the conflict between the towns and counties of Long Island, which has been in progress for a century or more. The Connecticut Commissioners are R. G. Pike, chairman, Middletown; Dr. W. M. Hudson, Hartford, and G. N. Woodruff, Sherman.

DO GERMAN CARP HIBERNATE IN CENTRAL NEW JERSEY?—Authorities on carp culture inform us that this fish passes the winter in a semi-dormant state; that a number of them assemble together, thrust their heads in the mud with their tails upward and outward, thus forming what is called a kettle of fish. That they do not pass the entire winter in this way in the latitude of Central New Jersey has been clearly proven during the winter just closed, as shown by the following statement: Having accustomed my fish to a certain portion of the pond by throwing them small bits of bread for which they showed great fondness, and after which they come to the surface of the water, they continued to make their appearance there on pleasant days till the 9th of December last. The pond then becoming frozen over, I saw nothing of them again till the mild weather in February. On the tenth, and again on the twenty-seventh of this month they made their appearance. Besides the fragments of the submerged leaves of the yellow pond lily (*Nuphar advena*) which the winter does not kill, floating about and partly eaten, gave unmistakable evidence that they had been feeding. As they continue active all winter in Southern waters, may they not do the same also in this latitude?—J. H. B.

PENNSYLVANIA STATE HATCHERY.—It is reported that the property of H. J. Schantz, near Allentown, has been rented by the Pennsylvania State Fish Commission for a period of ten years. New buildings will be erected this spring, and the State fishery will shortly be removed from Donegal, its present location, to the new site.

CALIFORNIA TROUT FOR TENNESSEE.—The United States Fish Commission car from Wytheville (Va.) hatchery, arrived at Chattanooga, Tenn., on March 14 with 4,000 California trout. The fish are to be distributed in the streams of East Tennessee, Alabama and Georgia, and it is said this lot of fish is the most valuable ever sent South.

The Kennel.

FIXTURES.

BENCH SHOWS.

March 18 to 21.—Washington Bench Show, Masonic Hall, Washington, D. C. Chas. Lincoln, Superintendent.

March 26, 27 and 28.—The Dominion Kennel Club's Second Annual Bench Show, Horticultural Gardens. Charles Lincoln, Superintendent. W. S. Jackson, Hon. Secretary, Toronto, Canada.

April 3, 4 and 5.—The Cleveland Bench Show Association's Second Bench Show. Charles Lincoln, Superintendent. C. M. Munhall, Secretary, Cleveland, Ohio. Entries close March 24.

May 6, 7, 8 and 9.—The Westminster Kennel Club's Eighth Annual Bench Show, Madison Square Garden. Entries close April 21. Chas. Lincoln, Superintendent. R. C. Cornell, Secretary, 54 William street, New York.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1010.** Volume I., bound in cloth, sent postpaid, $1.50.

CLEVELAND DOG SHOW.

Editor Forest and Stream:

From the number of entries already received the indications are that our second bench show will be a great success. The citizens of Cleveland are taking a great interest in the exhibition, and are donating a number of special prizes, which will be announced in due time. Count Noble and Dido II. will be here for exhibition. They will be a great attraction for sportsmen, and we hope to see many of them here from all parts of the country. We can assure them a hearty welcome.

C. M. MUNHALL, Secretary.

CLEVELAND, March 15.

NEW HAVEN DOG SHOW.

THE first annual bench show of the New Haven Kennel Club, held at New Haven, Conn., last week, was a decided success. There were three hundred and eight-five entries, and only about a dozen of them were absent. There were quite a number of puppies shown, which brought the total above four hundred. There was a very good showing of local dogs, fully one-half of the entries being from New Haven and immediate vicinity. The building is very well adapted for holding a show, being large, well lighted and ventilated. The benching of the dogs was admirable; the large dogs were in roomy stalls which extended clear around the sides of the hall, making a very attractive appearance. There were three double rows of benches extending nearly the length of the room, with wide alleys between, giving plenty of room. Many of the stalls were tastefully draped and decorated, adding not a little to the attractiveness of the show. The managers are entitled to a great deal of credit for the very excellent manner in which they conducted the show. No labor or expense was spared to make the exhibition satisfactory to all, and we heartily indorse the many encomiums that we heard bestowed upon the managers for the excellence of the arrangements. The attendance, notwithstanding the bad weather, was very good indeed, and it gives us pleasure to announce that the balance was on the right side of the books. The club intend to hold a show each year, and without doubt they will receive the cordial support they deserve

The judging was generally satisfactory, although a few mistakes were made. Mr. James Watson judged the pointers, setters, spaniels, greyhounds, deerhounds, foxhounds, beagles and dachshunde, and Mr. James Mortimer the remaining classes, except the trick and retrieving dogs, which were judged by Mr. J. R. Pierson. In commenting upon the dogs we have indulged in no spirit of fault finding, but have endeavored to point out their faults for the benefit and instruction of those of our readers who have not had the experience necessary to form a correct opinion.

MASTIFFS.

Champion mastiffs had only one entry, Mr. Mason's Nevison. He was looking very much better than we had ever seen him, and barring the rather unsightly protuberance on his nasal bone and his habit of knuckling over, he is a very fine dog; he has filled out wonderfully.

In the open class for dogs, Mr. Burgess's Hero had virtually a walk over, as there was nothing in the class that could get near him. He has a very good skull, ears well carried, and a square muzzle, good color and mask. His faults are a slightly tucked up appearance, and he falls away a little under the eyes and has a greyhound tail, but, taken altogether, he is a very fine animal.

Agrippa, second, is a well shaped but small dog, with a plain head and rather a light eye. Surrey, hc., is a large dog, a little smutty in color, rather leggy and short in body. Romeo, c., possesses some good points. He shows age and was in poor shape. The others call for no special comment.

In mastiff bitches, Dutchess, first, is a good roomy bitch, rather light in bone and has a bad eye. Juno, second, has a very good skull and muzzle, and is of good type but is undersized and out at elbow. Queen, vhc., is a fair bitch and will improve, we think, with age.

The only entry in puppy class was absent.

ST. BERNARDS.

In champion rough-coated St. Bernards, Bonivard, the only entry, was shown in the pink of condition. He is a very typical dog, good in coat and color. He has that benign expression of countenance which should characterize this noble breed of dogs. Bonivard also won the special prize for the best non-sporting dog in the show.

In the open class (dogs) the Chequasset Kennel's Hermit beat the Clovernook Kennel's Samson in head, bone and coat. His worst faults are his light body and rather badly-carried tail, he is also rather straight behind. Samson, second, has a weak, bitchy head, and is a trifle too curly in coat; he, also, has a ring tail. He is, however, a five young dog. Felix Mendlessohn (vhc.) has good coat and bone, but a rather weak head and bad ears. Duke (hc.) and Guy (c.) were very bad in head properties, and looked more like immense collies than anything else. They should not have been noticed. In bitches, Mr. Hearn's Gertie, a very well made, roomy bitch, of good color, won easily, all other awards being withheld. In rough-coated puppies Schoonhoven, a seven-months old puppy of good bone and size, coat and color, was an easy first, the other entry only getting a c.

There were no entries in the champion smooth-coated St. Bernard class.

In the open class (dogs) Alexander, a fair dog, with no especial merits, was the only entry. He was awarded first. In bitches, Juno, an undersized bitch, was awarded second prize, the first being withheld for want of merit. In puppies, Billy, a rather plain puppy, but with good coat and immense bone, won over Eckhardt, who was given second.

BERGHUNDE.

There was but one entry in the berghund class, a fair Newfoundland in looks; in fact he was better than any in the Newfoundland class. The award was properly withheld.

NEWFOUNDLANDS.

First and second prizes were withheld. Jack, who was vhc., is of good size, which is about all that can be said in his favor. The others we did not consider worthy of mention.

BLOODHOUNDS.

As there was nothing in the class that had any pretention to the name, all prizes were withheld. There was a very good Ulmer in this class—Dink. The nearest approach in looks to a bloodhound was Trump, a cross between the mastiff and foxhound.

GREYHOUNDS.

The managers were very liberal with the greyhounds, dividing the class into two champion and two open classes. There were eight entries, six of them receiving prizes. Four firsts and two seconds were awarded which should certainly satisfy the owners, especially when we take into account the quality of the exhibit, which was not of a high order of merit. Friday Night had a walk over in the champion dog class. He staked himself a few weeks ago and was in very bad condition. Fan also had a walk over in the bitch class. She was in elegant condition, and except that she is a bit too small, is about as good as we have. In the open dog class Doubleshot, who was given first, was in good condition. He has not sufficient greyhound character to win in a good class. Dell, who was second, should have been first. He is a good specimen with a good and well balanced head, a magnificent coat and shapely body. He is a trifle weak and straight behind, and has a bit too much hair in his tail. Dorothée, who won first in the bitch class, has a good head and a deep chest, and was in good condition. She is a trifle too wide in front, and might be better behind. Lufa, wrongly entered as Lupa, was given second; she should have been content with less. She lacks quality, and is light with very straight stifles.

DEERHOUNDS.

The deerhounds were very good all through, Lance, who was the only one in the champion class, is a very good specimen with no weak points. His shoulders and feet are capital. Roy, who won first in the open class for dogs, is a fair animal rather out of condition. Fleet, who won second, we liked full as well for first. He has a good head, and shows much quality. Roderick Dhu, hc., is also fairly good, except in coat. Blake's Lorna II., who won in the bitch class, has a good head with a long clean jaw, and is an animal of much quality. The same may be said of Thayer's entry of the same name, who won second; she is very near the winner. Thora, unnoticed, also shows lots of quality, but shows mange and want of condition.

POINTERS.

We expected to see a good showing of pointers, as there are many owned in this portion of the State, but they failed to put in an appearance in sufficient numbers to fill the classes as they should have been filled, and the showing was rather ordinary, although there were some good ones present. In the champion class, Peter Black, Knickerbocker, and Lassie were the only ones to compete, Rhona being absent. The Westminster Kennel Club, who own Lassie, declined the offer of a separate class for her, preferring defeat rather than to win without competition., and the three were judged in one class, and the pride of place was given to Lassie. Some one raised the point that the class was understood to have been divided, and the two dogs were then compared, and Knickerbocker was also awarded a champion medal. Lassie was shown in fair condition. She is quite a good bitch with a fair head, capital fore legs and feet, good back, quarters and stern. She is a little weak and straight in stifles, and a trifle throaty. She is also growing old. Knickerbocker was not in first-rate condition. He has a fair head, good chest and plenty of bone; he is a bit wide in front and might have a better back and stifles. Peter Black is a fair dog with good legs and feet, he was looking well, but was soft. In the open class for dogs over 50 pounds first went to Beaufort, who was decidedly the best in the class. He was not in nearly so good condition as when at Washington last year, having but recently recovered from an attack of inflammation of the bowels. Although his coat was in good condition, his eyes were not bright, and he did not carry himself in the faultless style he affects when at his best. Zeb, who won second, is rather a taking dog at first glance. He stands straight on a good set of legs and moves very well, he has rather a plain head, and might be better in shoulders, loins and tail; his coat looks well, but is rather long. Bravo, vhc., was very well shown, he has plenty of bone, and good legs and feet. He is a bit heavy in head, throaty, and out at elbows. Bud, hc., is a fair dog, with good legs and feet, he has a fine head, except that his ears are set on too high, he is also a trifle weak in stifles. Jimmie, also hc., we liked as well as any in the class, except Beaufort. He has a fair head, a good coat and tail, and the best of legs and feet; he is a trifle wide in front, and has a light eye, which detracts somewhat from his good looks. We also liked Fritz, unnoticed, for the two letters, he has a fair head with good shoulders, legs and feet, he is a bit snipy, and might be better in tail and hindquarters. In the small dog class there were but two entries, both very bad ones. The first prize was withheld, and the second should have been also. There were three entries in the large bitch class; none of them were first rate. Lady Gleam, who was placed first, is light in bone, wide in chest and coarse in tail. Lill, who won second, we liked better for first. She shows considerable quality, and has capital legs and feet and a good loin. She is also wide in front, a bit snipy, and has a coarse tail. She was well shown. Mab (hc.) is a fair specimen only, with weak hindquarters. In the small bitch class first was given to Lady Bang. She has a good body, legs and feet. She is a little too round in skull and carries her ears badly. She is also throaty, and might be better in tail. Moonstone, who won second, was not in good condition. There was not much to choose between her and Polly (vhc.), who has a good head, legs and feet. She is a trifle wide in front, and might be better in shoulders. She did not show at all well. Bertie (hc.) is a fair looking bitch, with no very good or bad points. In the puppy class, Lady Nixon, who won first, is quite a pretty bitch, with a good body, shoulders, legs and feet. She is a bit snipy, and might be better in tail. Lennox, who was second, is a big fellow, a bit lathy and coarse. He has plenty of bone, and may improve with age.

SETTERS.

Lava Rock, the only entry in the English setter champion class, was absent. In the open dog class, Yale Belton, who won first, is quite a nice dog; his head is fairly good, he has plenty of bone with good legs and feet, and good quarters. His tail is also good; he was in good condition, except that his coat was rather short. He is a bit wide in front, and does not move quite so free and easy as we like to see. Jester, who won second, is a very good-looking dog, with good shoulders, legs and feet and tail; his head is fair, but a trifle heavy; he is badly undershot, and was in very bad condition. Pride of the West, who was vhc., we fancied for first place. He has the best head in the class; his shoulders are fair, and he has a good chest and quarters, with the best of legs and feet; he has a nice coat, and was in fair condition. He carries his tail too high, which is about the worst fault. Royal Sultan, also vhc., got all that he deserved. He was not in good condition. Frank, who was hc., is a useful-looking dog, with plenty of bone and capital legs and feet. He is rather plain in head and heavy in shoulder. Tom II., who was c., deserved another letter. He has a good head, plenty of bone, with good legs and feet. He might be better in hindquarters. There were a number of useful-looking dogs in the class that we have no doubt are capital workers, but they are not quite up to bench show form. In the bitch class, Blue Belle won first. She was in her usual good form, and, as usual, was shown a trifle too fat. She has capital shoulders, plenty of bone, with good legs and feet. If her head were as good as the rest of her, she would be hard to beat. Alice Dale, who won second, is very close to the winner. She has a very sweet head and is good all over except that her elbows set too far under her, and her feet turn out a little. The remainder of the class we did not fancy, although, as in the dog class, many of them looked like workers. The puppies were a fair lot and well placed except that we should have given Bess, in the bitch class, another letter. She is a very nice little thing, and we shall expect, if she goes right, to see her beat the winner next year.

Champion black and tan setters brought out three good ones. Turk, who won the first prize, was looking better than we ever saw him. Argus was also looking well. He is but a trifle behind the winner. Trump is also a capital dog, but he begins to show his years and was not in good condition. In the open dog class, Glen, who won first, is a big upstanding dog of good form. He moves very well and was entitled to the place. Gem, second, and Chris, vhc., are both fair specimens with not much to choose between them. The bitch class was poor. The first was withheld, and second given to Clip, who is only a moderate specimen; none of the others were worthy of mention. In the puppy class there was a litter only twelve weeks old that look promising, but they were too young to be shown, the only other entry was given the prize. He was only fair. There were no entries in the champion Irish setter class. In the open dog class, Dash, who won first, is rather a taking dog to look at. He has a fair body with good legs and feet. He is very dark in color and has a Gordon head, and carries his tail too high. Second went to Dick, who is a fair dog with good body, legs and feet. His head is not first-class, and his ears are set on too high. Rory O'More, Jr., who was given vhc., was the most typical Irish dog in the class, and should have been first. He has a good head, is fairly well formed, of good size and color, and has good legs and feet. He was not shown at his best. Red and Roe, both hc., were only moderate. Many of the others were quite fair animals, but more of the English than Irish type, and not deserving mention in an Irish class. The bitch class contained nothing remarkably good, neither did the puppy class; we thought them as well placed as possible.

SPANIELS.

There was only one entry in the Irish water spaniel class. He was rather a useful-looking dog of no particular breed, and the prize was properly withheld. Benedict was alone in the champion class for field spaniels. He was not in his usual good form. In the open class, first, second and hc. went to three fair Clumbers; Punch, who was first, beat John Halifax in bone, otherwise they were nearly equal. Vesta, hc., is a very promising puppy. C. went to Beauty, a liver and white with rather a pleasing head. She has a curly coat and is a bit leggy. The others were a poor lot. There were no entries in the champion cocker spaniel class. In the open dog class first went to Obo II., a first-class little dog. He was shown a bit too fat and was a little off in coat. Sport, who won second, is a liver with white on his breast. He is also quite a cocker with a capital coat. He was timid in the ring, and did not show well. The others were not worthy of mention. Fido, who was entered in this class, is a fair Irish water spaniel, and would undoubtly have secured notice had he been in his proper class. In the bitch class, Blackie III. had an easy win. She is a very well-formed bitch, with a splendid coat. She has a light eye, and stands just a bit high on her legs. Queen, who was second, looks as though she might be a very fair animal when in condition. She was nursing a pretty litter. Suwanee, hc., is very pretty, with a good head. She is very light built and was short of coat. The puppies were a grand lot. Helen, who won first, bids fair to turn out a nice one. She is of good shape, with capital legs and feet and lots of quality. Her coat is a little curly, but she may outgrow this. Sambo, who was second, except that he is a trifle crooked in front, is very good. He is rather large for his age, and will probably outgrow his class. Darkie II., who was vhc., is well formed, and has a fair coat. She is a trifle too high on her legs. Dandy Zulu, hc., is also well formed, but was badly shown.

FOXHOUNDS.

The foxhounds that were noticed were a workmanlike looking lot, but not quite up to the form called for by the standard. Jerry II., who won first, is about the stamp of dog that New England fox hunters secure when they can, and keep when they get them. There were no entries in the puppy class.

BEAGLES.

There were only two beagles shown. Both were fair animals. They were properly placed.

DACHSHUNDE.

There were three entries in this class, only one of which was a dachshund. He was quite a fair specimen and entitled to his prize. The others were properly unnoticed.

FOX-TERRIERS.

The fox-terrier classes did not fill well. Richmond Olive was absent and Vixen had a walk over in the champion class. This is an honor that she is not entitled to, and how so good a judge as Mr. Mortimer could bestow a champion prize upon so worthless a specimen, we cannot understand. She is very thick in skull, wide in chest, out at elbows, very poor in coat, and has bad open feet. In the open dog class, Lancelot, who won first, is a very showy dog. He is just a little too high on his legs and was not in goood coat. Nip, who won second, has a good coat and fair legs and feet. He is a trifle thick in skull, wide in chest, and his ears are set badly. In the bitch class, Jaunty, a very moderate specimen, was given second, first being withheld. In the puppy class, Clover Belle won first. She is a fair specimen with good coat, shoulders and feet. Rascal, who won second, we do not like. He is coarse and out at elbows and will be too large when matured. We liked Boxer, vhc., better for the place, although he is nothing to brag of, being leggy and with a poor coat. The others were not worthy of mention.

COLLIES.

The show of collies was very fine. Robin Adair had a walk over in the champion dog class. He was very well shown, except that he was short of top coat back of his shoulders. Zulu Princess, the only entry in the bitch class, was absent. In the open dog class first went to Bruce, a nice dog with a good head, body and coat. Hiram, who was second, has a profuse coat which is of good texture. He has a fair head with rather heavy ears. He was much too fat. Brack, who was vhc., is a well-made dog, except that he is a trifle too close coupled. He has a good head and well-carried ears. Rokeby, hc., is a nicely colored sable with a good head and coat. He is a little sway-backed and might be better in shoulders. Donald, hc., and Sandy, c., are quite fair little dogs, rather light in coat. Both have the domed skull that we often see in the progeny of Marcus. In the bitch class, Iona won first. She has a nice head and is well formed, but she was in very bad condition, and should have given place to Jean, who was second, or to Fairy, who was vhc. Between these two there was not much to choose, both are nice bitches. We also liked Winnie, who was hc. She has the best head of the lot. She has but just arrived from England, and was all out of condition, and with no coat. She is a little light in bone, but when at her best the others must be in good form to beat her. The puppies were more than an average lot, even the unnoticed ones were fairly good. We thought them well placed.

BULLDOGS.

Tippoo, the only entry in the champion class, is a very good specimen. He has a good skull, ear, stop and chop. He is just a bit pinched in face and a trifle long in body, and was shown too thin. It will take a very good one indeed to beat him when he is at his best. In the open dog class, Boz, a very good one, captured first. There was not much to choose between Hamlet second, and Viscount and Moses, both vhc., all were fairly good. In the bitch class, Sweet Briar had a walk over. She is a good bitch, with rather a plain face and is a little short of lip. She also won the special for the best bull, dog or bitch, Boz being absent on account of sickness.

TERRIERS.

There were no entries in the champion bull-terrier class. There were ten in the open dog class, four in the bitches and two in the puppy class, with only three bull-terriers in the lot. Grand Duke, first in the dog class, is a very fair dog except that he is faulty in stern. Little Maggie is also a very pretty one, with rather a full eye. Fan C. is only fair, the others were a wretched lot of ill-looking, scarred brutes, most of them, judging from their appearance, are well acquainted with the mysteries of the pit. In rough-haired terriers Patsy, a varmint looking customer, deserved his first, the only other entry receiving a c. The black and tan terriers, with the exception of Minnie Warren, were a bad lot. Minnie, who was only a fair specimen, was given vhc., the other awards being withheld. Irish terriers had but one representative, a poor one, and the prize was properly withheld. There were several pretty little silky-haired toys in the Skye terrier class, but not a Skye among them, and no awards were made.

PUGS.

The pugs were also very poor, with not a really good one among them. There were no entries in the champion class. In the open dog class the best one was given a c., which was enough. In the bitch class Beauty won first. She is a nicely-formed little bitch, but smutty in color. None of the others were more than middling.

YORKSHIRE TERRIERS.

There was but one in this class. He was only a moderate specimen.

TOY TERRIERS.

The toy terriers were fair only, and properly placed.

KING CHARLES SPANIELS.

First prize was withheld. Jack, who was given second, is too large and was in bad condition.

ITALIAN GREYHOUNDS.

First should have been withheld in this class also, as the winner, Top, is coarse, although he has rather a nice head.

MISCELLANEOUS CLASS.

In the miscellaneous class, under 25lbs., first went to Mee Too, a very good specimen of the Mexican hairless dog. Moses

a very fair Scotch terrier, winning vhc. Pete, a diminutive hard-haired terrier, said to be as game as a pebble, was given hc., which he well deserved. In the large class a fair wavy-coated retriever was given first. Prince, who won vhc., should have been first; he is a better Dalmatian than we often see. Aside from these there was nothing in the class worthy of notice.

SPECIAL PRIZES.

There were just one hundred special prizes offered. Thirty-four of them were cash prizes ranging in value from $4 to $15. Many of the others were very valuable, and nearly every class received one or more. Unless otherwise specified all of the specials were for the open classes, and their disposition was decided in the regular judging. On account of the prizes offered for the sporting dogs, the management transferred some of the classes assigned to Mr. Mortimer to Mr. Watson. The prize for trick dogs brought out three. Fritz, the winner, is a fair looking pointer owned by Mr. A. C. Collins, Hartford, Conn. Fritz was trained by his owner according to the rules laid down in "Training vs. Breaking," and the very cheerful and intelligent manner in which he went through his performances reflects no little credit upon his trainer, and shows that he has imbibed the true spirit of the system, which we have recommended and so long followed. Prince, a very good Dalmatian, who was entered in the miscellaneous class, was very highly commended for the very creditable manner in which he performed his tricks. There were four entries for the two prizes for the best retrieving dogs. First was fairly won by Dan, a liver pointer owned by Mr. R. H. Meachem, New Haven. Dan did his work in a cheerful manner, and appeared to have a good mouth. Tom II., who was second, is owned by Mr. J. C. Schuyler, Lehighton, Pa. He also performed very well, but did not do his work in so cheerful a manner as Dan. The performances of the trick and retrieving dogs were greatly enjoyed by the spectators. The medals given by the club are very nicely gotten up, and cost more than the money prizes offered at many shows. Following is a full list of the

AWARDS.

Class 1. Champion Mastiffs, Dogs or Bitches.—1st, Charles H. Mason's Nevison, fawn, 4yrs., Gurth—Juno.

Class 2. Mastiffs, Dogs.—1st, J. W. Burgess's Hero II., A.K.R. 545; 2d, Shaw & Bates's Agrippa, A.K.R. 449. High com., William North's Surry, fawn, 18mos., imported. Com., Munson & Pierpont's Romeo II., fawn, 5yrs., imported, Romeo—Juliet.

Class 3. Mastiffs, Bitches.—1st, Shaw & Bates's Dutchess, A.K.R. 260; 2d, Richard W. Meigs's Juno, fawn, 17mos, Turco—Queen. Very high com., D. D. Mangam's Queen, fawn, black muzzle, 16mos., Herald—Dido. Com. E. A. Pierpont's Juno, 1yr.

Class 4. Mastiff Puppies.—Absent.

Class 5. Champion Rough-Coated St. Bernards, Dogs or Bitches.—1st, E. R. Hearn's Bonivard, A.K.R. 361.

Class 6. St. Bernards, Dogs.—1st., Chequasset Kennel's Hermit, A.K.R. 23; 2d, Clovernook Kennel's Samson, 14mos., Mink II.—Sheila. Very high com., E. B. Condon's Felix Mendelssohn, 4yrs., Pliny—Jessica. High com., James S. Thompson's Duke, tawny and white, 3yrs., Bruno—Minka. Com., Arthur B. Wright's Guy, tawny, 3yrs., Bruno—Minka.

Class 7. Rough-Coated St. Bernards, Bitches.—1st, E. R. Hearn's Gertie, orange and tawny, 3½yrs., Nero—Clio; 2d, withheld.

Class 8. Rough-Coated St. Bernards, Puppies.—1st, Schoonhoven Kennel's Schoonhoven, A.K.R. 795. Com., Henry Muller's Fluhli, A.K.R. 176.

Class 9. Champion Smooth-Coated St. Bernards, Dogs or Bitches.—No entries.

Class 10. Smooth-Coated St. Bernards, Dogs.—1st, Carlos French's Alexander, tawny, 2½yrs., Philip—Juno.

Class 11. Smooth-Coated St. Bernards, Bitches.—1st, withheld; 2d, Carlos French's Juno, tawny, 4½yrs., Chamoniux—Alpe.

Class 12. Smooth-Coated St. Bernards, Puppies.—Carlos French's Billy, tawny, 7mos., Philip—Juno; 2d, Millbrook Kennel's Eckhardt, A.K.R. 413.

Class 13. Berghunds, Dog or Bitch—Prize withheld.

Class 14. Newfoundlands, Dogs or Bitches.—1st and 2d prizes withheld. Very high com., G. J. Bassett's Jack, black, 2yrs. Com., A. C. Lightbourn's Hector, black, 7mos., imported; F. A. Gilbert's Watch, black, 2yrs.

Class 15. Bloodhounds, Dogs or Bitches,—Prizes withheld.

Class 16. Champion Greyhounds, Dogs.—1st, H. W. Smith's champion Friday Night, A.K.R. 753.

Class 16A. Champion Greyhounds, Bitches.—1st, Joseph H. Pierson's champion Fan, A.K.R. 10.

Class 16B. Greyhounds, Dogs.—1st, H. W. Huntington's Doubleshot, A.K.R. 73; 2d, Mrs. Henry Allen's Dell, fawn, 18mos., Don—Dam imported.

Class 16C. Greyhounds, Bitches.—1st, H. W. Huntington's Dorothee, A.K.R. 72; 2d, H. W. Smith's Lufa, fawn, 5yrs., Ferret—Little Bess.

Class 17. Champion Deerhounds.—1st, John E. Thayer, Esq., Lance, fawn, 4yrs.

Class 17A. Deerhounds, Dogs.—1st, Clovernook Kennel's Roy, 2yrs., Paddy—Lassie; 2d, Theodore A. Blake's Fleet, blue, 7yrs., Kirk—Fanny. High com., W. H. Carmalt's Roderick Dhu, fawn, 4yrs., Lupur—Mona.

Class 17B. Deerhounds, Bitches.—1st, Theodore A. Blake's Lorna II., blue, 11mos., Oscar—Lorna I.; 2d, John E. Thayer, Lorna II., brindle, 3yrs., Bruce—Lorna.

Class 18. Champion Pointers, Dogs.—1st, Knickerbocker Kennel Club's Knickerbocker, A.K.R. 19.

Class 18A. Champion Pointers, Bitches.—1st, Westminster Kennel Club's Lassie, A.K.R. 208.

Class 19. Pointers Over 50lbs., Dogs.—1st, Charles H. Mason's Beaufort, A.K.R. 694; 2d, Robert Wilson's Zeb, liver and white, 4yrs., Shot—Jess. Very high com., S. M. Bryan's Bravo, lemon and white, 4yrs., Rake II.—Miranda III. High com., E. W. Buell's Bub, liver and white, 8yrs., pedigree unknown; Walter E. Miller's Jimmie, liver, 19mos., Start—Maud.

Class 20. Pointers, Dogs under 50lbs.—First withheld; 2d, Knickerbocker Kennel Club's Rushton, A.K.R. 215.

Class 21. Pointers, Bitches over 50lbs.—1st, Knickerbocker Kennel Club's Lady Gleam, A.K.R. 207; 2d, Luke W. White's Lill, liver and white ticked, 5yrs., champion Sensation—champion Grace. High com., Mrs. Doctor Martin's Mab, black, 3yrs., Storm's Black Pete—Mab.

Class 22. Pointers, Bitches under 50lbs.—1st, Knickerbocker Kennel Club's Lady Bang, A.K.R 698; 2d, Westminster Kennel Club's Moonstone, liver and white, 5yrs., champion Bang—Davis Luna. Very high com., Westminster Kennel Club's Polly, A.K.R. 212. High com., J. A. Schuyler's Bertie, lemon belton, 26mos., Rab—Bellona.

Class 23. Pointers, Puppies.—1st, Dr. A. McCollom's Lady Nixon, A.K.R. 699; 2d, Geo. L. Wilms's Lennox, lemon and white, 11mos., Glenmark—Girl.

Class 24. Champion English Setter, Dog or Bitch.—Absent.

Class 25. English Setters, Dogs.—1st, F. A. Cannon's Yale Belton, black, white and tan, 4yrs., Belton—Blonde; 2d, Louis B. Wright's Jester, black and white ticked, 2yrs. 8mos., Dashing Monarch—Blue Belle. Very high com., Hugh Hill's Royal Sultan, A.K.R. 119; Geo. R. Nichols's Pride of the West, black, white and tan, 16mos., Count Noser—Lola. High com., Edward A. Todd's Frank, black, white and tan, 3yrs., Yale Belton—Lill. Com., Edward A. Todd's Dash, black and white, 2yrs., Yale Belton—Mollie; Comfort J. Treat's Ranger, orange and white, 3yrs., Nutmeg—Lill; J. C. Schuyler's Tom II., orange and white, 3yrs. 8mos., Tom I.—Bell; Frank L. Wilkinson's Don, black and white, 3yrs., Ned—Flora.

Class 26. English Setter, Bitches.—1st, Chas. H. Mason's Blue Belle, 5yrs., Roderick Dhu—Mina; 2d, Wm. A. Buckingham's Alice Dale, orange and white, 2yrs., Grouse—Daisy Dale. Very high com., R. L. Henry's Blue Victress, black and white, 14mos., Lava Rock—Lady Beaconsfield. High com., R. B. Penn's Lill, orange and white, 4yrs., Ranger II.—Coin. Com., H. L. Cowell's Molly, lemon and white, 4yrs., Ranger II.—Coin; David Calahan's Psyche, orange and white, 4yrs., Ranger II.—Coin. Chas. M. Carlton's Beauty, mottled black and white and tan, 3yrs., Ely's Drake—Ely's Sylph.

Class 27. English Setter Puppies, Dogs.—1st, F. A. Cannon's Eastern Dan, black and white ticked, 8mos., Sig—Bessie. Very high com., Dr. Paul C. Skiff's Duke, black and white, 7mos., Prince—Fairy II., High com., Dr. Paul C. Skiff's Don, blue mottled, 8mos., Don Juan—Ferrel III. High com., Chas. M. Carlton's Tip, black, white and tan, 10mos., Bran's Cook—Beauty. High com., John H. Linsley's Dan, black and white, 11mos., Blue Blood—Coin.

Class 27 A. English Setter Puppies, Bitches.—1st, F. A. Cannon's Bessie II., black and white, 8mos., Sig—Bessie. High com., G. Edw. Osborn's Bess, black and white, 8mos., Blue Blood—Coin. Com., W. R. Nichols's ——, black and white, 7mos.. Dash—Lady Mannering.

Class 28, Champion Black and Tan Setter, Dog or Bitch.—1st, H. Clay Glover's Turk, black and tan, 9yrs., Colburn's Dash—Pryor's Belle.

Class 29. Black and Tan Setters, Dogs.—1st, Clayton H. Redfield's Glen, black and tan, 6yrs., Dr. Aten's Glen—Dr. Aten's Belle; 2d, Charles R. Taylor's Gem, black and tan, Dexter—Belle. Very high com., C. C. Smith's Chris, black and tan, 4yrs., Redfield's Glen—Redfield's Jet.

Class 30. Black and Tan Setters, Bitches.—1st, withheld; 2d, J. W. Meacham's Clip, black and tan, 7yrs., Ben—Belle. High com., Walter Gibb's Jennie, black and tan, 4yrs., Dr. Aten's Glen—Francis Flirt.

Class 31. Black and Tan Setters, Puppies.—1st, J. W. Meacham's Ben, black and tan, 10mos., Don—Clip.

Class 32. Champion Irish Setters, Dogs or Bitches.—No entries.

Class 33. Irish Setters, Dogs.—1st, C. Berry Peet's Dash, red and white, 3yrs., Berkley—Lulu; 2d, W. F. Maguire's Dick, red, 1yr., Echo—Pearl. Very high com., Charles R. Thorburn's Rory O'More, Jr., red, 3yrs., Rory O'More—Norah O'More. High com., O. S. Kelsey's Red II., red, 2yrs., Dirk—Peggy; C. P. Phelp's Roe, dark red, 5yrs., Dash—Creena.

Class 34. Irish Setters, Bitches.—1st, Jean Grosvenor's Zelda, A.K.R. 240; 2d, Charles R. Thorburn's Lady Biddy, A.K.R. 622. High com., A. S. McClean's Meg Merrilies, 3yrs., Elcho I.—Peg Woffington. Com., J. Clarence Lester's Maud II., red, 4yrs., Champion Berkley—Champion Lulu.

Class 35. Irish Setters, Puppies.—C. B. Demarest's Wanda, red, 7mos., Dan—Moy. High com., Merrimac Kennel Club's Rufe, dark red, 7mos., Shamrock—Kate; Jean Grosvenor's Primrose, dark red, 6mos., Champion Echo—Zelda.

Class 36. Irish Water Spaniels, Dogs or Bitches.—Prizes withheld.

Class 37. Champion Field Spaniels, Dogs or Bitches.—1st, H. W. Huntington's Champion Benedict, A.K.R. 61.

Class 37 A. Field Spaniels, Dogs or Bitches.—1st, Maxwell Evarts's Punch, lemon and white, 15mos., imported Judy; 2d, William P. Trowbridge, Jr.'s, John Halifax, Gentleman, lemon and white, imported sire—Eagan's Judy. High com., Edward S. Porter's Vesta, lemon and white, 9mos., Eagan's Lorne—Eagan's Judy. Com., W. H. Beers's Beauty, liver and white, 6yrs.

Class 38. Champion Cocker Spaniels, Dogs or Bitches.—No entries.

Class 39. Cocker Spaniels, Dogs.—1st, J. P. Willey's Obo II., black, 18mos., Obo—Chloe II.; 2d, E. & G. Sheffield's Sport, liver, white breast, 2½yrs., high com., James A. Howarth's Don, liver and white, 4yrs., Dash—Floss. Com., S. R. Hemingway's Duke of Argyle, liver and white, 3yrs., Champion Charlie—Zuleite.

Class 40. Cocker Spaniels, Bitches.—1st, J. B. Willey's Blackie III., A.K.R. 428; 2d, Frederick Smith's Queen, liver and white, 18mos., Charley—Bowder. High com., A. C. Wilmerding's Suwanee, A.K.R. 648.

Class 41. Cocker Spaniels, Puppies.—1st, W. O. Partridge's Helen, black, 6mos., Obo II., A.K.R. 432—Critic, A.K.R. 303; 2d, John Daly's Sambo, black, 5mos., Obo II.—Darkie. Very high com., Joseph Hill's Darkie II., black, 5mos., Obo II.—Darkie. High com., Irving M. Dewey's Dandy Zulu, A.K.R. 382.

Class 42. Foxhounds, Dogs or Bitches.—1st, R. H. Meacham's Jerry II., black, tan and white, 4yrs., Jerry—Vick; 2d, F. A. Wilton's Sam, black and white, 3yrs. High com., William H. Lee's Major, black and tan, 2½yrs. Com., Dr. Benjamin M. Page's Stephen, black, tan and white, 8mos.

Class 43. Foxhounds, Puppies.—No entries.

Class 44. Beagles, Dogs and Bitches.—1st, Geo. B. Inches's Dell, A.K.R. 319; 2d, Joseph A. Blake's Diana, black, white and tan ticked, 14mos., Ringwood—Queen.

Class 45. Dachshunde, Dogs or Bitches.—1st, Wm. Lee Howard's Scamp, tan, 1yr. 4mos., Kaiser—Waldina; 2d, withheld.

Class 46. Champion Fox-Terriers, Dogs or Bitches.—1st, Samuel T. Peters's Vixen, 7½yrs., imported.

Class 47. Fox-Terriers, Dogs.—1st, Chas. E. Wallack's Lancelot, white, black and tan markings, 2yrs., Tweezers II.—champion Olive; 2d, H. A. Doggett's Nip, white and black markings, 4yrs., Brokenhurst Joe—Lady Teazle.

Class 48. Fox-Terriers, Bitches.—1st, John E. Thayer's Jaunty, tan and white, 2yrs., Joker—Torment; 2d, withheld. Com., F. D. Thompson's Lulu, black and white, 17mos., imported Nimrod—imported Nan.

Class 49. Fox-Terriers, Puppies.—1st, Clovernook Kennel's Clover Belle, 7mos., Joker—Guilty; 2d, John E. Thayer's Rascal, white, with black, 10mos., Nailer—Diana. Very high com., Fred Hill's Boxer, 11mos., Corinthian—Cosey. High com., Beatrice Paulding's Boots, white, black and tan, 10mos., Harold—Lady Gay Spanker.

Class 50. Champion Collies, Dogs.—1st, Thos. H. Terry's champion Robin Adair, A.K.R. 892.

Class 50A. Champion Collies, Bitches.—Absent.

Class 50B. Collies, Dogs.—1st, Kilmarnock Collie Kennel's Bruce, 20mos., A.K.R. 325; 2d, James Lindsay's Hiram, sable and white, 9mos., Rex—Kitty Mac. Very high com., Martin Dennis's Brack, A.K.R. 33. High com., J. W. Burgess's Donald, A.K.R. 532; J. D. Shotwell's Rokeby, sable, 3yrs., Marcus—Isie. Com., J. O. May's Fritz, black with tan points, 2yrs; J. W. Burgess's Saudy, A.K.R. 540.

Class 50C. Collies, Bitches.—1st, Kilmarnock Collie Kennel's Iona, black, white and tan, 4yrs., Champion Nero—Lassie; 2d, J. W. Burgess's Jean, A.K.R. 538. Very high com., James Lindsay's Fairy, sable and white, 9mos., Rex—Kitty Mac. High com., Kilmarnock Collie Kennel's Winnie, sable and white, 2yrs., Gairlock—Laurie.

Class 51. Collies, Puppies.—1st, Kenyon Gorham's Sam, fawn and white, Dudley—Olivia; 2d, James Lindsay's Nannie O., black, white and tan, 9mos., Rex—Kitty Mac. Very high com., J. D. Shotwell's Lennox, sable, 7mos., Rokeby—Fanny; J. D. Shotwell's Shepard Boy, sable, 7mos., Rokeby—Fanny; Stepney Scotch Collie Kennel Club's Montrose, A.K.R. 891. High com., A. Warren's Lark, black and tan, 9mos., Blucher—Jennie. Com., Stepney Scotch Collie Kennel Club's Lady Clyde, A.K.R. 883; Stepney Scotch Collie Kennel Club's Fanny II., A.K.R. 881; A. Warren's Rob Roy, black and tan, 9mos., imported Sweep—Purt Gart.

Class 52. Champion Bulldogs, Dogs or Bitches.—1st, John E. Thayer's Tippoo, A.K.R. 390.

Class 53. Bulldogs.—1st, R. & W. Livingston's Boz, A.K.R. 443; 2d, John P. Barnard Jr.'s Hamlet, dark brindle, 16mos., President Garfield—Wheel of Fortune. Very high com., John E. Thayer's Moses, A.K.R. 323; A. C. Waite's Viscount, black and white, imported.

Class 53A. Bulls, Bitches.—1st, R. & W. Livingston's Sweet Briar, A.K.R. 444.

Class 54. Champion Bull-Terriers, Dogs or Bitches.—No entries.

Class 55. Bull-Terriers, Dogs.—1st, R. & W. Livingston's Grand Duke, A.K.R. 524; 2d, withheld.

Class 56. Bull-Terriers, Bitches.—1st, R. & W. Livingston's Little Maggie, A.K.R. 525; 2d, withheld. Com., James Mountford's Fan, white, 17mos., Billy—Parker's Fan.

Class 57. Bull-Terriers, Puppies.—Prizes withheld.

Class 58. Rough-Haired Terriers, Dogs and Bitches —1st, Allerton & Moses's Patsey, blue and black, 6mos.; 2d, withheld. Com., Allerton & Moses's Spider, yellow, 14mos.

Class 59. Black and Tan Terriers, Dogs and Bitches.—1st and 2d, withheld. Very high com., P. McKiernan's Minnie Warren, black and tan, 2½yrs.

Class 60. Dandie Dinmont Terriers, Dogs or Bitches.—Prizes withheld. Com., Thos. H. Bell's Peel. A.K.R. 433.

Class 61. Irish Terriers, Dogs and Bitches,—Prizes withheld.

Class 62. Skye Terriers. Dogs, or Bitches.—Prizes withheld.

Class 63, Champion Pugs, Dogs or Bitches.—No entries.

Class 64. Pug Dogs.—Prizes withheld. Com., C. H. Crosby's Jimmy, 15mos.

Class 65. Pugs, Bitches.—1st, Walter D. Peck's Beauty, 2yrs., Heck—Daisy; 2d, Allerton & Moses's Lucy, 6yrs. Very high com., Chequasset Kennel's Trantrums, A.K.R. 220. Com., Charles R. Taylor's Betty, 2yrs., Morrison's Strain; Walter D. Peck's Daisy, fawn, 1yr., Major—Beauty.

Class 66. Pugs, Puppies.—1st, Chequasset Kennel's Treasure, A.K.R. 472; 2d, Allerton & Moses's Dandy, 8mos. High com., Walter D. Peck's Major, 3mos., Pug—Beauty; Philip O. Schwaab's Peggy, fawn with black, 3mos., Heck—Vixen. Com., Allerton & Moses's Lady, 8mos.

Class 67. Yorkshire Terriers, Dogs or Bitches.—1st, Geo. E. Vaughn's Joe, blue and tan, 3yrs.; only entry.

Class 68. Toy Terriers, Dogs or Bitches.—1st, John O'Brien's Topsy, silver, 2yrs., Dixey—Molly; 2d, Fred Bullen's Baby, silver terrier, 2yrs., Yorkshire Dan—Silver Bess. Very high com., J. H. Tyler's Maggie, tan, 4yrs.

Class 69, King Charles Spaniels.—1st, withheld; 2d, Fred Bullen's Jack, black and tan, 5yrs.

Class 70. Japanese Spaniels, Dogs or Bitches.—No entries.

Class 71. Italian Greyhounds, Dogs or Bitches.—1st, R. G. Bacon's Top, 7yrs.

Class 72. Miscellaneous, Under 25lbs.—1st, Nellie Thomas's Mee Too, mouse color, 2yrs., Fiji dog. Very high com., S. S. Thompson's Moses, blue and tan, 4yrs. High com., H. L. Bradley's Pete, blonde, 10yrs. Com., A. D. Fogg's Shoo Fly, brown, 10yrs., pedigree unknown.

Class 73. Miscellaneous, Dogs or Bitches Over 25lbs.—1st, Henry Pearsall's Bob, black, 5mos., imported, curly-haired English retriever. Very high com., L. G. Dickinson's Prince, black and white, 2yrs. Com., Robert O. DuBois's Captain, black, 5yrs., full pedigree, curly-haired English retriever.

SPECIAL PRIZES.

For best mastiff bitch—Shaw & Bates's Duchess.
For best mastiff dog or bitch—J. W. Burgess's Hero.
For best mastiff puppy—Absent.
For best mastiff in the show—Charles H. Mason's Nevison.
For best champion rough-coated St. Bernard—E. R. Hearn's Bonivard.
For second best rough-coated St. Bernard dog—Clovernook Kennel's Samson,
For best rough-coated St. Bernard bitch (two prizes)—E. R. Hearn's Gertie.
For best rough-coated St. Bernard puppy—Schoonhoven Kennel's Schoonhoven.
For best smooth-coated St. Bernard puppy—Carlos French's Billy.
For best smooth-coated St. Bernard (two prizes)—Carlos French's Alexander.
For best Newfoundland (two prizes)—G. J. Bassett's Jack.
For best bloodhound (four prizes)—Withheld.
For best greyhound bitch—H. W. Huntington's Dorothée.
For best greyhound dog—H. W. Huntington's Doubleshot.
For best deerhound bitch—Theo. A. Blake's Lorna II.
For best deerhound dog.—Clovernook Kennel's Roy.
For best champion pointer dog.—Knickerbocker Kennel's Knickerbocker.
For best champion pointer bitch—Westminster Kennel Club's Lassie.
For second best pointer dog over 50lbs.—Robert Wilson's Zeb.
For best pointer dog or bitch in the show—Charles H. Mason's Beaufort.
For best pointer bitch under 50lbs.—Knickerbocker Kennel's Lady Bang.
For second best pointer bitch under 50lbs.—Westminster Kennel Club's Moonstone.
For best pointer dog over 50lbs.—Charles H. Mason's Beaufort.
For best pointer dog under 50lbs.—Knickerbocker Kennel's Rushton.
For best pointer bitch over 50lbs.—Knickerbocker Kennel's Lady Gleam.
For best pointer bitch puppy sired by Beaufort—Dr. A. McCollom's Lady Nixon.
For best pointer puppy sired by Beaufort—Dr. A. McCollom's Lady Nixon.
For best English setter dog—F. A. Cannon's Yale Belton.
For second best English setter dog—Louis B. Wright's Jester.
For best English setter bitch—W. H. Bebee's Blue Bell.
For second best English setter bitch—William A. Buckingham's Alice Dale.
For best champion black and tan setter—H. Clay Glover's Turk.
For best black and tan setter dog—Clayton H. Redfield's Glen.
For best champion English setter—Absent.
For best brace of English setters owned in New Haven—Edward A. Todd's Frank and Dash.
For best brace of pure Laverack setters—Dr. Paul C. Skiff's Duke and Don.
For best English setter puppy—F. A. Cannon's Eastern Dan.
For best English setter, dog or bitch—F. A. Cannon's Yale Belton.
For best black and white English setter, owned in New Haven—F. A. Cannon's Eastern Dan.
For best English setter puppy under 6mos.—G. Edward Osborn's Bess.
For best black and tan setter puppy—J. W. Meacham's Ben.
For best black and tan setter bitch—J. W. Meacham's Clip.
For best red native setter bitch—Jean Grosvenor's Zelda.
For best red native setter puppy—C. B. Demarest's Wanda.
For best red Irish setter, dog or bitch—C. Berry Peet's Dash.
For best collection of red native setters of same pedigree—Not awarded.
For best red native setter over one and under two years old—W. F. Maguire's Dick.
For best native red setter owned in Connecticut—W. F. Maguire's Dick.
For best red and white Irish setter dog—W. P. Bigelow's Tom.
For best brace of setters—F. A. Cannon's Yale Belton and Eastern Dan.
For best native setter, dog or bitch—Wm. A. Buckingham's Alice Dale.
For best native setter owned in Connecticut—W. A. Buckingham's Alice Dale.
For best native setter of New Haven, Conn.—Not decided.
For best setter bitch with litter of puppies—Not decided.
For best field spaniel—Maxwell Evarts's Punch.
For best Clumber spaniel—Maxwell Evarts's Punch.
For best cocker spaniel puppy—W. O. Partridge's Helen.
For best liver and white cocker spaniel dog—J. A. Howarth's Don.
For best cocker spaniel, dog or bitch—J. P. Willey's Obo II.
For best cocker spaniel bitch—J. P. Willey's Blackie III.
For best foxhound dog—R. H. Meacham's Jerry II.
For best foxhound, dog or bitch—R. H. Meacham's Jerry II.
For best beagle, dog or bitch—George B. Inches's Dell.
For best dachshund dog—Wm. Lee Howard's Scamp.
For best dachshund bitch not awarded.
For best champion fox-terrier, dog or bitch—Samuel T. Peters's Vixen.
For best fox-terrier puppy—Clovernook Kennel's Clover Belle.
For best fox-terrier, dog or bitch—Chas. E. Wallack's Lancelot.
For best collie dog—Kilmarnock Collie Kennel's Bruce.
For second best collie dog—James Lindsay's Hiram.
For best collie bitch—Kilmarnock Collie Kennel's Iona.
For second best collie bitch—J. W. Burgess's Jean.
For best collection of collies—Kilmarnock Collie Kennel's Bruce, Iona and Winnie.
For best collie dog puppy—Kenyon Gorham's Sam.
For best collie bitch puppy—James Lindsay's Nannie O.
For best collie in the show—Thos. H. Terry's Robin Adair.
For best bull, dog or bitch—R. & W. Livingston's Sweet Briar.
For best bull-terrier other than white, dog or bitch—W. C. Dole's Brandy.
For best bull-terrier, dog or bitch—R. & W. Livingston's Grand Duke.
For best black and tan terrier—P. McKiernan's Minnie Warren.
For best Skye terrier. Not awarded.
For best pug, dog or bitch—Walter D. Peck's Beauty.
For best pug puppy—Chequasset Kennel's Treasure.
For best collection of pugs—Walter D, Peck's Beauty, Daisy and Major.
For best Yorkshire terrier—Geo. E. Vaughn's Joe.
For best toy terrier—John O'Brien's Topsy.
For best dog or bitch in miscellaneous class under 25lbs.—S, S, Thompson's Moses.
For best non-sporting dog in the show—E. R. Hearn's Bonivard.
For best trick dog—A. C. Collins's Fritz.
For best sporting dog in the show—Chas. H. Mason's Beaufort.
For best retrieving dog—R. H. Meachum's Dan.
For second best retrieving dog—J. C. Schuyler's Tom II.
For the best coach dog—L. G. Dickinson's Prince.
For best dog or bitch in miscellaneous class over 25lbs.—Henry Pearsall's Bob.

NEW YORK DOG SHOW.

Editor Forest and Stream:

The managers of W. K. C. Bench Show have decided to offer a medal for the best Clumber spaniel. Entries for same should be made in class 60 or 61.

ANNOUNCEMENT OF JUDGES.

Mr. John C. Higgins—English setters.
Mr. Paul Dana—Mastiffs and pugs.
Mr. James Mortimer—Fox-terriers, bulldogs, bull-terriers, and collies.
Mr. J. R. Pierson—Greyhounds, Italian greyhounds, and deerhounds.

Judges of other classes will be duly announced.

CHAS. LINCOLN, Superintendent.

MASTIFF TEMPERAMENT AND PECULIARITIES.

Editor Forest and Stream:

Although I have not so far succeeded in eliciting comments from our mastiff fanciers on what I had to say on mastiff temperament in FOREST AND STREAM of Jan. 24, I am pleased to send you the following, from Richard Cook, Esq., honorable secretary of the old English Mastiff Club, England.

W. WADE.

PITTSBURGH, March 6, 1884.

One of my bitches, one morning early, allowed some painters to bring their ladder into my grounds, ready for work, and they then went away to breakfast. Returning, they were about to raise the ladder, when Sylvia said no, and would not allow them to touch it until my man came. Again. Twenty years ago I owned a dog, Warwick. I lived in a house adjoining another. The occupant of the next house had free access to my grounds, there being a gate between them. Mrs. Bell, my adjoining neighbor, frequently fed the dog, and he was as fond of her as possible. For all I knew he considered her as one of the family. One Sunday my wife and I went to take a walk, and as all the servants were absent, I locked the front door, left the back one open, and left Warwick loose. In half an hour Mrs. Bell thought she would take a look over my place to see that all was right, but on coming to the gate between her own and my grounds, War-

wick met her, growling at her fiercely, and would not allow her to come in. I believe that he had been in the house, found it empty, and I know would have guarded it to the death. I left this house when Warwick was ten years old, and left him with my successor. He pined over it very much, and when I called there three weeks after the poor dog was so delighted that in his demonstrations of joy he fell down in a fit, and died three days after. My present dog, Cromwell, is another of similar temperament. RICHARD COOK.

EASTERN FIELD TRIALS CLUB.

Editor Forest and Stream:

A committee has been appointed by the governors of E.F.T.C. to revise and alter the running rules to avoid any repetition of last year's errors, and any person receiving Derby blanks without the running rules, will, by application, have the same sent as soon as they are printed, which will be at the earliest date possible.

Quail have wintered well at High Point, and the prospects, if the spring is favorable, are that the birds will be more abundant than last fall, insuring a short and most successful meeting. WASHINGTON A. COSTER, Sec.

FLATBUSH, N. Y.

MR. D. C. SANBORN.

AT a meeting of the Eastern Field Trials Club at Delmonico's on Tuesday evening, March 11, the following resolutions were unanimously adopted:

Resolved, That the Eastern Field Trials Club has learned with pain of the decease of our esteemed friend, Mr. D. C. Sanborn; that the genial, open, kindly and generous qualities of Mr. Sanborn, united with the influence of his sterling honesty and lofty views of the duties of sportsmen toward the development of field trials, have had a greater influence toward the elevation of the objects for which this and similar clubs were organized than that of any other individual since the establishment of the Association, and that we, in common with the entire community of American sportsmen, have sustained in his decease an irreparable loss.

Resolved, That these resolutions be spread upon the minutes, and that a copy thereof be transmitted to the family of the deceased, with our respectful sympathy in their great affliction.

N. A. K. C. STUD BOOK.

Editor Forest and Stream:

In reply to Mr. James Watson's inquiry in your last issue about the N. A. K. C. Stud Book, I will say that the club entered into a contract with Dr. N. Rowe on Dec. 10, 1881, turning over to him all entries and other material pertaining to said book, he agreeing to publish it for a term of ten years, annually, if necessary, or every two years. This matter was freely discussed at the meeting of the club at Grand Junction last December. Why this part of the proceedings of the meeting was omitted and everything else published, is more than I can tell. In the absence of Dr. Rowe, Mr. Whitford stated that the book was in the printer's hands and would be out early in January. The matter was referred to the executive committee with instructions to see that Dr. Rowe fulfilled his contract without any further delay. I cannot say why the book was not published in January, as I can get no response from Dr. Rowe to any letters on this subject. I trust Dr. Rowe will soon have this much needed book out of the printer's hands. D. BRYSON (Secretary N. A. K. C.).

AMERICAN ENGLISH BEAGLE CLUB.

THE following circular has been sent to the members of the American English Beagle Club:

Gentlemen—Your Executive Committee, to whom was assigned the drafting of a constitution and by-laws for the Club's management, having given the work before them careful consideration, wish to submit for your approval their report as follows: Yours respectfully,

DR. J. W. DOWNEY, J. N. DODGE,
GEN'L F. A. BOND, A. C. KRUEGER,
W. H. ASHBURNER, Chairman.

CONSTITUTION.

ARTICLE I.

NAME.—The Association shall be known as and called "The American English Beagle Club."

ARTICLE II.

OBJECT.—The object of the Club shall be to promote the improvement of the English Beagle Hound in America, by having a proper standard to breed to, and of having our Bench Show Managers adopt the same for guidance in judging, also having proper judges selected at our bench shows, and the following classes assigned to the Beagle Champion: Dog and Bitch, and Puppy open, also a class for Basket or Foot Beagles under twelve inches.

ARTICLE III.

MEMBERS.—A person to be a member must be recorded in a book provided for the purpose by the Secretary. The date of his becoming a member, also the time of his ceasing to be such shall be recorded. Any member can resign from the Club by sending his resignation to the President or Secretary, in writing, and upon the acceptance of such, all his interest in the property of the Club ceases from the date of such resignation. A member whose dues shall remain unpaid for six months after the same have become due shall cease to be a member and forfeit to the Club all claims and benefits to which he would have been entitled as a member, provided that the Executive Committee may consider his case, and upon sufficient cause shown reinstate him to membership on payment of his dues. Any member acting contrary to the provisions of the Constitution or in violation of the By-Laws or Rules of the Club, or in any way which may tend to the injury or destruction of the Club, or neglecting his duty as an officer or a member or being convicted of crime in a court of justice, may be expelled and shall forfeit to the Club all dues paid, all property claims and benefits to which he would have been entitled as a member of the Club. A member can be expelled only by a vote in favor of his expulsion of two-thirds of the members after thirty days notice has been given to him personally of the charges against him, when action will be taken thereon by a vote.

ARTICLE IV.

OFFICERS.—The officers shall consist of a President, a Secretary and Treasurer and an Executive Committee, said committee to consist of three active members, whose duty shall be as the by-laws prescribe. Any vacancies occurring in the said committee shall be filled by appointment of the President. Should the office of President or Secretary and Treasurer be vacant, the same shall be filled by appointment of the Executive Committee. All appointments so made as above to hold good only until the yearly election next following such.

ARTICLE V.

ELECTIONS.—An election of officers of the Club to serve one year shall take place annually in January, and a majority of the votes cast for a candidate shall elect him.

ARTICLE VI.

MEETINGS.—As it is not practical to have meetings, as the members are situated so far apart, they will be informed from time to time by circulars of the working of the club, or by writing to the Secretary or any member of the Executive Committee.

ARTICLE VII.

COMPENSATION FOR SERVICES.—The President, the Secretary and Treasurer and the Executive Committee, also Special Committees, shall receive no salary from the club for his or their services.

ARTICLE VIII.

AMENDMENTS.—The Constitution and By-Laws may be amended or altered by a vote in favor thereof of two-thirds of the members after notice thereof with a copy of the proposed amendment or alteration has been sent to every member ten days before voting thereon.

BY-LAWS.

1. PRESIDENT.—It shall be the duty of the President to assume general supervision of the affairs of the Club and report from time to time to enforce the observance of the By-Laws and he may vote on amendments to the Constitutions or alterations of the By-Laws, also on the expulsion of a member, but on all other matters shall vote only in the case of a tie, and then give the casting vote.

2. SECRETARY AND TREASURER.—It shall be the duty of the Secretary and Treasurer to have charge of all official correspondence to keep copies of all letters sent by him, and file such as he may receive, to correspond at the request of the President or Executive Committee on all matters appertaining to the object of the Club. To keep a record of the members, their admissions and discontinuances. To collect and receive all money and dues to the Club, and keep a correct account of the same. He shall pay all orders drawn on him by the Executive Committee out of the funds of the Club in his hands when countersigned by the President and to present a report of the condition of affairs in his department every six months to the Club.

3. EXECUTIVE COMMITTEE shall have charge of the property and effects of the Club, keeping a correct inventory thereof. They shall receive and take charge of all gifts of books, pictures or works of art, specimens of natural history, etc. They shall make all purchases ordered by the Club, audit the accounts of the Treasurer and report the same at the time of the Annual Election in January, and transact all business not otherwise herein ordered. They shall provide a book in which shall be kept the proceedings and orders of the Committee. They shall have power to appoint Sub Committees for any special object, and to delegate to such Sub Committees the powers and functions of the Committee relating thereto. The President shall be the Chairman of the Executive Committee.

4. FINANCES.—The Finances of the Club shall be under the care and management of the Executive Committee.

5. ANNUAL DUES.—The Annual Dues shall be two dollars, due and payable at the time of a member joining the Club, and shall be paid from the date of his joining yearly.

You will please notify the Secretary not later than March 21, if you vote for accepting the above for the management of the Club or not. A. C. KRUEGER, Secretary and Treasurer.

WRIGHTSVILLE, York County, Pa.

THIRTY YEARS AGO.—Philadelphia, Pa.—*Editor Forest and Stream:* I notice in your last issue an item from Oxford, Me., concerning a hound being killed by a locomotive while crossing the track, close behind a fox. A parallel case occurred over thirty years ago on the Boston & Albany Railroad, near Chester, Mass. The train was ascending a grade, and somewhat slowly, when the engineer saw a large fox cross the track a few yards ahead, closely followed by a hound. The fox disappeared in a thick growth of bushes, soon doubling and coming out directly abreast of the locomotive, and ran alongside of it till the hound was nearly upon him, when he suddenly forged ahead and crossed close in front of the cowcatcher, which struck and killed the hound as he attempted to follow.—MILTON P. PEIRCE.

GORDON JUDGING AT NEW YORK.—The Westminster Kennel Club have written to Mr. H. Malcolm, of Baltimore, Md., the following letter: "New York, March 1, 1884.—H. Malcolm, Baltimore, Md. Dear Sir—The managers of the W. K. C. show have resolved upon striking out the clause in the rules which announces that the judges will be requested to make their decisions in conformity with "Stonehenge," etc. As they have always declined to pass upon a decision which did not seem to be in accordance with that request, the rule has been practically a dead letter. They will, however, be glad to hand to the judges the standard adopted by your society, and no doubt the judges will be influenced thereby.—(Signed) ROBT. C. CORNELL (Sec. W. K. C.).

WASHINGTON SHOW.—The Washington bench show bids fair to be as fine an exhibition as that held here last year. Attorney-General Brewster and other prominent gentlemen will enter some fine dogs. I understand the entries number somewhat over 300. There will be a good display of deerhounds. The number of foxhounds and beagles will be small. —HOMO.

TORONTO DOG SHOW.—The bench show to be held at Toronto, Ont., next week, will undoubtedly be first-class in every respect. In addition to the very liberal prize list, more than fifty special prizes have already been offered to the different classes; many of them are valuable, and the list is not yet complete, as several more have been promised.

THE WATERLOO CUP.—The Waterloo coursing meeting was held at Altcar, near Liverpool, Eng., Feb. 20, 21, 22, the final heats resulting as follows: Waterloo Cup—Mineral Water first, Greenick second; Plate—Cocklaw Dean first, Cyril second; Purse—Escape and Gladys divided.

BLUE CARP.—The North German Lloyd steamer Werra, arrived on Saturday last, and brought forty blue carp for the United States Fish Commission. They are said to be an improved kind.

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, of breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Drake. By Mr. Chas T. Corbin. New Britain, Ct., for red and white setter dog, whelped July 7, 1883, by Dan II. (Mike—Susie) out of Topsy (Dan—Beauty).

Bella Rita. By Mr. Geo. L. V. Tyler, West Newton, Mass., for liver and white pointer bitch, whelped Dec. 22, 1883, by Baronet (A.K.R. 264) out of Rita Croxteth (A.K.R. 168).

Zero. By Mr. Geo. L. V. Tyler, West Newton, Mass., for lemon and white pointer dog whelped Dec. 22, 1883, by Baronet (A.K.R. 264) out of Rita Croxteth (A.K.R. 168).

Glenwood. By Mr. J. Purrington, Bath, Me., for white, black and tan beagle dog, whelped Nov. 21, 1883, by Ringwood (Ranter—Beauty) out of Music III. (Flute—Victress).

Rex, Castelar, San Juan, Joaquin, Lopez, Rajah, Lady Ashmont, Moza and Rita. By the Ashmont Kennel, Dorchester, Mass., for mastiffs, six dogs and three bitches, whelped Jan. 26, by their Diavolo (A.K.R. 548) out of their Madge (A.K.R. 548).

Merle. By the Ashmont Kennel, Dorchester, Mass., for black and tan setter dog, whelped Jan. 19, by Leavitt's Moses out of their Ashmont Nell.

Spider. By Mr. Geo. E. Drew, Rochester, N. H., for black, white and tan beagle, whelped Nov. 13, 1883, by Ringwood (Ranter—Beauty) out of champion Belle (Davison—Millie).

Captain Fred. By Mr. C. H. Lounsberry, Providence, R. I., for black and white ticked English setter dog, whelped Oct. 6, 1883, by Emperor Fred (A.K.R. 33) out of Polka (A.K.R. 115).

Roland and Jessie. By Mr. I. H. Roberts, Philadelphia, Pa., for red Irish setters, dog and bitch, whelped July 30, 1883, by champion Elcho (A.K.R. 295) out of champion Noreen (A.K.R. 297).

Little Nell. By Mr. I. H. Roberts, Philadelphia, Pa., for red Irish setter bitch, whelped Aug. 4, 1883, by champion Elcho (A.K.R. 295) out of Rose (A.K.R. 298).

Hazel Kirke and Hebe. By Mr. I. H. Roberts, Philadelphia, Pa., for red Irish setter bitches, whelped June 9, 1883, by Chief (A.K.R. 231) out of Hazlenut (A.K.R. 57).

Bryan Borru. By Mr. I. H. Roberts, Philadelphia, Pa., for red Irish setter dog, whelped June 9, 1883, by Chief (A.K.R. 231) out of Hazlenut (A.K.R. 67).

Leon. By Mr. I. H. Roberts, Philadelphia, Pa., for red Irish setter dog, whelped June 12, 1883, by Bruce (A.K.R. 54) out of Luray (A.K.R. 59).

Duke. By Mr. H. B. Young, Brooklyn, N. Y., for orange and white English setter dog, 30mos. old, by Mercilliot's Will out of Hale's Juliet.

Ashmont Kennels. By Dr. J. F. Perry, Boston, Mass., for his kennel of red Irish setters and mastiffs.

NAMES CHANGED.

☞ *See instructions at head of this column.*

Jumbo to Jerry. Orange and white setter dog, age and pedigree not given, owned by Mr. Warren Lowe, Tenafly, N. J.

BRED.

☞ *See instructions at head of this column.*

Gem—Obo II. Mr. Geo. L. V. Tyler's (West Newton, Mass.) liver and white ticked cocker spaniel bitch Gem (Snipe—Feather) to Mr. J. P. Willey's Obo II. (A.K.R. 432), Feb. 22.

Smut—Obo II. Mr. H. C. Bronsden's (Boston, Mass.) cocker spaniel bitch Smut (A.K.R. 858) to Mr. J. P. Willey's Obo II. (A.K.R. 432), Feb. 26.

Ruby—Druid. Mr. H. E. Hamilton's (New York) English setter bitch Ruby (Rake—Fanny) to Mr. A. Burges's Druid (Prince—Dora), March 6.

Phœbe—Bow. Mr. C. A. Johnston's (Columbus, Miss.) liver and white pointer bitch Phœbe (Faust—Jaunty) to Mr. Edward Odell's champion Bow.

Queen—Bow. Mr. C. A. Johnston's (Columbus, Miss.) pointer bitch Queen to Mr. Edward Odell's champion Bow.

Milicent—Foreman. Dr. L. H. Twaddell's (West Philadelphia, Pa.) 12in. imported beagle bitch Milicent to Mr. W. H. Ashburner's 10in. imported Foreman, March 8.

Annie Laurie—Rattler. Mr. W. A. Faxon's (Boston, Mass.) collie bitch Annie Laurie (Marcus—Isle) to the Kilmarnock Collie Kennel's Rattler Tweed—Lassie), March 7.

Novice—Priam.—Mr. Fred. W. Rothera's (Simcoe, Ont.) St. Bernard bitch Novice to his Priam (A.K.R. 485), Feb. 21.

Lassie—Lorne. Mr. Fred. W. Rothera's (Simcoe, Ont.) Scotch collie bitch Lassie (A.K.R. 445) to his Lorne (A.K.R. 446), March 3.

Katydid II.—Mack B.—Mr. Eugene A. Austin's (Providence, R. I.) English setter bitch Katydid II. (Dash III.—Katydid) to Mr. C. Fred. Crawford's Mack B. (Dick Laverack—Twilight), March 13.

Maggie O'More—Arlington. Major Lovejoy's (Bethel, Me.) red Irish setter bitch Maggie O'More (A.K.R. 981) to Mr. C. Fred. Crawford's Arlington, March 13.

Lady Elmore—Ringwood. Mr. Chas. F. Kent's Monticello, N. Y.) white, black and tan English beagle bitch Lady Elmore (Ringwood—Queen) to Mr. N. Elmore's imported Ringwood (Ranter—Beauty), Jan. 16.

Queen—Flute. Mr. N. Elmore's (Granby, Ct.) white, black and tan English beagle bitch Queen (Victor—Lucy) to his Flute (Rattler—True), Jan. 20.

Thorn—Flute. Mr. N. Elmore's (Granby, Ct.) English beagle bitch Thorn (Victor—Lucy) to his Flute (Rattler—Beauty), Jan. 22.

Chase—Flute. Mr. N. Elmore's (Granby, Ct.) white, black and tan ticked English beagle bitch Chase (Ringwood—Belle) to his Flute (Rattler—True), Jan. 27.

Collette—Ringwood. Mr. N. Elmore's (Granby, Ct.) white, black and tan English beagle bitch Collette (Chanter—Beauty) to his Ringwood (Ranter—Beauty), Jan. 28.

Beauty—Flute. Mr. Henry Cowdry's (Hartland, Ct.) foxhound bitch Beauty to Mr. N. Elmore's beagle Flute (Rattler—True), Jan. 3.

Silver—Ringwood. Mr. N. Elmore's (Granby, Ct.) English beagle bitch Silver (Flute—Bess) to his Ringwood (Ranter—Beauty), March 1.

Gay—Flute. Mr. Hopkinson's (North Granby, Ct.) English beagle bitch Gay (Ringwood—Bunnie) to Mr. N. Elmore's Flute (Rattler—True), March 9.

Flick—Dinks. Mr. Frank Huckins's (East Boston, Mass.) Gordon setter bitch Flick (A.K.R. 293) to Mr. J. F. Hartwell's Dinks (Natt—Bess), March 1.

Kate—Bang. Mr. T. W. Sterling's (New York) liver and white pointer bitch Kate (Croxteth—Trinket) to Mr. J. W. Munson's imported Bang (champion Bang—Luna), Feb. 19.

Dent—Meteor. Mr. J. W. Blythe's (Burlington, Ia.) liver and white pointer bitch Dent (Faust—Lassie) to Mr. J. W. Munson's imported Meteor (Garnet—Jilt), Feb. 28.

Dell—Meteor. Mr. Geo. A. Castleman's (St. Louis, Mo.) liver and white pointer bitch Dell (Croxteth—Trinket) to Mr. J. W. Munson's imported Meteor (Garnet—Jilt), March 3.

Marvel—Meteor. Mr. J. W. Munson's (St. Louis, Mo.) liver and white pointer bitch Marvel (Croxteth—Trinket) to his imported Meteor (Garnet—Jilt), March 13.

Bertie—Sensation. Mr. J. A. Schuyler's (Lehighton, Pa.) pointer bitch Bertie (Rab—Bellona) to champion Sensation (A.K.R. 217), March 10,

WHELPS.

☞ *See instructions at head of this column.*

Carlina. The Dominion of Canada Kennel Club's English setter bitch Carlina (Carlowitz—Princess Nellie), March 4, six (four dogs), by their Count (Bandit—Royal Jess).

Princess Belle. Dr. G. A. Seaman's (Marysville, Kan.) English setter bitch Princess Belle, Jan. 2, five (one dog), by his Colonel Thunder.

Glenfinlass. Mr. T. G. Davey's (London, Ont.) English setter bitch Glenfinlass (A.K.R. 588), March 7, eight, by his Prince Phœbus (A.K.R. 597).

Clio. Mr. J. S. Brown's (Montclair, N. J.) liver and white pointer bitch Clio (Sensation——), Feb. 23, eleven (four dogs) by Mr. A. E. Godefroy's Lord Sefton (Croxteth—Vinnie); three bitches since dead.

Countess Mollie. Mr. Peter Moeller's (Nyack, N. Y.) English setter bitch Countess Mollie (Count Noble—Spark), Feb. 27, nine (eight dogs), by the late Mr. D. C. Sanborn's Gus Bondhu.

Beauty. Mr. Henry Sturtevant's (Medina, N. Y.) imported English setter bitch Beauty (A.K.R. 806), Feb. 16, seven (four dogs), by his Perfection (A.K.R. 826).

Viola. The Surrey Kennel's (Ellicott City, Md.) pointer bitch Viola (A.K.R. 703), March 4, six (five dogs), by Mr. C. H. Mason's Beaufort (A.K.R. 694).

Bridget O'More. Major Lovejoy's (Bethel, Me.) red Irish setter bitch Bridget O'More (A.K.R. 564), March 14, eight (five dogs), by his Ned Elcho (A.K.R. 984).

Daisy. The Chequasset Kennel's (Lancaster, Mass.) imported pug bitch Daisy (A.K.R. 468), March 3, six (four dogs), by their imported Young Toby (A.K.R. 475); two dogs since dead.

Music. Mr. N. Elmore's (Granby, Ct.) imported beagle bitch Music (Rockwood—Faithful), Feb. 9, four (one dog), by his King; all white, black and tan.

Gyp. Mr. W. W. Hurd's (Colebrook River, Ct.) black and tan foxhound bitch Gyp, March 13, thirteen (nine dogs), by Griswold's Colonel.

Modesty. Mr. J. W. Munson's (St. Louis, Mo.) liver and white pointer bitch Modesty (Croxteth—Trinket), March 13, seven (three dogs), by his imported Bang (champion Bang—Luna); all liver and white.

SALES.

☞ *See instructions at head of this column.*

Joe. Fawn pug (A.K.R. 925), by Mr. Jas. Mortimer, New York, to Mr. Geo. H. Hill, Cincinnati, O.

Trim. Gordon setter dog, whelped Oct. 22, 1883, pedigree not given, by Mr. Geo. A. Ayers, Pawtucket, R. I., to Mr. F. T. Seward, McKean, Pa.

Kate Claxton. Liver and white English setter bitch, age not given (Guy Mannering—Flash), by Dr. Robt. I. Hampton, Athens, Ga., to Mr. A. J. Crovatt, same place.

Belle Rita. Liver and white pointer bitch, whelped Dec. 22, 1883, by Baronet (A.K.R. 264) out of Rita Croxteth (A.K.R. 168), by Mr. George L. V. Tyler, West Newton, Mass., to Mr. N. P. Warren, Newtonville, Mass.

Lee. Black, white and tan beagle dog, whelped 1877 (Warrior—Rosey), by Mr. R. M. Lindsay, Scranton, Pa., to Mr. Pottinger Dorsey, New Market, Md.

Fannie. Black, white and tan imported foxhound bitch Fannie, by Mr. B. R. Houghton, Boston, Mass., to Mr. W. C. Crandall, Springville, N.Y.

Dick Laverack. Blue belton English setter dog, 4½yrs. old (Thunder—Peeress), by Mr. H. Bailey Harrison, Tilsonburg, Ont., to Mr. T. G. Davey, London, Ont.

Belle's Pride. Blue belton English setter bitch, 4½yrs. old (Paris—Belle), by Mr. H. Bailey Harrison, Tilsonburg, Ont., to Mr. T. G. Davey, London, Ont.

Genevieve. Blue belton English setter bitch, 23mos. old (London—Dawn), by Mr. H. Bailey Harrison, Tilsonburg, Ont., to Mr. T. G. Davey, London, Ont.

Peek-a-Boo. English setter bitch (A.K.R. 825), by Mr. Henry Sturtevant, Medina, N. Y., to Mr. Ricardo B. Smith, Washington Heights.

Rush P. White pointer dog, whelped July 29, 1883 (Nip—Josie), by Mr. L. F. Patterson, Bainbridge, Ga., to Mr. G. W. Mroczkowski, same place.

Dick. Setter dog, by Joe (Check II.—Pink) out of Nellie (Frank—Kate), by Mr. J. W. Trantum, Middletown, Ct., to Major Lovejoy, Bethel, Me.

David O'More. Red Irish setter dog, whelped March 29, 1883, by Ned Elcho (A.K.R. 984), out of Bridget O'More (A.K.R. 964), by Major Lovejoy, Bethel, Me., to Mr. J. W. Trantum, Middletown, Ct.

Hornell Obo. Imported black cocker spaniel dog, age not given (Obo—Nellie), by Mr. G. W. Leavitt, Boston, Mass., to Mr. J. P. Willey, Salmon Falls, N. H. Price, $450.

Fun. Fawn pug bitch (A.K.R. 469), by the Forest City Kennel, Portland, Me., to the Chequasset Kennel, Lancaster, Mass.

Don. Fawn pug dog (A.K.R. 704), by the Forest City Kennel, Portland, Me., to the Chequasset Kennel, Lancaster, Mass.

Pan. Fawn pug bitch (A.K.R. 469), by the Chequasset Kennel, Lancaster, Mass., to Mr. Francis Lynch, Newburgh, N.Y.

Chum. Smooth-coated St. Bernard dog, whelped June 17, 1882 (Rex—Brunhild, A.K.R. 28), by the Chequasset Kennel, Lancaster, Mass., to Mr. F. Louis Mahler, Raleigh, N. C.

Ringwood—Silver whelps. Beagles, whelped Nov. 12, 1883, by Mr. N. Elmore, Granby, Ct., a dog to Mr. I. I. Lanty, Mole Hill, W. Va.;

a dog to Mr. Chas. F. Beard, Boston, Mass.; a dog to Mr. Joseph W. Gross, Harrisburg, Pa., and a bitch to Mr. Frank Lynch, Newburg, N. Y.

King—Mary whelp. Beagle bitch, whelped Nov. 11, 1883, by Mr. N. Elmore, Granby, Ct., to Mr. I. I. Lanty, Mole Hill, W. Va.

Ringwood—Belle whelp. Beagles, whelped Nov. 13, 1883, by Mr. N. Elmore, Granby, Ct., a dog to Mr. Geo. E. Drew, Rochester, N. H.; a dog to Mr. Haven Doe, Salmon Falls, N. H., and a bitch to Mr. W. Hamersley, St. Leonard, Can.

Ringwood—Bush whelp. Beagle dog, whelped, Nov. 28, 1883, by Mr. N. Elmore, Granby, Ct., to Mr. Frank Lynch, Newburg, N.Y.

Ringwood—Music II. whelp. Beagle dog, whelped Nov. 21, 1883, by Mr. N. Elmore, Granby, Ct., to Mr. J. Lingsham, Plantsville, Vt.

Bang—Spinaway whelps. Pointers, whelped Jan. 9, by Mr. J. W. Munson, St. Louis, Mo., a lemon and white pointer dog to Mr. B. P. Halliday, Prairie, Miss.; a liver and white bitch to Vaiden & Houston, Unlontown, Ala.; a liver and white bitch to Mr. J. W. Blythe, Burlington, Ia.; a liver and white bitch to Mr. C. B. Whitford, Chicago, Ill.; a liver and white and a lemon and white bitch to Mr. W. S. Titus, Memphis, Tenn.

Ringwood—Myrtle whelp. Beagle bitch, whelped Nov. 26, 1883, by Mr. N. Elmore, Granby, Ct., to Mr. Jos. W. Gross, Harrisburg, Pa.

Dan. Orange and white pointer dog, age and pedigree not given, by Mr. Thomas M. Smith, Jersey City, N. J., to Mr. Peter Kelley, New York.

Croxteth—Spinaway whelp. Liver and white pointer bitch, age not given, by Mr. J. W. Munson, St. Louis, Mo., to Dr. N. B. Carson, same place.

PRESENTATIONS.

☞ *See instructions at head of this column.*

Zero. Lemon and white pointer dog, whelped Dec. 23, 1883, by Baronet (A.K.R. 264) out of Rita Croxteth (A.K.R. 168), by Mr. Geo. L. V. Tyler, West Newton, Mass., to Mr. Forest W. Forbes, Westboro, Mass.

Roscoe. Lemon and white setter dog, age and pedigree not given, by Mr. Edward Odell, New Orleans, La., to Mr. J. T. Haidie, same place.

May. Pointer bitch (A.K.R. 211), by the Surrey Kennel, Ellicott City, Md., to Mr. N. Dorsey, same place.

DEATHS.

☞ *See instructions at head of this column.*

Vinnie II. Liver and white pointer bitch (A.K.R. 466), owned by Mr. C. R. Squire, Troy, N.Y., March 9, from poison.

Kathleen Mavourneen. Red Irish setter bitch (A.K.R. 617), owned by Mr. C. R. Squire, Troy, N.Y., March 1, from distemper.

Smoke Morrissey. Red Irish setter dog (A.K.R. 622), owned by Mr. C. R. Squire, Troy, N.Y., March 3, from acute pneumonia.

Lady Elcho. Red Irish setter bitch (A.K.R. 978), owned by Mr. C. R. Squire, Troy, N.Y., March 8, from distemper.

Daisy. Imported pug bitch (A.K.R. 468), owned by the Chequasset Kennel, Lancaster, Mass., March 8.

Bang—Spinaway whelps. Two pointers, whelped Jan. 9, owned by Mr. J. W. Munson, St. Louis, Mo., March 9, from worms.

Stunner. Lemon and white pointer dog (A.K.R. 218), owned by the Westminster Kennel Club, New York.

Brimstone. Liver and white pointer dog, whelped Aug. 24, 1883 (Tory—Moonstone), owned by the Westminster Kennel Club, New York.

KENNEL MANAGEMENT.

☞ **No Notice Taken of Anonymous Correspondents.**

W. F. T., Altoona, Pa.—We could not intelligently prescribe for your dog without a full description of symptoms. He may have received an injury to his spine, or his trouble may be a sequence to distemper. Write, giving all particulars.

E. H., Ottawa, Can.—Your dog probably has an attack of distemper. Keep him in a dry and well-ventilated place, and nurse him carefully. Write a full description of symptoms should he not improve.

Rifle and Tray Shooting.

FIXTURES.

First International Clay-Pigeon Tournament, at Chicago, Ill., May 26 to 31. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

RIFLES OF TO-DAY.

THE BULLARD REPEATING ARM.

THE Bullard is one of the latest models added to the collection of rifles now in use, and as yet can hardly be said to have entered very largely into the arena of competition. Very flattering words have been said of it; a few good scores have been made, and it has many warm friends. What it is and what it looks like the accompanying cuts will show.

It is the invention of Mr. J. H. Bullard, and the story of its birth is a very brief one. Mr. Bullard had for several years held the position of master mechanic at Smith & Wesson's pistol factory in Springfield, Mass. In 1879 the works were visited by a prominent Chinese official, and a conversetion upon pistols and rifles took place between the American mechanic and the visiting Mongolian. The latter put the question, "Why the repeating rifles of the day were so weak in their mechanism, and if one could not be invented which would shoot the heaviest charges with perfect safety." Mr. Bullard said he knew of no mechanical difficulty, and at once set to work thinking and model making. A test rifle was made embodying the parts, which, in the opinion of Mr. Bullard, met the Chinaman's question. It was subjected to the severest tests and criticisms, and came out of the trial with no signs of weakness and with the most flattering opinions of the experts and critics who had been invited by the inventor to witness the experiments.

The patents covering the invention were issued on Aug. 16, 1881, and the Bullard repeater of to-day is almost precisely like the first model as designed in 1879. A joint stock company, known as the "Bullard Repeating Arms Company," has been formed, in which Mr. J. H. Bullard, H. H. Bigelow and a third and silent partner are said to hold ninety-five per cent. of the stock. Land has been secured at Springfield, Mass., and a brick factory structure 109×67 feet in area and practically four stories in height, has just been completed. There are three machine rooms, each 40×125 feet, the woodworkers' department being in the attic story. There is a very complete outfit of the accurate machinery needed in the making of such a fine bit mechanism as a repeating arm, and besides there is a complete set of special fixtures and tools designed and invented by Mr. Bullard.

The general appearance of the Bullard rifle is already familiar to readers of the FOREST AND STREAM through the illustrations in the advertising columns. Fig. 1 shows the complete rifle. It is one of the class of rifles having a tube magazine arranged below the barrel. There is a bolt action in opening the breech and in bringing up the next cartridge from the magazine, but there is a peculiarity of construction in locking the breech and bringing the striking pin into range, which can be easily studied through Figs. 2 and 3, showing respectively the action closed and open. In Fig. 2, A, the breech block, is held firmly in place by brace C, which is pivoted and cradled on hammer pin and lock frame; C is brought into place and firmly held by links B, which are on either side, only one being shown in section, and which are connected by strong pins to guard lever D. It will be seen that it is impossible to get the hammer to reach the firing pin until the brace C is in its proper place and the line of recoil carried back to the hammer pin and in that way distributed to the lock-frame and stock. A claim made in this connection is that there are no sliding surfaces as all the parts are pinned and hinged together. The action is a positive one, not dependent upon springs. Care has been taken to have the material used the very best throughout, no iron or malleable iron being used, all being of forged steel except the carrier, which is composition or gun metal.

The magazine is charged from the under side, and it can be done with equal facility by a right or left-handed person. And as there are no holes or spring covers on the side, it is not likely to become clogged by passing through brush or laying it on the ground or in trenches, etc. It is also easy to load on horseback with the magazine opening below the arm. It can be loaded as a single-loader either from or bottom, leaving the magazine full at all times for an emergency.

"It is possible," says Mr. Bullard, "to fire the Bullard rifle with greater rapidity than any other repeating rifle, from the fact that it works easier and smoother by reason of its more direct leverage on the work to be done, the heaviest work being done with the best leverage, as in extracting the cartridge, which is started when the lever is in position to exert the greatest strain. Cocking the hammer is also done by direct leverage inside the receiver or frame instead of a sliding motion of bolt or firing-pin on and over the top of hammer, which is very often liable to grind, and always makes the arm work hard and unpleasantly." The Bullard has been fired in tests as rapidly as twelve shots in five seconds.

The Bullard, it is claimed, is the only lever repeater that will successfully use the regular United States copper cartridge (.45-caliber 70 grains powder), owing to its absolute certainty to extract the shell, which being made of copper and with a folded head, does not contract after firing (as is the case of brass shells) but often sticks in the chamber, a difficulty more frequently mentioned in reports of trials of breechloading firearms by government experts, than any other. Another advantage in using the U. S. cartridge is, that it is the standard ammunition and can be obtained anywhere in the country. This point will be appreciated by frontiersmen.

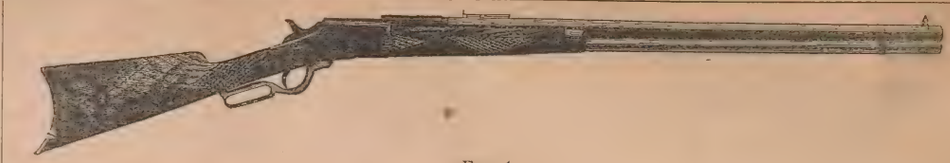


FIG. 1.

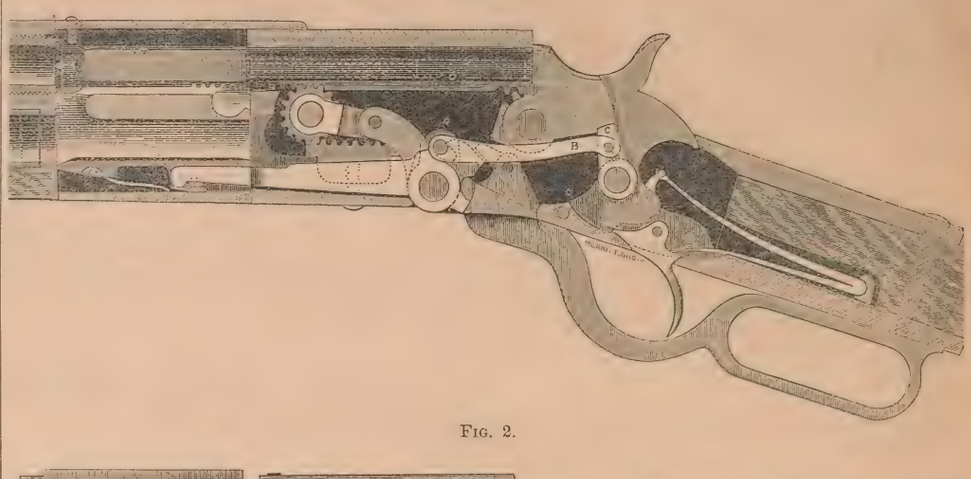


FIG. 2.

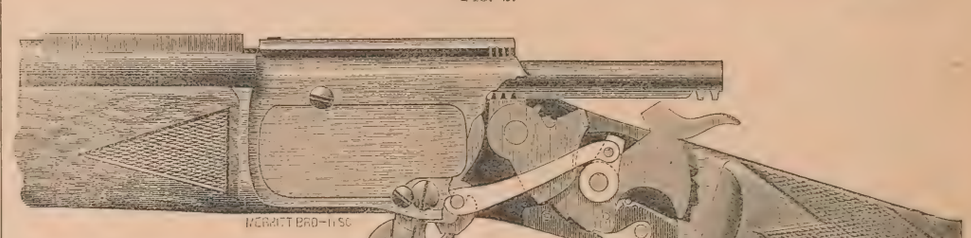


FIG. 3.

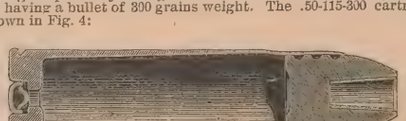
In loading the arm, it is only necessary to carry the lever forward as far as it will go and then insert the cartridge in the magazine through the opening under the carrier. To use the arm as a single-loader, carry the lever as far forward as is necessary to extract the spent shell, remove the shell and insert another cartridge in the chamber of the gun, or carry the guard lever as far forward as it will go, and insert another cartridge in the magazine through the opening under the carrier.

The arm is not a difficult one to dismount, if that be found necessary. To do so the following directions should be observed: 1, Take out tang screw; 2, half cock hammer and take out lock-frame and hammer screws; 3, pull out lock-frame, down and backward; 4, disconnect links from brace; 5, take out side plate screws and remove side plate; 6, remove carrier lever spring; 7, take out breech-bolt; 8, take out breech-block; 9, take out extractor pin and remove extractor, push back pin before removing bolt; 10, take out guard lever bolt; 11, draw out guard lever and its connections; 12, draw out carrier lever; 13, take out carrier. To assemble reverse these operations.

To remove the barrel, take out magazine plug screw and the two tip screws, pull out the magazine tube and take off the fore-arm. If the bolt has not been previously removed, pull it back so as to prevent the breaking of the extractor while unscrewing the barrel.

The record of the Bullard is at present not a very extensive one, and but few trials of it have been made at the target in formal matches. Three riflemen have made scores up to 111 and 113 points in the possible 120 at 200 yards on the Massachusetts target, with open military sights. At Creedmoor the arm is comparatively unknown.

The number of models made by the Bullard Company is quite large. Among the .50-caliber models there are three different sizes, carrying respectively charges of 95, 105 and 115 grains of powder, each having a bullet of 300 grains weight. The .50-115-300 cartridge is shown in Fig. 4:

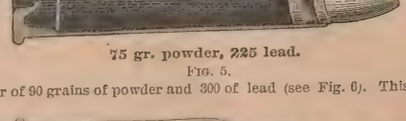


115 gr. Bullard Express.

FIG. 4.

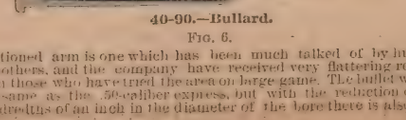
The .45-caliber group of Bullard rifles also include three different sizes, one using the government cartridge, with 70 grains of powder and 500 of lead, another with the same powder charge and 405 grains of lead. The former to be used in single loading and the latter in the magazine. The remaining .45-caliber is one of 85 grains of powder and 285 grains of lead. This proportion gives a very low trajectory, and experiments at the Bullard armory show a rise it is claimed of but 9 inches in 200 yards.

The .40-caliber rifles include one of a 60-grain powder charge, another with a 75-grain charge behind 225 of lead (see Fig. 5), and another of 90 grains of powder and 300 of lead (see Fig. 6). This last-mentioned arm is one which has been much talked of by hunters and others, and the company have received very flattering reports from those who have tried the arm on large game. The bullet weighs the same as the .50-caliber express, but with the reduction of ten hundredths of an inch in the diameter of the bore there is also a reduction of the atmospheric resistance in a greater proportion, giving this bullet great penetrative power, as well as greater range. The weight of these rifles, including the .50-caliber express, is 9¾lbs. to 12lbs. The .38-calibers will be ready by May 1, and will comprise two cartridges of 40 and 60 grains of powder in each. Thirty-two-caliber rifles will probably come at about the same time, and include .32-cartridge of 20 grains and Farrow's express shell of 45 or 50 grains.



75 gr. powder, 225 lead.

FIG. 5.



40-90.—Bullard.

FIG. 6.

Our object in giving full information for the benefit of our readers would stop short if the rates of charges upon these several arms were not given. The .45-70, .45-75, .45-60 and .40-60, round barrel, 28in., carrying 11 shots, with plain stock, open sights, graduated for 1,200yds., cost $33; half octagon and full octagon barrels running $2 higher. The .50-95 express, 27in., round barrel, with full or short magazine, costs $40, and with half octagon barrel, $42; 105 and 115-grain express, same style and finish, $5 extra. The 38-caliber, 24in. round barrel, with 16-shot magazine, costs $27, and with half octagon barrel, $29. The .38 caliber special .38-50-200, costs, with 26in. round barrel, 11-shot magazine, $30, either short or full magazine.

In connection with their arms and under instructions to purchasers Mr. Bullard gives some plain directions in reference to some important points of reloading, which it were well for all who act as their own cartridge makers should mind. He says that all shells, as soon as possible after being fired, should be cleaned and washed out carefully with strong soap suds or soda water and thoroughly dried, otherwise the deposit of nitric acid left on them after firing causes them to oxidize rapidly, and they become worthless. The primer should always be pressed down so that it is sure to be lower than the head of the cartridge shell. Use American Powder Company's Dead Shot, FG; or, Hazard Powder Company's Sea Shooting, FG; or, Orange Rifle (Laflin & Rand Powder Company) FG.

Use for bullets one part tin to sixteen of lead, and keep the molds very hot and the handles of the molds tight together. It often happens that the handles become too hot for comfort and are not held together properly. The result is a bullet that is not round and one that will not fit the shell. See that the grooves of the bullets are filled with beef tallow or Japan wax, wipe off all surplus greese before loading. When pressing the bullet into the shell, see that it is forced into the chamber of the reloading tool as far as it will go. He recommends, however, that all sportsmen buy their bullets of cartridge manufacturers, as they are all swaged by powerful machinery and are far more perfect than it is possible to cast them.

RANGE AND GALLERY.

BOSTON, March 15.—There was a fair attendance of riflemen at the Walnut Hill range to-day, those present shooting under difficult weather conditions. The scores were:

Creedmoor Practice Match.

J B Fellows	5454545555—47	J H Sears	4455444444—42
H Cushing	5545454454—45	J Payson (mil)	4444454444—41
C B Edwards	5454554544—45	T C Williard	4353454453—40
T C Field	5543445555—45	W H Morton	4443444443—39
C H Stump	5554444534—43	H M Wilkes	4445424444—39
A T Richardson	5444445545—42	J P Webber (mil)	3544442254—39
F W Fowle (mil)	4444544445—42		

Creedmoor Prize Match.

C E Berry, B	5555445555—48	T I Barnes, B	5544554544—45
J P Bates, E	5554444455—45	H Whitington, E	4544444455—44
J B Thomas, B	5554544454—45	A H Whitney, E	4544454445—43

Decimal Match.

W Charles, P	8	6	9	7	9	10	8	10	6	6	—79
W Gardner, E	10	8	6	7	5	6	9	7	8	7	—75
A C Adams, P	8	10	6	4	10	7	9	8	7	4	—73
A H Whitney, B	4	6	7	7	10	7	0	8	4	7	—66
J C Gifford, B	8	10	8	4	5	7	5	7	5	5	—64
J P Bates, E	9	8	4	9	10	5	3	2	4	3	—57
H Withington, E	4	5	4	6	4	4	4	7	6	7	—51

SARATOGA SPRINGS, N. Y., March 10.—Following is the highest score made by each member in attendance at the Saratoga Rifle Club range during the regular days (Wednesday and Saturday) of last week. Massachusetts target, 200yds. off-hand. Weather favorable for good work on both days:

H Wheeler	11	12	11	11	11	11	10	11	10	11	—108
A F Mitchell	10	12	10	10	10	10	11	12	11	12	—108
I Davis	9	11	12	10	11	11	11	11	10	10	—106
W Allerdice	9	10	11	12	12	11	12	9	10	9	—105
Wm B Gage	12	11	11	12	11	10	10	7	9	10	—104
W H Gibbs	11	11	9	10	9	11	11	10	11	10	—103
H Wellington	5	10	11	11	9	11	12	10	9	9	—101
F A White	11	10	8	10	9	11	12	10	9	9	—99
J Hays	7	8	10	12	11	10	10	11	5	12	—96
Ira D Roods	7	9	8	9	8	7	10	9	11	9	—87
S F Corey	11	4	9	10	5	11	7	9	9	10	—85

GALLERY PRIZES.—An all comers match will open at the Grand Central Rifle Range, No. 5 Vanderbilt avenue, on Thursday next, and remain open till April 26. Cash prizes aggregating $100 are offered. Seven shots per entry at Creedmoor Everbaugh ring target, best five scores to count. Entries unlimited, 25 cents each.

FIRST GERMAN GUN CLUB OF NEW YORK.—The annual election of officers of the above club took place March 12 at the club's rooms, 384 Pearl street. The following gentlemen were elected: Henry Zahn, President; Leopold Maisch, Vice President; Fr. Wm. Pfaender, Secretary; Fr. Jenner, Treasurer.

ZETTLER CLUB.—Regular weekly shoot March 11, gallery distance: M. Dorler 116, C. G. Zettler 113, A. Lober 114, D. Miller 110, M. B. Engel 115, P. Fenning 115, B. Zettler 113, J. Adrien 106, H. Horges 109, G. Schurmann 95, W. Vondertleinden 111, N. D. Ward 102, T. C. Noone 97, V. Stevibock 109, H. Oehl 114, C. Joison 113.

NEW YORK.—Regular weekly shooting of the Bullshead Rifle Club, 222 Third avenue, March 6. 12-ring, possible 120: C. Rein 119, H. Holzmann 115, A. Lober 115, G. Zimmerman 114, H. Hackmann 113, H. Gunther 112, B. Walters 109, S. Mehrbach 109, D. Holland 104, D. Loumskie 82.

ALBANY, N. Y., March 13.—The second competition in the American decimal match was shot at Rensselaerwyck to-day. Scores were made as follows:

Wm E Fitch	8	9	9	9	10	9	9	10	9	9—91
B R Spelman, Jr	8	10	10	8	8	8	9	10	9	6 9—90
Chas H Gaus	6	9	10	9	10	7	9	10	9	9—88
Leonard Geiger	8	10	7	7	7	10	9	8	10	8—84
J B Schuyler	0	0	0	9	10	5	7	6	8	9—63

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

CONNECTICUT STATE SHOOT.—Wallingford, Conn., March 12.—The scores made at the State Badge shoot, held here to-day, gave a victory for the home team. The full scores follow:

Wallingford Club.

Goodrich	1111101110010101111111101—19
Brogden	1001111110011010011110011—16
Hall	1100111010111110111111111—20
Talcott	1101110111111110010110001—16—71

New Haven Club.

Folsom	0011001101011111111101101—17
Nash	0101100000100110011011010—11
Hanson	0000000111100001111111001—12
Smith	1111001011101111110100001—18—58

Milford Club.

Miles	0010001101011011010111101—15
Plumb	0011100010010100100100001— 9
Platt	1000011011111011010101111—16
Boughton	0111111111110101011111110—20—60

Meriden Club.

Strong	1101010110111010110100010—14
Baker	0110301011010600001100111111—13
Birdsey	1110101011111111111111010—20
Ives	1110110011010110010010111—15—62

Bridgeport Club.

D Smith	0100101010101101001100010—13
Tousey	0101111000111100001111000—14
Longden	1101101110000010100100100—11
Nichols	1111010101011111001111011—19—57

THE LIGOWSKY TOURNAMENT.—President Barbour, of the Louisville Sportsman's Association, writes as follows to the Ligowsky Company, touching the Chicago gathering of May. Under date of March 12, Mr. Barbour says: "Your circulars of March 15 received, and I note some good changes made, I refer particularly to county team rules. My idea is that any member in good standing in a club at the time you offered this match to the different clubs of the country, should be allowed to shoot with his club team no matter where he is living, whether in the same country or not, but I do not think any member joining a club since you offered this match should be allowed to shoot in their club team. This would shut out clubs from electing members for the special purpose of making team, and if left to your executive committee, I think they will so decide. Don't understand me as wanting to meddle in this matter, I only make these suggestions in the interest of the success of this great match. There is another point I think you have made a mistake in, that is in allowing the first entry the very great advantage of naming the time they shall be called to the score, that should be determined by lot, and would give more satisfaction. I will do all in my power to make your tournament a success, and I think that is already assured, I am receiving entries every day for our champion cup match. I think every State in the Union will be represented in this match. The Southern boys are coming in force. I will endeavor to get them to come up in time to go with me up to Chicago to your shoot. Our club will be represented in the meeting called in the interest of forming a national association."—J. M. Barbour, President L.S.A.

WORCESTER, Mass., March 4.—This afternoon there was a meet at the South End Range of members of the South End and Woodlawn Gun Clubs. The occasion was the first of a series of team matches. There were some fifty spectators present. The judges were W. S. Perry for the South End Club, and E. S. Knowles for the Woodlawn Club, O. A. Benoit referee. There were five on a side. Twenty glass balls were thrown for each man, in strings of five each. The following is the result:

South End Club.

Webber	1111111011111111010—17
Whittaker	1101111111010111011—16
Whittier	0111011011111100111—15
Jewett	0100011111001101101—12
Dam	1111101000110100100l—11—71

Woodlawn Club.

Fuller	0011101100101001101—11
Moscroft	1010100000100001111— 9
Rice	0001110111111100101—13
Gilman	0011111161100091001—11
Togus	0101011001100101010111—11—55

March 12.—Second match of the series:

South End Club.

Davis	1101111010110111101—15
Webber	1030110110111110111—14
Whittier	0001001111100110001— 9
Whittaker	1101010001101011011—12
Jewett	0101001101100101111—13—63

Woodland Gun Club.

Rise	0101101010111110111—14
Gilmon	1111111001011111011—15
Togus	1111010111011010101—14
Fuller	1111110111111110111—18
Moscroft	1111111600111110110—15—77

Each club has now won one match. The closing one will be shot on Thursday next on the grounds of the Sportsman's Club.

EAST PROVIDENCE, R. I., March 11.—The weather to-day was most favorable for the shoot of the Watchemoket Gun Club. For the clay-pigeon cup the following was the score, best out of a possible twenty clay-pigeons, ten singles and five pairs of birds:

E W Tinker	1001101010	10	01	10	10	00— 9
C M Sheldon	1000100110	11	00	10	01	11—11
F Wehoskey	1111101110	10	11	00	10	01—13
E S Luther	1100110111	10	00	11	11	11—14
F E Tingley	0101110000	10	10	10	10	00— 8
C C Gray	1101001100	10	10	10	00	01— 9
C P Payne	0111011011	11	10	10	00	00—11
M B Cornell	1110011010	10	10	10	10	10—11
Isaiah Barney	1111111110	11	10	11	10	11—17
George F Butts	0100111111	00	10	11	10	10—12
A F Saulsbury	1100110001	11	00	10	01	10—10

The cup was awarded to Isaiah Barney for the first time. George Barney won the glass-ball cup, having won it for the fifth time, the other contestants on this occasion withdrawing after shooting at ten balls each. On this occasion he made 18 out of a possible 20, and he has broken in the five contests 89 out of 100.

COLLEGE MARKSMEN.—The Harvard Shooting Club had a meet at Watertown, Mass., on the afternoon of March 14, and shot seven matches under the direction of Mr. W. H. Slocum, '86; scoring by Mr. S. C. Jones. The following is a summary of the events:

Match 1, 5 glass balls—First, W. L. Allen, '85, Palmer, '87, E. J. Sartelle, '85, and W. H. Slocum, '86; second, W. Austin, '87, Frye, '86.

Match 2, 15 glass balls, Walnut Hill cup match—First, W. H. Slocum, '86, 13 balls; second, E. J. Sartelle, '85, 12 balls.

Match 3, 5 clay-birds—First, F. Austin '86, W. Austin, Frye, Palmer; second, Foster, S. S. Payne, '84, Sartelle, Slocum.

Match 4, 5 clay-birds—First, Payne; second, Batten, '85, F. Austin, W. Austin, Frye, Palmer, Sartelle and Slocum.

Match 5—First, W. Austin, Sartelle, Slocum, Foster, Frye.

Match 6—First, Frye; second, T. Austin, Slocum.

Match 7—First, Allen, T. Austin, Frye; second, Palmer, Slocum.

The next meet was set for March 19.

STATEN ISLAND GUN CLUB.—The Staten Island Gun Club met at Delmonico's on March 4, pursuant to regular call, and discussed plans for future attractions. The treasurer offered a handsome cup to be shot for at ten birds each man, 30yds. boundary; present handicaps to be shortened 2yds. for the event. Two valuable silver cups were offered by members to be shot for on conditions to be announced later. A committee was appointed to issue a challenge to the Carteret Gun Club for a team shoot. Conditions: Five men from each club, 30yds. rise, 20 or 25 birds each man, to be shot on the grounds of the S. I. G. C. The meeting was a large and enthusiastic one, and from the expressions of interest in the club and the number of private matches arranged during the evening, the club's prospects would seem never to have been brighter.—Governor.

NARRAGANSETT GUN CLUB.—Providence R. I., March 6.—The weather was beautiful to-day, the first and only spring day we have had thus far, and as a consequence the boys turned out in force. The Watchemoket, Union and Mashapaug Gun Clubs being represented. The next shoot will probably take place at Pawtucket, when we shall try to bring the badge home again.

Ligowsky State badge, 25 clay-pigeons, 15yds., 5 traps, one barrel only.

C B Payne, Union G. C., of Pawtucket	25
E W Tinker, Narragansett G. C., of Providence	22
L M Eddy, Narragansett G. C., of Providence	22
E S Luther, Watchemoket G. C., of East Providence	21
C M Sheldon, Narragansett G. C., of Providence	21
C C Gray, Narragansett G. C., of Providence	21
F O Wehoskey, Narragansett G. C., of Providence	20
Mr. Mathewson, Narragansett G. C., of Providence	20
C H Perkins, Jr., Narragansett G. C., of Providence	19
C B Potter, Narragansett G. C., of Providence	19
James Payne, Union G. C., of Pawtucket	19
A Salisbury, Union G. C., of Pawtucket	15
J E Bourne, Watchemoket G. C., of East Providence	13
Mr. Cornell, Mashapaug G. C., of Cranston	11

Same day, club badge:

E W Tinker	11	00	10	10	11	11	00	11	11	10—13
C H Perkins, Jr	11	10	10	11	10	00	10	01	10	11—12
C B Potter	10	10	10	10	11	11	01	01	00	10—12
C B Payne	11	01	11	10	10	11	01	00	10	01—12
C M Sheldon	00	00	10	11	10	11	01	11	10	10—11
F O Wehoskey	00	01	10	10	01	11	10	11	00	11—11
L M Eddy	10	00	10	10	10	11	00	10	11	10—10
C C Gray	10	11	00	10	11	00	00	11	00	11—10
Mr Cornell	00	10	00	00	00	11	00	11	10	01— 7

TORONTO, Ont., March 8.—The clay-pigeon shoot on the bay to-day was attended by about 200 interested spectators. Twenty-one shot in the contest. This was the third shoot for a gold medal, which is to be won three times by the same shooter. Mr. Worden was first winner, Mr. Crothers second, and Mr. Cockburn took it to-day, each with a score of 7 out of 10. The following was the full score:

Cockburn	7	Forman	4
Stelsted	6	Greenwood	4
Martin	6	Mallett	3
Martin	6	Lalor	3
Crothers	5	Dangerfield	3
Treblecock	5	Pearsall	3
Briggs	4	Armstrong	3
Robinson	4	Turner	3
Townson	4	Townson	3
Urwin	4	Quest	3
Pearsall	4		

Mr. Black acted as referee.

WASHINGTON, March 5.—The fifth annual meeting of the Capital City Gun Club was held this evening. The following officers were elected for the ensuing year. E. L. Mills, President; J. E. Hosford, Vice-President; F. B. Farnsworth, Secretary; C. M. Taylor, Treasurer; W. B. McKelden, fifth member of the Executive Committee. The club has a membership of forty-four, and is in a flourishing condition. —J. E. H.

WELLAND, Ontario, March 14.—In the shooting match here to-day between George Rogers, of St. Catharines, and Capt. Ritter, each broke 30 glass balls straight, and they continued shooting until Rogers missed, Ritter winning. In the pigeon match of 15 birds each between the same men, Rogers shot 13 and Ritter 12.

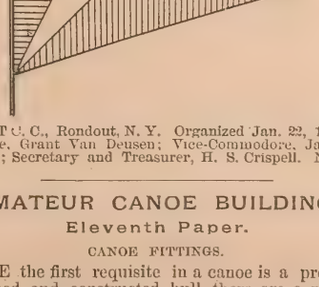
Canoeing.

FIXTURES.

Winter Camp-fire.—Sixth meeting, Wednesday, April 2, 8 P. M., No. 23 East Fourteenth street.

Secretaries of canoe clubs are requested to send to Forest and Stream their addresses, with name, membership, signals, etc., of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to Forest and Stream their addresses, with logs of cruises, maps and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.

RONDOUT C. C.



Rondout C. C., Rondout, N. Y. Organized Jan. 22, 1884. Commodore, Grant Van Deusen; Vice-Commodore, Jansen Hasbrouck, Jr.; Secretary and Treasurer, H. S. Crispell. Nine active members.

AMATEUR CANOE BUILDING.

Eleventh Paper.

CANOE FITTINGS.

WHILE the first requisite in a canoe is a properly-designed and constructed hull, there are a number of minor parts, generally summed up under the head of "Fittings," that are hardly less essential to safety, comfort and convenience, and which, with the sails and rigging, make up a complete craft. Perhaps a more correct term for these numerous details would be equipment, but the word fittings is generally used.

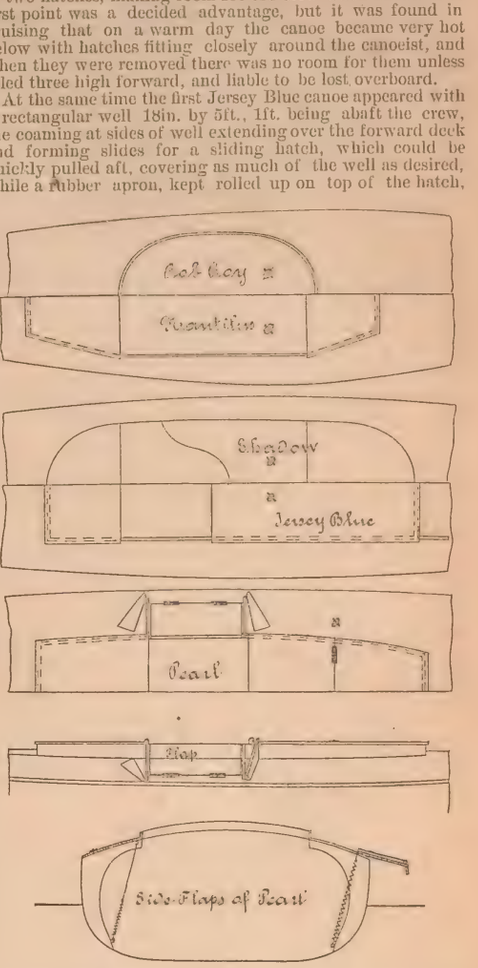
The Well.

This feature distinguishes the modern canoe from its savage progenitors, as, excepting the kayak, savage canoes are undecked, and its shape and condition are important considerations. As a general rule, the smaller the well, the better; as less water can get below, there is more covered stowage room, and the boat is much stronger; but, on the other hand, there must be an opening long enough to permit sleeping, storing long spars below, giving access to hatches below deck, and, on occasion, taking a companion. The wells of the early Rob Roys were elliptical, 20in. wide and 32 to 36in. long, requiring no hatch, the coaming, 1in. high above deck, being bent in one piece, as in the drawing. This small well, resembling that of the kayak, was almost a necessity, as the boat was so low and wet in rough water.

A step in advance was the old Nautilus well, which was from 4ft. 8in. to 5ft. 8in. long, and 20in. wide, a length of 16in. being shut off by a movable bulkhead just abaft the crew's back; this portion being covered by a movable hatch, with a similar hatch at the forward end, leaving an opening of 2ft. or a little more for the crew. This well, with its ugly octagonal form, while a decided improvement in many ways, more than any other feature earned for the canoe the dismal epithet of coffin, once so frequently applied to it; besides which, owing to the number of pieces (eight) it gave no strength to the deck, and the joints soon opened and leaked, while the almost square end forward did not throw the water from the deck, but sent spray back over the crew.

In 1878 the Shadow canoe came out with an elliptical well 20in. by 5ft., covered by four hatches, so arranged as to close the well entirely in shipping the canoe; or by removing one or two hatches, making room for the crew when afloat. The first point was a decided advantage, but it was found in cruising that on a warm day the canoe became very hot below with hatches fitting closely around the canoeist, and when they were removed there was no room for them unless piled three high forward, and liable to be lost overboard.

At the same time the first Jersey Blue canoe appeared with a rectangular well 18in. by 5ft., 1ft. being abaft the crew, the coaming at sides of well extending over the forward deck and forming slides for a sliding hatch, which could be quickly pulled aft, covering as much of the well as desired, while a rubber apron, kept rolled up on top of the hatch,



completed the covering. This arrangement answered the purpose of protection, but the square corners and sliding hatch were clumsy and heavy in appearance.

At the same time a canoe was built in Harlem having a pointed coaming forward, with a slight flare, the first of its kind, in America at least, and in 1880 the Sandy Hook and Jersey Blue canoes were fitted with pointed coamings, but not flaring, the first of the style now so common being put in the Dot in place of the Shadow well in 1881.

This form of well, shown in the Forest and Stream of March 13, is in outline similar to a Gothic arch, and in addition the sides flare outward, throwing off all spray at the sides. The after end is made either round or square, the latter giving more room when two are carried. A chock of mahogany (*q*) in the drawing, is fitted in the angle, belaying pins or cleats being sometimes put on it. This form of coaming is well fitted to hold an apron, the fore end of which, being fitted to the point of the coaming, cannot wash off, and no spray can beat in under it. The well may be partly or entirely covered by hatches, as desired.

Another important feature in a well is its width, which must be regulated by the size and intended use of the canoe. In a narrow and shoal boat, such as the Rob Roy, a width of 18in. will be enough, as the side decks will be wider and less water will come over the side, while the crew can still lean out to windward, but in a wider and deeper boat there is less danger of water over the side, and the coaming being higher above the floor will interfere with the crew leaning over, and therefore should be made wider, the usual width being 20in.

American practice in canoe sailing, especially in racing, differs materially from the English; the crew, in America, almost invariably being seated on the weather deck, in sailing to windward, the feet braced under the lee deck, the body leaning well to windward, and the steering being done by means of a tiller on the after deck, but in England the crew is seated low down in the canoe, a portion of the deck abreast the body being cut away and the opening closed at will by a hinged flap, the weather one being closed and the lee one opened at the end of each tack, only the head and shoulders being above deck, offering but little surface to the wind. With this arrangement a narrow well is allowable.

That canoeists may judge for themselves as to the value of this feature for their work, we quote from the London *Field* the opinions of Messrs. Baden-Powell and Tredwen concerning them. The former gentleman says: "In describing the canoe fittings of the present day, the side deck flaps must not be omitted. In a sailing canoe it is all important, but I do not admit its great utility in a traveling canoe, at least, not for general work. Where the chief work is to be lake sailing, side flaps will be very useful; but where much hauling out and jumping in and out is to be the order of the day, side flaps are utterly out of place. The side flap was first introduced in the Rob Roy in 1868, but did not appear in the next edition of that name. It has, however, now become a general favorite, and it is to be found in every sailing canoe. If fitted to the traveling canoe, the after end of the flap should be just forward of the backboard beam, and it should be strongly hinged at the outer edge; and, in short, strongly fitted in every way, as it is just about the place that one's hands lay hold of to raise the body in case of a sudden jump up or out. A broken, and perhaps lost overboard, flap would be a dangerous mishap to a canoe, if caught at the time in a breeze at a mile or two from land."

Mr. Tredwen, after describing some of the canoes that he

has designed and built during the past fifteen years, continues: "It has already been observed that the flap side decks have not been fitted to all the Pearl canoes, and that where a canoe has been built with them, they have been subsequently discarded, and that the next canoe built without them has subsequently been altered by the addition of this contrivance. The result of this varied experience is to establish them as a very valuable adjunct to a cruising canoe if properly applied and fitted, otherwise they are better omitted. There are two essentials besides the flaps themselves, consisting of two sets of coamings around the openings cut in the deck. The first coamings are parallel and close to the cuts across the deck, and consequently at right angles with the ordinary well coamings, and are screwed securely to the deck, and their inboard ends butt on to the well coamings. They entirely prevent any leakage along the deck from forward or aft, into the openings of the flap side deck.

"The second set of coamings are placed transversely, hinged to the deck, and when raised their inboard ends fit closely against the beading or coaming of the hatch cover; and they are not intended to exclude leakage along the deck, but they serve as catches around which the mackintosh coat fits, to prevent any sea breaking into the well. The inboard ends must therefore project about half an inch above the hatch cover when they are raised. Many canoes have had these hinged coamings fitted without the fixed coamings, and without sufficient width to project above the hatch cover, and as they neither exclude water running back along the deck, nor provide a holdfast for the mackintosh, the whole contrivance has been condemned."

In this country the first step in this direction was in the Elfin, a New York canoe, which in 1878 had her coamings cut and hinged; the first real side flaps being put in the Sandy Hook in 1881, since which they have been tried in various canoes, but have not come into general use. Their construction is shown in the drawings.

In the Pearl canoe, the well, which is almost rectangular, is covered by a forward hatch in two parts, the after portion extending to the body being hinged to the forward part, so as to lie flat on it, when opened. On its after end is a beading, over which the skirt of the canoe jacket is drawn, this skirt also being held, by a rubber band run around its lower edge, to a similar beading on the after hatch, and to the hinged coamings described; the deck flaps opening inside the wide skirt, so that there is no entrance for water below. Where it is desired to close the canoe entirely, the well is covered by three or four hatches, fitting closely together, as shown in the drawing of the Shadow. These are held down by a bar running over them fore and aft, one end of which is inserted in an eyebolt at fore end of well, the other padlocking to a similar bolt aft.

THE EVERSON CANOES.

WHEN the New York C.C. was first organized some fourteen years ago, one of their earliest acts was to look for a boat builder who would undertake to build the heretofore unknown craft. As the result of their search, they settled on Mr. James Everson, of Williamsburgh, N. Y., already well-known as a builder of Whitehall boats, and to him entrusted the drawings of the early Nautilus, sent to them by Mr. Baden-Powell, and since that time many well-known boats have started their first voyage from this shop, the Violetta, Walrus, Rosalie, Kaloolah, Shadow and Dot, besides others less widely known.

A visit to Mr. Everson's shop will well repay any one interested in canoes. The first boat noticed on entering the door is a very handsome cruising and racing canoe that will soon fly the N. Y. C. C. burgee, her lines being designed for a member of that club by Mr. John Hyslop. The leading dimensions are 15x31, with 13in. depth amidships; a handsome sheer, straight keel, sternpost straight and raking about 3in. aft. The bow is worthy of special notice, and the stem, well cut away below water but nearly plumb above, is handsomer and more yachtlike than the curved form so common here. With 9in. crown to the deck, there will be ample room inside. The well will be pointed and flaring, coaming 3½in. high forward. The keel is flat, to admit of Child's patent centerboard, which will be of brass, weighing nearly 50 pounds, and housing inside the canoe. If fitted with a suitable rig, there should be nothing in the N. Y. C. C. fleet that can approach her, and she will doubtless make a record at the meets this season.

Besides several new canoes of the well known Shadow model, there are two designed by Mr. Charles Farnham especially for cruising work that are ahead of most boats of similar dimensions. They are 14ft. 4in.x30in., without the tumble-home so noticeable in the Shadow—an improvement in looks at least. The keels are flat, and well rounded up at the stern as well as forward, the sternpost being straight from the water line up. Both are fitted with keels to be screwed on, if required, and also with air tanks of Morse's non-corroding metal, the deck hatches being dispensed with. The sliding bulkhead consists of a frame, over which leather straps are passed, making a yoke on which the canoe may be carried.

Besides the new boats mentioned, there is a curiosity in the shape of the Violetta, built for ex-Commodore Alden some twelve years since. All the canoes built by Mr. Everson are lapstreak, and their record, after the rough usage of cruising and hard racing, proves not only the excellence of his workmanship, but also of this method of construction.

CANOE AND SNEAKBOX.

Editor Forest and Stream:

Wonders will never cease. Who ever thought that a canoeist would be bold enough to fling out a challenge to sail against the sneakbox. I have had some years' experience in the sneakbox, it being of Jersey origin; and gunning from it in my younger days, I think I am pretty well conversant as to what it can do.

I have never sailed in a canoe, but being a close observer of their struggles in their endeavors to stand up to it, and with their knock downs, shakes and luffs, I think that the sneakbox would have a walk over. And as for cruising by all-water routes, and for comfort, commend me to the sneakbox.

Staunchness. Well, I always considered myself at home in any weather. I sent a sneakbox to Maryland this winter, of the Kilpatrick make, and the way she skipped across the mouth of Rumney Creek caused my friend William, who never sailed in one of these craft, to remark: "Well, who ever thought these things could sail the way we are going!" Six yards canvas (winter rag), a fearful blow, and 320 pounds to windward. Size of boat, 12.0x3.10. Will Dr. Neidé please inform me the kind of race, and where to take place, he would like against a sneakbox? "Seneca," in the issue of FOREST AND STREAM of March 6, declines. The Doctor will please speak out. Who knows we may have a race yet. GEO. H. WILD.

RED BANK, N. J.

[There will be a fine opportunity for a race at the Newburgh camp on May 29 and 30 of this year, as Dr. Neidé will be there, and many other canoeists, and the friends of the sneakbox will receive a hearty welcome. A correspondent in the South, who has been cruising in a 14x30 canoe, with 150 pounds of ballast and 178 pounds crew, in company with a 14x4ft. 3in. sneakbox, writes that the canoe is more than a match for the latter on every point, blow high, blow low.]

THE CHART LOCKER.

V.—INLAND WATERS OF MAINE.

Editor Forest and Stream:

In reply to "X." who asks for information in regard to the route to Megantic Lake and the Chaudiere via the Kennebeck and Dead rivers, I can say from personal observation that he would find it an extremely difficult operation (I doubt if it is possible) to make the ascend of the Kennebeck and Dead rivers in a Stella Maris or any other decked canoe that is not susceptible of being poled.

My friend, Mr. F. Stanton Hubbard, and myself, made the trip last June in an open English (Peterboro) canoe 18ft.x30in., launching at Gardiner, Me. "X." would find no scarcity of water in the Kennebeck between Gardiner and Norridgewock, but beyond there the water is shallow and very rapid—so say the natives, I have no knowledge of it from personal observation.

We left the river at Bombazee Rips, 4 miles above Norridgewock and portaged to Sam Parson's on the Dead River via North Anson, distance about thirty miles, over a very excellent road. The portages on the Kennebeck between Gardiner and the point at which we left it are, first, dam at Augusta, carry about ¼ mile on left bank; second, between Waterville and Kendall's Mills there are several dams around which a carry must be made with a team, distance 3 miles; third, carry around Skowhegan Falls and Dams, distance about 2 miles. There are also many booms and a few rips over which canoe must be hauled.

From Parsons to Flagstaff, distance 12 miles, the river is very crooked and current quite rapid; there are two or three short rips, up which canoe must be hauled or toted around. Between Flagstaff and Eustice, distance 18 miles, the river is very crooked. Carry around Arnold's Falls on right bank—distance about ¼ mile. There are several vicious little rips on this stretch, which must be either poled up or carried around.

At Eustice there is a dam, carry short; on left bank, one mile above, carry around Ledge Falls, distance short. Next another Arnold's Falls, carry on left bank, distance 100yds.; then big and little Scrampus Falls, few rods between, carry on right bank, distance about 150yds. Chain Pond Dam, six of one and half dozen of the other, which side carry is made—short in either case. Pass through Round Pond in Long Pond, at head of which lives Peter Le Royer, Indian hunter. Peter's word can be relied on for directions as to reaching Megantic Lake.

From Long Pond into Horseshoe Pond, narrow, swift stream, to Atkinson's Dam, distance not less than 4 miles; some hard work must be done in the way of poling, tracking and lugging over ledges and fallen trees. Haul over Atkinson's Dam, cross small pond and carry one-quarter mile into Mud Pond, cross this and then carry one-half mile into Moosehorn or Arnold Pond.

From Arnold Pond to river of same name, carry six miles over a bad trail. At time we were there last year the Arnold River was so full of logs that we were forced to carry six miles to head of Megantic Lake. For information in regard to the Chaudiere River, see "Chaudiere by Paddle and Portage," by Chas. E. Chase, in *Frank Leslie's Monthly*, August, 1881. CHAS. A. NEIDÉ.

Editor Forest and Stream:

In response to your request for parties able to give information in regard to canoeable waters in this vicinity to send their address to you, I send my own. If any canoeists coming this way will call upon me, I shall be most happy to show them about here; and if they can manage to strike here Saturday night, I will take them to one of the prettiest lakes in New England where they will meet a number of canoeists, although no organized club. E. M. JAMES.

44 MANCHESTER STREET, Manchester, N. H.

THE WINTER CAMP-FIRE.

THE attendance at the fifth camp-fire last week was smaller than usual, there being about a dozen members present. Mr. King, who had offered to speak on the subject of canoe tents, was absent, being confined to the house by sickness, and no formal meeting was held; but those present enjoyed a very pleasant evening in the discussion of announced subject, and in comparing experiences of cruises in various places. The date of the next meeting has been changed, as will be noticed above, to Wednesday, April 2.

RONDOUT C. C.—This club gave their first reception on Friday evening, March 7, at their new club house. The invitations, specially designed by a member of the club, summoned the guests at "8 bells" to the club house, which was decorated with flags, burgees, paddles, boxing gloves, snowshoes, models, pictures and canoe gear of all kinds, the canoeists themselves being in boating rig. "Mess" was served at 2 bells by the members, and dancing followed at 4 bells.

CLUB NOTES.—A canoe club is now being organized in St. Paul, Minn. The Vesper Boat Club, of Lowell, Mass., has now a fleet of twenty-five canoes, and proposes to organize a canoe division. Mr. Frank H. Pullen has returned to Lowell from Chicago. Dr. Neidé writes that there have been thirty-five applications for membership since the last meeting.

Yachting.

FIXTURES.

May 24.—Oswego Y. C., Opening Cruise.
May 24.—Boston Y. C., Opening Cruise.
May 30.—Knickerbocker Y. C., Spring Matches.
May 30.—Atlantic Y. C., Opening Cruise.
May 30.—Newark Y. C., Spring Match.
May 31.—Boston Y.C., First Match, Connor and Commodore's cups.
June 9.—Portland Y. C., Challenge Cup.
June 10.—Atlantic Y. C., Annual Match.
June 12.—New York Y. C., Annual Matches.
June 14.—Hull Y. C., Club Meet.
June 14.—Seawanhaka Corinthian Y. C., Annual Matches.
June 16.—East River Y. C., Annual Matches.
June 23.—Newark Y. C., Open Matches.
June 28.—Boston Y. C., Ladies' Day.
June 30.—Manhattan Y. C., Annual Cruise.
July 9.—Beverly Y. C., Marblehead, First Championship.
July 12.—Hull Y. C., Club Meet.
July 12.—Boston Y. C., Second Club Match.
July 26.—Beverly Y. C., Nahant, Second Championship.
Aug. 9.—Hull Y. C., Club Meet.
Aug. 9.—Boston Y. C., Open Matches, all clubs.
Aug. 16.—Beverly Y. C., Swampscott, Third Championship.
Aug. 23.—Beverly Y. C., Marblehead, Open Matches.
Aug. 23.—Boston Y. C., Third Club Match.
Sept. 6.—Beverly Y. C., Marblehead, Special Matches.
Sept. 13.—Hull Y. C., Club Meet.
Sept. 13.—Boston Y. C., Second Ladies' Day.

SOME VALUABLE EXPERIENCES.

Editor Forest and Stream:

About six years ago I was skipper of a little yawl hailing from Quebec. She was 18ft. keel, 8ft. beam and 3½ft. draft. She carried us through almost any weather in safety and moderate comfort, thanks to plenty of ballast and moderate deadrise, but had too little keel to go to windward very well, and was too short and chubby to run fast, especially when jumping about in the short seas which the Lower St. Lawrence and Gulf can get up when wind is against tide. Later I took a cruise in a grand boat of the same type, but 7 or 8ft. longer on the same beam and depth, and with the addition of a 10in. deep keel, ballast, pig iron, and all inside. Long floor, with moderate deadrise; bows fairly fine on water-line, with lots of flare. Two of us ran her day and night and through any weather, and a magnificent run we had.

I will not forget in a hurry our return to the grand old city of Quebec. Flying up the river before the remains of an easterly gale, on the top of the flood tide, after a trying night of darkness and storm and rain, during which we ran ninety miles with only a triangular corner of the mainsail set, the peak being dropped. That was the last of my salt-water cruising so far. I hope it will not be the finish altogether. Then followed a long series of years on inland rivers, where I was obliged to content myself with skiffs and centerboards and factory cotton, and used to balance myself on the weather gunwale and keep a sharp lookout for puffs. Lake Superior was a magnificent change for the better. First I tried a fishing skiff about 25ft. keel, flat as a pancake on the bottom. A few rocks for ballast and one mast right in her nose and another in her center, with two spritsails, the most unscientific rig I believe that was ever invented. She was a centerboard, of course.

I pounded around Thunder Bay in this thing until I was sick, and had nearly broken the boat's back, and sprung both masts, and was glad to sell out for twenty-five dollars. Next I tried a catamaran and the first puff pulled up the backstays and the deck with them, and the least little sea threatened to dislocate the whole contrivance. Then followed a good honest boat, yawl again, of seven tons, with standing keel and lots of ballast, which a friend and self built to suit ourselves. She was 25ft. keel, 8ft. beam, and 4½ draft. And she is to this day the most comfortable cruiser and the ablest boat on the bay. My friend was a busy man and not often able to cruise, and the boat too large for me to handle myself, so I sold out and built myself a rough and ready little yawl of 20ft. keel, 5ft. beam, and 4ft. 9in. draft with some ballast hitched on to the keel and any amount inside. More as an experiment than anything else, and consequently just thrown together in any shape so long as it was cheap.

This little hooker, with her bottom foul all the time, she was merely paid over with coal tar and bolt heads and rivets sticking out all over, ballast of blacksmith's scrap and sand, berthed three of us on a two weeks' cruise of 500 miles in her tiny cabin under a flush deck, and behaved in an astonishing way in a stiff breeze and rough water. Latterly she was lightened up a little and rigged as a cutter, and is said to sail much better. Last fall, in a southeasterly gale, beat out six miles to windward with a couple of ladies on board, made her port and came back, when a 30ft. fishing boat of the centerboard persuasion making for the same point, turned and fled. Her faults were that she was too short and "jumped short," as the fishermen say, and her accommodations were rather meagre.

For the last two summers I have been cooking about the coast, and incidentally have done a lot of boat traveling. Have made long trips in every month, from early in May to late in January, and have had a nerve-trying time in these wretched flat-bottomed, clunker-built boats, hammering at head seas with a disheartening amount of leeway, and the boat threatening to stave in her bows or break her back at any moment. Was obliged to bear away, and run before a furious squall on one occasion simply because all the centerboard we could give her would not hold her waste hulk above water and light weight, and enable her to work up under short canvas. Another time we were literally blown away from our anchor and hove on the beach in fairly smooth water, and nearly starved and frozen to death before we got afloat and reached camp again. All this, and the prospect of more traveling next summer, has moved me to design the Freda, a narrow yawl or ketch-rigged yacht of 29ft. waterline, and 6ft. 4in. beam, with 5,000 lbs. on the keel. H. K. W.

PORT ARTHUR, Lake Superior.

A VERY FAST YACHT.

THE Petrel, the property of Mr. John Hyslop, of New York, is pretty well known to local circles as a yacht of more than ordinary speed, and, above all, as a yacht which excels on all points in all sorts of weather. But with her form under water few are acquainted. The Petrel carries valuable lessons on many of the principal topics continually cropping out in club gossip, and also demonstrates what can be done by earnest study and the application of science. She is a production of great interest to all, and is to be considered a prominent beacon, marking the turn around which public opinion has swept during recent years. Built in 1876, the honor of leading off in the reform must be conceded this handsome little vessel. True, the cutter Vindex had preceded the Petrel by several years, but the Vindex did not represent in the elements of her design a very radical departure from the proportions of a deep sloop, though in point of outline and rig she properly enough laid claims to recognition as a cutter. The Petrel, on the contrary, borrowed none of the sloop's elements, but was a complete departure and bold "revolution" upon all the cherished traditional dogmas of the old sloop school, according to whose creed she should have been a depressing failure in every respect. Had the owner sought prominence for his boat through working up a racing record, the advent of the Madge and her victories would have possessed nothing novel or instructive, as we should have learned through the Petrel's performance what the Madge drove into our heads at a much later period. Indeed, the few who followed the Petrel with intelligence, and who were free from preconceived notions, did privately reach those very conclusions which escaped the public at large, until the fame of the Madge's victories had been spread broadcast over the land. What we may for short call "cutter principles" received the most successful and complete vindication through the sailing of the Petrel. Most prominent is of course the fact that she is a keel boat, and the equal, or rather more than the equal, of any centerboard of her loadline sailing with fixed ballast. She exploded most thoroughly that ludicrous old fancy, that in practice the board is a whit faster than the keel, and for that alone, if nothing else, the Petrel deserves to rank among the most influential achievements in the yachting world. The old school was much given to theorizing and the construction of rickety samples of logic. The new takes its departure in the field of fact and accurate observation. Now, in theory the board is a faster contrivance than the keel, for the reason that its area is more effective, and consequently a smaller amount exposed to skin friction supplies the same weatherliness as a larger amount of keel which, owing to its length, is not as effective. But in practice all this is again wiped out, because the keel offers the chance to hang ballast so much lower, equivalent to an increase of sail area, which overcomes, and often more than overcomes the extra amount of friction. And furthermore, the keel so steadies a boat on her helm, and holds her down to business in choppy water, that the actual advantages in practice at least balance the theoretical inferiority. The Petrel is proof most positive of the foregoing. For, cut the keel from beneath and supply a board instead, and a single glance at the accompanying plans will convince any yachtsman that the Petrel, as a centerboard, would have been a complete failure. She could not have carried her present sail plan by a good deal, nor could she have been pressed. She would have been exceedingly tender, without a will of her own, and in no way the good vessel she really is. It is often the custom to point to some of the old-fashioned, flat-floored boats, with a plank spiked underneath, as evidence against the keel, or to the many ancient keel tubs sailing in competition with the fastest modern boards of the day. But their comparatively poor display is to be, in justice, attributed to form and poor design, as well as inferior ballasting. Whatever such keel boats may do, the Petrel is always indisputable proof that a keel boat *can* be made to equal any board yet produced, if the design, as a whole, is made to conform to the requirements of a keel, just as experience has clearly marked out certain attributes as necessary to a successful vessel supplied with a board. The Petrel, the Bedouin, the Oriva, would all be fearful failures were they to change to the board, and similarly it is rational to suppose that the keel must fail unless the vessel, as a whole, is of suitable planning. Where this is overlooked, the keel, as a matter of course, turns out more or less of a failure, and as all our builders were brought up to the trade of scheming upon boards, the new departure in favor of keels finds them laboring under the disadvantage of old associations, from which they cannot as yet quite free their minds while exploring an unaccustomed field. But give them the time to unlearn and learn afresh, and the brilliant success of such yachts as the Petrel ought to be convincing enough as to what is possible with the keel. More especially so, when we mention that owing to the exigencies of personal business affairs, Mr. Hyslop has never been able to bestow more than casual attention to the equipment of the Petrel, and nowadays no experienced man needs to be told that want of perfect preparation in this respect is a very heavy handicap with which to come to the line as a fighting vessel. The official record of the Petrel, though an excellent one, is dimmed somewhat by the unavoidable drawback as explained. But it is to her cruising reputation, her many off-hand brushes with other well-known yachts of her class, that we must look for a true interpretation of her capacities. It has been our good fortune to ship aboard the Petrel upon many an occasion, and our own verdict as well as that of those intimately acquainted with the yacht, stamps the Petrel as a cutter of phenomenal speed. Should she ever be taken in hand in earnest and skippered for what there really is in her, we do not hesitate to predict for her a racing career which will put her in the van of public estimation as the fastest yacht of her loadline yet launched from any port on this side of the Atlantic.

Her lines and elements are therefore deserving of the closest study and we deem their production in these pages for the benefit of the public one of the great services rendered to yachting through this journal.

The Petrel is a craft entitled to a niche in the temple of fame for reasons other than her speed. She is a "scientific" design in the fullest meaning of the word. She was not whittled out as a happy-go-lucky venture, but was deliberately planned for a purpose. Mr. Hyslop had given Scott Russell's wave line theory full investigation, and backed by numerous well executed experiments arrived at the conclusion that wave lines only opened the door to an enlarged system of construction of far more importance and more immediate applicability than mere cycloidal waterlines could possibly convey. Long before the Petrel was struck out on paper, Mr. Hyslop had formulated the system of "wave-line areas," in which the cross sections are made to correspond in the relation of their areas to the ordinates of the wave curve mooted by Scott Russell, instead of giving such shape to waterlines, only regardless of their areas. Thus the theory which Scott Russell applied to the contour of lines only, Mr. Hyslop impressed upon the actual volume of the boat passing through the water. This same system was later on composed by Mr. Colin Archer, a Norwegian shipbuilder, and by him published in the London *Field* some years ago, and by his name the system now generally goes. It is right, however, that Mr. Hyslop should share in the credit of the production of a method which, in some of its details, he has carried to a degree of refinement beyond the proposition of Colin Archer. Of course we are not prepared to reason from the single success of the Petrel that the system is the long-sought philosopher's stone, and that equally favorable results can be counted upon with certainty by simply mechanically revolving the crank of some set formula, but the Petrel is at all events strong prima facie evidence that a close adherence to the formula is compatible, if not directly conducive to the highest results, while as a general standard of comparison for estimating the elements and data of boats, the system admits of no question. There seems good reason to invest it with promising import, as Mr. Hyslop has brought the formula into requisition upon other occasions with favorable results. The new cutter Merlin was designed by Mr. Ripley on the same principles, and will be watched closely in pursuit of further testimony for or against. It is likewise noteworthy that all fast yachts of which data are at hand correspond in their cross areas very closely to the wave line ordinates, including those owing their success to "intuition," that is whittling with an eye to whittle by. It should be added that Petrel's waterlines are also in themselves wave curves.

Her main features can be described as follows: Moderate beam, insuring generally fine form, "Two ends," in place of the long entrance and short, heavy haunches prevailing in sloops. A rocker keel with

raking post, the lowest position to weights, with a high center of buoyancy, to compensate for moderate displacement, thereby insuring enough sail with the choice of driving the boat upon an easy side. A proper balance between immersed and emersed wedges preserving the same trim as when at a plumb and the ease on her helm which follows. Healthy draft in proportion to displacement. For a boat of her depth the Petrel is distinguished by the wonderful ease of her fore and aft sections and her diagonals, as inspection of the plans will elucidate. She has just enough flare to her bow frames to lift dry and clear, just enough tumble home to topsides for a long easy body to drive when heeled under pressure of wind, and her quarters are drawn in just enough for perfect delivery and at the same time ease in her motions. She lifts to everything because free from haunches aft to prevent the depression of her stern. In regard to rig she is a cutter in point of principle, though in some of the mechanical features corresponding to the sloop. Her sail plan will be produced next week.

In actual sailing the Petrel is perfection. She is the easiest boat imaginable, and though her lee gangway is awash by the time she is fairly down to her bearings and at her best in a smart breeze, she is remarkably dry to windward. She throws no spray in the hardest drives, and rides to her chain like a rocking chair without tug or snub of the slightest appreciation. She is able in a chop, and with two cringles down puts in licks to windward, screwing out higher than she points in astonishing style She is at all times and in all weather very fast, jammed high or romping with sheets lifted. From actual experience through several seasons we know her draft never gives anyone the slightest perturbation, which can easily enough be understood when we remember that five feet is scarce neck-high, and no call exists for sailing in shoaler water when there are thousands of square miles where more than five feet can be carried to every one-acre puddle with less. There is no difficulty in beaching for a scrub, as a leg is got out abreast the chain plates at high water, and the throat and peak carried broad off to steady as the water falls away. Her rig presents no complications in practice whatever. The foresail has a high boom to the foot, the boom working on the sheet as a traveler, so that foresheet need not be touched in beating up. One might sail in her all day and never be aware of her cutter rig. No one who has cruised in her ever as much as mentions or notices her double head sail, which is answer enough to the bugbear about "complications."

On the other hand, the rig is found extremely convenient, as it does away with all reefing and bobbing of jib and also gives greater choice of arrangement of sail. The area is quite moderate for the boat's length, far less than in a beamy hard-bilged sloop, and spars correspondingly snug and light with beneficial effect in a head sea. The Petrel heels quickly to her bearings as can be imagined, and until it blows strong is over on her side considerably more than a sloop, but never enough to interfere with perfect control and the management of her gear, or "comfort," in spite of the impressions her heeling may produce upon the inexperienced seeing her under way. And when heeled she goes along about her business in holiday fashion without towing her helm over the weather quarter, and without any gymnastics to keep her on her course. And her speed in a breeze is enough to contradict that ludicrous vagary that the wind "just blows over her sails" without doing any good. And her speed and keen pointing at all times is likewise enough in opposition to the equally absurd notion that one big bag of a jib drives better than two well trimmed flat surfaces, the inner sail operating to better purpose on a forestay at much less obtuse angle than the lifting, and therefore less effective lead of a single jibstay to bowsprit end.

Practically, the Petrel opened the title chapter of the new era in New York waters, and that the first attempt to depart radically in all essentials from the cast-iron dogmas of snarled tradition in American yacht building should have been accompanied by such unequivocal success is the reward of her originator for his independence of thought and clear analysis of the principles of design. As the pioneer of the new era, as the first "American cutter," as the exponent of intelligent process, as a flyer of first rank, the Petrel will always live a bright and shining example in the history of the transitory period through which American yachting is now passing.

Length over all	32ft.
Length L.W.L	28ft.
Beam extreme on L.W.L	8ft.
Depth, plankshеer to garboard on M.S	4ft. 7in.
Least freeboard	16½in.
Greatest draft	4ft. 10½in.
Displacement	7½ tons.
Ballast inside	4,000lbs.
Ballast on keel	2,526lbs.
Area lower sail	800sq. ft.
Hoist of mainsail	20ft.
Ratio of sail to square L.W.L	102 per cent.

Attention is called to the small sail area required to drive the Petrel. It is about the same as that of the sloop Gleam of only 23ft. loadline, and the hoist of Petrel's mainsail is much less, being 18ft. against Gleam's 23ft. The great economy in driving power and management of the cutter is very apparent. The Petrel on 28ft. drives 7½ tons displacement with practically the same sail the Gleam requires for only 5 tons on 23ft. There is little difference in the cost of the two boats, but the cutter is much the larger, abler, and would leave the Gleam out of sight in a match, all of which is obtained by departing from the tradition of great beam and centerboard, and building upon an intelligent and well considered scheme. The difference in ballast between the two is about two tons, or say $50 for inside iron, a purely nominal sum, considering the far greater return received from the Petrel's design than from that of the Gleam.

CUI BONO?

Editor Forest and Stream:

Believing as I do that under equal conditions the cutter Aneto did not nor can outsail the Gleam, I will match the Gleam against the Aneto for three races for $100 cup each race; Atlantic Y. C. course and rules.

JOHN G. PRAGUE, A. Y. C.

47 Bible House.

[The proposition is hardly likely to lead to a race, as no grounds for a race exist. Aneto is a little cruiser, 21x7ft., with a lower sail area of 405 sq. ft. Gleam is a racing sloop, 23x9, with an area of 788 sq. ft. Hoist of Aneto's mainsail is 14ft.; that of Gleam is 23ft. The difference in size and character of the two boats is much too great to permit their racing to any logical purpose. The Aneto is also yawl-rigged, which of itself is enough to prevent a match upon even terms, as the Atlantic Y. C. rules impose. Nor do we suppose that any sensible person, least of all the owner of the Aneto, claims her capable of beating Gleam in ordinary weather. About the only chance for the Aneto is in a drift pure and simple, which would be without satisfaction to either party, or else in a nose-ender with a jump when Gleam is at her worst, owing to excessive beam and oversparring, conditions under which Aneto came out best in a brush between the two last fall out of Larchmont harbor. Such conditions could not be insured in Mr. Prague's offer, and without them no one pretends the snug little cruiser Aneto a match for a boat one-third larger, with nearly twice the sail area].

BELLEVILLE NOTES.

THE projected Lake Yacht Racing Association will soon, in all probability, be an accomplished fact, as nearly all the clubs concerned have signified their approval, and appointed delegates to a convention which will be held two weeks hence in Toronto for the purpose of organization. The knotty points will be the limits for second class, shifting of ballast in second class, and rule of measurement. I have no doubt that the length and sail area rule of measurement will carry, and that standing ballast will be decreed, but the classification will be troublesome, as several yachts were built to the extreme verge of the old limit, which ought to be conformed to as closely as possible in justice to all concerned.

Mr. R. J. Bell's Norah is on the Marine Railway at Deseronto, where she will get a thorough overhauling before entering on another season's work.

Treasurer Pike's cutter Sylvia is to get a heavier keel, which she is in great need of.

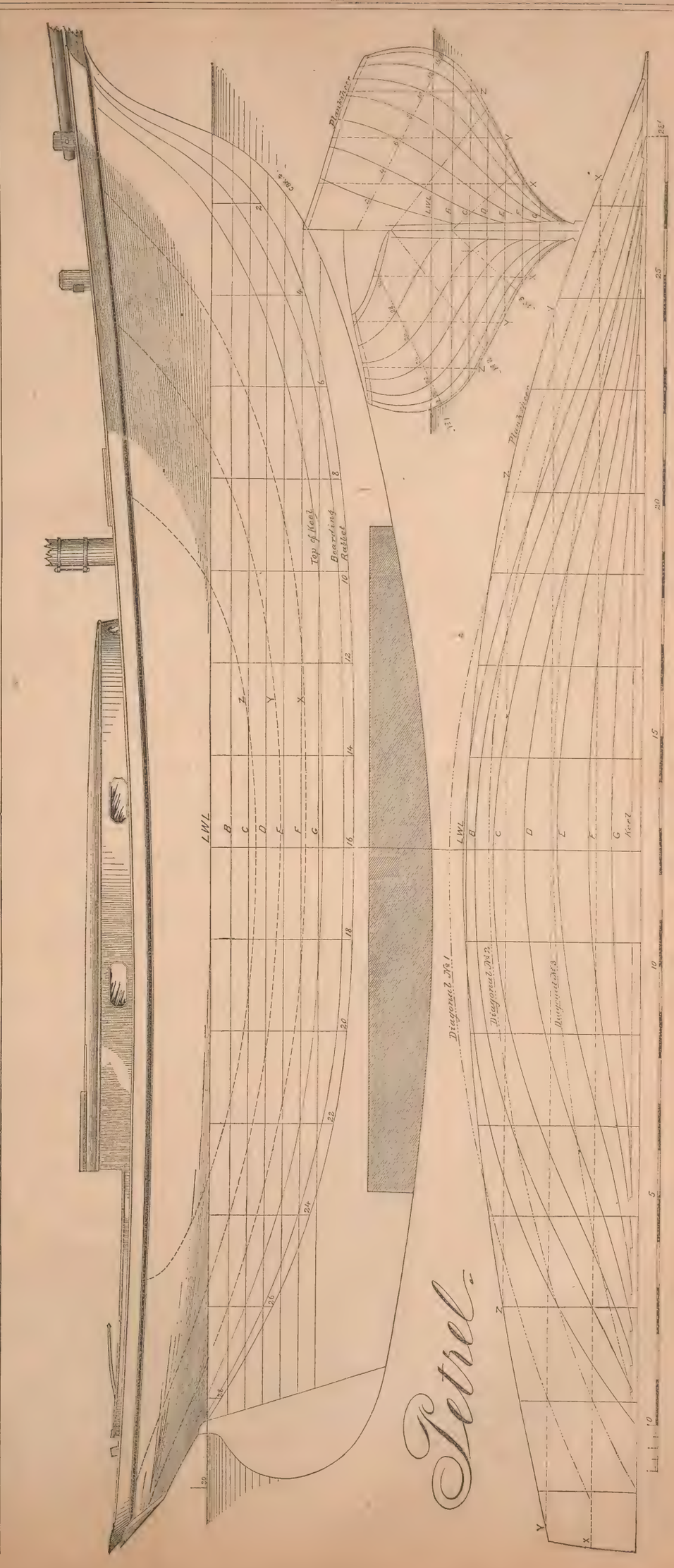
A new steam yacht may be added to the fleet this year.

No new craft in hand here, and no repairs or fitting out yet.

PORT TACK.

THE LAKE Y. R. A.—The following letter has been addressed to the Toronto *Mail:* "Sir—The majority of the yacht clubs of the lakes having expressed themselves favorably to a lake yacht racing association, and some of them having suggested the time of the Kennel Club show in this city for a meeting of delegates, and it also having been found that three delegates have been appointed by most of the clubs, it has therefore been deemed advisable to call a meeting of three delegates from each club at the Queen's Hotel, Toronto, on Saturday, March 29, at 3 P. M. These delegates to draw up a constitution, elect officers and committee for the present year, decide on a measurement rule, and, in fact, get the association fairly under way. It is desirable that delegates attending the meeting should make themselves thoroughly acquainted with the constitution of similar association as far as possible, also with the different measurement rules.—WM. DICKSON, Hon. Sec. Toronto Y. C."

NEW ENGLAND Y. R. A.—Clubs are entitled to admission which have twenty-five yachts of more than 16ft. length, not 10ft., as misprinted.



MODEL YACHT.—Mr. Daniel T. Hendrickson, of No. 22 East Mechanic street, has just completed a miniature model of a modern racing cutter from the lines laid down in FOREST AND STREAM last summer in illustrating the Neva, of Boston. It is extremely doubtful if a similar model has ever been made with such faithful attention to detail and skillful handling of the numerous small parts. The hull is built of white wood in two pieces, each half being steamed and bent into perfect conformity with the framework of ribs. The rail and trimmings are of mahogany and white holly, the hull is black to the waterline and gilt below. The deck is laid off in seams conforming to the lines of the vessel, and a grating of mahogany occupies the bow, where also is a small working capstan of brass. A geared steering wheel moves the rudder, and little blocks with sheaves of brass are all in their proper places, and will do their required work. The cockpit is upholstered with velvet seats and surrounded with a coaming of white holly and mahogany, each strip of which is about one-quarter inch wide and an inch long, and is worked with a delicate bead. From the cockpit four mahogany steps lead down into the cabin, which is housed over and lighted with brass-rimmed ports. The cabin is carpeted, and contains completely furnished bunks and lockers and a dining-table, everything made exactly as though intended for the use of a Liliputian crew. The whole model is not more than 4½ft. in length, the hull measuring 32in. It is rigged with mainsail, topsail and jibs. —*Newark Sunday Call.*

LARCHMONT Y. C.—Officers for the year: Commodore, Augustin Monroe, sloop Schemer; Vice-Commodore, A. Bryan Alley, sloop Cruiser; Rear-Commodore, Harold A. Sanderson, open boat Zoe; Corresponding Secretary, William Porter Jenkins; Recording Secretary, Frank L. Anthony; Treasurer, Thomas B. Brown; Measurer, Frank E. Towle.

HAVERHILL Y. C.—Officers for the year: Commodore, W. M. Dresser; Vice-Commodore, G. A. Toxboy; Fleet Captain, N. G. Knowles; Secretary and Treasurer, C. H. Stacy; Measurer, Lewis Willett. Trustees—E. P. Tenny, L. H. Spaulding, C. H. Stacy. Regatta Committee—E. F. Brown, F. G. Knowles, J. E. Collins.

NEW HAVEN Y. C.—Officers for the year: Commodore, Charles W. Scranton, sloop Acme; Vice-Commodore, Frank Wheeler, sloop Wild Pigeon; Fleet Captain, Alexander Lutz, sloop Wild Duck; Secretary, Henry D. Bristol; Treasurer, James Gallagher, Jr.; Measurer, Frank H. Andrews.

MANHATTAN Y. C.—Officers for the year: Commodore, George E. Brighton, sloop Susie B.; Vice-Commodore, Henry Andrus, cutter Sasqua; Rear-Commodore, N. D. Lawton, sloop Gleam; Secretary, James R. Thomas; Treasurer, William H. Simonson. The annual cruise is fixed for June 30.

ISIS.—The new cutter building at Poillon's will be named the Isis. She is 62ft. 3in. over all, 51ft. 5in. waterline, 13ft. beam, 8ft. hold. and 9ft. water. Built from designs of the owner, Mr. Cass Canfield.

FORTUNA.—Through a member of Mr. Hovey's family, we learn that he is very much pleased with the performance of his schooner at sea.

GITANA.—Mr. Weld's schooner arrived at Villefranche March 13.

MONTAUK—Arrived at St. Kitts, Feb. 14; all well.

ANSWERS TO CORRESPONDENTS.

LONE ANGLER.—There is a letter for you at this office.

MAX. Hopedale, Mass.—A communication for you is at this office. Please send address.

E. G. B., Hartford, Conn.—We have never used the wads about which you ask, but are told that they will not do what is claimed for them.

J. H., Elizabethtown, Pa.—Where is the Bullard Repeating Arms Company located? And is Mr. Farrow superintending the making of the new rifle? Ans. Springfield, Mass. He is in their employ.

C. A. R., Pittsburgh, Pa.—1. Received the signal, etc. 2. We know of no such map. 3. Waters Bros., Troy, N. Y. 4. None of this size have been built. All such boats must be carefully kept and housed.

F. W., Paterson, N. J.—Which of the following woods do you consider the best for trout fly-rods, viz: Bethabara, greenhart, lancewood, or snakeroot? Ans. These woods all have their advocates and their faults. Lancewood if properly made, so as not to be too heavy, is as good as any.

E. J. B., Charlottetown, P. E. I.—Are the thread-wound cartridges for long ranges advertised in FOREST AND STREAM really of any use? A friend of mine here tried some of them and assures me that they are a fraud. Ans. We have never used them, but have heard them well spoken of by those who have.

J. H. R., Scranton, Pa.—Can you inform me where I can find a good assortment of hunting pictures—quail and partridge shooting, etc.—as I wish to purchase a pair of such pictures; size, not over 12×14 inches. Ans. Write to J. M. Tracy for catalogue of his pictures. We do not know of many good pictures.

S. M. N., New York.—Have the State Fish and Game Commissioners made a report of the year's doings, or is there any way of finding out what the sectional protectors have done during the past year? Ans. The report of the Fish Commissioners of New York is now in the hands of the State Printer and will soon be issued.

J. B., Brooklyn, N. Y.—Is the species known as Audubon's warbler extinct (*Dendroica auduboni*)? If not, is it only occasionally seen and what is its habitat? Ans. A very common bird from the Rocky Mountains to the Pacific. Further East, accidental. The wing you send belongs to the American goldfinch or yellow bird. (*Astragalinus tristis.*

C. B., Taunton, Mass.—What is the best way to raise goldfish? Can their eggs be taken and hatched in trays? Ans. Get medium-sized bright fish and put in a pond where there are water plants and where the water gets warm. They will spawn in May or June and hatch without care. The young are brown the first year, and in some waters longer. Their spawn is glutinous and cannot be handled on trays as some other eggs are.

RAMBLER'S CLUB, Chelsea, Mass.—1. Which is the best place in Massachusetts, both as regards gunning and fishing, for a party to go camping? 2. Which is the best place in Maine for a party to spend a few weeks gunning and fishing? 3. Where is the best camping ground in New Hampshire? Ans. You give no idea as to the season of the year at which you wish to go, and it is therefore impossible to answer intelligently your questions. In Massachusetts there is fair gunning for shore birds on Cape Cod. Grouse and quail near Plymouth. For information about Maine resorts write to Kennedy Smith, Eustis, Maine. New Hampshire shores of Lake Winnepissaukee or among the Green Mountains; almost anywhere.

SUBSCRIBER, Brunswick, Ga.—1. Please let me know where I can purchase from 100 to 200 live quail for stocking purposes. 2. What is the largest squid on record? 3. How often does a bitch get in heat? 4. How long from time should she be locked up? Ans. 1. Write to Chas. Reiche & Bro., Chatham street, New York. 2. The largest entire squid that we know of was in the New York Aquarium. It was forty feet long. It may now be in Coup's Museum and Theatre, Chicago. 3. Generally twice a year. 4. About three weeks.

G. E. S., Fredericton, N. B.—1. There is a certain lake not far from this; it is about half a mile long and a quarter long, very pure good water, entirely fed by springs, no inlet and not much outlet except for about three months in the year when the water seems to rise a bit. In about one-third of the lake a line 160 feet long cannot find bottom, the rest of the lake is from six to twelve feet deep. There are in it now some black bass and trout. What would be good fish to stock it with, both in a sporting and "mouey" sense of the word? The lake, I believe, has a muddy bottom. 2. As I am thinking of going on a trip on horseback in a short time, please send me any information upon bridle, saddle or camping out which might be of use. Ans. 1. We presume that the fish already in the lake will do better than any other kind. Should think that trout especially ought to do well there. 2. Would recommend a heavy leather headstall with rings and snaps at the sides, so that the bit could be taken off without removing the headstall. There should be a ring beneath the jaw to which a rope could be attached. Use a Californian or Mexican saddle, but get one that comes somewhere near fitting you. There are many works on camping. See list of books we publish. We have not the space here for an essay on the subject.

DESIGNER, New York.—1. Is the rock bass mentioned in your paper the striped bass? 2. Are the parties right who say they are caught with the fly? I remember one day last April catching a fine striped bass upon a hook which had a piece of scarlet worsted, frayed out, tied to the snank, and was baited with clam. The day was cold and gray and the water wild, with wind blowing off shore, tide flood. Writing about bass reminds me of some which I caught last fall, the gills of which contained a hard bony bug, which, when put upon the finger would take a firm hold upon the flesh and were hard to remove. 3. What are they? 4. Where can menhaden be obtained in this city? 5. The planting of salmon in the Hudson, mentioned in one of last year's papers, was it done, and will they appear in the Hudson in 1885, or will they seek the native stream of the parent fish as the ex-Commissioner of the Canadian Fisheulture asserts, and be seen in the Hudson no more? Would they be seen breaking water in the lower Hudson as well as upper part? Ans. 1. No. The rock bass is a fresh-water fish, seldom reaching a pound in weight. As the striped bass of the North is called rock, and rockfish in the South, the two are often confounded. 2. The rock bass, *Ambloplites*, takes the fly. 3. A crustacean parasite often found on fresh-water fishes. 4. Of E. G. Blackford, Fulton Market. 5. The salmon were planted and may return. There is no probability of their seeking the Penobscot, from which they came. They would be apt to show in the lower Hudson if they return.

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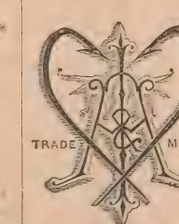
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IN A RECEIVER'S HANDS.

THE Yellowstone Park Improvement Company is in the hands of a receiver. It is stated that the motion for a receiver was made at the instigation of Rufus Hatch, who is believed to be the largest creditor of the concern. Just what the exact facts of the case are, cannot now be known, but, as reported, it stands something like this: The application for a receiver was made in Trenton, N. J., before Judge Nixon, of the United States Court, by Charles E. Quincy, a stockholder and creditor. Mr. A. L. Love, cashier of the Stebbins Bank, of Livingston, Montana, which is a creditor of the company to the extent of $13,000 or $14,000, was appointed receiver, and will for the present manage the affairs of the company for the benefit of the stockholders.

The liabilities of the concern are stated at $210,000, against which they have the hotel and furniture, which cost $150,000, some few horses and cattle, and some sawmills built on Government land and used to saw for themselves timber belonging to the United States. Rufus Hatch claims to have advanced $112,000 out of the $130,000 expended upon the project, and instigates these proceedings for the protection of this claim.

The readers of FOREST AND STREAM are pretty well acquainted with the history of this company, but we may give some additional inside facts about it. Among the incorporators were a number of prominent men, but they were only figureheads, and the real parties in interest were Rufus Hatch, John Douglass, C. T. Hobart and Henry Douglass. John Douglass is the brother-in-law of Senator Windom, who made such a strong fight to have the Park given up to the exclusive use of this company. It appears now that these partners have fallen out, and John Douglass tells the story of the final rupture as follows. After stating that negotiations had been in progress to pull the concern out of its difficulties, and that Hatch had promised to await the issue of the pending arrangements, he continued:

"The question of the settlement of the affairs of the company depended largely upon the temper and intentions of the creditors. If they were disposed to wait and be accommodating, there were two parties, one living West on the Northern Pacific and the other in New York, who were ready to put up the $30,000 Mr. Hatch demanded as a condition precedent for his retirement from the company. These two gentlemen were absent on an extended trip and were delayed thereon. I telegraphed Mr. Hatch, and received a reply from him dated New York, March 6. Here it is. Read it for yourself. You see it says, 'Will wait ten days for a proposition from you.' The ten days did not expire until last Sunday, and I now discover that Mr. Love was appointed receiver ten days ago. Arrangements to secure such appointment must have been pending when Mr. Hatch telegraphed that he would wait. The Stebbins Bank, with which Receiver Love is connected, is a creditor to the amount of $18,000, not all of it debts due the bank directly, but on paper they have cashed or bought. I further learn that Mr. Stebbins proposes to foreclose on the property and assume control of the affairs of the company, leaving us out in the cold, but he will discover that he cannot do this easily, as we will fight for our rights."

"Who are 'we?'"

"Well, there are a number of figureheads, of course, but Henry F. Douglass, my son, C. T. Hobart, and myself, with Rufus Hatch, constitute the 'we.' By the terms of a private contract entered into between Henry Douglass and Mr. Hobart on the one hand and Rufus Hatch on the other, the latter was to receive 35 per cent. of the interest in the Improvement Company, leaving 65 per cent. for the rest of us, and this private contract, which will have to be made public soon, is all we have to show for our right, title and interest in the company. By the terms of that contract the three parties named bound themselves solemnly to stand together and protect their mutuality of interest. No important measure to be carried into effect without the consent of two out of the three."

The Livingston, Mont., *Enterprise* says, regarding the situation at the Park:

C. F. Hobart, agent of the Park Improvement Company, at Mammoth Hot Springs, is securing the claims of a few of the creditors, by giving mortgages upon the company's chattels. To one a lien upon the stock of liquors has been issued, and to another security upon the piano at the hotel, and so on. The carpenters who are holding the hotel wish to be secured in the same way, but Mr. Hobart told them he thought they had a good enough thing if they could maintain it without any mortgages.

It was supposed, at first, that this application for a Receiver might have been made for the purpose of arousing sympathy for the broken down company, and thus influencing legislation at Washington in their favor. This does not appear to be the case, however, and since it is seen that the only sufferers are the speculators who went into the scheme with their eyes open, we presume that very few tears will be shed on their account. If all that is said is true, the only heavy loser is Hatch.

It is to be hoped, however, that whoever manages it in the future will have a little more regard for the rights of the Government and the people than has been manifested by Hobart and Hatch; certainly whoever he may be he cannot have less than they did.

UNHEEDED LESSONS.

WHAT is the lesson which the floods of the winter teach us? A few weeks since, the sympathies of the country were stirred by tales of the suffering along the Ohio River. Now we learn that the valley of the lower Mississippi is a vast inland sea, that farms are many feet under water, that stock is drowned, that men, women and children are living on rafts and in the lofts of gin houses; that, unless Government aid is extended to these poor people, they must starve. This aid should be sent them. It cannot be done too quickly.

The tale is a pitiful one. It is also an oft repeated one. But no remedy, except the ancient one of building dirt walls, which are washed away as soon as the water reaches them, is suggested. Occasionally a seeker for a fat contract at Washington proposes to wall in the river from source to mouth. Still the destruction of the forests goes on, and will continue until the burdens of the unhappy people who dwell on the banks of the Ohio and the Mississippi become too great to be longer borne. When the annual floods have depopulated this great and once fertile and prosperous region, then our sluggish legislators may be induced to take some action. In the mean time, God help the poor people in the Southwest, whose possessions are annually destroyed by the floods.

Our law givers are slow to learn. They follow public opinion, never lead it. And until the public sentiment shall demand in unmistakable tones that our fields and hills be reforested, the law makers may be trusted to do nothing. From the valleys of the Ohio and the Mississippi, where the terrible effects of our criminal waste of the woodlands are fast making themselves felt, will come the cry for protection from floods which are annually more dreadful, and this cry will be taken up sooner or later all over the country.

This protection must be on a scale commensurate with the forces to be resisted. As well attempt to bind the ocean in fetters of brass, as to confine with levees the Mississippi, when, swollen by the precipitation of half a continent, it hurries toward the Gulf. We may curb the waters when they are raindrops, or tiny rills, or springs, with some prospects of success, but to restrain the Father of Waters when once he has burst his banks, is impossible.

The case is a plain one and demands attention from those in power. Even if it were taken in hand to-day it would be years before the full effects of the reforesting would be felt. If some measures are not at once adopted by the Legislatures of the different States and by the general Government toward the establishment of forestry commissions, and an intelligent and universal tree planting, the losses from floods will each year become more severe, and portions of our territory, once reckoned most fertile and valuable, will be deserted by their inhabitants, and become mere waste land.

The people are slow to learn, but it seems as if the lessons of the present year must have taught something to those most nearly affected, if not to the country at large. Will this lesson pass unheeded? Will another more severe be required?

OPENING OF THE TROUT SEASON.

BEFORE we go to press again, the trout season will be opened in the State of New York. That is, it will be legally opened all over the State, although in fact few waters, besides those of Long Island, will be actually fished. There are enthusiastic anglers who would fish on the coldest day in mid-winter, if the season was lawfully opened on that day, and who will fish Long Island waters on the 1st of April, no matter how much the east wind may whistle about their ears. Others, more sensible, will await the coming of weather fit for angling, when they can cast their lines without suffering, and we will wait with them.

The fishing-tackle dealers are busy in filling orders, and in showing the novelties in tackle that have been put on the market since last year. In this line there is nothing particularly worthy of note outside of reels. Several new reels are out, and they seem to combine all that an angler can wish for. We think there has been a great improvement in reels within the year, and it would seem as if perfection had at last been reached. The curbstone dealer in walking-cane rods has not yet made his appearance. By the time the angle worms get to the surface, and begin to bask in the moon's cool rays, he will be out with his traps to sell to boys with more pennies than judgment, and who will show their companions their "genuine Japanese fishing-rod which shuts up into a bully cane."

The trout exhibition at Blackford's, in Fulton Market, will be up to the usual standard, and will repay lovers of trout to inspect. Trout of all sizes, ages and colors will be present from all parts of trout-bearing America, as well as from some parts of Europe. Truly the 1st of April in New York City is the anglers' holiday.

STOCKING PRESERVES. — We understand that Messrs. Reiche & Bro. have furnished, during the past winter, over two thousand live quail to parties who desired to turn these birds out for the purpose of stocking their grounds. Of these, it is said that more than one-half have died in captivity, through the ignorance or neglect of those who had them in charge. In many cases the birds were not supplied with gravel, and in others no greens were given them, and they soon succumbed to disease. The hints published in these columns a few weeks ago should have been more carefully observed. For Mr. Lorillard's preserve in New Jersey a number of English pheasants have been imported, as well as a lot of English partridges, and arrangements are being made for a large shipment of prairie chickens from the West. All these moves are in the right direction and it is to be hoped that they will be crowned with success.

WOODCOCK IN THE CITY.—Last week a dead woodcock, which had flown against the telegraph wires, was picked up by a hackman in the Bowling Green in this city. Another, killed in the same way, was found in a gutter in Canal street. Both were large birds and in good order. In Newark, N. J., one was found dead on the roof of a piazza, having evidently flown against the house during the night and dropped down on to the roof, where it was found the next morning. The last of the birds are moving along now. Many have been here for nearly a month.

"WOODCRAFT" is in an advanced state of preparation, and will probably be ready for delivery in less than two weeks' time. Judging from the enthusiastic letters which we receive about it, old "Nessmuk's" book is going to have a boom.

AMATEUR PHOTOGRAPHY.

MANY of the readers of FOREST AND STREAM will no doubt take with them on their summer tour or vacation a camera. Those who expect to do so should purchase it now, and devote some time to practice, before going into the field to take views. The experience gained in this way will be of great value to them, saving many failures, and enabling them to bring home a good set of views, instead of a lot of plates, which, through the lack of knowledge of the operator, may, when developed, produce results altogether unsatisfactory.

There are plenty of books devoted to the subject of Amateur Photography, and the beginner will, of course, study them for information on the subject. The following remarks are intended merely to give certain hints, which are not found in the books. The trouble with such volumes usually is, that they are written by professional photographers, to whom the business is an old story, and who, because they know all about it, take too much for granted, and assume that the minute details of the work are known to every one. They are not simple enough. The writer is an amateur, self-taught, and hopes, by mentioning some of the difficulties which he has encountered, to help the readers to avoid or conquer them. As he is writing entirely for beginners, some definition of the terms used may be given. The

Lens is the disc of glass at the back of the tube, through which the light reaches the glass plate, which receives the picture. The

Tube is the metal cylinder, through which the light comes to the lens, its purpose being to keep out all side lights, and to admit only those from directly in front of the lens. The

Cap is the covering for the open end of the tube, by the application of which all light is excluded from the camera. The

Drop is a cap, perforated with a small hole in its center, and closing with a spring. The

Ground glass is a plate of this material in a frame at the back of the camera box. It receives the image of the picture through the lens, and the operator, by looking at this reflection, is enabled to decide whether his instrument is properly focussed or not. The

Camera is the box with bellows and slide, and when ready for use has the lens in position in front and the ground glass at the back. The

Tripod is the frame of three jointed legs, on top of which the camera rests and revolves. The

Plate holder is a light-tight frame, into which the plates are put for the purpose of exposing. The

Shields are slides, usually of pasteboard or thin wood, which cover the plates when in the holder.

Since the lens forms the basis of all good pictures it is of the utmost importance to get a good one. It is much better to spend money on this, rather than in procuring a showy outfit. With a cheap, camera but a good lens, you can get excellent results, and the lens can be used for a camera of different size, if you should wish at any time to take larger views. When you have obtained your instrument, and know how to put it together and take it to pieces, it will be well to go out of doors and learn to set up and take down your camera, so as to be able to set it up on a level, or square. The base line of the picture should be parallel to the lower margin of the plate. Practice looking through the instrument at the landscape, and be careful to get a good proportion of sky, fore and back ground. Face the instrument to the view you wish to take, put the ground glass in position at the back of the camera, and then look through it, covering the head and back of the instrument with a dark cloth, so as to exclude all light except that which enters through the tube. Looking toward the light before you, you will see on the ground glass the picture that you wish to take. If you should see nothing, slide the back of camera—and so the ground glass—backward or forward until you do see the image. Then adjust the camera by a screw in the position in which the image appears most distinct. This is called focussing, and is the same operation which you go through when you use an opera glass. In focussing, always select some definite, distinct object, and be sure that this object is sharply defined on the ground glass. Now move the camera on the tripod to right or left, still looking through the ground glass with the head and instrument covered with a dark cloth, so as to exclude all light except that which enters through the tube. Observe the effect of the shadows and the light, and you will very likely find that by taking in some additional object or through the changes of light you will have a much better picture than in the first position. The light often strikes the angles of a house in such a way as to make the shadows very dark, and to spoil what would be a very good picture if taken in a different position. Never face your camera so that the sun will shine into the tube, for this will throw the shadows in the wrong direction. Deep shadows and bright objects do not time well together in the same view. The exposure will be too short for one, and too long for the other.

In taking off the cap, do it quickly, but without jarring the instrument, and carry the hand down and toward the tripod, not out in front. In returning it, catch the tube on the lower side first. When the drop is used, no discretion as to time can be exercised, but as the drop can be used only in a strong light, you often have to work with the cap. It is necessary, then, to time the exposure, and as it is not always convenient to hold a watch, you should learn to count by seconds. With a little practice you can learn to count accurately. Not one in fifty can do so without practice. The time for exposure depends on the strength of the light, the rapidity of the plates, the time of day and the time of the year. From 9 o'clock to 4, in the bright days of summer, the light is stronger than at the same hours in winter. The reflection on the ground glass will enable you to judge of the strength of the light. If the objects come out strong and clear, the light is better than when the objects are dim. If the plate is exposed for a sufficient time, say twenty to thirty seconds, a picture can be taken, even though the reflection on the glass is scarcely to be seen; but when the colors and objects are bright, a flash of light through the lens is all that is required with the instantaneous plates. It requires judgment and practice, therefore, to time the exposure.

To test this, place a plate in the camera. Remove the shield next to the lens, cap and uncap as quickly as possible. Now push the shield about one-third of the way into the holder, and expose the plate, according to your judgment, and cap; push the shield in a little further, making two-thirds of the way in, and expose say one second and cap. Now push the shield into position, and you have a plate exposed to three different spaces of time, the longest time being at the small end of holder. Develop until the picture begins to sink, and, after fixing, you can then judge which part was timed correctly. The instantaneous plates are the best for general use, as they can be used with either the drop or cap. When you have become accustomed to timing them, do not change the kind of plate that you have been using, as all your experience will be lost and will avail you nothing with a slow plate—that is, as to time required for exposure.

Mark your shields "exposed," and when you put the plates into the holder, have that side of shield next to the plate. After exposing the plate, turn the shield and put it into the holder with the word outside. By this plan, you will not forget that the plate has been exposed, and will not take, or attempt to take, two pictures on the same plate, when they are only made for one.

When away from your base, or in camp, it is not necessary to have a ruby light, unless you want to develop your plates. Try this plan. In the daytime or with any light, place your shields in the holders with the word "exposed" inside. Cut the paper that confines the cover on your box of plates, then put the box and holders on some board, or on your bed, where you can work. When it is dark, take out the shields to holder, by feeling, then remove a plate from the box with the right hand, not touching the face of the plate, but holding the edges between the thumb and fingers. Then, with the thumb of the left hand, scratch the corner of the plate. If that is the film side, it will chip; if the glass side, the nail will slip. Take the slide in the left hand and put the plate into it with the film side out. Keep the box and the mats, and return the plates to the box with mats between them after exposing. Wrap the box in paper, and develop at your leisure. Never remove an undeveloped plate except in the dark—not even in the moonlight—or in a ruby light.

Plates can be put in or taken out of holders in a dark closet in daytime, if no light is allowed to touch them.

Owing to the suction of the water and the smooth surface of the bottom of tin developing trays, plates often stick, and are difficult to remove from tray. This can be avoided by making two or three slight dents, made from the under side, in the bottom. You will then be able to get the finger under the plate and remove it easily. Always keep your lens well protected from the dust, and be careful not to scratch it. Dust it off with a fine brush or by blowing on it; never rub with cloth or paper.

The following is one of the latest and best formulas for developing:

A—Pure carbonate of potash (free from chloride)	90	parts.
Water	200	"
B—Pyrogallic acid	12	"
Sulphite of soda	25	"
Citric acid	1½	"
Water	100	"

To develop a 5x8 or smaller plate, to three ounces of water add sixty drops each of A and B. If a stronger contrast, deeper shadows, are required, drop a few drops of B into your graduated glass and pour the developer in your tray into glass and return to tray. Never add a strong chemical to that in the tray, as it does not get well mixed. When you use the developer for the second plate, if you find you have too much of B, add say half the quantity of water to tray. You can get good results up to six ounces of water.

Unlike the ammonia formulas, this is not unpleasant to use in a confined room, and will not fog the plate. The chemicals can be had dry, and the water added when required.

"THE ANTELOPE AND DEER OF AMERICA."—The eagerness with which sportsmen are calling for Judge Caton's work on the North American deer, shows very clearly how large a proportion of those who enjoy the noble sport of big-game hunting desire to pursue this sport intelligently. It is an axiom that the man who is most successful as a hunter or angler will be he who is most familiar with the habits of the game or fish which he pursues. Most of our readers appreciate this, and since our reduction of the price of this book has brought it within the reach of all, we are not surprised to find the demand for it very large and constantly increasing.

The Sportsman Tourist.

BETWEEN THE LAKES.

Eighth Paper.

BY THE GREEK PROFESSOR.

IT was a beautiful morning when the Judge and the Professor came out from their tent, yawning and rubbing their eyes, and with an indescribable sense of rest in every bone and muscle, such as comes to him who breathes the pure air of Superior. Beautiful! Would that I could describe the scene that met our eyes as we stood at the door of our tent that still July morning. In front of us stretched the calm blue waters of Superior, broken only by that swell whose outline is beauty, and by that hushed roll and sob on the beach that is music to the ear. The air never was clearer, and the blue of the lake and the blue of the sky seemed bluer because of that perfect sea of transparency that lay between them.

Five miles to our left, projecting into a long curve of the lake, was the Grand Portal, the most magnificent of the Pictured Rocks. The sun shone with marvelous splendor on the eastern side of this great portal, opening to our view the huge cavern in its depths, although we were miles away. I gazed with astonishment, for the unseen hands of that strangely clear morning seemed to have lifted, and borne toward us, the massive rock, till it appeared scarcely a mile away. In the distance gleamed the white speck of a sail-boat. Perhaps some of our friends from Munising were coming on a fraternal visit and fish. But the Judge was impatient and the boat at least an hour away. Our excursion had been planned for days, and we would not delay on an uncertainty. The Judge drew his gold spectacles astride his nose, frowned ominously, and wrote on a pine board this legend, "Gone two miles south of Beaver Lake, trouting," and placed it on the table—the first place the strangers would seek.

With jerked venison and biscuit in our wallets, and shot-gun, rods and hatchet in our hands, we wended our way to the bluff on the south side of Beaver Lake. How calm and placid lay the little lake in the virgin bosom of that forest green. To the south the unbroken swell of the green rose till the far-away hilltop seemed kissed by the blue of the sky. In the midst of this rising mass of unbroken forest a ravine seemed to wind its way, trending gently toward the south and west, and in this ravine we doubted not the waters of the creeks we were going to explore found their way into Beaver Lake.

A quarter of an hour's brisk exercise with the paddle brought us to the south shore of the lake. The bottom along this shore is seen distinctly through the clear water, and at times is almost pure yellowish white sand mingled with coarser gravel; at other times the gravel changes to boulders and large stones, and next we glide over an interval as smooth and solid as a marble floor, for here the smooth sandstone is washed clear of all débris. For a goodly distance the bank along this shore is about a yard in height above the level of the water. Portions of this bank to the very water's brink are thickly set with white cedar trees, some standing erect and others leaning far over the bosom of the sparkling waters. Other portions of the bank, when viewed from the distance of a few hundred yards, look as if a solid wall of rock had been raised a yard high by the masterly skill of the mason, but, on nearer approach, you find it a wall of boulders as large as a man's head, laid with great regularity and evenness by the hand of those great storms from the northwest which so frequently heave the bosom of this little inland lake. But all at once an exclamation came from the Judge:

"A deer!"

"Where?" said the Professor.

"To the west of us, just around the point and the dipping cedars," was the calm reply of the Judge.

"Get your gun ready and I will bring you near enough to get a shot," and his pole grated on the sand and the boat shot forward steadily, and the Professor held his gun in a firm grasp. But the story has been told, and with only such embellishments as the Judge's long experience in the intricate windings and technicalities of law would logically necessitate. Suffice it to say that with the deer in the boat, and the boat upon the bank among the cedars, and compass in hand the Judge and the Professor were soon moving due south.

A quarter of a mile of dense white cedar being passed with great difficulty and toil, we found ourselves at the foot of the bluff and the beginning of the hard-wood timber. As we climbed the hills, now following the windings of ravines as often as they bore in the direction whither we were going, and now following the narrow but well-trodden runway of the deer, we often paused to admire the beauty of this virgin forest, and to stand in amazement beneath the high-reaching branches of some hoary denizen of the woods. How beautiful and smooth and shapely were the beeches, and how the birches reached upward toward the light. And maples! such maples. In my boyhood in Indiana I thought I had seen the prince of sugar trees, but never have I looked up into such towering and wide-spreading sugar tree tops as I did that morning. The memory of the vision of those large maples haunts me to-night in my study. There were but few of the exceeding large ones, many of the beautiful smaller ones. After, perhaps, a half mile of rolling land, the Judge in front struck one of the wildest and thickest swamps we ever saw. The undergrowth was small, but as thick as the quills on the back of that porcupine which the Judge did not kill in the midnight watches. Rod by rod the Judge hewed his way into the midst of the tangle, throwing the half severed saplings to the right and the left until, almost before we were aware of it, we were on the banks of the first branch of the creek we sought. It might almost be said upon the creek, for it was scarcely more than eighteen inches wide, and about as deep, and frequently, for a few feet, would vanish under the roots and moss of the swamp. The water was clear, cold and sweet, and fishing it for a few rods some very prettily marked, though small, trout were taken. Leaving this creek, and still pressing toward the south, the Judge, still puffing and panting, emerged from the swamp and rejoiced to move on more easily over the rolling hard wood timber land. Mingled with the hard-wood here were some giant white pines, lifting their skeleton arms high above the surrounding forest, for they were dead. I could but pause beneath them and look up and wonder what vicissitudes of human life they could tell of if they had speech. Others again were green in a vigorous old age, and here and there were groups of large hemlock, the largest trees in the neighborhood excepting the pines.

All at once the Judge paused and, with a comforting tone in his voice, asked:

"What do you most desire?"

"Light," promptly responded the Professor.

"With the assistance of your legs I will soon bring you to it," was the laughing reply of the Judge.

"Look forward yonder and to the left and you will see the opening." The last words of the Judge were fairly drowned by his impetuous charge through the bushes, and the joyful Professor followed close in the rear. A few moments later we stood in the opening, and beneath the glaring sunshine, gazing at the beautiful green of the beaver grass and the scattered clumps of alders.

"There are trout there!" shouted the Judge, as he pressed forward into the meadow.

"Slosh, clug, plug, ugh!" from the Judge, as he floundered in the meadow half knee deep in the water, for the banks of the little creek were in many places on a level with the water, and the roots of the grass were covered as in a freshet. The joints of our rods were soon together, and we were on the soft springy margin of the creek casting for trout, and taking them too.

The creek here is from two to four feet wide, and about the same depth, occasionally spreading out into a shallow pond. From the narrow and deep channels under the edge of the sod, we lifted some very pretty though small trout. Following the stream downward you soon pass from the beaver meadow into the cedars, and thence out again into tangled thickets of black alder, and almost every rod of the creek contains trout, small, but increasing in size as you journey toward the lake. The adventurous trapper has been here after the beaver, whose haunt we discover in the decaying dams over the creek, and cut logs along its bank. We found the trapper's little hut, and in a reverent attitude—for the door was so low he had to enter on his hands and knees—the Judge explored the interior, finding beaver teeth and hoops for stretching the skins.

This main branch of the creek was fished by the now wearied Judge and Professor for perhaps a mile from the first beaver meadow where they struck it, with constantly increasing numbers and size of fish. But the sun is gliding rapidly into the west, and our legs are weary with riding the black alder. The Judge calls a halt. There is at least a mile more of creek between us and the lake, and extremely slavish walking on its banks. The Judge takes his bearings, decides about where the boat ought to be, and boldly plunges through the grass, black alder and swamp, to the rolling ground a hundred yards away. The Professor soon follows, and as the Judge disappears over a hill he shouts:

"Hold on, Judge, you have certainly made a mistake. You are bearing too far to the west."

The Professor's legs were tired and he wanted to halt the Judge till he could catch up. The Judge pulled his spectacles down, sighted through one glass at the sun, swept the woods to the north with a quick glance, looked into the compass and only said, "I am right," and rolled on. The Professor smiled sadly, but with confidence in the Judge, pressed on. On, on, up hill, down hill, through the ground hemlock, which now and then clutches your feet like a vise, the unwearied Judge strides. The Professor is in despair, and on the point of calling a halt to rest, when the Judge pauses at the foot of a hill and calmly wipes his steaming brow, until the Professor comes up, or rather down, into the ravine. That was a beautiful little ravine in which they halted, stretching backward and upward into the hills, apparently losing itself in the deeper shadows beyond. It was somewhat open where they stood, and a few rods below we could hear the gurgle of the brook which they had left a half mile back. It had doubled on them. Down through the middle of this ravine there came a little tiny brook of clear, sweet, spring water. Just below were a few lily-pads, and just above an old limb of a tree lay on the seemingly innocent soil.

"Well, I am going to cross above there," said the Judge.

"I am going to cross right here," said the Professor. "A straight line is the shortest distance between two points."

The Judge moved off. The Professor lingered a moment to make up his mind and then started. One, two, three steps, and the Professor found himself in the yielding mud up to one knee and with a grunt of disgust backed out. Just at that moment there came a voice from above.

"Ho! Professor, come here, I am in a tight place."

"It seems rather loose around where you are, Judge, what is the matter?" innocently asked the Professor, for the Judge had not seen him back out, nor heard his expletive.

"Well," said the Judge with more emphasis than the occasion would seem to warrant, "I am here, and can neither advance nor retreat. In front the bottom has entirely dropped out, and the old limb in the rear is so small and smooth that I am afraid to attempt to turn back."

"Well, what are you going to do about it?" said the Professor with a chuckle, for he always enjoyed seeing the Judge in a dilemma. "Are you going to camp there for the night?"

The Judge's only reply was, "Cut me a pole and throw it to me and I will bridge the rest of the way across." With these words the Judge flung the hatchet with a spiteful force, not at the Professor, but at the solid earth behind him.

Very leisurely the Professor picked up the hatchet, and more leisurely began to select a suitable grub; for was he not tired, and was not the Judge calmly awaiting his actions? Did not the Professor know that the Judge would not get away from him?

"Hurry," said the Judge, "it is getting late, and I am tired of standing here."

The Professor hurried a little, but he knew the Judge would not leave in a hurry, and so he kept trimming the pole. In order that it might more safely support the Judge's weight, the Professor had left here and there a projecting limb a foot long.

"It is ready, Judge," said the Professor.

"Reach me the end easy," said the Judge, "easy, or you will push me off."

There was no malice in the Professor's heart, and he did reach the end easy to the Judge, and in doing so slipped off the end of the limb with one foot and was half knee deep in the mud. He was just opening his mouth to let escape some of the emotion swelling within, when there was a desperate plunge, a grunt of anger and disgust, a splash, a groan, and then—perfect quiet. One of the projecting limbs had caught the Judge's leg when he threw the pole forward, and obedient to the impulse he followed. The Professor looked forward, and in amazement broke out:

"What on earth are you doing there?"

"Doing nothing. It's already done," said the irate Judge The Professor took in the situation, saw it was impossible for him to go any deeper without bisecting himself, for he had caught on his pole with one leg. Then the Professor was too full to hold in longer; the woods rang with his hearty laugh. Then he forgave the Judge his exaggerated story about the squirrel rifle and the "buck ague," forgave his omissions, that he wounded the huge buck, that he did put powder behind every ball—all these things the Professor forgave, and remembered them against the Judge no more. The Professor laughed till he was so weak he could hardly stand, and the tears came into his eyes. Finally he gasped out:

"Why don't you get out?"

"I want to bring my shoe with me," was the panting answer of the Judge. He pulled and panted, and grunted and groaned, but with no appreciable effect. The Professor was in the background applauding, encouraging, laughing till his sides ached.

"I am coming, I am coming," shouted the Judge after a second attempt. "I am coming with my shoe on, too," and something of the Judge's hearty good humor began to beam on his face. A long and steady pull and he stood with both feet on the pole, dripping with mud and water, and sweating at every pore. A moment more and he stands safely on the other shore, and the Professor, laughing at his sorry plight and murmuring to himself, "The wicked stand in slippery places," cautiously follows the Judge's path without his misfortune.

A brisk walk of half an hour brings us to the brow of a hill, and away across the tops of the cedars gleams the water of Beaver Lake. But such a half mile of swamp as lies between us and the boat! The Judge plunges boldly in and the Professor follows close behind. The cedars stand so close together that the Judge can with difficulty press his 220 pounds through, and the tough dead limbs come so near to the ground that he cannot crawl under. Now, the Professor forges ahead, and part of the time squeezing between the cedars and part of the time on hands and knees, he worms his way along. The Judge groans and then he gives a sigh of relief, for here two or three cedars have fallen down and knocked others with them, and the Judge mounts their trunks and walks with comparative ease. The Professor has wormed his way on hands and knees ahead, and then another lament from the Judge salutes his ear.

"I don't believe I can get through," says the Judge with a comical smile, bordering on the pathetic.

The Professor looked up, and there, fifteen feet in the air, was the Judge, swaying to and fro on the last partially fallen cedar and looking in despair at the Professor on his stomach, crawling through the seemingly thicker cedars, and satisfied with his 125 pounds of avoirdupois. He was in too close a place to speak. He gave an encouraging smile to the Judge and then crawled on, for he had caught a glimpse of the water just beyond. Hot, exhausted by his toil, hounded by the demoniac mosquito, he sank on the mossy margin of the lake and waited for the Judge. He soon came, but had miscalculated as to the location of our boat. It was at least a quarter of a mile to the west of us. What was to be done? The Professor sat still in quiet contentment, for that was the Judge's problem. He quickly began its solution.

"Shades of my fathers," said the Professor, when he turned his head a few moments afterward to look at the Judge, "is it possible that this is the learned Judge, the eloquent advocate, the cultured and genial gentleman whom I so frequently meet on the streets of our city and at our college commencements? It cannot be."

Such were, or ought to have been, the communings of the Professor as he gazed on the Judge. There he stood in the margin of the lake. His woolen shirt, bound at the throat and thrown back, exposed a breadth of breast inviting to the mosquito. His face was damp with sweat and red with the toil of his journey. His shoes lay on the moss, and his jean pants were rolled high above his knees. He reminded the Professor of a Greek gymnast ready for the race. He soon disappeared around the curve of drooping cedars to the west of us, his legal heels grinding the loose pebbles of the shallow waters into the yielding sands. The time slips rapidly away, and the Professor looks longingly across the lake to the northern shore, beyond which lies the camp. A quarter of an hour passes, and the Judge in the little Wawa glides around the little curve of cedars and into the shore, where sits the wearied Professor.

He entered the bow of the boat, stepping across the body of the much-slandered deer—for one of the balls had hit just where the Professor aimed—and taking the paddle, joined his to the Judge's lusty stroke. The boat shot forward toward the distant shore, and in a few moments we were out of the calm and into the ruffled waters. It then became apparent to the Judge and the Professor that the waves were much higher than they supposed. An uneasy look swept over the face of the Judge, and a thought of home, of wife, of children came gliding into the mind of the Professor. It was cold, quite cold, down in those deep blue waters, for a crest of an angry wave spit its foam on the hand of the Professor as he bent to his oar.

"Judge, can you swim?" at last said the Professor, coolly.

"Not a stroke," said the Judge, with an unusually kind tone in his voice.

"Can you?" was the next question from the Judge.

"Like a fish," was the laconic reply of the Professor as he bent to his stroke.

"Suppose my oar should break," said the Judge, gently; "we would be in a bad fix then. But I believe," with a more hopeful tone in his voice, "I could make it with the pole for a paddle."

The Professor made no reply, but looked ahead to the rising waves and to the bluff beyond them.

"Ugh!" said the Judge, as a vicious wave cast a pint of water into his lap over the boat's side. Now, the Judge is a Presbyterian, and as their custom is, does not take kindly to water, especially to large bodies; but the Professor is a genuine Baptist, and prefers even a lake to a bowl. These facts may account for the pensive mood of the usually jubilant Judge, but the reader must decide that.

After a perilous half hour's struggle the yellow of the sands gleamed through the boiling waves, and the Judge was his genial self again, and I am not sure that he did not fling a quotation from Blackstone and some law Latin at the angry waves.

In a few moments the Judge, Professor and deer were in camp, and the greetings to our friends from Munising, who had arrived in our absence, Mr. E. C. Cox and Ira Weller, being over, the Judge proceeds to broil the steak. Now, it is one of the idiosyncrasies of the Judge to talk to the pots and pans when he is cooking by himself. The Professor had left the camp-fire a few moments before, but unexpectedly returned. The Judge was talking to himself even more warmly than usual, and the Professor thinks that these were about the words: "That may be all right for a Baptist Professor—be still, won't you"—this last with a vicious punch at the steak, which was curling on the griddle—"but for a liberal Presbyterian who takes his drop at a time, that lake was a little too deep for comfort, and—" here the Professor coughed, and the Judge looked up, and with an innocent simplicity the Professor asked,

"Isn't supper about ready?"

"Yes, it is ready," said the Judge, with rosy cheeks; and he placed the fragrant steaks on the table.

It was a custom of the Judge and the Professor, after the day's toils were over, to light the candles, and retire to their couch, and have some of the delights of conversation and literature. The evening of this busy day was no exception to the rule. For, perhaps, an hour they read with only an occasional remark. The Professor saw the Judge giving now and then a vicious slap at some imaginary fly under his part of the coverings, but without much success. He finally became impatient, and began to turn down the covers as if he were going to annihilate some stubborn juryman. He gave an earnest look through his glasses and, with a yell that would have made a Comanche Indian blush with shame, he bounded—literally bounded—from the bed, striking the sloping side of the tent.

"A snake! a snake!" he cried, and with an energy born of natural disposition and close confinement, he attacked it with a loose tent pin, and in a moment a harmless little garter snake was wriggling its last on the sands of our tent floor. The delights of literature were over for that evening. The Professor laughed till his strength was exhausted; laughed himself to sleep. But the Judge had a troubled sleep, and moaned, and in the silent hours of the night gave the clothes a most vigorous kick, muttering as he did so, "Darn the snake!"

IN THE WOODS, AND OUT.

WHY it seems but yesterday that passing down this path I heard the tuneful wings of busy bees circling along the misty morn to forage on the blossoming fields.

The woods were vocal with songs. The air was ladened with perfume from the flower-crowned hills.

Far, far below, the fog hung in the valley like a lake. Cool, shady groves were on the distant shores, and now and then glad echoes ferried the robin's simple song across the silent deep to me. This, thought I, as I looked away toward the blue hills, around me, is nature's walled city. Builded like unto the city with its twelve great gates, that lies away out eternityward.

And yet I know that to these courts autumn would come and demand the scepter of summer.

Well do I remember on a September evening, when the crimson banners of sunset were streaming from the western sky, how I watched great flocks of birds drifting through the defiles out to the south to join a sorrowing queen that had deserted the halls of day; deserted because the heralds of autumn were telling of the barbarians coming. And oh! what changes were wrought! The landscapes were decked in brown and gray; the forest was despoiled of its dress; flowers were buried in unmarked graves, and when the unleashed whirlwinds of the equinox rolled all that was beautiful into drifts of mouldering ruin, nothing but a specter of the vernal scene was left to me.

But then I soon fell into line with autumn and became as one of the family. I heard the rattling nuts among the limbs; I saw the gray squirrel grow sleek and fat; I watched the wild goose sailing out of the north, and by and by it dawned upon me, what would one do without the music of fall?

Had I not twenty years ago shouldered my three-dollar shotgun and enlisted in the cause? And have I not every season since tramped hill and plain, through meadow and brake, through sunshine and storm, now shooting over a staid old dog in the stubble, now wasting lots of powder practicing on grouse in the thickets, and again cheering on the noisy chase among the hills? Well, come to think about it, the fall is the musical season of the year. But the autumn is gone, and I am looking on the winter's trail. The cold north wind is roaring along the bare ridges and bleak downs. I hear the allied tempests marshalling along the scraggy cliffs, and roaring through the rocky gorge, dance lightly over the waters of the lake, and driving through the woodland with sober pace, awake the genie of the place to chant old winter's symphony. And now again, I hear them masking all their forces on the border of the thicket, and now the whirlwind charges up the dizzy heights beyond the little chapel, and eddying through the guttered fields goes coasting down the gentle slopes toward the southern horizon.

What a vast brotherhood these wintry winds are! I hear their rustling wings on every hand. How they torture the clouds; how they stir the very depths of the laboring sky! Hush! I hear them here and there—and see them never.

Hark! I hear the woodman's axe in the valley. One, two, three, and now a thousand echos take up the measure of the master stroke, and labor's melody swells into a grand chorus to cheer the toiler to the end of day. For sixty years the bright axes of this craft have spangled these slopes; for sixty years the woodman's axe and husbandman's plow have been devastating the primal beauties of these hills and vales; and I now see away in the vista guttered fields and vast tracts of brush, that hear no more the moan of laboring axe, but are simply the home of the wild fox, and Industry's offering at the altar of Folly. The master stroke has an echo away on the borders of civilization, and unless there is a cessation of the music, a century's reparation will be but as a drop in the sea from the sum of our losses.

Save the forests while yet we may.

Down in the fastness of his thicket home I hear the grouse beat a tattoo. How vain is he when he spreads his dapple wing before the chary flock, and yet, with all his vanity, the music of his wing adds a charm to the solitude, nor mars one item of the woods' solemnity. Who has the heart to slip among the shadows and shoot this bird upon the ground or tree, and give not even one chance to his nervous wing to stretch away in flight before the vengeful gun?

Hush! I hear a quail piping a note of warning to his mates. And now I see them racing through the dead grass of the pasturage. I mark one down. There will he lay, and count with fluttering pulse the snail-paced flight of danger's hour, and will only feel from danger free when, in the twilight hour, the wary cock calls to the scattered covey and leads it to the sheltered bivouac.

Ah, Bob! I wasted many a pound of shot before I became very successful in cutting you down. But I never cut you when you were down. You know it was a square heel and toe race, and you know that for several years you won, because I insisted on shooting with both eyes shut.

My footstep startles the rabbit from his nest among the greenbriers, and he drifts away as noiseless as the light of

day. What is there in the sounds down the hollow of the forest gloom that tells of danger? What instinct leads him among the shadows by the brook, through the clearing, down the path to the sugar camp, and stays his feet from circling flight just where I entered the thicket? See how he tracks the danger past his nest, and circling once again to spy the ambush, if one there be, creeps back among the briers to dream away the day. Oh, unseen Hand, thou great Creator, how perfect the workings of Thy laws!

On up the steep path I am climbing. I hear the red fox barking among the rocks above me; I hear the brotherhood of winds tuning their harps amid the swaying, shivering trees, but not a bird cheers me on my way with a note of welcome. Across the valley I see the crow climbing the blast with lazy wing, and perching upon the topmost branch of the highest oak, laughs at the storm. Ominous bird!

Time's corroding touch may scar the beauty of the highest art, time may strew the hills with mouldering monarchs of a royal forest, time may shepherd the deeds of great men upon the highlands of the past, yet time seems never to dim the fire in the eye of this robber drifting upon the tide of idle years, yea, shiftless years; he does no deeds that call for praise; he forms no tender ties to stay his flight, when fancy leads to some adventure far beyond the confines of the day. He haunts the woods, the cliffs, the highest hills, the valleys low and damp, and loves to linger near the cabin home of the pioneer, not, however, to admire the laborer who is studding the crown of poverty with gems of righteous deeds, and who, with toiling hands is sealing within the tomb of day, just acts, that shall be golden recompense in vast eternity, but to steal anything that may be found loose.

Far from the stately city he plumes his ebon wing and patrols all the country side with Saracenic vigilance. No scene too sacred, no borderland to stay the passage of his untamed wing.

Swinging from the elm near the church, he has watched the funeral pall pass to the grave, and when the rattling clods were awakening hollow echoes to read the closing chapter in the book of life, then was his cry the loudest.

Woe to the nestling when his wing shades the nest. Brothers, an ounce and a half of No. 6 shot is always taken at par by the crow family.

Darker and darker grows the day. Great, lumbering old blasts come groaning and complaining over the western hills. The archers of the storm king are feathering the red roof of yon distant barn with arrows of snow. The loud-voiced farmer calls his flock home from the broken hills. Through the drifting storm I hear their tardy feet hastening down the stony path to battened stalls and manger fat with salted hay. The house-wife stands with shining pail in hand awaiting the coming herd. Hissing geese crowd around the corn-crib door and watch the golden stores with hungry eyes; turkeys peep and gobble in the distant orchard; complaining chickens crowd the garden fence, while on the oak, that stands way down the lawn, the peafowl has a perch, and from this airy post will sound the charge for every circling squadron of the storm throughout the night. A bright wood fire snaps and cracks on the kitchen hearth. I would love to sit an hour by the cheerful blaze. I would love to linger longer on this sea, open to winter gales, but a safe harborage from the whirlwinds of passion and ambition that are laying the wrecks of human expectation thick along the shores of time.

But past the farmhouse and the sheltering fold my path leads over the dark fields. Night is scaling the walls of the horizon, and the brotherhood has an old hurricane headed through the portals of the west.

There by that mass of broken stone and scattered mouldering logs, was once the home of the first settler in this "district." There young hands first took up their tasks of life; their necessity ruled and exiled pleasure's cause was never plead. And of the fruits of that forgotten seeding time, we have this desolate ruin, which is the chaff the marching years have left upon the thrashing floor of time. Poor Ben Johnson! They say he loved the woods too well; his gun was his constant companion, and the music of the forest the destroyer of his earthly prospects. His keen eye interpreted the unwritten language of nature, and his soul was jubilant as he heard the Creator's praise syllabled in the song service of the birds. The sturdy arm that blazed a trail up into this Eden wielded a scepter that preserved it for sixty years. But when at last he was laid to rest, the vengeful axe swept away his treasures; and, ere long, some sacrilegious hand erected this legend above his neglected and brier-covered grave, "No Hunting Allowed Upon These Premises!"

Who enjoys more fully, who can comprehend more clearly, the divine wonders of this world than the sportsman wandering through field and wood? Follow him with gun afield, or with clicking reel by the quick waters, and you will find his actions tempered with reason and his eye keenly observant of all that is beautiful around him. Could we have watched Ben Johnson awake to his first sunrise among the blue hills of eternity, is it not possible we would have heard him exclaim, "I thank You, oh, God! that it is Thy pleasure that I enjoy forever in Thy kingdom what was allowed me in life; communion at Thy altar and among Thy subjects!"

Can the human heart conceive grander or more magnificent scenes than the sportsman finds in his travels?

Pardon me for getting into the woods, but I am out.

Parson O'Gath.

Wildfowl in New Brunswick.—*Editor Forest and Stream:* Those who read the first paper on the "Cruise of the Alice May," in the February *Century*, have thereby been introduced by Mr. Benjamin to one of the best sea-fowl shooting grounds in Canada. On both shores of the Northumberland Straits, and along the north shore of New Brunswick, from this date to the middle of May the wild geese, brant and black ducks alight on the shore flats to feed and rest on their way north to their hatching grounds in Labrador. They are hunted and shot from boats about ten feet long, rigged up with side paddle wheels like a miniature steamer. Each boat only accommodates one man, who propels himself with cranks which act directly on the paddle wheels. When he gets near enough to the birds, which he can do readily enough among the huge blocks of floating ice, he seizes his gun and blazes away. From one hundred to one hundred and fifty birds are often bagged in a day in this way by the more experienced gunners, who can stand the wear and tear of that means of propulsion. A few pioneer flocks of the geese have been seen within the last few days. It will yet require several steady south winds and warmer weather to make the shooting season regularly open.—B. (New Brunswick, March 19).

Natural History.

THE DEER OF THE OTTAWA VALLEY.

BY WILLIAM PITTMAN LETT.

[Read before the Field Naturalists' Club of the City of Ottawa, Ontario, Canada, on the 13th day of March, 1884.]

[*Concluded from Page 144.*]

THE common deer, *Cervus virginianus*, so named on account of the species having been first discovered by Europeans in Virginia. This idea was in the mind of Robert Burns when he said:

"Lord, I'se hae sporting bye an 'bye,
For my gowd guinea,
Tho' I should herd the buckskin kye
For't in Virginia."

The Virginian deer is one of the most graceful and beautiful types of the deer genus, and is so well known that it is almost superfluous to describe it. Generally speaking, the male only of this animal has horns. I have seen, however, within the last three years, two does brought to Ottawa market, each of which had small horns, somewhat resembling the antlers of a "spike-horned" deer; and, although the time was late in the season, the velvet still remained on the horns. These are the only instances in which I have noticed horns on the female of this species.

The Virginian deer in form is the most elegant of all the North American deer. The following description is from "Billing's Naturalist and Geologist": "It has a long tapering, pointed head and large, lustrous, bluish-black eyes. The legs are slender but well formed, and in proportion to their size, possessed of prodigious muscular strength, while the body is moderately stout and flexible. The horns are not large, but they are well armed with strong and sharp spikes. They are near their base bent backward, and in the upper half turned forward. They are usually cylindrical, but they are also sometimes met with a good deal palmated. They vary very much in size and shape upon different individuals. The prongs are round, conical, sharp, and directed upward. Situated partly on the inside of each horn, near the base, there is a short brow antler on most of the specimens. A large pair of horns weigh about six pounds, but there are few over four or five pounds in weight.

"The color of this animal varies with the season; in the autumn and winter it is bluish grey, in the spring reddish, becoming bluish in the fall. Beneath the chin, throat, belly, inner side of legs and under side of tail white. The fawns are at first red and spotted with white along the sides. In the autumn of the first season they lose the white spots, and thereafter are the color of the old ones. The hair is flattened and angular, that upon the under side of the tail long and white.

"The average length of this species is from the nose to the root of the tail five feet four inches; length of tail without the hairs, six or seven inches; with the hairs a little more than one foot. The females bring forth in May or June, one, or two, rarely three at a birth."

Occasionally specimens of this deer are found of a pure white color, with the pink-colored eyes, denoting an albino. I have seen two or three marked with irregular patches of white on various parts of the body. On one occasion a few years ago, at Hemlock Lake, in the Province of Quebec, I shot a fine buck, in the skin of which the white hairs predominated so much, that the animal had quite a white appearance. A large doe was killed by another of the party about an hour afterwards with precisely the same peculiarity of appearance. A few years ago Mr. Neil Morrison of this city, had a magnificent white buck, carrying a fine pair of horns. As a *lusus naturæ* in the animal creation of extraordinary elegance and beauty this lovely specimen was unrivalled. The pure and uniform whiteness of the skin of this fine buck was almost beyond belief. This rare and valuable specimen was caught in deep snow when about three years old, about thirty miles up the Gatineau River. It afterwards came into the possession of the Hon. R. W. Scott, who kept it with a number of others in a park, where it ultimately died. If a deer be killed in the water during the period of the red coat, say from June until the middle of August, the carcass will sink to the bottom. At all other seasons the dead body will float. From recent accounts given by sportsmen in Forest and Stream—and intelligent sportsmen are frequently very reliable naturalists—the largest male animal of the Virginian species has been found to weigh something over three hundred pounds gross weight, while it is stated by Mr. Cyrus Butler, of Anna, Ill., that "the Virginia deer of the Pacific States are smaller than those of the same latitude in the Central and Eastern States; and I do not think that the deer of Texas will average more than one-half of the weight of the deer of Wisconsin and Michigan. From all I can learn on the subject, it seems that the Virginia deer of the Western States are smaller than those of the same latitude in the Central and Eastern States, and it is certainly true that the further South we go, the smaller we find the deer."

A beautifully formed deviation in the *Cervus virginianus*, is called the "spike-horn." This animal, although identical in color and habits with the branching horned variety, or rather generic type of this species, is rounder and thicker in body, shorter in legs, and has a more elegantly shaped head than the other. The true spike-horned deer has straight, sharp antlers, of from six inches to nine inches in length, setting backward, like the horns of the African oryx, which renders him a formidable and generally victorious antagonist, in the periodical combats which take place between the male knights errant of the deer tribes. Those conflicts are often desperate and protracted. I have seen a piece of bush fully a quarter of an acre in size, after a light snow, in November, all tramped over, the soil torn up, and small trees—it was in a *brulé*—uprooted in all directions, as the evidences of one of these battles. I was told by a still-hunter on the Madawaska River, who killed 170 deer in one season (how is that compared with the mild and less sanguinary dog hunting?) that the same year—I think 1879—he came upon two fine bucks fighting and, getting in within thirty yards, killed them both; rifle, small Ballard. In such conflicts the animals frequently get their horns locked beyond the power of extrication, and both die of starvation. I once saw two heads locked so tightly facing each other, that a strong man could not separate them.

I am indebted to our friend Mr. James Fletcher, the accomplished botanist of the Field Naturalists' Club, for a copy of the London *Field*, containing a photograph of the most extraordinary head of abnormally shaped horns which I have ever seen. The same paper contains another photograph of two heads locked together, side by side, while fighting, in such a manner that nothing but the shedding of the horns could have freed them. When found the deer were alive and in good condition. In both cases the animals were of the Virginian species. This beautiful deer is found in all parts of the valley of the Ottawa, and between the Ottawa and the St. Lawrence, in such places as the hardwoods and swamps are large enough to shelter them. They roam through the hardwood and hemlock ridges in summer, and make their yards, if possible, in a tamarac swamp in winter. I have seen, about twenty years ago, a deer yard stretching from Bear Brook away beyond the Castor River, which must have been at least nearly four miles square. This yard was completely intersected by paths branching off in all directions and beaten hard enough to bear a horse. Deer yards are found in the same section of country still; but, like the red-skinned herds of woodland beauties which then made the wilderness glorious, they have been growing smaller and smaller; and a well-beaten yard often acres in extent within twelve miles of Ottawa, is now no mean representative of the wide trodden haunts of the Virginian deer in the near past. The multiplication of hunters, superinduced by arms of precision and volunteer companies, but above all the lawless assassin who slaughters them, male and female, old and young, upon the crust, during deep snow, have tended, in a measure, legally and illegally to more than decimate the magnificent denizens of the forests surrounding the city of Ottawa. The clearing away for agricultural purposes, and the destruction by bush fires of the forest in many places, has driven the deer back to more distant haunts. The wolf, too, although not more sanguinary in his instincts than the lawless crust-hunter, has done his part in thinning the deer in the valley of the Ottawa. Still, it is almost astonishing to know that there are large numbers of them on both sides of the Ottawa River, and in the forests bordering upon its many large tributaries. In summer the Virginian deer delights to hang around clearances for the purpose of feeding on grass, clover, turnips and potatoes. In former times many were killed from scaffolds in the nights by watchers in the turnip and potato fields. I have not time, nor do I wish if I had, to give a description of the various modes of deer hunting in fashion among sportsmen. As a sportsman I would scorn to refer in a descriptive manner to fire-hunting or crust-hunting. Of the two legitimate methods, still-hunting and hound-hunting, I prefer the latter, on the runway system, as less destructive and more lively and full of real sport than the former. To me with the glorious music of the dogs ringing and re-echoing through the woods, there is more sport in striking a buck on "the full jump" with a single bullet, than doing the same thing in any other style.

THE HORNS OF DEER.

No hunter to whom I have spoken, nor any book which I have read, has given me a satisfactory account of what becomes of all the cast-off horns of our common deer. I am aware of their being gnawed and eaten up by mice and other rodents; but during the period when the horns are falling, from the first to the sixth or seventh of January, it is a very rare occurrence even with little or no snow on the ground, to find the horn of a deer, and much more unusual to find both horns together. Some of the knowing ones say that the deer buries his horns; others say that he drops them in the water; but no proof has been adduced that either conjecture is correct. Although it is a common thing to find the shed antlers of the wapiti on the prairies, and around the borders of wooded slopes and along the banks of creeks, the whereabouts of the cast-off horns of the *Cervus virginianus* has not yet been discovered. This is a point in natural history upon which we still want light. It is a strange and mysterious provision in the economy of nature, that the periodical growth of a deer's horns—even the ponderous antlers of the moose or wapiti—should involve only an extraordinary forcing process of little more than four months. Shortly after the dropping of the horns, the new ones begin to appear. The growth is slow until the setting in of the warm spring weather, after which it is exceedingly rapid. The new horns make their first appearance in a round knobby, pulpy state. About the middle of August they are full grown, when they are covered with a soft, velvety skin, which the animal gets rid of by rubbing them against small trees. About the first of October, sometimes earlier in the season, the velvet has disappeared and the new antlers may be seen in all their hardness and beauty. The animal may be said to be then in his finest condition and at his heaviest weight. A buck of the *Cervus virginianus* is seldom seen on the first day of January with his horns on, and never that I am aware of after the fifth of the same month. It is a well known fact, however, that the moose does not lose his horns until later in the season. I have seen the head of a moose killed in January of the present year with the horns still on, and without any appearance indicating that they were about to fall off.

Here, I imagine, is the proper place to refer to some of the peculiarities and diversities in the horns of our common deer. It is difficult to account for the abnormal growth so frequently visible in the horns of those animals. Some naturalists seem to think that such irregularities of growth in the horns of deer have been occasioned by injuries received by the horn when in its soft and pulpy state. If such were the case, would it not be natural to conclude that after the deformed member had been shed, the new horn of the following year would resume its normal shape? This cannot be said to be the case. This head which I now show you, as you may observe, is one of most singular formation; and from personal observation I know that the splendid animal that carried this strangely abnormal pair of horns, wore his crown in its present shape year after year. I had a fair open view of this deer the year before he was killed, at or near the spot where he was shot, and I particularly remarked the strange-looking horn growing out of the right side of his head. Here are also two fine heads each with backward lateral prongs of a style which is rarely seen. Both have been taken from old and heavy deer. Abnormal shaped horns are seldom, perhaps never seen, except in deer of great size and age. I have frequently seen very old bucks of the red species with an immense long curved beam on each side, and others of similar size with only rudimentary protuberances, indicating, as it were, the places where in the horns of former years the prongs had been accustomed to grow. It is not always the largest buck that carries the largest horns. The largest deer I ever saw, and one that I gave the finishing touch to myself, had the most miserable set of attenuated antlers I have ever found on the head of a full-grown deer. On the other hand, one of the heaviest pairs of antlers which have yet come under my notice—I have them at home—were taken from the head of a deer of

about one hundred and fifty pounds in weight. Here is another set of red deer horns, perhaps the largest and most beautiful that any one present has ever seen. The animal from which they were taken was shot on the Castor, or Beaver River, fourteen miles from Ottawa. They belong to Mr. Harry Baldwin of this city. They are singularly regular in beauty of shape, and at the same time strangely irregular and unlike ordinary antlers of the *Cervus virginianus*. To a certain extent they are palmated and evidently grew upon the head of a very old deer. Perhaps some gentleman present may be able to enlighten us upon this question of abnormal horns.

In telling you what I have learned about the deer of the Ottawa Valley, I have aimed at the simply popular without aspiring at the purely scientific, as the mode more likely to interest the greater number. I have endeavored to avoid abstruse technicalities. Above all I have unwillingly been compelled to curb my inclination to tell the thrilling story of many a glorious run, and rehearse the tale of many a night of happiness around the camp-fire, where battles were fought over again, and memory brings around us the branching antlers of many a woodland monarch, whose trophied heads can be found to-day in more than one home of the dearly loved companions with whom I have so often pitched the tent in the wilderness. If I have succeeded in any measure in either instructing or interesting my audience this evening, I shall proudly feel that I have not roamed the woods, stood upon the runway, heard the deep and matchless music of the hounds, or drawn the rifle trigger in vain.

And now, my pleasant task is done,
The fruits of many a glorious run!
Still springing 'mid the lambent haze
Which circles round the camp-fire's blaze;
Revealing to fond memory's eye
The dear unrivalled joys gone by,
When limbs were lithe, and arms were strong,
And life one gladsome burst of song!
Revealing 'mid unfading sheen,
The runway in the forest green—
The antler'd monarch's springing bound—
The matchless music of the hound!
As headlong on the steaming scent
With instinct true as steel, he went!
The gaze into the spreading track—
The breaking twig, the rifle's crack,
The quivering limb, the closing eye—
The forest's dying majesty.

THE MUSKRAT AS A FISH-EATER.

BY C. HART MERRIAM, M.D.

THAT the muskrat is not commonly considered a fish-eater is evident from the absence of reference to such habit in the published accounts of the animal. Robert Kennicott is, so far as I have been able to ascertain, the only author who mentions this trait. He says: "Except in eating mollusks, and occasionally a dead fish, I am not aware that this species departs from a vegetable diet." ("Quadrupeds of Illinois Injurious and Beneficial to the Farmer," 1857, p. 106.).

At a meeting of the Biological Society of Washington, held in the National Museum, Dec. 14, 1883, Mr. Henry W. Elliott spoke of the "Appetite of the Muskrat." He stated that in certain parts of Ohio the muskrat did great injury to carp ponds, not only by perforating the banks and dams and thus letting off the water, but also by actually capturing and devouring the carp, which is a sluggish fish, often remaining motionless, half buried in the mud. In the discussion that followed, Dr. Mason Graham Ellzey said that from boyhood he had been familiar with the fact that the muskrat sometimes ate fish. In fact, he had seen muskrats in the act of devouring fish that had recently been caught and left upon the bank. The President, Dr. Charles A. White, narrated a similar experience.

On the 7th of February, 1884, I brought this subject to the notice of the Linnæan Society of New York, and asked if any of the members knew the muskrat to be a fish-eater. Dr. Edgar A. Mearns said that he had long been familiar with the fact, and that it was no uncommon thing to see a muskrat munching a dead fish upon the borders of the salt marshes along the Hudson. He has shot them while so engaged. He further stated that the muskrat is very destructive to nets, destroying the fishermen's fykes by scores by entering them in quest of fish and then tearing the nets in order to escape.

Dr. A. K. Fisher said that at Sing Sing, N. Y., he had often known muskrats to enter fykes, sometimes drowning, but oftener escaping by gnawing the meshes, thus doing considerable injury to the nets. He supposed they entered the nets because placed in their line of travel. He further stated that he knew that fykes made of fine wire were used with success in capturing these animals.

Mr. Wm. H. Dall, the well-known Alaskan explorer, now of the Coast Survey, kindly favors me with the following: "In 1863 I visited Kankakee, Ill., on a collecting tour for river mollusks, in July. You know how muskrats throw up mounds of the shells they dig out. I examined many of these for *Unios*, etc. On several I saw the skeletons of fish (chiefly suckers, I believe), partly or wholly denuded of their flesh, and showing the marks of muskrat (or, at least, rodent) teeth. I also saw the shell of a common mud turtle, so gnawed and in the same situation. I did not see the animal in the act of feasting, which, I believe, is chiefly done at night, but I have no doubt that the fish and turtle were eaten by the muskrat, as well as the mollusks associated with them in the same pile."

Under date of March 5, 1884, I have received from Dr. Fisher the most valuable record yet obtained concerning the habit in question. Dr. Fisher writes: "A few days since two young men were fishing through the ice for pickerel, with live bait, at Croton Lake, Westchester county, N. Y. Several times they were troubled by having one of the lines pulled violently off the bush and run out to its full length. Finally they saw the line start again, and by pulling it up quickly they landed a large muskrat on the ice." Here is an authentic instance, not of a muskrat eating a dead fish on the bank, but of actually capturing a live fish in the water under the ice. Fortunately the fish was attached to a hook and line, and the muskrat was caught and killed.

Cannot some of the readers of FOREST AND STREAM throw more light on this interesting subject?

The Rodentia being essentially an herbivorous order, with teeth adapted to gnawing, it is always very interesting to note any marked appetite for flesh among any of the species of this order. Many exceptions have been found to exist in regard to this general law, it having been long known to be a fact that rats will eat flesh as quickly as vegetables; that the capybara will eat flesh when no other food can be found, and that squirrels will at times eat animal tissues. In fact, it seems probable that all of the species of rodents may, under favorable circumstances, be caused to eat flesh. Now it has long been known to the writer, and it is probably well known to other observers, that the muskrat (*Fiber zibethicus*) will and does, at least in certain localities and under certain conditions, resort to a carnivorous diet. The piles of *Unios* heaped up on a muskrat's mound and the muskrat in the act of eating this mollusk have both been seen many times. Knowing this so well ourselves, and supposing it to be a well-known scientific fact, we never took the trouble to look it up, and hence were much surprised to hear it said in the Biological Society at Washington that it had never been published in any scientific monograph of the animal. At this meeting, Dec. 12, 1883, Mr. Henry W. Elliott, of the National Museum, read a paper upon the "Appetite of the Muskrat," in which he claimed to be the first to record the carnivorous habits of the muskrat before a scientific body, asserting that no published record could be found, in which statement he was sustained by the curator of mammals. The particular kind of eating which Mr. Elliott proved the muskrat to be guilty of never having been observed by the writer, and being of great importance and interest, are given below.

While Mr. Elliott was at his home in the West, several of his neighbors complained that they could get no carp from their ponds, and in his own ponds carp were seldom obtained. No reason could be given for their disappearance, as there should have been great numbers in the ponds. Hawks were not abundant, in fact the locality was rather too thickly settled for hawks to carry on their depredations. In several of the ponds obstructions were placed to prevent people from seining the carp, and through no possibility could they escape from the pond. But still they disappeared, and their disappearance still remained a mystery. At last he had the water drawn off and noticed two muskrat holes in the bank, but did not even then suspect the miscreants, until a neighbor came along and suggested that the muskrats were the depredators. Upon examining the holes few bones were found, a fact which could be explained by their cartilaginous structure rendering them digestible. The probabilities are then, and Mr. Elliott believes, that the carp were eaten by the muskrats, and unless some mode of exterminating the pests is found, he predicts that great damage will result to American carp culture. Being a sluggish fish the carp is easily caught, and furthermore, it has the stupid habit of sticking its nose into the mud and hibernating. So just in the season when the natural food of the muskrat is very hard to obtain, he has a luxurious fish, lying still in the water and easily captured. It is then easily understood how it would change its diet for a part of the year at least. Being a clumsy animal the muskrat could not obtain the quicker motioned fish. In the interesting discussion which followed the reading many new points were obtained, and it seemed to be a well-known fact that the muskrat would eat flesh, notwithstanding the fact that no published account of such habits could be found. One man said he had seen muskrats take bait from his line and eat fish caught by hooks. The way this animal gets the mollusks from the *Unio* shells without breaking the shells is not known, unless that they are allowed to die, and then picked out after the shell has gaped open. As to exterminating the muskrat, many suggestions were made. It being rather difficult to shoot them, it was suggested that steel traps be used. A gentleman said that he had frequently killed them by putting strychnine in an apple and placing the apple upon a stone. It is asserted by hunters that they cannot be killed with poison, but this person says that this is a mere prejudice. Certainly if it be a fact that the muskrat does eat carp he is a dangerous enemy, and should be vigorously persecuted by any and all means.

WASHINGTON, D. C. R. S. T.

BIRD NOTES.

THE spring flight of ducks to the north has commenced. I saw six wild geese yesterday, the first this season. Black ducks, shelldrakes, whistlers, oldwys, broadbills and coots are about the only species that are found around here. They are coming on in quite large numbers. I very seldom see wild geese flying this way to the south in the fall, but generally see them in large numbers in the spring in their flight to the north, which generally commences about the last of March, with them and ducks, and lasts until about the first of May, when they disappear altogether. I was out shooting to-day and killed an uncommon large sea gull called gannet, a species very seldom seen around here unless it is a very cold winter, like this winter. The feathers on the breast and neck are pure white, while those on the back and wings are jet black. F. I. C.

NORWALK ISLAND LIGHTHOUSE, March 14.

Within the last week numbers of bluebirds and robins have made their appearance; and yesterday I saw a flock of Canada geese flying northwest. If the weather continues as mild and pleasant as it is now, I expect to note many more arrivals. NEMO (of Texas).

FRANKLIN, Mass., March 19.

The following may be of interest to ornithologists: Mr. C. M. Carpenter, of Providence, reports seeing white-breasted swallows flying March 12, and March 19 redwing and crow blackbirds. This is a very early date for the arrival of swallows with us. SAMUEL F. DEXTER.

PAWTUCKET, R. I., March 22.

THE PLUMAGE OF QUAIL.—*Editor Forest and Stream:* In January I had from Southern Tennessee a dozen live quail bred in that country, and recently I have obtained a few live birds which are native to Northern Ohio. The plumage of the former seems to me (without having the two specimens side by side) to be much brighter, and the markings much more distinct than those of the Ohio birds. Does the difference exist only in my imagination; is it because all birds of the family are in finer feather in January than in March; or is there an actual difference of plumage in the different latitudes? Will some expert give the facts?—B. (Toledo, Ohio, March 20). [The Southern quail have the plumage somewhat brighter and the markings more sharply defined. In the Southwest (Texas), on the other hand, the plumage is grayer and the colors blend more. The dark Cuban race of *Ortyx virginianus* and the Texan form are the two extremes. It is hardly probable, however, that you would find any very strongly marked differences between birds from the localities which you mention.]

Game Bag and Gun.

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

In looking over the long list of rifles now in the market to see what one would choose as a hunting rifle, one is forced to admit that, although there are many rifles of various patterns, there are but few that fill the bill as one would like to have it. Let us begin at the beginning and examine some of the best, or those that are recognized as such, leaving the confessedly inferior guns out of the account.

In singleloaders we have first of small caliber the .22 Ballard and Stroms, differing but little from each other in shooting qualities, and the difference in mechanism being mainly a question of taste, as both are strong enough and safe enough for the light cartridges in use. But when we examine the proportions of powder and lead of the cartridge we find for the .22 short 3 grains powder and 30 grains lead, or 1 to 10; for the .22 long 5 grains powder and 30 grains lead, or 1 to 6, and the .22 extra long 7 grains powder and 40 grains lead, or 1 to 5.7, a proportion that in all cases seems to me to be enormous, as more powder (with increased velocity and dangerous space) could just as well be used as not, provided the bullets were made hard enough to stand the heavier blow of the powder, so as not to be too much upset in the barrel.

Doubtless for gallery or target practice the cartridges are heavy enough, as generally the gallery is of but short length, and the distance shot at invariable; so that the gun once sighted, good shooting follows. But cannot this gun be improved and its usefulness extended by increasing the weight of powder? Are there not many who could and would use this rifle as a "squirrel gun," provided it held its flight long enough, and had a flat enough trajectory to be depended upon for shooting at variable distances? Although from experience I know it shoots hard enough to kill at say 75 to 100 yards on small game, still the curve of the trajectory is considerable, and could be lessened by the use of more powder, and a more effective gun be the result. There is nothing in the mechanism of either rifle to preclude the use of a long cartridge, as in both the chamber is open at the rear when the gun is opened, and any length can be inserted or extracted.

The form of the bullets of this caliber could also be improved, and the manner of their insertion into the shell made the same as for heavier cartridges, and improved shooting be the result; the bullet being made full .22-caliber for the entire length of its cylindrical part, and the contraction where they enter the shell being done away with. This would give a bearing surface for the ball of the full length of the cylindrical part, as well as abolishing the "neck" at the rear of the bullet that may have a tendency to derange its flight.

Passing to the next higher calibers we have Ballard, Stroms, and Remington .32-caliber singleloaders, Winchester .32-caliber repeater, and Smith & Wesson's .32-caliber revolving rifle; the Ballard and Stroms using .32 short or long cartridges, either rim or central fire, the Remington possibly the same, and the Winchester and Stroms center fire cartridges.

In the rim fire .32-cartridges we have powder 6, lead 55 for the extra short; powder 9, lead 82 for the short; powder 13, lead 90 for the long; powder 20, lead 90 for the extra long; and in the center fire cartridges powder 9, lead 85 for the .32 S. & W.; powder 12, lead 90 for the .32 Colt's; powder 9, lead 82 for .32 short; powder 13, lead 90 for the long; powder 20, lead 105 for the extra long, and powder 20, lead 115 for the .32 Winchester.

An examination of this list shows a proportion of powder to lead of from 1 to 9⅙ to 1 to 4⅓ for the rim fire, and 1 to 9⅔ to 1 to 5¼ for the center fire, a proportion altogether too small for the powder in my opinion, and easily remedied for the Ballard, Stroms or Remington, as they all can take a longer cartridge without alteration, whereas the Winchester, and Smith & Wesson's would probably need alteration to accommodate the longer shells.

In the .38-calibers, also found in the Ballard, Stroms and Remington for singleloaders, and in the Winchester and Ballard for magazine guns, we still have either rim or center fire cartridges for the singleloaders, and center fire for the magazine guns, and a proportion of lead to powder of from 7 to 1 to 4 to 1, approximately for the singleloaders 4½ to 1 for the Winchester or Bullard, and 6 to 1 for the Bullard special, and it is only when we come to the .40-calibers that we begin to reach heavy charges of powder as compared to the lead, as well as guns in which new cartridges have been adapted, preserving their length invariably so as always to place the bullet up close to the grooves, but yet varying the proportions of powder and lead.

In the .40-caliber we have the Ballard, Sharps, and Remington as singleloaders, with the Bullard and Marlin as repeaters. The singleloaders using central fire ammunition, have a proportion of powder to lead of from 1 to 5⅞ to 1 to 4½, the .40-90 Sharps using the heaviest cartridge, 90 powder, 370 lead, while the Marlin uses the 60-260 cartridge, leaving the Bullard as the only magazine rifle that uses variable cartridges or that excels the old Sharps with its 90-370 charge.

In the Bullard .40-caliber we find two guns, one using the straight shell with 60 grains powder and 260 lead, or their special cartridge with 75 grains powder and 225 grains lead, a proportion of 1 to 3, or another gun using at present 90 to 95 grains powder and 300 lead, so that in either gun a more powerful magazine gun than any yet introduced will be found; and one has only to pay their money and take their choice between either the .40-60 or .40-75 straight-shelled gun, or the .40-90 using the bottle-necked shell.

Passing by all the .44 calibers as "among the things that were" (for what is the use of a .44-caliber when the .45 comes so near to it, and all later guns are of this caliber), and particularly as all the magazine guns of this type have too little powder to their lead, we come to the .45 caliber, and here we still find the Ballard, Sharps and Remington, the Peabody and Springfield also appearing, for singleloaders, and the Bullard, Winchester, Marlin, Kennedy-Burgess, Hotchkiss, Lee, and a host of others for magazine guns, and nearly all of the latter with a disproportion of lead to powder, they having mainly been, in caliber, copied from and adapted to use the same cartridge as the Springfield, a military and not a hunting rifle.

By this I mean that the government having adopted .45 as the caliber for its rifle, manufacturers followed in adopting the same caliber, and adapted the government cartridge for their guns in competing with the Springfield before ordnance boards; and having adopted this caliber and cartridge, and laid down the "plant" to make them, still adhere

to this standard for their rifles, although they do not come properly under the head of hunting rifles.

It is true that there are singleloaders and one magazine gun that do not come under the above head; but still from the ammunition the singleloaders use they are all properly long-range rifles, and not properly short-range hunting guns. The one magazine rifle, although adapted to the government cartridge, has still another special one, and with this in use comes under the proper class of hunting rifles.

Understand that I do not mean to say but that these rifles may all be used as hunting rifles, and game killed with them; but I do mean to say that the hunter using them has got to be not only a good hunter but a good judge of distance, or he will miss more shots than he hits from shooting over or under from the high curve of the trajectory at short range—a fault not to be overcome in a rifle intended for long ranges except by the adoption of some special ammunition, with more powder and less lead for the short ranges.

Such being the case, the introduction of the 85-285 cartridge by the Bullard Arms Company is to be welcomed by all who have .45-caliber rifles chambered for the .45-70-405 cartridge, for it gives them a hunting rifle as well as one of long range, and one that has power to kill at all reasonable distances with the light ball, as well as one for long shots with its regular cartridge. And on the frontier, where .45-70-405 is the standard cartridge, from the very fact of its being the government standard, ammunition can always be had, even when the special ammunition gives out, as it may on a long march, scout or expedition, and the rifle still be effective.

A recent change in the government standard to .45-70-500 is fast running out the .45-70-405 cartridge at military posts, and therefore still more should the .45-85-285 cartridge be welcome, as the new government cartridge is still more emphatically a long-range cartridge than the old one, and the special cartridge therefore more needed. A very mistaken impression seems to prevail that the Winchester .45-caliber can be used with the government shell, or use the .45-70-405 cartridge, and in fact, if I remember aright, I have seen it so advertised by dealers, but not by the Winchester Arms Company, to do the latter justice; the Winchester .45 does not use the government cartridge of any kind, but uses either the .45-60-300 cartridge with straight shell or the .45-75-350 grain cartridge with bottle-necked shell, so this makes two guns of the .45 class of their make.

I have tried to adopt the .45-70-405 cartridge to the Winchester, but found it impossible, as the length of the "carrier block" is not enough to take in the length of this cartridge. Neither will it take the .45-55-405 government carbine cartridge, as this is the same length as the .45-70-405, the space in the shell not filled by powder being filled with pasteboard wads.

The Marlin .45 uses the government cartridge .45-70-405, the Kennedy uses the .45-60-300 cartridge, the Burgess did use the .45-70-405 cartridge, but appears to have passed either out of date or under another name, the Hotchkiss and Lee both use the .45-70-405 cartridge, and are of the bolt type of repeater, working with the knob on the side, and not with the lever.

Passing to the .50-caliber, we still have singleloaders, but all using a proportion of lead to powder of 1 to 8 to 1 to 5, and then for all properly long-range rifles, and in magazine rifles we have the Bullard and Winchester express—both using the same cartridge.—50-95-300—and both good guns, the only .50-caliber magazine rifles I know of; the old-fashioned Spencer being .56-caliber and about obsolete.

From an examination of this list of rifles it cannot but be seen that, with the exceptions noted, all are undercharged with powder and have a high trajectory; the ball starting with a slow velocity; the trajectory must have a high curve to get the ball to the distance desired, and the ball having considerable weight, and therefore the remaining velocities not diminishing very rapidly, the ranges will be long, a thing good in itself for some purposes, but not what is wanted in a hunting gun.

In considering this list of guns, no account has been taken of any special home made ammunition, but only of the factory or standard and special ammunition made by the manufacturers for the trade; doubtless there are many who have already altered the proportions of their powder and lead improvement of the shooting of their rifles.

No mention has been of special guns such as can be had by paying for them; but I have confined myself to those guns found advertised as made for the trade, that any one can find by looking for them. That there are such special guns I am well aware, and can only congratulate those that are able to possess them.

As said by me in a previous letter, it is a pity that more qualifications cannot be combined in one gun; but, as that is an impossibility, one has to "pay their money and take their choice" from what are to be had, unless able to have a special gun built.

In the singleloaders I would choose a gun whose mechanism was such that I could see through the barrel from the rear end, whose breech block was at right angles to, or locked itself firmly against the breech, and then I would have a gun I could vary to suit myself, provided I could find a mechanic with skill enough to chamber it as I wanted for longer cartridges; but in magazine guns one cannot do this, there are other elements that enter the problem, and the breech frame being a fixture, longer cartridges cannot be fed into it from the magazine than the breech frame and carrier were built for; now the gun should be chambered to receive them; with such chambering done the gun could be used as a singleloader with such special long cartridges, provided there was room enough to extract the shells, and as a magazine gun with its regular ammunition, the shooting qualities with the regular ammunition being somewhat impaired, however, from the chamber being deepened.

For magazine guns, therefore, the only hope of perfect results is to be found in an appeal to the makers either of the guns or the cartridges; to the gunmakers, if the size of the parts have to be altered to suit longer cartridges, and to the cartridge makers if more powder and less lead can be obtained in the same length cartridges, so as not to have to alter the dimensions of the gun.

That such appeals are not in vain, the production of the .40-90 and the .45-85-285 cartridge will show; the .40-90 being an alteration of these makers' .40-60 to take this special cartridge, and the .45-85-285 being a new cartridge adapted by them to their .45-70-405 rifle. Doubtless other appeals to other makers would be followed by more powder and less lead in their rifles, an end so much to be desired, in my opinion, as I have tried to set forth.

But we now have three powerful guns before us, or I may say four—the Bullard with its .40-75-225 cartridge, the same with the .40-90-300, the .45-85-285, which will also use the .45-70-405, and the .50-95-300 express of either Bullard or Winchester make, and unless one wants a special gun, it seems to me there is not much more to be wished for.

A great deal has been said about the killing power of the .40 bullet as against the .45, and all against the .40 on account of its smaller area. That it will have less killing power on account of its diminished area is conceded, but not to the extent that is claimed by some. The areas being proportioned to the square of the diameters, these areas will be in the proportion of $.200^2$ to $.225^2$, or 40,000 to 50,625, or the area of the .40-caliber bullet will be a little less than four-fifths of the .45-caliber.

But other factors enter into the "killing power" besides area of striking surface. The "living force" of the bullet, depending upon the mass and the square of the velocity, comes in also; and, as the velocity has the element of the resistance of the air to contend with, more velocity can be given to the .40 than to the .45-caliber bullet with an expenditure of equal force, and the .40-caliber bullet will therefore have more "living force" provided its mass is the same as that of the .45-caliber.

Take the .40-90 as compared with the .50-95, both Bullard; both bullets weigh 300 grains, and the extra amount of powder behind the .50-caliber, will not much more than overcome the increased atmospheric resistance that it has to overcome from its increased area of cross section; so that, leaving the express principle out of account, the .40-90 would probably have the greater living force, and the greater penetration also, as the penetration would be inversely as the striking surface, other things being equal.

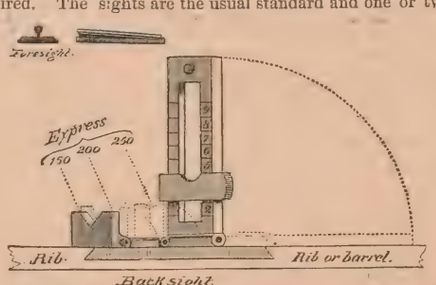
Whether more powder behind a .50-caliber bullet is to be desired I leave for some one else to solve. Doubtless for heavy game such would be very desirable, but then we would have a special gun only fit for the large classes of game and one that would be useless on the smaller kinds.

Though arguing that one all-around gun is as impossible as one all-around boat, or as impracticable as the general run of "general utility tools," still I claim for the .40-90-300 magazine gun a greater range of usefulness than for any gun that has yet been made; next to it probably comes the .40-75-225; next the .40-60-260, for all those guns can be used on a wide range of game, while the .45-85-285 and the .50-95-300 are more to be considered as special guns, useful and powerful in their place, but not to be chosen for general work. C. D.

FORT MCKINNEY, Wyoming, March 1, 1884.

Editor Forest and Stream:

It is, as most sportsmen are aware, possible to combine the advantages of a long range and express rifle in one weapon. This is very successfully done in a rifle which is made here principally for South Africa, by Messrs. Henry, Turner, Tolly, and others. It is a .45-caliber, with 28-inch barrel, and of about 8 or 9 pounds weight, taking the usual musket shell and 80 to 90 grains of powder, and has a spiral of one turn in 22 inches, the usual military rifle twist. It shoots both express 270-grain hollow and 480-grain solid bullets well, and the same cartridge can be used with either bullet as occasion requires. If the shells are loaded with powder and wad only, either kind of bullet can be inserted as required. The sights are the usual standard and one or two



leaves for 150, 200 and 250 yards for the express bullet, and a long leaf with slide graduated from 200 to 800 or 900 yards for the long-range bullet. Either sight can be used independently of the other, and they do not interfere with each other; the standard sight of course is used for short ranges with the heavy bullet. The express sights are placed in rear of the long-range one, and as the latter lies flush with the rib or barrel of the rifle when not in use, it is not in the way. For Indian shooting, rifles are hardly ever sighted to over 250 yards, as it is generally considered unsportsmanlike to try long shots, and they are rarely attempted except by novices, or on very special occasions. The rough sketch will give an idea of the sight. BENGAL SEPOY.

LONDON, Eng.

Editor Forest and Stream:

May I rise to explain? I will. In your issue of March 13, "D. M. B." alludes to me; and although the allusion is complimentary, flattering even, it will be apt to give a wrong impression of at least one old swamp loafer of the seventh distillation.

He says: "Every true sportsman must admire the picture of our old friend 'Nessmuk,' clinging with fond tenacity to the use of the old muzzleloader that has served him so long and well."

It is true. In my declining years I have gone back to my first love—the single-barreled, hair-triggered, muzzleloader, and it has served me "long and well." But do not infer that I have clung with blind prejudice to any such weapon throughout my best days in the woods. Very far from it. On the contrary, I was among the first to take up and test the breechloader from its first advent. I started in with a Sharps carbine. I got it in Rochester, and I thought it about as sportsmanlike a weapon as an ordinary spade. There was no hang, handle or nicety about it. They talked about "balance." A crowbar will balance—if you take it at the middle. Estimating the graded sights, I concluded the makers had allowed for 100 feet drop in 100 rods, which turned out to be the case. Only, it wouldn't drop two successive bullets within ten feet of each other. With my muzzleloading Billinghurst I could hit a 30-inch ring all day at that distance.

I traded the Sharps to a fellow who was going to Kansas, and my next venture was a Maynard. This was more like a rifle, but there were insuperable objections to it. The barrel was too short, the sights too near each other, the back sight "blurred" in dark woods, and it needed a donkey with a short-tug harness to pull it off. I took it to a gun shop, had these faults remedied as far as possible, loaned my faithful old double barrel to a friend, and adopted the Maynard for the season. The first two days I hunted with it I lost three deer that I would have been dead sure of with the double barrel. At the end of the season, on a fair estimate, I had lost one-half of the deer I ought to have scored. I did not care for the loss. They were welcome to go. It was the vexation and disappointment. I sent the Maynard out West, and tried a Ballard, then a Spencer, and eventually a business Sharps and a Winchester; also a Remington. Now, I will admit that the last three named are wicked, murderous weapons. For the plainsman and the mountain hunter, the business Sharps is sufficiently destructive, while for black bear and deer in a wooded country, the improved Winchester ought to satisfy the most greedy maker of "bags" and "scores." But it doesn't. Not a number of FOREST AND STREAM comes to hand in which I do not find well-written articles on the best, *i. e.*, the most destructive, hunting rifle. The diverse notions advanced are a trifle amusing. One wants a .40-90-500 repeater; "D. M. B." wants a .45-115 to 120-350 cartridge, while "Manhattan" finds 25 grains of powder in the Winchester "heavy enough for moose, caribou and bear." The fun of it is, to a simple backwoodsman, that these articles are written by the very sportsmen who are most eager for efficient game laws and the enforcement thereof—the men who most bitterly deplore the rapidity with which our best game is being slaughtered.

Gentlemen, you are right. Demand creates supply. Keep up the demand for a "perfect hunting rifle"—one that, while not too big for a squirrel, will stop a 1,200-pound grizzly in his rabid charge, and with a "trajectory" so flat that it will not be at all necessary to make any allowance on sights from forty yards to four hundred. The rapid increase of panthers, grizzlies and other "dangerous" animals demand that the coming rifle shall possess the ultimate possibilities of slaughter. Let us have the perfect rifle by all means.

NESSMUK.

WELLSBORO, Pa., March 17.

The rifle columns of your journal have for some weeks past contained a series of most interesting papers relative to the choice of a hunting rifle, and while the majority advance the merits of existing calibers, but a few have advocated a change in proportions of powder to lead, and only one an innovation, a .28-caliber. This correspondent, "Peabody Martini," after a series of experiments, has determined that for all small game the .28 is superior to the .32 or .38. This is indeed a long step in advance, and present calibers with ammunition as now furnished must yield to the coming rifle for all game smaller than deer. In behalf of the large number of rifle enthusiasts, whose leisure is too limited to permit a lengthy trip, and who, in the suburbs of cities, can enjoy a few hours sport with small calibers, allow me to appeal to manufacturers concerning the popular .22-caliber. The ammunition as now supplied is most unsatisfactory, if very cheap, and a great deal more pleasure could be had if the powder charge was increased, the ball hardened, and made to fit a central fire, bottle shell containing fifteen grains powder or more, the balls swaged. The long .22 now contains but 7 grains, and the shorter ones from 3 to 5 grains. With present ammunition the gallery ranges are from 30 to 50 feet, and even then a full score is the exception because of the faulty method of making the balls of a less diameter that part of their length which is sealed in the shells. Were they seated as they should be and hardened, and an increased powder charge in a larger shell, bottle-shaped, the accuracy would be much improved, and the interest in that sport much greater. In my opinion the English sparrow is the legitimate target for this caliber where game is unknown, if they are half as much a nuisance elsewhere as in New Orleans.

G. H., M.D.

NEW ORLEANS, March 20, 1884.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

I have read with interest the various opinions by different writers in your journal on the subject of guns. I will give you mine for what it is worth. I commenced to shoot long before breechloading shotguns were known, and was very well content with the old muzzleloader, having owned two excellent ones before the war, and came into possession of a very superior one just after the war. I shall never forget the contempt with which I viewed the first breechloader I saw—about fifteen years ago. The next time I saw one was an altered Greener, of which I will speak hereafter. From year to year I became more familiar with them, and finally bought one of an American manufacture, and still shoot it at birds. After careful experiment and observation in the field, I became satisfied that, for bird shooting, they were quite as good as the muzzleloaders, while the superior convenience and safety of them was too apparent to question. I for a long time doubted, however, their capacity to cope with the muzzleloader in buckshot shooting; but am now satisfied on that point. My first experience with them in buckshot caused me to condemn them, utterly. I had hunted deer for many years—killed a good many—and had never missed a single deer up to the time of the trial I made with the breechloader. The first three deer I shot at with my breechloader I missed, and they were all within easy range. I laid it aside and went back to the muzzleloader—a 10-pound, 10-bore Greener—and every one I shot at I killed until the fourth. This one I made a clean miss on, and so with the fifth. The next time I went deer hunting I took the Greener before mentioned that had been altered from a muzzle to a breechloader. I killed four deer straight with it, all at good fair distances. I then began to think that there was more in the man than in the gun. So I took my discarded breechloader and tried it with both the muzzleloading and breechloading Greeners—both of which I knew to be good buck guns—and found that it made as good a target as either of them. I have not tried it on deer since the target practice, but last fall I went with a party of gentlemen, most of whom had breechloaders, some muzzleloaders. We made an extra fine hunt, and the number of misses turned out fewer on the breechloader side than on the muzzleloader. I scored a clean miss with my muzzleloader. After the hunt we did some target practice, and the breechloaders showed up superior. I am now fully persuaded that the breechloader is the equal of the muzzleloader in all kinds of shooting, and that it is pure prejudice in any man who holds up for the superiority of the latter over the former in any kind of shooting. I had it (the prejudice) as bad as a man could have it. I first divested myself of it by actual experiment in bird shooting, but clung to it for some time on the buckshot. Now I am convinced that there is not the slightest appreciable difference in that. I feel sure that the trouble arose in my case—and, no doubt, this is what is the matter in other cases—from overloading the breechloader. Too

much powder. Twelve buckshot, that a No. 12 paper shell will chamber four of, only weigh an ounce, and hardly that unless they fit too tight. So that why should one put a great load of powder (4 to 5 drams) behind an ounce of buckshot, and only 3 to 3½ drams behind 1⅛ and 1¼ ounces of bird shot?

WHACK.

STAUNTON, Va., March 18.

Editor Forest and Stream:

In your issue of Feb. 7, "Buckeye" asks: "How much further will a 10-gauge kill its game than a 12, both guns of same grade, and bored on same principle?"

Under ordinary circumstances, I say, not an inch. The greater number of shots are at single birds; and a 12 choke-bore charged with 3 drams of good powder and 1¼ ounces of chilled shot, No. 4, 5, 6, 7 or 8, will kill a single bird, sitting or flying, duck, quail, prairie chicken, snipe or woodcock, or with No. 1 or BB a goose, just as far as a No. 10 will, charged with 5 drams of powder and 1¼ ounces of shot. For close, strong, hard shooting, and long range, the 12 gun need not be more than 28 inches long, not heavier than 7½ pounds, while the 10 would require to be 30, 32 or 34 inches long, and 9 or 10½ pounds in weight, necessitating a waste of strength to carry it about, and an unnecessary waste of ammunition—a nuisance to carry—in its use. I have given the weight and length of my own full-choke hammerless Greener above, the shooting and killing qualities of which are at least equal to the better class of choked guns. At from 20 yards up to 80 yards, I find my gun, when carefully and properly loaded, always equal to the occasion, and its execution singularly free from accidental or wild shots. Speaking from my own experience, I would just as soon think of firing a field piece loaded with grape or canister at a wild turkey, as to discharge 4½ or 5 drams of powder and 6½ ounces of shot at a single bird of any of the varieties enumerated above, excepting, perhaps, the wild goose. If I want to shoot at a flock of ducks at 100 yards, I can always manage to reach them effectively with No. 1 or No. 3 shot. Further still, if you tie the 10-bore down to 3 drams of powder and 1¼ ounces of shot, in competition with the 12 at long range, the former will be simply nowhere. Lightness, combined with necessary solidity and safety, and a minimum of charge, sufficient to lessen expense, and moderate recoil, yet completely effective, are among the chief characteristics of a good gun. All these desiderata can be found in a first-class No. 12 of at the outside 8 pounds in weight. Too much of a good thing is sometimes objectionable. For the information of our friend "Buckeye," who, perhaps, may not have taken the trouble to experiment backward, I wish to say that I have done some capital shooting with my gun with 2 drams of powder and half an ounce of Tatham's American chilled No. 6 shot, up to 45 and 50 yards; but, as a matter of course, at birds on the wing, the calculation and precision would require to be drawn to an extreme nicety. For flying shooting I cannot recommend such small charges. "In the multitude of counsellors there is safety." I need scarcely say that I am in favor of the hammerless gun, in my opinion the *ne plus ultra* of breechloaders. ALGONQUIN.

OTTAWA, Canada, March 10.

Editor Forest and Stream:

I have used shotguns ever since I was big enough to be trusted with one, and have owned several, but when I got my first double barrel, the climax was reached in my estimation. This was a 14-gauge 34-inch barrels, and was really a good shooting gun. To prove this, I was once barred in a shooting match in company with a friend whose gun was same size bore as mine, with 32-inch barrel. After each of us had got a chicken, we were not allowed to shoot any more. The conditions were to put two shot in a 6-inch circle at 80 yards. Two years ago I got the fever for a breechloader, and so sold my old favorite, the muzzleloader, and purchased a breechloader with all improvements, a W. Richards .12-28-8⅝. I immediately commenced to experiment with my new gun, and in a short time I found that my old gun was nowhere, as the breechloader would discount it in distance, penetration and distribution. I once shot against two 10-gauge guns, breechloaders, distance respectively 60, 80 and 100 yards, two shots each at each distance, and my score was the best every time, which proves conclusively, to my mind, that the 12-gauge is superior to the 10 for all ordinary shooting. I use the Winchester brass shell, and for woodcock, partridge, etc., I use 3 drams American Dead Shot powder, one wad on same (Winchester pink edge) 1¼ ounces Tatham's chilled, No. 8 shot, with thin black-edge wad on same. For squirrel shooting the same quantities, only No. 6 shot.

I have experimented a great deal in loading, and I find that the above method gives the best results. If any one will use the same quantity of shot that they do of powder (in bulk) for brush shooting, I think that they will agree with me. I know that a great many use two wads on the powder and claim better results, but I claim that one good thick wad that will not blow to pieces in the barrel is better than more. If two wads are better than one, why would not three be better than two, and so on. I would like to hear the experience of others on this point, especially those who have experimented the most, and if two wads are better than one, please give the reason why. WESTLEY.

NEW MARKET, N. H., March 17.

Editor Forest and Stream:

I have an 8-pound Parker gun, 12-gauge, 28-inch barrels. I loaded four metal shells for target practice on Saturday, 15th, as follows: 3¼ drams of Hazard's No. 5 ducking powder, and 1⅛ ounces of shot. I placed two No. 10 pink-edge wads with a Barclay loader firmly on powder, and one of the same thickness on the shot. At a target 40 yards distant and 30-inch circle I obtained the following result with very even distribution; First shot I placed inside of the circle 200, second 219, third 225, fourth 227. AMATEUR.

COLLINSVILLE, Conn., March 17.

Editor Forest and Stream:

As how to load is the leading topic, I will contribute my mite: For a Baker 12-gauge, three-barrel, 9 pounds 6 ounces; for birds, 3¼ drams powder, 1 ounce No. 8 shot; for squirrels, 3¼ drams powder, 1 ounce No. 5 shot; for ducks, 4 drams, 1 ounce No. 5 shot; for geese, 4 drams, 1 ounce No. 1 shot; two pink-edge wads on powder; one thin cardboard wad on shot; No. 4 Hazard duck-shooting powder. I find I can stop anything within 70 yards, but over that distance there is no certainty about it. I have made some very long shots with this gun, but do not rely on such shots to fill the bag. I would like some one who uses the three-barrel gun to tell me what kind of a back sight he uses, as the one the factory puts on the gun I cannot do anything with. I can do better shooting without raising the back sight; have killed squirrels, ducks and geese at 40, 50 and 70 yards without raising the back sight, but over that distance cannot do anything with the gun with or without raising the sight. TINKER.

DECATUR, Ala., March 18.

[NOTE.—The communication of "D. H. S.," in our issue of March 6, in which it was stated that his gun put No. 3 shot in an inch circle, has been criticised by a number of correspondents. It is due to "D. H. S." to state that he wrote "No. 8 shot," and not "No. 3" as printed, and that the blunder was made by the printer, the writer of the note being in no way responsible for it.]

COMING OF THE BIRDS.

THE wildfowl are back with us again, at least their vanguard has been sighted. I saw a pretty pair of green-winged teal and a black duck in the market a few days ago; they had been shot in Greece by James Burns, one of the numerous farmers living in the town who are good shots and shoot a great many ducks every season.

This morning I was aroused from slumber by a sound that seemed familiar, although I had not heard it before for several months. It came from overhead, and on looking out of the window my conjecture was confirmed, for there, in full view, a few hundred yards above, was a flock of about thirty Canada geese, beating the air with slow pinions and gobbling in their usual noisy fashion—noisy, I said, but it was more musical to my ear than sounds I have often paid to hear. CROWN WAD.

ROCHESTER, N. Y., March 22.

Ducks and geese commenced coming in from the south on the 26th. The main spring flight is not here yet. Ice is all out. Sportsmen who want to hunt on the line of the Atchison, Topeka & Santa Fe R. R. for ducks or geese, are advised to stop off between Nickerson and Larned. Further west is no good, for we raise but little grain west of Larned and there are twenty ducks east of there to one west.

W. J. D.

CIMARRON, Kansas, Feb. 28.

Woodcock and snipe have arrived. There was a woodcock killed about ten days ago, and one last night at the Relay House, by flying against the telegraph wires; attracted by the electric light, I think. The one this morning was fat.

H. B. VONDERSMITH.

LANCASTER, Pa., March 22.

TWO MORNINGS' WORK.

ONE evening in January, 1884, as I stepped from the ferryboat at Sullivan's Isle, a little girl met me with, "O! Mr. G., you ought to have been here to-day. Mr. Hudson shot twenty-two ducks and Mr. Edwards twenty-five." A minute later, as I stepped into the door of my house, my wife saluted me with, "O! John, you don't know how many ducks have been shot to-day! Mr. Hudson killed twenty-two and Mr. Edwards twenty-five. They have been shooting all day. Clarence went out, but he only got eight." By and by in came Clarence, a young friend without much experience in shooting. He told me that the cold storm had driven the ducks in the cove. "But why did you not kill more than eight if there were so many?" "Well, you see, John, the canoe rolled so that sometimes I shot within four feet of the boat, and then I did not know they were there until Hudson came back." "Didn't you hear them shoot?" "You see, I was busy, and did not pay any attention to it." "Shot fifty cartridges and got eight ducks!" "Yes, but I crippled about twenty, and they were wild after being shot at so much."

I determined to see if I could bag a few of them the next morning. First, my decoys were packed nicely in a basket. The canoe is moored at the steps; the 10-bore looked at, and found in good condition. Next come the cartridges, which are carefully emptied on the floor. Not very carefully you think? Well, no; but you see if you empty them on the table, they will roll on the floor; and then I enjoy sitting on the floor and counting them. At length forty-five shells, mostly loaded with No. 5 shot, are all I can find. These are carefully put in the boat-box; next my clothes are placed where I can find them; the alarm clock set for 5 o'clock, and I sleep to dream of ducks. Once in the night I awoke and was sorry to hear it was raining. At 5 o'clock still raining and the wind blowing a gale. However, I started for the wharf, but, just as I reached the shed, down comes the rain in torrents, and the wind blew so that it shook the shed like a leaf. The weather is really too bad, so I go back to wait until the wind goes down. Although it is only seventy-five yards away, as I am coming back I am caught in a shower and drenched up to my knees.

But what is that? Yes, a duck flew around the wharf and lit not thirty yards away. Two cartridges are quickly slipped into old Pieper, and I sight across the barrel, but I can't see the duck. There he is, but the rain comes fast and it is not quite light. I see him at last and give him the open barrel, and there he is with his heels up. In another minute I have him—a little fellow, but plump. I now finish bailing out the canoe, get everything aboard, and start across the cove. Several flocks of ducks go up wild, and as I near the marsh a black duck gets up, but out of shot. I now put out the decoys, pull the little boat in the marsh out of sight, and wait and watch, but not a duck will come near. It is getting very cold. This won't do. I will row across the cove and see what is over there. As I round a point three little fellows rise. I stop two with the first barrel, and the other with the next; but two of them are only crippled and have to be shot over. A little further on I see a large flock, just around a point of marsh, and as I get within a hundred and fifty yards of them down comes a colored brother with an old musket, and as I hear it thunder away go the ducks. He did not kill one. Just as I am in the act of thinking what a jewel he is, the ducks circle and come right past me. They are a long way off, but I give them both barrels for luck, and nine fall, but several have to be shot over. I now get to windward of the birds and the little eggshell goes down on them like a flash, and it is now blowing a stiff breeze, the little fellows have to rise to the windward. I empty both barrels among them.

So I followed them up. Every few minutes there would come a shower, and several times I had to stop and bail out the canoe. My rubber coat I had long since thrown into the bottom of the boat to kneel on. And what would I have done without my boat box? It kept my cartridges dry as a chip. After a little more of this I am tired, hungry and wet through and through, so I start for home. A few strokes bring me to the wharf. I have not been a half a mile from home all the morning. The ducks are soon counted and number thirty-one. After donning dry clothing comes a good breakfast, and who relishes his meals like the hunter? The gun is cleaned up nicely, and I take 12 o'clock boat for town. In the evening I bring seventy-five cartridges loaded with No. 7 shot. The next morning, wind blowing half a gale and very cold. By keeping well in the lee of the shore and up the creeks, although ice made in the boat, the spray wet me up some. After three hours' hard work I brought in thirty ducks. As I came in I had killed a beautiful drake that I thought I would have set up. A crowd from the saloon met me with "What luck?" Not one of them went out; too cold that morning. I had my gun in one hand, the drake in the other. I laid it on the sidewalk, and with a tired look, which was not very hard for me to assume, for I was very tired, I pointed to the lone duck. "One duck," said one. "Hard luck," said another. "After all that hard rowing," put in the third. Then they commenced to brag and tell how many they had killed the first day, and I told them I had twenty-nine more in the boat. "Twenty-nine in all this wind? Well, that's good luck."

Sixty-one in two mornings, and so ended my ducking. The next morning it was bright and clear, and not a duck could be seen. JOHN FIX.

CHARLESTON, S. C.

THE FIRST SNIPE.

THREE English snipe were killed on the meadows this week, one on Thursday and two on Saturday, and no others have been seen. I have not been fortunate enough to get a shot thus far. Will go over the grounds daily, and hope to bag a few birds next week. Quail have wintered well, and large bevies are frequently seen near the village. With a good breeding season we may look for excellent shooting next fall. Ruffed grouse are very scarce, and that noble game bird will soon be a thing of the past in our woods. Woodcock have appeared in fair numbers, and fine shooting may be looked for in July. The best grounds in this vicinity are reserved, and those who are not privileged to shoot on such grounds can make but a poor bag at best. Robins, meadow larks and bluebirds have been with us nearly all winter, and blackbirds have appeared in large numbers. GOOD ENOUGH.

FARMINGDALE, Monmouth County, N. J., March 22.

There was a loud crash as the door of a Newark saloon burst open last evening and a man, who looked not unlike the statue of Gen. Phil Kearny in the park, plumped into a party of sportsmen.

"Say, now! Look a 'ear, look a 'ear, now, say! I've got 'im!" he shouted excitedly. "I've got 'im! I've been tryen' fur fiv'teen year tu git 'im, an' I got 'im at last. I can prove it."

He waved his hands exultingly.

"See the blood!" he gasped, as he continued to poke his fists under the noses of the hunters. He then teetered wildly out into the night.

"In the name of all that's good," exclaimed an old gentleman, a stranger, who, while waiting for the train, was having a quiet beer at the bar, "what has he got? What has he done?"

"Got? Yes, it looks as if he's got 'im," replied a middle-aged man in an old greasy corduroy shooting coat. "It's true what he sez, he's been tryin' for fiv'teen year to get in his claim. He's gallyed us now, by thunder. He's killed him at last. Yer don't understand, don't yer? Well, he's shot the fust English snipe of the season, he has."—*F. Satterthwaite in N. Y. Herald.*

The first English snipe was seen on our meadow March 21. Quail have stood the winter well in this section. S.

NORTH TRURO, Mass., March 24.

Two English snipe were killed at Bergen Point, N. J., March 24, by P. Lumbreyer.

PHILADELPHIA NOTES.

ALMOST all of our sportsmen who have started out for the first snipe of the season have either brought in a showing of one or a couple, or have seen birds on the meadows, which are in a very wet condition in our section. There is a superabundance of overflowed and "navigable ground" near our river shores which will make bad tramping, and so much of it that such snipe that come our way in their northern flight, will be scattered about everywhere. The flight of ducks which I mentioned had reached the Maryland shores last week, instead of making good shooting on the flats from boxes, appear to have settled down in the Gunpowder and Bush River regions. I was informed by both Messrs. McComis and Bancroft, of Baltimore, who are about as well posted on the doings of wildfowl as any gentlemen I know, that the great body of fowl that came are now in sections where box-shooting is not allowed. Perhaps I am a chronic growler on the subject of battery or box-shooting, but it is a fact noticeable to Havre de Grace duckers, that canvas-backs, redheads and blackheads seem to know the difference between a bunch of decoys and a flock of their own kind as soon as they arrive. This is especially noticeable in the spring, no doubt from the recollection of the reception they received on their first coming in the autumn, young, green and fresh from the nesting grounds, and when it is known that on shooting days there are often as many as thirty or forty boxes anchored on the flats near the mouth of the Susquehanna at Havre de Grace, is it any wonder the ducks become educated, and the instinct to avoid such warm receptions on their natural feeding grounds—the battery must be anchored in shallow water—is transmitted to the young, and in time we have an entire change in the habits and actions of the fowl!

To me, point and blind shooting at ducks, as they trade from place to place, is the most legitimate sport of the two, certainly the less destructive. Many geese have begun to go north. The snow geese that were in the Delaware have started to their breeding grounds, and we may look for open weather, I think. Speaking of geese reminds me of a very curious specimen of the breast bone of *Anser canadensis* Mr. McComis, of Baltimore, showed me last week. The breast bone of all water fowl, when devoid of flesh, it is known, has much the resemblance of an old-fashioned skate, an upper bone taking the place of the plate and the sternum the part of the blade or runner. One of Mr. McComis's friends, on cleaning the breast bone of a large goose he shot, found lying on the upper part of the bone three large shot, two encysted and the other detached. No fracture of the bone appeared, and no evidence was found how the shot had

entered. How they got there has puzzled many, but it would seem to me that when the goose was first shot he must have been going away from the shooter and the shot entered in under "the apron," and when their force was spent rested at the place they were found. On comparing the shot with ammunition in his store, Mr. McComis found them to be such as are in Eley's S. T. wire cartridges. HOMO.

March 22.

LONG ISLAND POACHING.

Editor Forest and Stream:

In your issue of March 6, Mr. Lane, after informing you that ducks were being caught in nets by the thousand in Shinnecock Bay, goes on to say that he has notified me at two different times and that I had paid no attention. Before Mr. Lane notified me I had been giving my attention to this matter. I wrote to him in reply to his first letter, asking him to collect me evidence, and that I would at once see to it. He wrote in return that he was tired of trying to have the game law enforced, and that he expected that he could rely on me, etc. I have taken every possible means at my own expense to stop this violation of the law, but it is impossible for me to succeed unsupported, and all the inhabitants of the locality are all more or less engaged in the business, and act as spies on my proceedings. Mr. Lane probably knows by this time some of the difficulties which lie in the way of an enforcement of the law.

In your issue of March 20 there is a letter from Manorville with reference to the trapping of partridges. I am aware that from Riverhead to Babylon, and also on the north side, the woods are lined with partridge hedges. I made a great effort to catch the parties, and many of the hedges were destroyed, but none of the offenders could be trapped. If gentlemen who are credibly informed of the trapping of birds or other violations of the law, will give me the names of witnesses I will see that the offenders are attended to. They should recollect that I have a coast of 300 miles and about 2,000 square miles of territory, and I cannot, nor can any man, act personally in all cases.

Perhaps if persons buying wild ducks knew that a duck netted and drowned turns black, they would not be so easily sold, and if there were no sale of course there would be no catching.

GEORGE W. WHITAKER, State Game Protector.

SOUTHAMPTON, L. I., March 24.

SOUTH CAROLINA DAYS.

THE hot, dry summer of 1883, while very disastrous to field crops in this section, was very favorable for birds, and, per consequence, the long sedge cover on the hillsides overlooking the beautiful Catawaba is literally swarming with the brown beauties. In almost every piece of sedge, in every rough, uncultivated patch of any size, you are sure, with a good dog, to find game, and a three hours' tramp from my house on a good day will be rewarded with a sight of from eight to twelve coveys. It is true they are pretty wild and strong and swift of wing, and as I have good reason to know are exceedingly hard to hit. Still the sport is magnificent. Many a long tramp, and many a glorious day's shooting have I had this past season, in company with my genial friend, that clever sportsman and truly typical English gentleman, Capt. McMurdo, of Charlotteville, Va.

With the exception of one short spell, we have had a very mild winter. This month (February) has been about as warm as the average April, bright and beautiful, the very ideal weather for outdoor sports. Just such days as induce the partridge to go far afield in the early mornings and late evenings in search of food, and to lie cozily and lazily beneath pines in the warmer mid-day; so close and still that nothing short of a first-rate dog can then find them; so close and still that after your dog has made game, and is standing stiff as bronze on a "dead point," you peer curiously and anxiously into the short cover, see nothing but the short grass and dead brown leaves, and are almost persuaded the point is a false one. The dog is gently urged forward as you pass him, but stubbornly refuses to move, indicating by the slightest turn of the head the direction of the birds. On, on a few yards further and then, just under your feet, with a thrilling whirr, around, behind, before, and on either side, away go the birds; and too often, in spite of the best formed resolutions, off go the guns also before the game is properly covered, and at least half the shots fail to count. By the way, how rarely, except in the written accounts, do we ever see a really effective right and left on quail in February or March.

As there is no rose without its thorn, so there is no covey without its pine tree or trees, and long practice in eluding hawks has taught the cunning Bob Whites exactly how to take advantage of their friendly cover, and many a charge of shot, like the dagger of Roderick Dhu, finds "bloodless sheath," not in the earth, but the soft brown bark of the dwarf pines, while the intended victim, with the speed of the wind, seeks further safety in some neighboring reed brake, or amid the warning leaves of a convenient hillside.

A day's shooting behind Strother's Doctor Duer (Gladstone—Frost) and Perkins's imported pointer Mainspring, among as many birds as we have had this season, is a thing to be remembered with pleasure, when gray locks and uncertain legs shall have rendered all such joys a thing of the past, and when these two splendid representatives of their rival breeds are remembered only by the excellence of their offspring.

Allow me to predict that with continued good health and a fair amount of practice before the next field trials, Mainspring is going to make things lively for the best, not only of his own race, but the very best and fastest of the setters also. I have yet to see the setter that has the heels of him; no dog can have a better nose, and none be more sagacious or more easily controlled. I am perfectly satisfied that he is the very best pointer I have ever seen in the field, and is going to make a flutter in sporting circles when brought to the test.

Doctor Duer has about graduated, and is good enough for anybody. Keen, well-broken, handsome, and with brains enough to represent the Seventh South Carolina district in Congress. Doctor Strother will have to try a good many times before he gets a better or even as good a dog.

Dexter's Dirk and Del, pointer pups, Heald's Snowdon and McMurdo's Gloster, setters, are still in their nonage; all coming on well, and at least two of them will be heard of in the next Derby.

After a long day's tramp, a dinner and a smoke, I usually have two hours more of pleasure before me, passed in a game of backgammon and chatting with Capt. McMurdo, who, with all his modesty and reserve, has had many adventures "by flood and field," and it is indeed a privilege to a backwoods member of the "Stay at Home Club" like myself, to listen for hours to the conversation of an intelligent and enthusiastic sportsman, who has shot peacocks, ibex, pheasants and migratory quail in India, cinnamon bears and leopards in Cashmere, snipe and woodcock in Turkey and Asia Minor, black game in the Highlands, red grouse in England and Wales, woodcock and water fowls in New Brunswick, ruffed grouse on the Blue Ridge, and prairie chickens in the far West, to say nothing of that gamest and most difficult of all game birds, the wary, beautiful little Bob White, along the banks of the Catawba. W. R. D.

LANDSBORO, Chester County, S. C., Feb. 28.

ROCKY MOUNTAIN RAM AND GRIZZLY.

ABOUT thirty years ago a man named John Dunson, then a resident of Western Canada, went to the Rocky Mountains for the benefit of his health. And here it may not be amiss to say that, although then suffering from the effects of a pulmonary complaint, after a few years' residence on the slopes of the backbone of America he grew strong and robust, and completely recovered his health. One day, while digging for gold, near Pike's Peak, in a ravine, he heard a noise above him, and on looking up saw a bighorn of the largest size, a regular giant—old Cimmaron of the hills—with an immense pair of horns, standing in a narrow pass winding up the side of the mountain. The great horned sheep appeared to be intently watching some object other than the miner, which soon became manifest, as a large male and female grizzly and two well-grown cubs made their appearance, ascending the path upon which the bighorn was standing. When the great *Ursus horribilis* arrived within about fifteen feet of the sheep the latter lowered his head and descended upon his foe with the rush of a battering ram. The sudden and heavy stunning shock overturned the bear; but, before the assailant could recover from the momentum, the she bear caught him in her grasp and dragged him down, when her stunned partner, having recovered, the fierce animals made a feast upon the carcass of the fearless bighorn. It is a well-known fact that the bighorn of the Rocky Mountains is more than a match for the bull bison; but this is the first instance that I have heard or read of that a Rocky Mountain sheep has dared to face the fierce and formidable tyrant of the hill and the cañon. I have given the story as related by the witness, and have not the slightest reason to doubt its correctness. W. P. L.

OTTAWA, Canada.

THE AMERICAN DEER FAMILY.

THE ANTELOPE AND DEER OF AMERICA. By John Dean Caton. New York: Forest and Stream Publishing Company.

IN this volume, a second edition, may be found important alterations and additions, the result of Judge Caton's further studies in a most interesting branch of natural history. Perhaps no one in this country has devoted more attention to this subject than the author, for not only is he master of the scientific data, but has had the good fortune to note the characteristics of the American Cervidæ *in loco*, and for the purpose of comparison has been a keen observer of deer in other countries.

Beginning with the prong buck, or, as it is generally known, the American antelope (*Antilocapra americana*), the specific differences between it and the true deer, the moose (*Cervus alces*), wapiti deer, American elk (*Cervus canadensis*), woodland caribou, reindeer (*Cervus tarandus*), mule deer (*Cervus macrotis*), Columbia black-tailed deer (*Cervus columbianus*), common or Virginia deer (*Cervus virginianus*), the barren ground caribou (*Cervus tarandus arctica*), and the Acapulco deer (*Cervus acapulcensis*), are explained. The main peculiarity of the American antelope, which distinguishes it from its kindred ruminants, is to be found in the manner of growth of the horns. Audubon and Bachman doubted the statement of the early hunters, that no person had ever shot or killed an antelope without horns; but the hunters, says Judge Caton, were right and the scientific men wrong. In 1848 Dr. C. A. Canfield, of Monterey, first made the statement that the antelope had a hollow horn like the ox, and that this horn was cast off and renewed annually. This statement seemed to be so contradictory to all established zoological laws that it was hardly credited until some eight years afterward, when the Superintendent of the London Zoological Gardens published the facts in the proceedings of the society. In 1865 Judge Caton, unacquainted with the prior studies of Canfield and Bartlett, in a paper read before the Ottawa Academy of Natural Sciences, affirmed the same fact. "The antelope has a deciduous hollow horn, which envelops a persistent core, which is a process of the skull, like the core of the persistent horns of the ruminants * * * only the lower part of the horn is hollow, the core extending up scarcely half its length." The core is persistent, but when full development comes in October, this envelope of horn is cast off, to be renewed again. When the old horn is cast off the new one shows considerable growth above the core. Prof. Curtis, of Chicago, studying with the microscope the various stages of growth in the antelope horn, has rendered this curious subject quite clear. One peculiarity of the *Antilocapra americana* is the system of cutaneous glands. The activity of these glands is not confined to the rutting season, but the odor may be observed in all seasons; nor is it confined to the male, though the presence of these glands in no way affects the flavor of the flesh. The antelope is the fleetest of all animals, but, curiously enough, though it can leap over flat surfaces, it seems to be wanting when a perpendicular object arrests its flight. Caught in an inclosure, Judge Caton found that an antelope would not jump a fence three feet high. The prong buck is easily tamed, "soon loses all fear of man, seeks society, and enjoys his company."

After giving a description of each of the species of deer, with their characteristics, the author enters into more particular details, so that, by comparison, an excellent conception can be had of the similitudes and differences of the species. Commencing with size, the moose is the largest known living representative of the Cervidæ. An extinct deer, the bones of which came from Ireland, however, exceeded it in bulk. The maximum weight of the moose is 1,200 pounds, and its height, anteriorly, 6½ft. The elk will measure 16 hands in height, and will weigh, in a fine specimen, 1,000 pounds. Judge Caton killed a 5-year-old elk which weighed 900 pounds. Between the elk and the caribou the difference in weight is quite marked, 400 pounds being a good average, and it is less in size than the Lapland animal. Mule deer will weigh 250 pounds; Columbia black-tailed deer not much more than smaller kinds of common deer, say, 150 pounds, though the *Cervus virginianus* has been killed which would tip the scales at 248 pounds. Perhaps in certain seasons the Michigan deer are the heaviest. The smallest of the race is the Acapulco deer, and a very large one will weigh 50 pounds, but 40 is a fair average. Judge Caton has paid marked attention to the coat and color of deer, studying the spots which ornament the fawns of the Virginia and other deer, as traces of these spots were observable in some of the adult species. "I believe," writes Judge Caton, "these spots on the adult Virginia deer have been entirely overlooked by naturalists till I mentioned them to Mr. Darwin, when he noticed them in the "Descent of Man." The theory which naturally takes consistency from this is that at some prior period the *Cervus virginianus* was spotted like the fallow deer, and that in time it may disappear on the fawns as it has "nearly disappeared on the young of the moose and caribou, and has even now much faded under elk and caribou."

We think, from Judge Caton's observations, carried over a long period, that the danger of keeping males of the American Cervidæ in public parks, the Virginia deer not excepted, is pretty clearly proved. All these animals, in certain seasons, are likely to attack man. When in captivity the male deer loses that dread of man which is his natural condition when wild, and from familiarity there comes contempt. The elks in Judge Caton's North Park have more than once occupied their own ground and bid defiance to human intruders. Under such circumstances, when their anger is excited, elks must be quite formidable antagonists. Judge Caton writes:

"Three men, who thought they knew best and were not afraid of anybody's elk, scaled the fence and quietly walked along till they met the herd of elk, when the leader started after them with a dignified walk. They thought they had seen enough, and commenced an orderly retreat. The elk increased his pace, and soon treed two of the party and killed the other. One of them, a young, active, athletic man, left his tree and, by running from tree to tree, finally escaped, gave the alarm, and raised a party, who fought the elk with pitch-forks till they were finally driven off, although at first he drove three resolute active men thus armed several hundred feet before they could sufficiently break his guard to compel him to acknowledge the virtue of sharp hay forks. He did not charge on them with a rush, in the ordinary way of joining battle practiced by all the deer, but lowered his head so as to bring his face nearly parallel with the ground."

When the elk gave way it was a slow and sullen retreat, not a flight. When his keeper came the elk tried to kill him, and the man only saved his life by his courage. Next day it was determined to castrate the elk, and Judge Caton, with two other persons, had a severe tussle with him, for he was still undaunted. After the operation was performed he got wicked again, but soon all vicious symptoms left, and in a week he was as docile as a lamb. Judge Caton believes that such viciousness is rather exceptional. When buck elk fight, a common occurrence, they give voice which resembles something like the sound of a steam whistle, which can be heard half a mile. Sometimes in their battles they kill one another. The wapiti is more readily domesticated. A curious trait of the elk fawn is that when captured it will feign death. If you pick them up they are as limp as a wet rag, the head and limbs hanging down, without the least muscular action, the bright eye fairly sparkling all the time.

Efforts to domesticate the mule and the Columbia deer have been failures. In captivity not one of the Cervidæ seems to reproduce their kind as rapidly as when in the wild state. Judge Caton's chapter on the hybridity of the Cervidæ shows how thoroughly he understands this curious subject. He has succeeded in only four cases. He crossed a male Columbia with a female mule deer, a Ceylon with an Acapulco doe, a Virginia with a Ceylon doe, and a Virginia with an Acapulco doe. The cross between the Ceylon and Virginia varieties seemed to do the best. Although a cross was attempted between an elk and a Durham heifer naturally no progeny came from it. Prince Pless, in Silesia, has succeeded in crossing the wapiti and the common red deer. Judge Caton is certainly right in noticing this cross. He is of the opinion that it is not a case of hybridity, as undoubtedly the wapiti and the European stag have descended from the same progenitors. In his chapter on the chase are presented many pleasing incidents.

For the naturalist and the sportsman Judge Caton's book is of great value. It is not a dry compilation of concrete facts, made up in the study, but contains the exact experiences of a gentleman who has a direct interest and a practical acquaintance with the subject he exhaustively treats.—*New York Times, March 17.*

A PLEA FOR THE BIRDS.—*Editor Forest and Stream:* The discussion of the "destruction of our song birds by amateur ornithologists" is one of interest. I venture to say that fully one-half of the bright little lives so taken are of no benefit whatever to the collector. Rare specimens I grant may be secured for study, but surely it is nothing but wantonness that prompts the destruction of our many varieties of familiar birds. And here let me say, if you wish to study, build a "bird tank" and take your study from life. Do not take the life from your study! If an unusual visitor shows himself, identify him; but in mercy think twice before killing. This "bird tank" may be a hobby with me, but if only 25 per cent. of your many readers will try it, many hundreds, yes and thousands, of little victims will be spared to gladden the woods with their songs. Buy an opera glass, build a bird tank and then let us hear from you.—WILMOT (New York, March 21).

A BOUNTY ON FOXES.—Maine needs a bounty on foxes. They are very destructive to our game, and not only to game, but the poultry yards suffer from their depredations. Grouse seem to suffer more from them than other game for this reason. In cold weather the birds burrow in the snow through the night, and the keen scented fox soon finds them, and they fall an easy prey to reynard. Foxes never were so plenty as they are now in Maine, and unless something is done to destroy them, our noble game bird, the grouse, will soon be counted among things of the past. One can hardly go into the woods without finding the remains of a grouse or rabbit where reynard has dined. Now, brother sportsmen of Maine, let us push this question, as it is of great interest to us all. Let us wage war on the fox, and every farmer will hail with joy the sportsman that destroys his worst enemy. Let us hear from others of your readers here in Maine.—L. H. H. (Gardiner, Maine, March 17).

BIRDS IN GREAT SOUTH BAY.—The geese, brant and duck are becoming quite numerous in our bay, and some of the sportsmen are having good shooting. To have good sport it is best to be on the bay when there is a good southerly or easterly wind blowing, which keeps the birds in the bay. A northwest wind is very unfavorable, as it generally drives the birds to the ocean. There are some batteries used here, but the shooting is done mainly from points with a boat and decoys. There being quite a number of islands in the bay it makes the point-shooting more convenient and desirable. —GEO. KILIAN (South Oyster Bay, L. I., March 25).

VIRGINIA.—Staunton, March 17.—The birds wintered well here, and the prospect for good quail and grouse shooting next fall are as good as I ever knew them to be. The frequent and deep snows in the mountains west of us promise good results to the trout streams, by keeping up a good tide all summer. The headwaters of Greenbrier, in Pocahontas, are full of these fish, and from the middle of June to 1st of September there is no such fishing that is as accessible to fishermen from the Northern and Eastern cities as these streams, and none that yields so generous a return to the angler.—WHACK.

MASSACHUSETTS BIRDS.—While walking in the woods today with a friend and his dog, to see how the quail got over the winter, we flushed a nice covey of partridges, ten in number, and a pair of woodcock, but saw no quail. This is rather early for the longbill around here, as I found none till the first of April, last year. Snow is from four to five inches deep in the woods yet. Robins and bluebirds and song sparrows, and the red-shouldered blackbird are a week behind last year.—J. F. D. (Danvers, Mass., March 22).

HORICON SHOOTING CLUB. The Horicon Shooting Club was organized at Fond du Lac, Wis., last week. The following officers were elected: President, T. S. Weeks; Vice-President, S. B. Amory; Secretary, C. S. Mattison; Treasurer, W. S. Russell. The club holds the lease of about 10,000 acres of Horicon marsh (which is considered the best ducking ground in the State), and are proceeding to erect a suitable club house thereon.—HORICON (Oakfield, Wis., March 17).

NOT YET.—Was out Tuesday to try the ducks, but failed to get a shot. I only saw two flocks of ducks all day. I saw quite a number of ducks flying this morning; also heard of a few English snipe being seen near the Great Swamp. Will try the meadows for snipe on Saturday. The meadows will be in first-class condition for snipe this spring, and I hope I will be able to report some good bags.—16-BORE (Madison, N. J., March 20).

NEW GUN WAD.—We have received from the Merino Elastic Felt Gun Wad Company, of Baltimore, specimens of the new wad which they are about to introduce. It is claimed for these that they combine the advantages of other felt wads with greater cheapness. Messrs. Clark & Sneider are said to have tested them with good results.

OVER SEVENTEEN THOUSAND MEN were paid cash benefits in 1883 by the Travelers Insurance Company, of Hartford Conn., for losses by accidental death and disabling injury.—*Adv.*

Sea and River Fishing.

LONG OR SHORT RODS.

Editor Forest and Stream:

In common with many other fly-fishermen, I have been much interested of late in reading the discussion in your excellent journal of the relative merits of long and short fly-rods. Syracuse possesses a large number of expert fly-casters, as the records of the State tournament show, a fact largely due to the exertions and enthusiasm of the lamented Reuben Wood, and all of them take a warm interest in everything pertaining to the manly sport. Now, in considering this question of short against long rods, it seems to me the only points to be regarded are, the relative merits of the rods for actual fishing purposes.

I have long regarded the annual contests at the State tournament as very imperfect tests of the merits of either rods or anglers.

Distance seems to be the most important element, and delicacy and accuracy of casting secondary. In actual practice, I think every experienced fly-caster will agree with me, that these elements should be reversed, and a man's skill be determined by:

First, delicacy; second, accuracy; third, distance.

With these points in view it becomes very important what kind of a rod to use. To secure the best possible results a rod should be made to combine in the highest degree, delicacy of action, strength, and lightness and ease in handling.

A rod may be light and strong and yet so heavy in its action as to require much muscular exertion of the wrist, and so make the sport of fishing very fatiguing, while another rod equally strong and light may work so softly and with so little expenditure of strength that a long day's fishing will not weary the fisherman. Now, all short rods, so far as my experience goes, are stiffer in their action than long rods. Their best work can only be done at long distances, and only then by the exertion of a good deal of muscle. Even then, except in the hands of experts, the flies are apt to drop with a splash. In brook and stream fishing, long casts are seldom necessary, and often impossible, on account of obstructions preventing a recovery of the line. With long rods, on the contrary, say of eleven to twelve feet, gradually tapered, the spring is more soft and delicate and evenly distributed, than in the short rods.

A very slight exertion of the wrist will put sufficient spring into the rod to carry the flies to the full limit of the strength of the rod, accurately, softly, and without "swishing the flies, and they will drop at the end of a taut line, without a ripple. Such a rod as I have described, and have the delight of possessing and using, works equally well at either short or long distances. The muscular exertion is so slight that the angler can cast all day without fatigue, with either hand.

Mr. Wood sometimes used short, stiff rods in casting at the State tournament, but invariably used long rods in actual fishing. Indeed, for the past two years he used a long salmon rod, of sixteen or eighteen feet for bass fishing.

ONONDAGA II.

SYRACUSE, N. Y.

THE POLLUTION OF RIVERS.

THE fact that our rivers are used as sewers by all persons who may have refuse, which they can get rid of by dumping them into the water with less expense to themselves, is one that needs to be constantly presented to our legislators. It is bad enough for a man to put a dam across a stream and deprive the people above him of their fish, in order that he may make money, but when he adds to the injury by polluting the waters below him, it is time that he was made aware that he is a nuisance which should be abated. Sawmills and tanneries are among the principal offenders in this line, and their refuse can be found for miles below them, rotting and spreading not only death to fishes and their deposits of eggs, but malaria to the unfortunate people who live about or frequent the stream. That sawdust is fast filling the Upper Hudson is well shown in the following communication in the New York *Herald:*

"The newspapers have informed the public of the necessity of insuring the water supply of the Upper Hudson, but they never have been told of a flagrant practice licensed by years of indulgence, a practice burdensome to the taxpayers of this State, ruinous to the Upper Hudson and poisonous to its valley—namely, the annual dumping of several thousand tons of sawdust, edgings, sticks, chips, etc., from fourteen sawmills into the Upper Hudson. The sawdust dumped is burdensome to the taxpayers of this State, because large quantities of it carried away by high water help to form bars in the river near Albany, the removal of which costs the State $50,000 a year. In 1867 the State paid $525,000 for the dredging of bars near Albany, no small part of which was sawdust. The dumping of sawmill refuse is ruinous to the Upper Hudson, because at many points below Glens Falls Feeder Dam it has clogged, choked and filled the channel, so that in summer a person can walk across it without wetting his feet. At Fort Edward an accurate survey has shown that sawmill refuse to a depth of eight feet, more or less, covers eight acres of the river's bed within the corporation limits of that village. It is ruinous, because for miles below Fort Edward in summer, when the water of the Upper Hudson has fallen, little remains to mark the river's course, save great bars of sawmill refuse, so completely has its channel been filled in. I saw last summer below Fort Edward immense bars in places in the channel, where fifty years ago I fished where the water was from thirty to forty feet deep. I remember when the channel of the Upper Hudson was clear and well defined. That was before the dumping of sawmill refuse was so great. Nowadays bars of sawmill refuse are formed with great rapidity, because the volume of the Upper Hudson is yearly growing smaller, its channel—what remains of it—narrower and shallower, and the dumping of sawmill refuse greater. Years ago canal boats were floated up the river to Fort Edward. Now there are times when not even a rowboat can be floated to that place on what is called the Hudson.

"The dumping of sawmill refuse is poisonous to the valley of the Upper Hudson, because the rotten accumulation of acres and acres of refuse lodged in its channel breeds diseases which fifty years ago, when the channel was clear, were unknown to the inhabitants of that valley. Alas! I have lived to see the river that once was a full, clear, active, unobstructed, uninterrupted stream, transformed to a filled up, dried up, snake-like creek. But what will it be a few, very few, years hence if the dumping of sawmill refuse continues? Must the people of this State be taxed that the Upper Hudson may be sacrificed to the convenience and profit of a few sawmill owners? Must the people stand silently by and see an important part of the Hudson River filled up with waste and refuse without lifting one hand to stop it? Must health be destroyed and life taken to satisfy the avarice of a few sawmill owners of Northern New York? If so there is a sad scarcity of men among us—and especially among our so-called lawmakers."

THE DOWEL QUESTION.

Editor Forest and Stream:

I have read with considerable interest the several discussions in your paper concerning the dowel pins in fly-rods. I think Mr. H. P. Wells is right in every point, although I have never used a rod made without dowel pins, for the reason that there are no ferrules in the market suitable on account of being made tapering. I have used rods with the lap joints (no ferrules) with good success, except just the point that Mr. Wells condemns them on; the liability of the thin ends of splices to accident is just where the failure comes in. I have made rods for the trade for a good many years and used rods many more, and I certainly can see no use for the dowel pin, when we can get straight ferrules or tubing as Mr. Wells recommends. Will not Mr. Wells inform me either by mail or through your valuable paper where such tubing or ferrules may be had, for which I will be under obligations to him and the FOREST AND STREAM.

E. M. E.

HANCOCK, N. Y., March 21.

The above letter has been submitted to Mr. Wells, who replies as follows:

Editor Forest and Stream:

The ferrules, the complete success of which in actual and severe use inspired me to agitate the subject of dowel pins, were made from German silver tubing drawn for me by Mr. John H. Knapp, manufacturer of gold and silver pen and pencil cases, No. 17 John street, New York city.

Mr. Knapp drew these tubes from time to time as a favor, it being a small matter, and aside from the usual business of his factory. Being somewhat doubtful whether he would care to do this for others, I called on him to ascertain. He will fill such orders as he may receive for brass or German silver tubing, drawn inside and out, at the following rates: Brass, from 10 to 15 cents a foot; German silver, from 15 to 25 cents a foot. The length of the tubes will be from 3 to 5 feet, as desired, but the whole tube ordered must be taken, since of course fragments are useless to him.

The tubing for the male ferrules, as supplied me in the past by Mr. Knapp, has been just a shade too large to enter the female ferrule, so as to permit nice fitting. This tubing was beautifully drawn inside and out, and of good "temper." Mr. Knapp prefers samples should be sent with orders. He can supply any size which does not exceed half an inch in diameter.

HENRY P. WELLS.

Editor Forest and Stream:

I am very glad that the dowel question for fishing rods is being ventilated in your columns. I have fished for the last twenty-four years for black bass, and have made during that time about twenty rods, none over ten ounces in weight. I have never used the dowel with the exception of a piece of one-eighth inch brass wire of about one inch in length let in to the butt end of the second joint and proportional boring in the small end of the butt. This I find steadies the joint at that place and does not detract from the strength, as the hole in the butt is so small. I have never yet had the joints pull apart, and have fished about all known ways for bass, and am satisfied for my part that the dowel is not actually required. It is only an additional labor to fit them. I use the swelled ferrule, thereby getting the full size of the wood.

It may not be amiss to inform those of your readers who are, like myself, amateur rodmakers, how the wire is fitted. I cut a fine thread on the part that is to go in the middle, or second joint, for about half an inch, leaving three-quarters uncut which is to enter the butt. Then take a small piece



A, the Morse drill, ⅛ inch. B, the wood fitted to the inside of butt ferrule. C, bit stock.

of wood, fit it to the female ferrule of the butt, bore a hole with an one-eighth inch Morse drill, leaving three-quarters of an inch protruding through this piece of wood. Bore the hole in the butt, the piece of wood that you have fitted is a true guide.

W. K.

THE RAINBOW DARTER.

Editor Forest and Stream:

Inclosed you will find a small fish which I send you for a name. It was caught in a small stream in this locality this winter, when getting minnows for bait. It is something out of the knowledge of any one in this section. Please give it a name and general description, and if they are common.

W. H. JOHNSON.

LINDEN, Mich., March 6.

[The fish is one of a large family called "darters," *Etheostomatidæ*, which seldom grow to over a finger's length. They usually inhabit swift brooks, and lie in the sand or on the stones and dart by a movement of the pectoral fins. Most of them are plainly colored. There are about thirty species arranged in a dozen genera. The specimen sent is brilliant with blue and orange even in death. We take the following description from Jordan's Manual of the Vertebrates: "Rainbow darter, blue darter, *Pœcilichthys cæruleus* (Storer), Agassiz. Rainbow fish, blue Johnny. Olivaceous, tessallated above, the spots running together into blotches; back without black lengthwise stripes; sides with about twelve indigo blue bars running obliquely downward, most distinct behind, separated by rich orange interspaces; caudal deep orange, edged with bright blue; anal, orange with deep blue in front and behind; soft dorsal chiefly orange, blue at base and tip; spinous dorsal crimson at base, then orange with blue edgings; ventrals bluish, often deep indigo blue; throat and breast orange, these two shades very constant; female much duller, with but little or no blue or orange, the vertical fins barred or checked; colors fade in alcohol; body short and stout; head large; D, X—12; A. II, 7; lateral line 45 scales; length two to three inches. Mississippi Valley, abundant; the most gaily colored of all darters." This would make a gorgeous fish for an aquarium, and should be brought East for this purpose.]

BIG BASS LAKE.

HERE we are on the ice. The thermometer is at 14° below zero, and is undecided whether to slide still lower or stop short. We have been fishing for the past week, with grand good luck, and now we have but one more day and then home. We have averaged thirty-five lines each day, and our lines have been busy, as you may judge when six hours each day was our actual fishing time. A week ago we packed up a bundle of "tip-ups," packed our satchel, filled our grub bag and started for Big Bass Lake. It was cold when we left home; it was colder when we struck the lake, and by the time the ice was crossed and we had reached our camping place it was solid cold.

Last summer we had fished here and built a log hut, and now we find it still intact. Our axe cuts boughs from the nearest hemlock for our bed, and that tall spruce gives us a load of its branches with which to cover the hut. Over these we pile snow, and pack it down hard. Now we have as snug a den as we could wish. Our camp-stove burns in one corner, our bed is in the other.

Supper over, to bed. The next morning I am the first awake, and so I get breakfast ready, and then for the ice. I won't tell you about the trials of cutting the fishing holes. You who have fished through 24-inch ice can appreciate it. I have never seen fish bite as quick as here. They seemed to have been starved, and we could hardly attend to the lines. The lake trout were the largest fish caught, and seemed to bite the least sharply. Our bait was first-rate, as lively as crickets, and a great many were the popular "red fins," and though in summer in the same waters we had no luck using "red fins," in winter they were the best bait.

We give a table of our catches of the six days at the lake, and think it will compare favorably with the same number of traps, etc.

First day, 70 fish, weighed	250lbs. 5oz.
Second day, 100 fish, weighed	401lbs. 14oz.
Third day, 91 fish, weighed	320lbs. 2oz.
Fourth day, 66 fish, weighed	200lbs. 1oz.
Fifth day, 79 fish, weighed	215lbs.
Sixth day, 82 fish, weighed	202lbs. 4oz.
In six days 488 fish, weighed	1,689lbs. 10oz.

SIZE OF FISH.

First day, smallest fish	2lbs. 4oz	largest....10lbs.
Second day, smallest fish	3lbs. 1oz.,	largest ...17 9-16lbs.
Third day, smallest fish	2lbs.	largest ... 5 1-16lbs.
Fourth day, smallest fish	2lbs. 5oz	largest ...14½lbs.
Fifth day, smallest fish	2lbs. 1oz.,	largest.... 7½lbs.
Sixth day, smallest fish	3lbs. 4oz.,	largest....11 15-16lbs.

The smallest fish was a pickerel of two pounds, the largest a whale of a lake trout. The fish ran very even, as a general rule, but now and then a whopper got on to the line and made it sing.

Now, many of your readers may be curious to know where the lake lies that we fished in. We are sorry that we cannot publish it. We have fished this lake in summer and winter, and the fishing is grand. In the summer the bass fishing is unsurpassed.

The expense of the trip we have just taken, exclusive of personal conveniences, was—

Bait, 1,500, at $4 per 1,000	$6 00
Fare, railroad	8 00
Food and drink and other expense	8 00
	$22 00

Making $11 for one person for a trip of a week. We don't give this as a criterion to go by, as on one occasion in the early winter our expense was $20 apiece, and again at Christmas time only $9 for a week; still it is a fair average.

TWO BROTHERS.

VERMONT FISH LAWS.

THERE is no State in the Union, and probably no country among civilized nations, where the laws for the preservation of fish are so set at naught, and so openly violated, as in Northwestern Vermont. In Franklin county, within the immediate vicinity of one of our two Fish Commissioners, there are dozens of seines, pound and fyke nets, fully manned and constantly at work during the close season, sweeping the fish out of Lake Champlain's waters. Some of the nets are owned by parties from New York State, who, during the fall of 1882, came into this vicinity and, within fifteen miles of our wide awake Commissioner, built a large ice-house, where they have stored tons of fish caught illegally. It has been estimated by those who are posted that during the close season of 1883 from fifty to seventy-five tons of fish were caught in these waters and shipped to New York and Boston markets. Several writs were issued and served against some of these fishermen, but so far we have yet to hear of a single conviction. The Governor of the State appoints our Fish Commissioners, and it is to be regretted that for this locality he did not appoint a man who not only understands the duties of his office, but has moral firmness enough to put the laws into force. At the next State election a strong effort will be made, irrespective of party politics, to elect representatives who will do their utmost to remedy these evils by making provision to have competent men appointed as fish wardens. About a year ago an officer visited this locality and was driven over the ice within a few yards of holes cut in the ice, where trap nets were set and barrels of fish taken out daily, but he did not know what those holes were cut for and passed them by without examination. With a short pole with hook on it he could have fished something out of the water there that would have astonished him—trap nets of the most destructive kinds. I have no doubt but what the intentions of this officer were good, and that he intended to do his duty faithfully, and had he been "posted" or engaged a trustworthy guide, that he would have succeeded in capturing quite a number of large trap nets, and temporarily put a stop to this work.

STANSTEAD.

HIGHGATE, Vt., March 13, 1884.

SEA BASS IN CANADA.—An unusual development in bass fishing was made this winter in the Tidnish River, which forms the north shore boundary between New Brunswick and Nova Scotia. Last spring when the heavy ice left the river, an old farmer found some dead bass on the flats where they had evidently been crushed by the tide letting the ice down on them at low water. This winter, about a month ago, he cut a hole in the ice, and found the river so full of sea bass that he resolved to use a scoop net instead of hooks and lines. With the scoop nets, five tons weight of the fish were caught in one night, and since that two or three thousand dollars worth have been shipped to the Boston market. It was never before suspected that bass came there in winter.—B. (New Brunswick, March 20).

THE BISBY CLUB.

A VERY interesting report of the Bisby Club for the years 1883-84, gives an idea of the work and pleasures of this association, which has its grounds on the Adirondack lake which gives the club its name. In speaking of the accommodations of the club being taxed to their utmost during certain months, and the lack of visitors at other times, the report says: "There is every year a period when our accommodations go, as it were, 'a begging.' This is in the delightful month of July when the sun shines brightest, and the cooling shades of the woods would seem most welcome, and when the fish in the lakes are active in search of food in the deep water, and are consequently readily taken at the buoys. But this is the time our guests are fewest in numbers. Probably the bugbear of flies is what keeps people away. The flies in July are but little more than a bugbear. The winged fiend of the woods is the black fly, but his season rarely lasts through the month of June. When he leaves, the mosquitoes have the field to themselves, but the mosquito of our northern wilderness is not the venomous monster that haunts the seaside watering places, and the lagoons of the open country. His song is more nervously exciting than his bite, though the latter is to be avoided rather than permitted; but after all, the pleasures of life in the woods in the dog days far outweigh the discomforts of the insects. We recommend the month of July to all who would see the woods at their best, and receive the benefit of the purest and most exhilarating air."

The fishing last year was the best within the experience of the club. In Woodhull Lake many fine land-locked salmon were taken, and the run continued till late in June. The stock of fish in the Bisbys was replenished from the State hatchery at Caledonia by 18,000 brook trout, 6,000 lake trout, while in Woodhull 5,000 rainbow trout were planted, and 15,000 more were placed in Moose River. A hatchery has since been built, and there are now in the troughs 50,000 lake trout eggs, 40,000 hybrids, and 10,000 brook trout.

The better observance of the game laws for the last four years has resulted in the increase of deer, and the shooting was better last year than ever before in the history of the club. A larger per centage of the deer were young than formerly, of the deer killed, there being more bucks than of any other kind. During the visit of the Governor of the State, Hon. Grover Cleveland, the report says: "A fine buck passed within a few feet of the Governor's stand, but a ledge of rocks intervened, which prevented a shot. The same deer passed within club shot of the guide, Frank Hall, but as he had neither gun nor club, the deer escaped." This, we take it, is not seriously meant, yet it is so written that persons not familiar with the personnel of the party might construe it into a regret that the deer was not killed, even with a club. The Bisby Club is doing good work in enforcing the laws in its own grounds and contiguous territory and in stocking the waters, as well as in preserving the timber. It has twenty-five members. Gen. R. U. Sherman is the President, and Mr. Henry H. Thompson the Secretary. If all the clubs in the Adirondacks were as vigorous as the Bisby, there would be a better enforcement of the laws and consequently more fish and game in that region, which is only fitted to produce these forms of life together with a limited amount of timber and a great deal of water. The greed of the lumberman and the bark stripper, however, are to be combatted, or the whole region will soon be a barren waste, from which the rapidly melting snows will produce such freshets as the cities of Pittsburgh and Cincinnati have lately seen, while in mid-summer our canals and rivers will be dry.

IT IS PROBABLY TRUE.

A CORRESPONDENT clips from the Boston *Transcript*, of March 18, the item telling that the Hon. Hannibal Hamlin has just returned from Moosehead Lake, Maine, with a fine catch of trout. Then the correspondent heaves a groan and utters that, if a poor devil were camping out in Maine and tried to vary his bill of fare by shooting a deer or caribou before Oct. 1, the game warden is pretty sure to find it out and "sock it to him" accordingly. But the honorable gentleman makes his annual trip and comes home "with a fine catch of trout," caught through the ice, against the law of the State.

Now, Mr. "C. G. G.'s" mind will be entirely set at rest by reading carefully a proviso to Section 48 of the fish laws of that State: "Provided, however, that during February, March and April citizens of the State may fish for and take land-locked salmon, trout and togue, and convey the same to their own homes, and not otherwise." But "C. G. G." must read this proviso and then turn to Section 1 of Special Laws of 1881: "No person shall take, catch, fish for or destroy any trout or land-locked salmon in the Kennebago, Rangeley, Cupsuptic, Mooselucmaguntic, Mollychunkamunk and Welokennebacook lakes, or in the streams flowing into or connecting said lakes, during the months of February, March and April of each year."

Now, the Hon. Hannibal Hamlin did not fish in either of the above lakes, but in Moosehead, where he had a legal right to, in February, March or April, being a citizen of the State, and doubtless taking the fish to his own home. It is well known of the Maine Fish and Game Commissioners in their work that they have been unrelenting to honorable as well as dishonorable—breakers of the game law are generally dishonorable. Even ex-Governor Connor could not transport a deer, killed honorably in open season, from Bangor to Augusta last fall. Commissioner Stillwell, when applied to, said: "Governor, I can do nothing for you under the law." Governor Connor yielded willingly, like the true gentleman he is, and took his deer to Augusta by private conveyance. This was under the first enforcement of the new transportation law in that State, which few at that time understood. Even Senator George F. Hoar came near having to pay the fine for killing a moose in that State a year or more ago, since he happened to be in the party which did kill one, but he was able to show that he was not present at the time. One of the Maine Commissioners remarked last summer that even President Arthur would be punished were such a thing possible that he be caught poaching in Maine. It is a mistake. Favor has not been shown to either honorable or dishonorable in the enforcement of the game laws in Maine. SPECIAL.

BOSTON, Mass., March 24.

Editor Forest and Stream:

The complaint of "C. G. G.," in your last issue, deserves a word. We like our laws, and the respect being shown for them by our own citizens is evidenced every day during close time, and our game—ruffed grouse in particular—have not been so plenty for years. Not only this, but if "C. G. G." comes into Maine for recreation, he must respect and obey them just the same.

There is one point, however, in which our own citizens have precedence, and if your correspondent had taken pains to inform himself he would not accuse Hon. H. Hamlin with breaking our laws. As he says, "It speaks for itself." I have such confidence in the gentleman he contemptuously names the "Great American Game Warden," that if "C. G. G." will apply for a copy of our game laws, I am sure that it will be forwarded to him. At the end of Section 48, it reads: "Provided, however, that during February, March and April, citizens of the State may fish for and take land-locked salmon, trout and togue, and convey the same to their own homes, but not otherwise."

Once in a while we meet just such croakers as "C. G. G." One in particular I have now in mind. He lives in one of the best localities for small game, and he and his boys have until within a few years had free scope to kill water fowl at any and all seasons. Finding game was diminishing in the beautiful bay in front of the homestead, he began to be very ardent in advocating law. Well, the laws have been made, and still he croaks. The Protective Association in his vicinity wished to make him warden. True, he would do great things if he was warden; but he could not be prevailed upon to accept the position. The truth to-day is just this: Make a law that shall forbid everybody else but himself and his boys firing a gun within a dozen miles of his favorite bay, and he'll go for it every time.

Give these gentlemen the unlimited run of our State, let them murder our moose, deer and caribou, trout and salmon, in season and out of season; send cheap guns into the State to give to the boys who will shoot ruffed grouse for Boston market, while budding in winter, and while the game lasts they will be suited, and not till then. N.

BATH, Me., March 24.

A PECULIAR FISH.

Editor Forest and Stream:

I see in your issue of March 13 a piece headed "A Peculiar Fish," and, as there has been much discussion as regards it, I want to add my mite. I have for years lived near and fished these waters, and think the description of the fish far from right. Last fall I obtained permission from the State Commissioners to take fifty of these fish for the purpose of stocking Stone Pond. I caught two distinct varieties of trout; one very light-colored, slim and silvery, the other, to all appearances, was a common brook trout, being dark, with very bright spots, and much the heavier in propertion to length, the same length of the latter weighing one-third more than the former. There is no stream, however small, flowing into this lake, as it is entirely fed by springs. Only the common brook trout are found in the outlet of this lake. The right to fish this lake is claimed on the ground that it is a lake, and the "strange fish" is a lake trout for this reason. It is called in the Dublin history Monadnock Lake, and also Monadnock Lake on the county maps. It is called by many here Dublin Pond. The question is, is it a lake or a pond, and what is the difference between a lake and a pond? Last fall both kinds of trout spawned on the same bed, but what I term brook trout were about fourteen days later than the others, and did not come until the others had left.

FISH WARDEN.

MARLBORO, N. H., March 17.

[The differences mentioned are not of themselves sufficient to establish two species. Shape and color amount to little or nothing in the salmon family. The fact of a trout inhabiting a lake does not make it a "lake trout." By lake trout is understood the fish called in different places togue, lunge, salmon trout, Mackinaw trout, etc. We cannot say that the fish in question is not a distinct species, but evidence from an ichthyologist is first needed to prove it. The ordinary angler is seldom competent to decide on species. Send specimen to the Smithsonian Institution and let us know their decision. A lake is a large pond and a pond is a small lake.]

NEW JERSEY NOTES.—A bill has passed the Assembly appropriating $500 for fishways over the Dundee dam on the Passaic. Shad and striped bass formerly ascended the river above the site of the present dam, and a fishway there would give the anglers of Paterson a chance to fish near home. The Paterson *Press* says: "Just at present fish are being murdered by wholesale, and it is a disgrace to the county that the present laws are not enforced. Nets are being drawn regularly above the falls and also between Paterson and Dundee dam in direct violation of the law. The offenders could be brought to justice without the slightest trouble if somebody would only take hold of the matter. Another illegal method of capturing fish is extensively resorted to at present. If a person will take a walk along the banks of the river during any night he will see hundreds of lanterns burning along the shores and men in boats moving about from place to place. All these men are violating the law and running the risk of being sent to prison. Pickerel and bass are spawning at present. They seek the shallow places along the shores, where they lie frequently in a semi-dormant condition. Men with spears take hundreds of these fish every night in the most unsportsmanlike manner, and in direct violation of the law, and that under the very eyes of the authorities. A sportsman's club is badly needed in this county. There is an organization calling itself the Paterson Rod and Gun Club, but it has been little heard from in the way of protecting of fish and game. If the illegal catching of fish at this time of the year could be stopped, and there is no reason why it should not, there is no reason why there should not be good fishing in the Passaic near Paterson throughout the open season."

TROUT IN NEW JERSEY.—During the past week three of our Philadelphia anglers, having the fever upon them, went to New Jersey, within fourteen miles of Philadelphia, and caught sixty trout. They were mostly fingerlings, four inches long; the largest certainly did not exceed six inches. Worm was the bait. New Jersey allows trout fishing in March. At the corner of Seventh and Sansom streets, Philadelphia, black bass, fresh caught, are displayed on a stand fronting a restaurant. This is a violation of the law surely. —HOMO.

THE STRANGE FISH IN CAYUGA LAKE.—In answer to "what fish is this?" from Cayuga Lake, I believe they are what is called "dog fish;" when grown they do not look like bullheads exactly, but when small look like trout. I could not tell the difference. In talking with different ones while fishing in that lake last summer they all expressed a belief that the fish had been put in the lake for trout.—E. F. K. (Auburn, N. Y., March 16).

RIPARIAN RIGHTS IN CANADA.—*Editor Forest and Stream:* Mr. S. G. W. Benjamin, in "The Cruise of the Alice May," in the March *Century*, states that the Canadian government controls and leases our trout streams, even to the exclusion of the owners of the adjoining banks. Holders under leases of the streams from the government did try to establish that view of the law, but it has since been decided by our highest courts that the government have no such power over the rights of riparian owners, and consequently those rights are now universally respected. Many sportsmen find it cheaper to buy a lot of land on the shore and fish as a riparian owner, than to lease from the government.—B. (New Brunswick, March 20, 1884).

Fishculture.

NON-HIBERNATING CARP.

Editor Forest and Stream:

I notice in your issue of yesterday the communication of a gentleman whose initials and location indicate that he is a prominent member of the American Carp Cultural Association, who is engaging in carp culture systematically, and who closely watches for new developments. Several other members have written or informed me orally of similar developments in their ponds. The first carp which I obtained from the Government (scale-covered) were placed in a small pond of clear water where I could observe their habits. As soon as the water approached the freezing point, early in December, they collected in the deepest point and commenced burrowing, head downward. As there was a heavy admixture of sand in the mud, it was three days before they entirely disappeared. The third day nothing but their tails were in sight. These were in constant and active motion as long as visible. They made their appearance again early in May. In the winter of 1882-3 they did not hibernate at all, for I could see them swimming near the bottom, even under four inches of ice.

The fact is, that the American carp is becoming a materially different fish from the European fish. It is not only losing its hibernating instincts, but it attains double the growth here in a given time, and is in other ways improving when intelligently bred. It appears to be quite certain that we have but one variety of pure food carp in this country, the progeny of which retains the true characteristics noted by reliable ichthyologists. I refer to the parti-scale type, termed by the Germans "leather," "mirror," "bluebacks," and probably other fancy and whimsical names yet to be heard from. Our scale carp are notoriously improved, their progeny developing well-known types of hybridity. The carp culturists of this region are killing off their scale stock. Most of my own stock is of this type, and knowing of its impurity, I refuse to sell any of it alive. I am making all practical efforts to breed an entirely scaleless type. MILTON P. PEIRCE,

Secretary American C. C. Association.

PHILADELPHIA, Pa., March 21, 1884.

FISHCULTURE AND FISHWAYS IN NOVA SCOTIA.—In the Canadian Parliament the Hon. L. G. Power, Senator from Nova Scotia, made a speech on the fisheries, etc., on Feb. 22. In general terms, he indorsed the letter of Hon. W. F. Whitcher to FOREST AND STREAM, which made so much stir when that gentleman, during his official term as Commissioner of Fisheries, claimed that the results of fishculture in the Dominion had been very small. He referred to the descriptions of the McDonald fishway in FOREST AND STREAM of Jan. 3 and 10, and suggested that an inquiry be made regarding it, and, if the results are satisfactory, recommends that some of them be constructed. He thinks if this is done the fecundity of fish is so great that they would probably replenish its rivers in a very short time. The Hon. Mr. Kaulbach agreed with Mr. Power, and thought the hatcheries were not placed far enough above tidal water. If this is the case it seems to us that it would pay to transport the fry to the upper streams. It must be that there is something in the methods which are faulty, as fishculture is successful in most places outside of Canada.

THE PROPOSED FISHWAY AT DUNDEE DAM.—The New Jersey Legislature has appropriated $500 for a fish ladder at Dundee Dam. The one sunfish left in the Passaic River by the polluters and the fishers out of season, who are not in the State prison, is expected to climb the ladder early in the season.—F. SATTERTHWAITE.

The Kennel.

FIXTURES.

BENCH SHOWS.

March 26, 27 and 28.—The Dominion Kennel Club's Second Annual Bench Show, Horticultural Gardens. Charles Lincoln, Superintendent, W. S. Jackson, Hon. Secretary, Toronto, Canada.

April 3, 4 and 5.—The Cleveland Bench Show Association's Second Bench Show. Charles Lincoln, Superintendent. C. M. Munhall, Secretary, Cleveland, Ohio. Entries close March 24.

April 22.—The St. Louis Gun Club's Bench Show, St. Louis, Mo. Entries close April 14. J. M. Munson, Secretary.

May 6, 7, 8 and 9.—The Westminster Kennel Club's Eighth Annual Bench Show, Madison Square Garden. Entries close April 21. Chas. Lincoln, Superintendent. R. C. Cornell, Secretary, 54 William street, New York.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1010.** Volume I., bound in cloth, sent postpaid, $1.50.

DISQUALIFICATION OF JILL AT CINCINNATI.

Editor Forest and Stream:

In your issue of to-day you give, under the head of awards at Cincinnati, the following: "Fox-terrier bitches, open class. Tip. Puppy class. Clover Belle." Now, if this is not an error, will you kindly inform me by what bench show rules, either in this country or in England, you reach such a conclusion? The facts in the case are simply these: We entered our 8½ months' bitch puppy Jill in both puppy and open classes. When the classes were judged she was awarded first in both. After the awards were made a protest was lodged against her as being infected with mange, and the protest was sustained by the Arbitration Committee. Rule 7 in the premium list of the show says that "a dog disqualified for mange, etc., shall forfeit any prize which may have been awarded to it." This clearly debars us from claiming the money premium. But Rule 9 says, "The decision of the judges shall be final, except for fraud," etc., and Rule 10 says, "No question involving the merits of a dog to receive a prize can come before the referees." Now, it is absurd to suppose a judge like Mr. Mortimer would



THE KNICKERBOCKER KENNEL CLUB'S LIVER AND WHITE TICKED POINTER DOG "KNICKERBOCKER."

Winner of Champion Prize at New Haven and Washington. 1884.

award first to a disqualified dog. As a matter of fact, Jill has no mange at all. She was confined to keep her clean and got too high in blood, which caused skin irritation, and a scar over her eye and one on her hip, won in a late battle, doubtless added to the examiner's impression of mange. The class was not rejudged that I have heard of, and I submit that, as far as the record goes, the judge's awards were final and our bitch is entitled to the place she won. Even if she had mange, it would not detract from her merits, and to shut her out the protest should have been lodged before, and not after, the judge's award. This is not my individual opinion, but that of a dozen breeders in this section, and if we are wrong we would like to know how and why. If right, we want the correction made in your published list of awards. SURREY.

ELLICOTT CITY, Md., March 13.

[The disqualification of Jill places her exactly where she was before she was judged, so far as the prize or honor is concerned, and the question of merit does not, therefore, enter into the case at all.]

NEW ENGLAND KENNEL CLUB.

A MEETING was held March 19, at the Parker House in Boston, for the purpose of founding a new kennel club. The history of the movement is somewhat as follows: Dishonest dog dealers have imposed on breeders to a certain extent, by putting upon the public many dogs of impure blood, thereby injuring honest breeders; attempts have been also made to pass laws against the keeping of dogs, and believing that much good could be done toward remedying these and other evils, a number of gentlemen came together on the 22d of February at the Parker House, to consider the subject of forming the new club. After much discussion of matters relating to the breeding, showing, sale and pedigrees of dogs, it was unanimously voted to form a club, having for its objects the interest of all honest breeders and lovers of dogs, to make breeding on a par with any other business or calling, so that any gentleman might with dignity acknowledge himself a breeder. With these ideas in view, a committee was chosen to draw up a constitution, and at the meeting on the 19th inst., the "New England Kennel Club" was organized, and the constitution adopted. The objects of this club as provided for in its constitution are: To encourage the breeding and importation of thoroughbred dogs, to hold bench shows; also, to hold meetings for scientific and theoretic discussions, and the reading of essays on the subjects of breeding, to use every means within its power to protect breeders of stock having authentic pedigree, to influence the passage of just laws relative to and generally protective of dogs.

The officers of this club are: President, Arthur W. Pope, of Boston; Vice-President, Charles E. Shaw, of River Side Kennel, Clinton, Mass.; Secretary and Treasurer, J. A. Nickerson, of Boston. There is an Executive Committee of five, consisting of the President, Secretary and Treasurer and three members of the club, whose names are Dr. Frank S. Billings, V. S.; Jean Grosvenor, Shamrock Kennel, Boston, and J. Dobson, of Hyde Park, Mass. There is also a Finance Committee of three—Dr. J. Frank Perry, Ashmont Kennels, Dorchester, Mass.; C. H. Baker and Edward S. Payson, of Boston. The membership is unlimited as to numbers, and unrestricted as to residence of members. There are two classes of members—an active and an associate class. Both have the same privileges, except that none but active members will vote, or have any voice in the business of the club. The annual fees are, for active members, $10, and for associate members, $5, payable in advance. Blank applications for membership will be furnished by the Secretary on application. The annual meeting of the club will be held on the first Saturday of March in each year, but probably monthly meetings will be held also. The next meeting of the club will be held April 16, when all matters of interest to the public will be published in FOREST AND STREAM. Persons desiring to communicate with the club may address P. O. Box 2,574, Boston, Mass.

EASTERN FIELD TRIALS CLUB.

MEMBERS Take Notice.—On April 8, 1884, there will be a quarterly meeting of all the members of the club in conjunction with the Board of Governors.

WASHINGTON A. COSTER, Sec. and Treas.

CHAMPION KNICKERBOCKER.

WE give this week a cut of the large pointer Knickerbocker, winner of first, Boston, 1882; champion at Ottawa, Ont., and champion at both New Haven and Washington, 1884. He is by Glenmark (Rush—Romp) and out of Girl (Maryland—Till).

ROBINS ISLAND CLUB.

THE annual meeting of the Robins Island Club, March 17. The following list of officers were elected for the ensuing year:

PRESIDENT.
Dr. S. Fleet Speir.

VICE-PRESIDENT.
Mr. W. B. Dickerman.

SECRETARY AND TREASURER.
Mr. A. F. Plummer.

BOARD OF DIRECTORS.

Dr. S. Fleet Speir,	W. B. Dickerman,
A. T. Plummer,	W. B. Kendall,
Henry J. Cullen,	H. D. Polhemus,

A. S. Swan.

By unanimous vote of the club a vote of thanks was tendered to the retiring president, Mr. Wm. B. Kendall, for the very able and satisfactory manner in which he has administered the affairs of the club during the past year. The club is in a very prosperous condition, the treasurer's report showing a handsome balance on hand. $1,000 was appropriated for improvements the coming year. Much interest was manifest in the annual field trials of the club to be run next fall, and no effort will be spared to make them first class in every respect.

FOX SHOOTING AND FOX HUNTING.

Editor Forest and Stream:

It is probably hardly worth while to "let fall any word of extenuation from the pallid lips of the man who has shot a fox;" it would avail nothing with the man who thinks the only proper way to kill a fox is to worry the poor outlaw to death with a pack of hounds that give him not more than the ghost of a chance for his life. But then, we are all wedded to our idols and each to the sport he loves, and we all have little enough charity for the worship or the sport of others.

There is an element of cruelty, a strong leaven of the old savage Adam in all field sports, so much of it that every one who recreates himself with rod or gun or hound, must cry out at certain times when his heart is tender and the fire of the chase not burning within him, "God be more merciful to me than I have been to His creatures that He has set before me!" There is only one feature in field sports to redeem them from the charge of wanton cruelty, and that is fair play. Now, wherein does the shooting of foxes before one or two hounds lack this quality more than running them down with a dozen or more hounds followed by men on horseback? A man may get his neck broken, or a horse his knees, but that does not help poor reynard's case at all, for the hounds go bellowing after him just as if nothing had happened.

Wherein is there less of fair play to shoot a fox before hounds than to shoot a hare or a deer in like manner? And as for the skill required in each case, either as marksman or woodsman, any one who has tried the three knows which calls for most. If one will stand still long enough almost anywhere in the woods when dogs are running a hare, he may get a shot, and if long enough on a runway a shot at a deer, no matter how little he knows of the habits of the game. But he who hunts foxes on foot successfully must have much more of woodcraft and some knowledge of the manners and customs of the wiliest animal that ranges the woods, and he must be as much a man physically as he who goes a hunting on a horse's legs instead of his own, for he must endure long and hard tramps.

As for riding to the hounds, it is a very fine and noble thing to do, and I have read that the young men at Newport do it very well in the exciting chase of the anise-seed bag or the hobbled fox, and would doubtless die supremely happy if they broke their necks in the sport, if by so dying they could ape Englishmen as closely as they do in dress and speech and other matters of living.

This is the gist of it: It is un-English to shoot foxes, therefore it is unsportsmanlike. It is humiliating to think that any American, North or South, should care a snap of his fingers now for British opinion of anything concerning us. Are we not old enough and strong enough to have ways of our own and sports of our own, without regard to what others think of them? The nature of our country and the temper of our farmers alike forbid the hunting of foxes here in English or Southern fashion, and the Newport style of hunting is not likely to come into general favor yet throughout New England. Let us continue to hunt our foxes in our own way, and if beagles are "deadly" and staunch and musical, let us have them by all means.

My lips are not pallid when I say that I had good sport in shooting half a dozen foxes last fall, and that I hope to have many another day of such goodly sport in the brown, autumnal woods of my beloved New England. AWAHSOOSE.

FERRISBURGH, March 12.

N. A. K. C. DERBY.

Editor Forest and Stream:

In inclose additional list of entries for the Fifth Annual Derby, National American Kennel Club, received up to date. I have received a great many applications for entry blanks, and think the entry will be large. P. BRYSON, Sec.

MEMPHIS, Tenn., March 21.

ENTRIES.

JIM BLEDSOE.—Major J. W. Renfroe, Atlanta, Ga., black, white and tan English setter dog, Dec. 3 (Baden Baden—Daisy Royal).

PAUL JONES.—Major J. W. Renfroe, Atlanta, Ga., black, white and tan English setter dog, Dec. 3 (Baden Baden—Daisy Royal).

GEM.—Dr. J. N. Maclin, Keeting, Tenn., lemon and white English setter bitch, April 16 (Gladstone—Gazelle).

NABOB.—E. F. Stoddard, Dayton, O., liver and white pointer dog, Feb. 17 (Croxteth—Trinket).

DANDY BOB.—E. F. Stoddard, Dayton, Ohio, liver and white pointer dog, Feb. 17 (Croxteth—Trinket).

DAYTON.—E. F. Stoddard, Dayton, Ohio, liver and white pointer bitch, Feb. 17 (Croxteth—Trinket.

FRANK S.—F. I. Stone, Chattanooga, Tenn., blue belton English setter dog, May 31 (Gladstone—Zell).

GLAD S.—F. I. Stone, Chattanooga, Tenn., blue belton English setter dog, May 31 (Gladstone—Zell.

TANGIPAHOE.—H. Fontaine, Magnolia, Miss., black, white and tan English setter bitch, April 21 (Gladstone—Flossy).

JO JO GLADSTONE.—E. S. Bond, Chicago, Ill., black, white and tan English setter bitch, July 10 (Gladstone—Lavalette).

COUNTESS SPEED.—J. Hayward, Jr., St. Joseph, Mo., lemon and white English setter bitch, April 16 (Gladstone—Gazelle).

MABLE.—J. Hayward, Jr., St. Joseph, Mo., black and white English setter bitch, May 18 (Dash III.—Jessie).

ALFRED.—J. Hayward, Jr., St. Joseph, Mo., black and white English setter dog, May 18 (Dash III.—Jessie).

BABY MINE.—J. Hayward, Jr., St. Joseph, Mo., lemon and white English setter bitch, July 18 (Rake—Madam Llewellin).

GLADROY.—Whyte Bedford, Horn Lake, Miss., black, white and tan English setter dog, June 28 (Gladstone—Donna J.).

LOTTA.—W. B. Gates, Memphis. Tenn., black, white and tan English setter bitch, Aug. 19 (Count Rapier—Juno).

PEGMATITE.—Dr. N. Rowe, Chicago, Ill., black, white and tan English setter dog, April 11 (Cambridge—Marchioness Peg).

PEGOMANCY.—Dr. N. Rowe, Chicago, Ill., black, white and tan English setter bitch, April 11 (Cambridge—Marchioness Peg).

GILDIE.—W. W. Titus, Cherry Creek, Miss., lemon and white English setter bitch, July 23 (Count Rake—Minnie).

CARRIE H.—W. W. Titus, Cherry Creek, Miss., blue belton English setter bitch, June 3 (Roy—Gretchen).

JAMESTOWN.—W. W. Titus, Cherry Creek, Miss., black, white and tan English setter dog, May 7 (Count Noser—Lola).

NEW YORK DOG SHOW.

IN answer to inquiries the managers of the Westminster Kennel Club desire to state that dogs will be classified according to their record on date of entry. A first prize winner in an open class at Cleveland or Toronto, therefore, may compete in open class at New York, provided he was entered at New York prior to receiving the award at Cleveland or Toronto. Should entry be made after the award at the last named shows, he must be entered in the champion class.

Winners at Cincinnati are barred from open classes at New York. There have already been a large number of valuable special prizes offered which we will notice more at length next week. The club have made a new departure in the inauguration of a sweepstake for English setters, Irish setters, large pointers and small pointers. The entrance will be $10. The winner in each of the four classes to receive all of the entrance money and a piece of plate, added by the club. The winner to be known as the champion dog of America. The club to be permitted to compete. Entries in each of the sweepstakes to be made on or before the 21st day of April next.

In addition to the list of judges already published, Mr. E. C. Sterling, of St. Louis, Mo., will judge the pointers.

THE WASHINGTON DOG SHOW.

THE second international bench show, under the superintendency of Mr. Chas. Lincoln, was held at Washington, on the 18th, 19th, 20th and 21st inst. Owing to the uncertainty of securing a suitable building, only a short notice was given to exhibitors, but they at once rallied to the front, and a really good show was held. The attendance was very good, and included the President and many members of his cabinet, Secretaries Folger and Lincoln, Senators Bayard, Beck, Palmer, McKenna, and Hon. H. H. Riddleberger. The ladies also showed the lively interest they took in our faithful dumb companions, and forced us to the conclusion that Washington was pre-eminently the place for a successful bench show. The judges selected were as follows, viz.: For English setters and pointers, Hon. Jno. S. Wise, Richmond, Va., and Major J. M. Taylor, Lexington, Ky.; for Irish and Gordon setters, Major J. M. Taylor; for mastiffs, St. Bernards, spaniels, deerhounds and greyhounds, and all other non-sporting classes, Mr. Jas. Mortimer, N. Y. There were few complaints, and the judging, with a few exceptions, gave general satisfaction.

The entries in the big dog classes did not fill so well as might have been expected.

MASTIFFS.

There was only one mastiff, Dido, a tolerably well put together bitch, but altogether too small. She was awarded second prize.

ST. BERNARDS.

Only one St. Bernard faced the judge, a moderate, but fair coated bitch, with badly shaped skull. She was awarded the prize.

NEWFOUNDLANDS

Brought out three entries, of which Major was first, Lion hc. and Dido c. Neither of these deserve especial mention.

DEERHOUNDS.

Mr. Thayer's entries were all absentees, as was also the Clovernook Kennel's Roy, but the magnificent entries of Mrs. S. F. Emmons more than made up for their non-appearance. Three finer specimens we have never seen. They were well placed, Robin first, Brian second, Bruce vhc.

GREYHOUNDS.

The Cincinnati winner, Major, was an easy first; Snyder second, is good on head and body, but inclined to be coarse and rather strong in tail; Dorothée vhc., is beginning to show age; Buff c., a seven months' old puppy, is coarse.

SETTERS.

In champion English setters, dogs, Plantagenet, looking in good shape and condition, beat Cossack, who has lost the coat and feather he was so beautifully supplied with last year. In the bitch class, Dashing Belle easily won over Fairy II., who shows age. The open dog class, except pure Laveracks, was a large class, made up mostly of local dogs, and not up to the standard. All prizes were withheld, Rocket getting vhc. reserve, and Goodsell Kennel's Racket vhc., and Duke c. In the bitch class, Dashing Jessie was awarded first prize, Victoria second, Ophelia vhc., Bluebell hc. We liked Bluebell for second place, as she is a good mover, and with the exception of standing a trifle high behind, there is but little fault to be found with her.

In English setters, dogs of pure Laverack pedigree, Goodsell Kennel's Prince easily beat Bob White, who was shown very much too low in condition. In the bitch class, Petrel III. beat her kennel companions, Queen Petrel, second prize, and Daisy Laverack vhc. The dog puppies lacked quality, and all awards were withheld. Hilarity, a nicely-shaped puppy by Cossack—Ophelia getting an hc. The others were unnoticed, although we liked Alert, a litter brother to Hilarity. There were only two entries in the bitch class, of which Countess took first prize and Cassandra second. We could scarcely see the consistency of the judges in giving first and second prizes in the bitch and withholding all awards in the dog class, as the quality certainly was no better in this than the preceding class.

In champion Gordon setters Lady Gordon had a walk over. The open class for dogs was a very poor class, Ned getting first and Gem second. There were no other awards, although we thought Luke, in this company, might have got a mention. The bitches were a wretched lot, Fannie, hc., was the only one worthy of a card. In the puppy class first was awarded to Don, the only entry.

In champion Irish setter dogs, Glencho, in magnificent shape, had things all to himself. He scarcely needs description, so well known is he, and but for being a trifle weak behind, we think him simply perfection. Trix easily beat Clara Belle in the bitch class, being very superior in head and in that high bred appearance which distinguishes the Irish setter.

In the open dog class Glenmar, a six months old puppy, by champion Glencho, easily disposed of his rivals. He is a wonderfully well made and developed puppy and with good luck we predict a successful future for this gamy-looking youngster. Keys was awarded second prize; he is of good color with a nice coat but a coarse skull. Rob, vhc., Pilot c. We thought Elcho IV. as good as Rob and better than Pilot, but he failed to catch the judge's eye. In the bitch class Reeta, a very fair bitch with a nice head, good shoulders and coat, beat Ada, second, who is a good all round bitch, but is too small. Liffey, hc., and Blarney, c., are moderate specimens. In the puppy class Glenmar had things to himself. Kate Mackey, a very promising bitch, second; Walter, vhc.

POINTERS.

In champion pointers over 55lbs., the Knickerbocker Kennel Club's Knickerbocker was the only entry and was awarded the blue ribbon. The under 55lbs. class was divided into dogs and bitches. Bravo, looking very well, was first in dogs, and Dutchess beat Lassie in bitches. The open dog class over 55lbs., introduced some of the best looking large dogs we have seen for a long time. Guy, a well made lemon and white-ticked, of fine size, but a little coarse in head, and a trifle throaty, beat Fritz, a litter brother, who was placed second. Pilot, vhc., Cary, hc., and Tim, hc., were all very much above the average. We thought Fritz almost the best in the class, for though smaller than Guy, he shows more quality; Pilot has very few faults, but is rather weak in loin. Of the others, we liked Tim, hc., better than Cary, hc., who is heavy in skull with not the best of shoulders. The class, however, was an exceptionally good one. In the bitch class, Fanny was awarded second prize, all other awards and commendations being withheld.

In the dog class, under 55lbs., Tom Peter beat Match. There was not much between them. The winner is a light-bodied, leggy dog, but with good style, while Match is handicapped by his bad eyes. In the bitch class Lyde, a nearly black bitch, with rather a poor head but good shoulders, chest, legs and feet, was first. Polly, who was second, has a good head and body, but is somewhat out at elbow and wide-chested. She refused to show herself in the ring. Lena, hc., is a leggy, light-boned bitch, with good head. Moonstone was absent. This was not a good class. In the puppy class Lon, awarded first prize, shows a good deal of quality, but is light in bone and has none the best of feet. Daisy Bravo we liked quite as well as the winner, and Lady Mac, vhc., we thought better than either, but she is a trifle plain-faced, tight-lipped and her ears set rather high. Dandy Bravo is also a very promising puppy, but is a bit coarse in head.

Chesapeake Bay dogs brought two entries, one of which, Jeff, got loose and was not again captured. The other, Ches, consequently had a walk over.

SPANIELS.

In champion field spaniels, over 28lbs., Black Prince, the only entry, was absent. The Hornell Spaniel Club were the only entries in all the classes except one, in which Mr. Pierce exhibited a very nice little white and black bitch; she was awarded second prize, Rattler taking first, beating her in head and bone.

FOXHOUNDS

brought out two good ones. St. Burnea having the best set of legs and feet, back and loin, beat Gainer, who excelled in head properties, but was weak in loin.

BEAGLES

were a poor class, and placed Bessie, first; Bonnie Lass, second; Maggie, c.

DACHSHUNDE.

There was only one dachshund, Waldmann K., a nice black and tan, he was awarded the prize.

FOX-TERRIERS.

In champion fox-terrier dogs, Lancelot, in poor coat, was alone. He has good bone, nicely marked, but rather thick head, and stands a trifle high. In the bitch class, Lyra, the only entry, was absent. In the open dog class, Surrey Kennel's Flippant, shown in bad condition, was first. He has a fair coat and good bone. He is rather coarse in head, but is a useful sort. Tasman, second, has a thick skull, and is long-backed, wide in front, and has open feet. In the bitch class, Mr. Thayer's Jaunty, the only entry, was absent. In the puppy class, Belvoir Jack was the only candidate, and he had to put up with barren honors, receiving a vhc. He is a useful-looking puppy, but has a bad head, and is too high on his legs.

COLLIES.

In the champion class Robin Adair quite outclassed Rex, who was shown, "as were all Mr. Lindsay's entries," hog-fat. He is also in bad coat. In the bitch class Zulu Princess won over Jersey Lass, a plain looking bitch, but good-coated. Effie and Meg were both absent. Hiram was first in the open dog class, he is a large dog with good coat. He beat Tweed IV., a dog with a good deal of character, but inclined to be curly and soft in coat. Bruno, vhc., had nothing much to recommend him, being too thick in skull. He is, however, a very nicely marked black and tan, and is in fair coat. In the bitches class Fairy, a nice-moving bitch with good coat, but rather bad ears, beat Lilac, who is better on head and ears, but lacks coat. Doty, vhc., is a nice bitch, good in coat and color, but a trifle undersized. The puppy class brought out three good ones, with but little to choose between them. Nannie O., the best in color and coat, was placed first; Sandy, a nasty color, but profuse in coat, was second; and Donald vhc.

BULLDOGS.

The entries in the champion dog class were all absent. In the bitch class, R. & W. Livingston's Sweet Briar was the only entry. She is a good bitch, and was awarded the prize. There was only one entry in the open dog class, Major, who had to be content with second prize. He is small and narrow in skull, and long and pinched in face.

BULL-TERRIERS.

Grand Duke, a fine large dog, beat his kennel companion Little Maggie, a very nice little bitch, rather coarse in tail and with a large eye.

BLACK AND TAN TERRIERS.

Brilliant first, beat Vortigern, second, who shows age and is very wide in front, too light in tan, deficient in markings, and has lost his teeth. Daisy, hc., would have done better in the toy class.

DANDIE DINMONTS.

Dan was the only Dandie Dinmont in the class for these useful terriers. He is a good one.

IRISH TERRIERS.

Jessie, the only entry, is thick-headed and lacks coat.

CHAMPION SKYE TERRIERS

Brought out Mr. W. P. Sanderson's strong team, Jim and Suter Johnny; these are both extraordinarily good specimens. Jim beating Suter Johnny in color of coat, head and bone. In the open class Mr. Sanderson was again successful, with Robert Burns, a very nice young dog with good length of body and close to the ground, with the right coat. Mary Corning, second, is a good bitch. Marquis, vhc., has a badly-carried tail, and is rather high on legs. He is a good dog but shows age. Wallace, hc., is weak-jawed and snipy, and soft in coat.

ANY OTHER VARIETY OF TERRIER

Brought out an Airedale, showing almost too much otter hound and too little of the terrier. He was placed first; Buster, a Bedlington terrier, was second, and Remus and Marcus each vhc.

YORKSHIRE TERRIERS.

Puck, in grand coat, beat Eddie in coat and color.

ITALIAN GREYHOUNDS

Had only one entry, which was awarded the prize.

PUGS.

Champion pugs brought out Mrs. Pue's champion George, who was on exhibition only. Joe therefore had a walk over These are both very choice specimens, Joe being about the right size. In the open class for dogs Mrs. Chas. Wheatleigh's handsome little dog Tu Tu was first. He has a very good skull and good wrinkle, but is a little tucked up in body, rather weak in hindquarters, and has a large ear. Puggie, second, is a good-shaped dog, but is very smutty in color. Don Juan, vhc., we were disappointed with. He won second at this show last year, but seems to have grown plain. Punch, vhc., is a well-made dog, with a good head, but is too large. Joe is a puppy, too close to the ground, and rather crooked in front. In the bitch class, Chloe, a very nice bitch, good in head, was placed first. Judy, an overfed little daughter of champion George, was second. Victoria, vhc., a beautifully colored little bitch, we thought should have been second. Witchie, c., has grown gray in muzzle and ears, and is altogether too fat.

TOY TERRIERS

Under 7lbs. were a nice collection. Bijou, the winner, is a very pretty black and tan. Dot, the nicest of the lot, was overweight and, therefore, disqualified. The others were all good specimens.

KING CHARLES OR BLENHEIMS.

Mrs. Senator T. W. Palmer exhibited two very handsome Blenheims, which, we understood, had been successful at bench shows in England. Duke, placed first, had the best skull and shortest face, while Duchess, second, was in better coat and had the spot in forehead so desirable in this breed. They are certainly the best looking pair we have seen.

MISCELLANEOUS OR FOREIGN CLASS OVER 25LBS.

First prize was awarded to Minka, second to Cæsar, vhc. to Jack—all Siberian or Ulmer dogs.

Same class under 25lbs.—First and second to Mex and Nellie, Mexican hairless dogs; vhc. to Tony.

Following is a list of the

AWARDS.

Classes 1 and 1A.—No entries.
Class 1B.—1st, withheld; 2d, H. T. Janney, gray, 5yrs., Jack—Dido.
Classes 3 and 4.—No entries.
Class 5.—Absent.
Classes 6, 6A, 6B and 7.—No entries.
Class 7. Smooth-coated St. Bernards, Bitches.—1st, S. J. Martinet's Abra, brindle and white, 4yrs., Miter—Brunhild. Only entry.
Class 9.—Absent.
Class 10. Newfoundlands.—1st, Chas Dismer's Major, black, 1½yrs. High com., D. W. Oyster's Lion, black, 3mos. Com., G. M. Oyster's Dido, black, 3mos.
Class 11. Deerhounds.—1st, 2d and very high com., Mrs. S. F. Emm's Robin, tawny, 2yrs., Bruce—Maida; Brian, tawny, 3yrs., and Bruce, tawny, 5yrs., Torrun—Leda.
Class 11½. Greyhounds.—1st, Geo. S. Parvin's Major mouse, 1½yrs., Prince—Gypsy; 2d, W. M. Raines's Snyder, black, 5½yrs. Very high com., H. W. Huntington's Dorothée, A.K.R. 72. Com., J. S. Allen's Buff, 7mos.
Class 12. Champion English Setters, Dogs.—1st, Goodsell Kennel's Plantagenet, lemon belton, 3½yrs., Dashing Monarch—Petrel.
Class 13. Champion English Setters, Bitches.—1st, E. W. Jester's Dashing Belle, blue belton, 2yrs., Dashing Monarch—Blue Belle.
Class 14. English Setters, Dogs (except pure Laverack).—1st and 2d withheld. Very high com. reserve, W. R. Traver's Rocket, A.K.R. 118, and Goodsell Kennel's Racket, black, white and tan, 8½yrs., Rattler—Lada. Com., Russell West's Duke, orange and white, 2½yrs., Cossack—Nellie.
Class 15. English Setters, Bitches.—1st, E. W. Jester's Dashing Jessie, blue belton, 2yrs., Dashing Monarch—Blue Belle; 2d, A. E. Burche's Victoria, black and white, 4yrs., Warwick—Belle. Very high com., J. Thomas Barry's Ophelia, black, white and tan, 3yrs., Pontiac—Mollie Bawn. High com., L. Mills's Bluebell, blue belton, 1yr. 11mos., Dashing Lion—Armida. Com., F. A. Simon's Belle, white and orange, 2yrs., Cossack—Sue.
Class 16. English Setters, Dogs of Laverack Pedigree.—1st, Goodsell Kennel's Prince, black and white, 5yrs., Pride of the Border—Petrel; 2d withheld.
Class 17. English Setters, Bitches of Laverack Pedigree.—1st, 2d and very high com., Goodsell Kennel's Petrel III., lemon belton, 4yrs., Carlowitz—Petrel; Queen Petrel, lemon and white, 2yrs., Thunder—Petrel, and Daisy Laverack, lemon and white, 4yrs., Thunder—Peerless.
Class 18. English Setter Puppies, Dogs.—1st and 2d withheld. High com., O. M. Ball's Hilarity, blue belton, 6mos., Cossack—Ophelia.
Class 19. English Setter Puppies, Bitches.—1st, Dr. J. R. Evans's Countess, orange and white, 10mos., Neptune—Ruby; 2d, Miss Jennie Hitchcock's Cassandra, white and tan, 6mos., Cossack—Ophelia.
Class 20. Champion Gordon Setters.—1st, Garrett Roach's Lady Gordon, 6yrs., Grouse—Belle
Class 21. Gordon Setters, Dogs.—1st, Augustine de Iturbide's Ned, 1½yrs., Elcho IV.—Nannie; 2d, Chas. R. Taylor's Gem, 1½yrs., Dexter—Belle.
Class 22. Gordon Setters, Bitches.—1st, 2d, and very high com., withheld; High com., W. H. French's Fannie, Max—Jet.
Class 23. Gordon Setter Puppies.—1st, Mrs. C. F. Key's Don, 7mos., Sam—Jet, only entry.
Class 24. Champion Irish Setters, Dogs.—1st, Wm. H. Pierce's Glencho, 2¾yrs., Elcho—Noreen.
Class 25. Champion Irish Setters, Bitches.—1st, Wm. Kemble Lente's Trix, A.K.R. 187.
Class 26. Irish Setters, Dogs.—1st, W. H. Pierce's Glenmar, 5½mos., Glencho—Mavourneen; 2d, J. P. Barnard, Jr.'s Key, 3yrs., Berkley—Kate. Very high com., Commander R. P. Leary's Rob, 3yrs., Derg—Kate. Com., S. W. Norris's Pilot, red and white, 4yrs., Derg—Kathleen.
Class 27. Irish Setters, Bitches.—1st, E. J. Martin's Reeta, 3yrs. 10mos., Elcho—Fire Fly; 2d, F. A. Holbrook's Ada, 22mos., Helo—Rosanna. High com., W. A. Morsell's Liffey, 17mos., Derg—Belle. Com., Commander R. P. Leary's Blarney, 15mos., Bounce—Nell.
Class 28. Irish Setters, Puppies.—1st, W. H. Pierce's Glenmar, 5½mos., Glencho—Mavourneen; 2d, W. W. White's Kate Mackay, 7mos., Glencho—Reeta. Very high com., W. H. Pierce's Walter, 11 weeks, Glencho—Vic.
Class 29. Champion Pointers over 55lbs.—1st, Knickerbocker Kennel Club's Knickerbocker, A.K.R. 19.
Class 30. Champion Pointers, Dogs, under 55lbs.—1st, Norbury Kennel's Bravo, A.K.R. 559.
Class 30½. Champion Pointers, Bitches.—1st, Garrett Roach's Duchess, lemon and white, 5½yrs., Sensation—Whiskey.
Class 31. Pointers, Dogs, under 55lbs.—1st, C. B. Wildman's Guy, lemon and white, 2yrs., Beaufort—Spot; 2d, C. W. Littlejohn's Fritz, lemon and white, 2yrs., Beaufort—Spot. Very high com., C. W. Littlejohn's Pilot, lemon and white, 3yrs., Scent—Spot. High com., T. W. Edwards's Cary, liver and white, 2yrs., Beaufort—Spot, and Hon. H. H. Riddleberger's Tim, lemon and white, 2yrs., Tim—Beulah.
Class 32. Pointers, Bitches over 55lbs.—1st, withheld; 2d, Chas. W Butler's Fanny, liver and white, 4yrs., Beaufort—Bruce.
Class 32A. Pointers, Dogs under 55lbs.—1st, John L. Grubbs's Tom Peter, lemon and white, Tom—Beulah; 2d, R. C. Cornell's Match.
Class 32B. Pointers, Bitches under 55lbs.—1st, John Wenstall's Lyde, liver and white, 1½yrs., Maddux's dog—Lyde; 2d, Westminster Kennel Club's Polly, A.K.R. 212. High com., S. J. Martenet, Jr.'s Lena, lemon and white, 2½yrs., Rome—Rose.
Class 33. Pointers, Puppies.—1st, Garrett Beach's Lon, lemon and white, 10mos., Beaufort—Duchess; 2d, Norbury Kennel's Daisy Bravo, lemon and white, 7mos., Bravo—Lilly II. Very high com., Geo. H. Nixon's Lady Mc, liver and white, 10mos., Faust—Gertrude. High com., Garrett Roach's Jule, liver and white, 10mos., Beaufort—Duchess. Com., Norbury Kennel's Nellie D., liver and white, 8mos., Don—Daisy B.
Class 33A. Chesapeake Bay Dogs.—1st, L. C. Clark's Ches, 3yrs, Sport—Rose.
Class 36. Field Spaniels.—1st and 2d, Hornell Spaniel Club's Hornell Maggie, black, 3yrs., Bob III.—Jessie, and Burdette Bob, black, 3yrs., Bob—Venus.
Class 37. Champion Cocker Spaniels.—1st, Hornell Spaniel Club's Hornell Dinah, A.K.R. 66.
Class 38. Cocker Spaniels other than Black.—Hornell Spaniel Club's Hornell Rattler, chestnut and tan, 11mos., Hornell Dandy—Hornell Dinah; 2d, W. H. Pierce's Cassie, black and tan, 21mos., Bean—Fancy.
Class 39. Black Cocker Spaniels.—1st and 2d, Hornell Spaniel Club's Hornell Silk, black, 1½yrs., Obo—Chloe II., and Hornell 101, black, 16mos. Benedict—Prin.
Class 40. Sporting Spaniel Puppies.—1st, Hornell Spaniel Club's Hornell Rattler, chestnut and tan, 11mos., Hornell Dandy—Hornell Dinah.
Class 40A.—No entries.
Class 41. Foxhounds.—1st, J. W. Hoskin's St. Burnew, fawn, 2yrs., Killbuck—Belle; 2d, Dr. Darling's Gainer, tan, 4yrs., Killbuck—Belle.
Class 42. Beagles.—1st and com., Nelson Brumagin's Bessie and Maggie, tan, 1½yrs.; 2d, Wm. L. Bradbury's Bonnie Lass, Finderout—Bellmaid.
Class 44. Dachshunde.—1st, Carl Klocke's Waldmann K., black and tan, 4yrs., Waldmann—Waldine.
Class 45. Champion Fox-Terriers, Dogs.—1st, Carles E. Wallack's Lancelot, white, black and tan, 2yrs., Tweezers II.—Olive.
Class 46. Champion Fox-Terriers, Bitches.—Absent.
Class 47. Fox Terriers, Dogs.—1st, Surrey Kennel's Flippant, A.K.R. 528; 2d, Albert Miller's Tasman, white, black and tan, 1½yrs., Curate—Flora.
Class 48. Fox-Terriers, Bitches.—Only entry absent.
Class 49. Fox-Terriers, Puppies.—1st withheld. Very high com., Surrey Kennel's Belvoir Jack, A.K.R. 527.
Class 50. Champion Collies, Dogs.—1st, Thos. A. Terry's Robin Adair, A.K.R. 893.
Class 51. Champion Collies, Bitches.—1st, Thos. H. Terry's Zulu Princess, A.K.R. 896.
Class 52. Collies, Dogs.—1st, James Lindsay's Hiram, A.K.R. 824; 2d, Thos. B. Norris's Tweed IV., black, white and tan, 2yrs., Tweed III.—Floss. Very high com., Ron. Wm. Dorsheimer's Bruno, black and tan, 4yrs. High com., Misses F. L. & H. T. Rogers's Harry, tawny and white, 2yrs.
Class 53. Collies, Bitches.—1st, James Lindsay's Fairy, sable and white, 9mos., Rex—Kitty Mac; 2d, Thos. H. Terry's Lilac, A.K.R. 885. Very high com., J. D. Darden's Doty, black, tan and white, 15mos., Prince—Nora.
Class 54. Collies, Puppies.—1st, James Lindsay's Nannie O., black, white and tan, Rex—Kitty Mac; 2d, H. B. McKnight's Sandy, fawn and white, 9mos., Ayrshire Laddie—Jersey Lass. Very high com., R. R. Walker's Donald, fawn and tan, 5mos., Foxey—Nancy Lee.
Class 54A. Champion Bulls, Dogs.—Absent.
Class 54B. Champion Bulls, Bitches.—1st, R. & Wm. Livingston's Sweet Briar, A.K.R. 444.
Class 55. Bulls, Dogs.—1st, withheld; 2d, John P. Barnard's Major, fawn, 2yrs., Sancho Panza—Ida.
Class 56. Bulls, Bitches.—Absent.
Class 57. Bull Terriers.—1st and 2d, R. & W. Livingston's Grand Duke, A.K.R. 684, and Little Maggie, A.K.R. 685.
Class 58. Black and Tan Terriers, Over 7lbs.—1st, John Whitaker's

Brilliant, 1½yrs., Vortigern—Lilly II.; 2d, Edward Lever's Vortigern, 5yrs., Viper—Gypsy. High com., H. H. Dobbin's Daisy, 2yrs. 9mos.

Class 59. Dandie Dinmont Terriers.—1st, Robert Hume's Dan, pepper, 9mos., Badger II.—Needle.

Class 60. Irish Terriers.—Prize withheld.

Class 60A. Champion Skye Terriers.—1st, Wm. P. Sanderson's Jim, A.K.R. 138.

Class 61. Skye Terriers.—1st and 2d, Wm. P. Sanderson's Robert Burns, 1yr., and Mary, 5yrs. Very high com., Mrs. M. Adams's Marquis. High com., John Owne's Wallace, 3yrs., Macgregor—Lucy Ellen.

Class 62. Terriers (any other variety).—1st, Edward Lever's Sir Garnet (Airedale), gray and tan, 2yrs., Crack—Gipsey Queen; 2d, W. H. Littler's Buster (Bedlington), liver, 1yr., Sting—Wasp. Very high com., Miss Emma C. Pond's Marcus, 1yr., Marquis—Judy, and Miss Belle Davidson's Remus, fawn and blue, 1yr., Marquis—Judy. High com., W. B. Denny's Lassie, blue and silver, 2yrs.

Class 63. Yorkshire Terriers.—1st, Miss E. B. Wilson's Puck, 3½yrs.; 2d, E. Jordan's Eddie, 10mos.

Class 64.—Italian Greyhounds.—1st, E. W. Jester's Pearl, A.K.R. 758.

Class 65. Champion Pugs, Dogs.—Mrs. Geo. H. Hill's Joe, A.K.R. 925.

Class 66. Pugs, Dogs—1st, Mrs. Charles Wheatleigh's Tu-Tu, 2½yrs., Young Peter—Zoe; 2d, Miss Grace B. Adams's Puggie, 16mos., Pug—Pet. Very high com., W. R. Knight's Don Juan, 2yrs. 8mos., Comedy—Chloe, and Mrs. W. H. Bayne's Punch, Alfonso—Judy. High com., R. C. Flinder's Joe, 8mos.

Class 67. Pugs, Bitches.—1st, W. R. Knight's Chloe. 4½yrs., Chung—Darkie; 2d, E. J. Dallas's Judy, 15mos., George—Witchie. Very high com., Mrs. Charles Wheatleigh's Victoria, 14mos., Atlas—Vic. Com., Mrs. H. N. Barlow's Witchie, 3yrs., Punch—Dinah.

Class 68. Toy Terriers.—1st, Mrs. Senator T. W. Palmer's Bijou, black and tan, 2yrs.; 2d, Mrs. Flora B. Cabell's Fanny, black and tan, 7½yrs. Very high com., W. R. Traver's Dixey, black and tan, 8yrs., Sam—Flora. and B. B. Greenwood's Jeff, black and tan, 9mos., Dick—Rose. High com., B. B. Greenwood's Nell, black and tan, 2yrs., Dick—Nell.

Class 69. King Charles, Blenheim, or Japanese Spaniels.—1st and 2d, Mrs. Senator T. B. Palmer's Duke (Blenheim), liver and white, 5yrs., and Duchess (Blenheim), liver and white, 1yr.

Class 70. Miscellaneous Class, over 25lbs.—1st and 2d, G. M. Saegmuller's Minka and Cæsar, 18mos., Cæsar—Minka. Very high com., A. Santler's Jack, 4yrs.

Class 71. Miscellaneous Class, under 25lbs.—1st, Mrs. W. J. Rhees's Mex (Mexican terrier), yellow, 15mos.; 2d, J. F. Ellis's Nettie (Mexican terrier), yellow, 18mos. Very high com., R. J. W. Brewster's Tony (Mexican terrier), yellow, 14mos.

SPECIAL PRIZES.

A.—For best pug, Mrs. Geo. H. Hill's Joe.

B.—For handsomest brace of pointers that have never won at a bench show, C. W. Littlejohn's Fritz and Pilot.

C.—For best St. Bernard, Simon J. Martenet's Abra.

D.—For the best collie owned by a lady in Washington, Misses F. L. and H. T. Rodgers's Harry.

E.—For best pug owned by a lady in Washington, Miss Grace B. Adams's Puggie.

F.—For best Irish setter owned in Washington, W. A. Morrell's Liffey.

G.—For best pointer got by Faust or Beaufort, C. B. Wildman's Guy.

H.—For best setter owned in Washington, Miss M. L. Roessle's Cossack, English setter, white and orange, 4yrs. 10mos., Don—Fairy.

I.—For best pointer sired by Beaufort, C. B. Wildman's Guy.

ST. LOUIS DOG SHOW.

Editor Forest and Stream:

The St. Louis bench show will be held April 15, 16 and 17. Exhibitors at Cleveland will have ten days' rest for their dogs, and ample time before going to New York. The premium list is in the printer's hands, and will be mailed as soon as finished. A supply will be sent to you for those who may apply to you for them.

Champion pointers and setters, dogs and bitches, get $25 each. Open classes, the same, get first, second and third prizes—$20, $10 and $5. All other classes in the show, except champions, get first, second and third prizes. The specials, as usual in St. Louis, will be very handsome and worth winning. Three prizes will be given to Chesapeake dogs, and as a very marked demand for these dogs has arisen here lately the show will prove a fine market for them, and should attract some good entries from the East. Spotted coach dogs are to have a class, in order to interest local owners. This city is full of them. The cockers are to be divided into the International Club standard and the American Club standard, and three prizes given to each. Dr. Franklin, the secretary of the International Club, promises a handsome special for dogs of his club's standard, and a meeting of his club will be called here during the show. The judges will be announced at the earliest possible moment. J. W. MUNSON.

ST. LOUIS, March 17.

Editor Forest and Stream:

From unavoidable causes the dog show has been postponed till April 22. Entries close April 14. Prize lists and entry blanks are now ready. The superintendent's address is, care of Albright's gun store, 313 North Third street. I send you a package of premium lists and entry blanks by express to-day, which you can distribute to such persons as may apply to you for them. Major Taylor will judge setters and pointers. The judge for the other classes has not been secured yet.

The Natatorium building on Nineteenth and Pine streets, where the show is to be held, is one of the best for the purpose in America. It will hold a thousand dogs easily. It is steam-heated and electric-lighted. The judging will be done in an inclosed square in the center of the hall. Several large open lots surround the building, where dogs can be exercised.

Large tanks and tubs, with hot and cold water are in the building, for washing dogs. Dog biscuits and cooked food will be supplied. There are first, second and third prizes in nearly all the classes, which it is expected will induce a number of entries from owners who don't think their dogs can win first.

The list of specials will be sent you from time to time as they are secured. A committee of the club will start out at once to get them.

The champion classes for setters and pointers include the winners of a first prize at any bench show in America.

J. W. MUNSON.

ST. LOUIS, Mo., March 22.

CLOVER BELLE.

Editor Forest and Stream:

Allow me to correct through the medium of your paper an unintentional deceit on my part in entering the pedigree of my fox-terrier puppy Clover Belle at both Cincinnati and New Haven as being Akely Joe—Guilty, whereas she is a puppy I bought at the late Rutherford sale, and is pedigreed Joker—Warren Daisy, or Bessie, I have been as yet unable to ascertain which of these latter.

The mistake came about thuswise:

The puppy on being bought was at once sent out of town to my kennels at Scarsdale, Westchester, N. Y., together with a sister bought at the same time. A week later there were consigned to me from England two fox-terrier puppies, a dog and a bitch, which had been purchased by me from Mr. G. Raper. The former was by his champion Raby Tyrant out of champion Richmond Olive, now the property of Messrs. Thayer & Bro. The latter, by Akely Joe out of Guilty, she by Corinthian. I had the misfortune to lose the dog on the voyage. My kennel man met the steamer on her arrival and brought the remaining puppy to me for inspection. I looked her over and found her to all appearances a promising one. She was then sent to the kennels.

When the Cincinnati show was announced, I made entry of her in the puppy class, and the day I left for Cincinnati entered her for New Haven. She took first prize at both shows. Saturday morning, my kennel man came in from the country to meet the dogs coming back from New Haven, and then it was that I learnt that as the puppy I had ordered to go to Cincinnati was out of condition, he had substituted this one and had not found opportunity of telling me of it.

I have entered the same puppy at Washington, but under her proper pedigree.

Hoping that this note will rectify any erroneous information current concerning her and wishing "honor to whom honor is due," I remain, EDWARD KELLY.

CLOVERNOOK KENNEL, 185 Fifth avenue, N. Y. City.

CHAMPION VIXEN.—We have learned that Mr. Mortimer, in awarding champion honors to the fox-terrier Vixen, did so at the request of the managers of the show. We are pleased to set the matter straight and place the blame where it belongs, and sincerely hope that we shall not be called upon to record another instance of the kind. Bench show honors, especially champion honors, should only be conferred upon animals that are worthy, else the sole object for which bench shows were instituted is perverted. No fear of incurring the displeasure of the disappointed exhibitor should induce judge or committee to depart from this rule.

STRAY DOG.—*Editor Forest and Stream:* A dog has been offered to me by a person who found it in the water off Port Morris, N. Y., as nearly as I can find out about two years ago. He said he thought it had jumped off of some Sound steamboat. As I would like to see the dog restored to its owner, he may communicate through FOREST AND STREAM, should he happen to see this, giving a minute description of the dog. It is said that some time after the dog was found a gentleman made inquiries at Port Morris.—SEAGULL.

PEDIGREE OF GLEN II.—Brooklyn, March 20, 1884.—*Editor Forest and Stream:* I would like to correct the pedigree of Clayton H. Redfield's Glen II., winner of first at New Haven. It reads Dr. Aten's Glen and Dr. Aten's Belle. It should read Dr. Aten's Glen and Dr. Aten's Madge.—H. F. ATEN.

CLEVELAND DOG SHOW.—*Special Dispatch to Forest and Stream.*—Cleveland, Ohio, March 24.—Please announce that all railroads will carry dogs free to and from the show when accompanied by owner or handler.—C. M. MUNHALL, Secretary.

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, or breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Lady Bess. By Mr. E. B. Nichols, Dedham, Mass., for black, tan and white collie bitch, whelped Aug. 11, 1880 (Shep—Hornpipe).

Rob Roy and Meg Merrilies. By Mr. E. B. Nichols, Dedham, Mass., for light sable collie dog and dark sable bitch, whelped Dec. 7, 1882, by Prince out of Lady Bess (Shep—Hornpipe).

Will. By Mr. Raymond Rudd, Glenville, Ct., for black and white English setter dog, whelped Jan. 18, by Robin Hood (Carlowitz—True) out of Countess H. (Warwick—Belle).

Lit Laverock. By Mr. Thos. F. Connelly, Flatbush, L. I., for black, white and tan English setter bitch, whelped Dec. 28, 1883, by Tempest (Pontiac—Fairy II.) out of Lilly (Carlowitz - Queen Bess).

NAMES CHANGED.

☞ *See instructions at head of this column.*

Mab to Lady Mab. Black pointer, 3yrs. old (Pete—Mab), owned by Mr. Wm. Hepsley, Jersey City, N. J.

BRED.

☞ *See instructions at head of this column.*

Princess Royal—Gath. Mr. John Drees's (Little Rock, Ark.) black and white English setter bitch Princess Royal (Royal Blue—Florine) to Mr. W. G. Crawford's champion Gath (Count Noble—Peep o' Day).

Rhona—Don. Mr. J. E. Thayer's (Lancaster, Mass.) pointer bitch Rhona (A.K.R. 399) to Mr. R. T. Vandevort's Don (A.K.R. 165), Feb. 25.

Arrow—Don. Mr. R. T. Vandevort's (Pittsburgh, Pa.) pointer bitch Arrow (Bow—Sleaford Maid) to his Don (A.K.R. 165), March 6.

Becky—Chief. Mr. F. Raab's red and white Irish setter bitch Becky to Mr. Max Wenzel's Chief (A.K.R. 231), March 19.

Alma—Prince. The Chequasset Kennel's (Lancaster, Mass.) smooth-coated St. Bernard bitch Alma (A.K.R. 27) to Col. A. J. Parker, Jr.'s, Prince (Fido—Topsy), March 1.

Grace B.—Foreman. Mr. C. Fred. Crawford's (Pawtucket, R. I.) English setter bitch Grace B. (London—Dawn) to his Foreman (Dashing Monarch—Fairy II.), March 3.

Maggie O'More—Arlington. Major Lovejoy's (Bethel, Me.) red Irish setter Maggie O'More (A.K.R. 981) to Mr. C. Fred. Crawford's Arlington (Dan—Ruby), March 13.

Flora—Lee. Mr. Pottinger Dorsey's (New Market, Md.) white, black and tan ticked English beagle bitch Flora (Ringwood—Juliet) to his Lee (Warrior—Rosey), Feb. 27.

WHELPS.

☞ *See instructions at head of this column.*

Lady Bess. Mr. E. B. Nichols's (Dedham, Mass.) Scotch collie bitch Lady Bess (Shep—Horupipe), Feb. 9, eight, by Mr. B. F. White's Prince; two sable and six black, white and tan.

Vic. Mr. Archibald Gordon's spaniel bitch Vic (Bragg—Princess), March 6, eight (two dogs), by Mr. A. E. Godeffroy's Teddy Ban (Captain—Flirt).

Nun. The Chequasset Kennel's (Lancaster, Mass.) rough-coated St. Bernard bitch Nun (A.K.R. 24), March 6, twelve (four dogs), by the Forest City Kennel's Cæsar (A.K.R. 22).

Brunhild. The Chequasset Kennel's (Lancaster, Mass.) smooth-coated St. Bernard bitch Brunhild (A.K.R. 28), March 18, seven (four dogs), by the Forest City Kennel's Cæsar (A.K.R. 22).

Jersey Gyp. Mr. W. E. Rea's (Hackettstown, N. J.) English setter bitch Jersey Gyp (A.K.R. 107), March 3, five (four dogs), by Mr. C. N. Wade's Primer (A.K.R. 227).

Flora. Mr. A. D. Wilbur's (Catskill, N. Y.) cocker spaniel bitch Flora, March 17, seven (four dogs), by Mr. J. W. Rushforth's Chance; one dog since dead.

SALES.

☞ *See instructions at head of this column.*

Jock. Black, white and tan collie dog, whelped November, 1883 (Talisman—Iona), by the Kilmarnock Kennel, Mattapan, Mass., to Mr. Geo. A. Munroe, Somerville, Mass.

Avis. St. Bernard bitch (A.K.R. 929), by the Essex Kennel, Andover, Mass., to the Forest City Kennel, Portland, Me.

Lotta. St. Bernard bitch (A.K.R. 933) by the Essex Kennel, Andover, Mass., to the Forest City Kennel, Portland, Me.

Jude. Liver and white pointer bitch, whelped Sept. 26, 1883 (St. John—Folly), by Mr. J. H. Phelan, Jersey City, N. J., to Mr. George H. Piercey, same place.

Deacon. Red Irish setter dog, whelped Feb. 19, 1882 (Ned Elcho—Bridget O'More), by Mr. C. W. Feickert, New York, to Mr. Walter L. Hunter, same place.

Nellie. Red Irish setter bitch, age and pedigree not given, by Mr. C. W. Feickert, New York, to Mr. Walter L. Hunter, same place.

Craft. Lemon and white pointer dog, whelped Oct. 21, 1881 (Bang—Jean), by Mr. W. R. Stone, Atalissa, Ia., to Mr. Mortimer Mills, Jersey City, N. J.

Mab. Black pointer bitch, 3yrs. (Pete—Mab), by Mrs. Dr. Martin, Bridgeport, Ct., to Mr. Wm. Hepsley, Jersey City, N. J.

Stocking—Mab whelps. Black pointers, one dog and three bitches, 2mos. old, by Mrs. Dr. Martin, Bridgeport, Ct., to Mr. Wm. Hepsley, Jersey City, N. J.

Zantippe. Lemon belton English setter bitch, whelped Jan. 29, 1880 (Lotty—Maud Muller), by Mr. Henry Sturtevant, Medina, N. Y., to Mr. Thos. F. Connelly, Flatbush, L. I.

Lit Laverack. Black, white and tan English setter bitch, whelped Dec. 28, 1883 (Tempest—Lilly), by Mr. A. J. Ward, Boston, Mass., to Mr. Thos. F. Connelly, Flatbush, L. I.

Folko. Rough-coated St. Bernard dog (A.K.R. 477), by Mr. A. A. Whittemore, New York, to the Chequasset Kennel, Lancaster, Mass.

Janet. Black, tan and white Scotch collie bitch, whelped Feb. 9 (Prince—Lady Bess), by Mr. E. B. Nichols, Dedham, Mass., to Mr. C. C. Nichols, Walnut Hill, Mass.

Sir Gibbe. Sable Scotch collie dog, whelped Feb. 9 (Prince—Lady Bess), by Mr. E. B. Nichols, Dedham, Mass., to Mr. J. H. Gilman Cambridge, Mass.

Jean. Sable Scotch collie bitch, whelped Feb. 9 (Prince—Lady Bess), by Mr. E. B. Nichols, Dedham, Mass., to Mr. T. S. Beaumont, Fall River, Mass.

Gwenn. St. Bernard bitch (A.K.R. 932), by the Essex Kennel, Andover, Mass., to the Forest City Kennel, Portland, Me.

DEATHS.

☞ *See instructions at head of this column.*

Black Venus. Black spaniel bitch (A.K.R. 300), owned by Mr. A. C. Wilmerding, New York, March 18, in parturition.

Gypsey Queen. Liver and white pointer bitch, age not given (champion Faust—Munson's Queen), owned by Mr. Edward Odell, New Orleans, La.

KENNEL MANAGEMENT.

☞ **No Notice Taken of Anonymous Correspondents.**

G. H., Canal Fulton, Ohio.—Try Glover's mange cure.

AL, Gravenhurst, Ont.—See answer to "F. P. C.," March 13.

L. E. R., Essexville, Mich.—It is impossible to say what caused the death of your dog. You describe no symptoms that throw any light upon the subject.

AMATEUR, Wortendyke, N. J.—1. Bathe the sore with one part sulphurous acid to three parts water. 2. Twice a day is often enough to feed him. 3. Yes.

C. B. M., Wilkesbarre, Pa.—Give a little lime water in milk with each meal, and a teaspoonful of cod liver oil three times daily. Give plenty of exercise, but not until after his food has had time to digest.

NIGHT HAWK, Concord, N. H.—The dog has canker in the ear. Take bromo chloralum and laudanum, equal parts, and dilute with six times their bulk of water; fill the ear and gently knead the base for a short time. One or two applications should effect a cure.

Rifle and Trap Shooting.

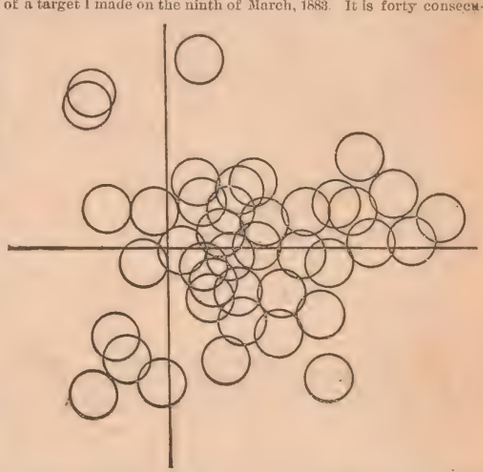
FIXTURES.

First International Clay-Pigeon Tournament, at Chicago, Ill., May 26 to 31. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

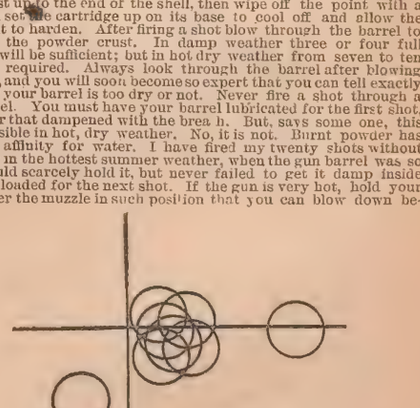
NON-CLEANING SCORES.

Editor Forest and Stream:

In reply to the communication of Philip Uhler, of Mechanicsburg, Pa., in a recent issue, permit me to say that I experience no difficulty in regard to the bullets dropping after firing a few shots without cleaning. Neither do I consider it absolutely necessary to use a lubricating disc between the powder and bullet. I inclose a diagram of a target I made on the ninth of March, 1883. It is forty consecutive shots in a 4-inch bullseye, using fixed ammunition and naked bullets, and the rifle was not cleaned during the shooting. The distance was 100yds., weather clear and dry, and the shooting was done in the back position, no rest being used. After the shooting was over I took the rifle home, and after blowing my breath through the barrel two or three times, I passed a dry swab, composed of a cotton rag, once through the barrel, and it was as bright as a silver dollar from breech to muzzle. This is not an exceptional circumstance, as it is only once out of several dozen times that I took the same gun out and shot it at 100yds. during last spring and summer, never firing less than twenty shots at a time, and never taking a cleaning rod to the range, excepting on one occasion, and on that occasion I made my worst record for the season, making an average of about an inch and three-quarters per shot. I do not attribute the bad shooting on this occasion to cleaning the gun, but to other circumstances which need not be mentioned here.



I consider forty shots without cleaning a severe test of any breech-loading rifle, and as my experience in regard to accuracy has been so very different from that of Mr. Uhler, I will tell him how I manage my gun. I use a Maynard .40-cal., 32in. rifle, weighing 9lbs. I load the shells with 60grs. of Hazard FG powder, and a bullet known as No. 2 cylindrical. The bullet weighs a little less than 200grs. I make them myself with moulds furnished by the manufacturers of the gun, and use one part tin and twenty of lead. I lubricate the bullets with tallow, three parts, beeswax, one part; seat the bullets in the shells with the loader, and then dip the bullets into the melted lubricator just up to the end of the shell, then wipe off the point with a rag, and set the cartridge up on its base to cool off and allow the lubricant to harden. After firing a shot blow through the barrel to moisten the powder crust. In damp weather three or four full breaths will be sufficient; but in hot dry weather from seven to ten may be required. Always look through the barrel after blowing through, and you will soon become so expert that you can tell exactly whether your barrel is too dry or not. Never fire a shot through a dry barrel. You must have your barrel lubricated for the first shot, and after that dampened with the breath. But, says some one, this is impossible in hot, dry weather. No, it is not. Burnt powder has a great affinity for water. I have fired my twenty shots without cleaning in the hottest summer weather, when the gun barrel was so hot I could scarcely hold it, but never failed to get it damp inside before I loaded for the next shot. If the gun is very hot, hold your hand over the muzzle in such position that you can blow down between the thumb and first finger. The lips will not stand the same amount of heat as the palm of the hand. If there is shade in the vicinity of the firing point, stand in the shade until your turn to fire. If there is no shade, stand with your back to the sun and hold your rifle in front of you in such position that the rays of the sun cannot strike the barrel. In this way you can always keep your rifle in such condition that it will shoot where you aim it.



I inclose another target which I shot March 2, 1883. It is ten consecutive shots at 100yds. without cleaning, no artificial rest being

used, and the rifle was loaded as described above. It will be noted that a three cent piece will cut over six of the bullet holes and the center of the bullseye. This is not a "dude target," according to Maj. Merrill's definition. The center of the bullseye is not an indefinite point, but was plainly marked with a cross before the shooting began. The string is as follows: .21, .24, .28, .30, .33, .43, .56, .98, 1.02, 1.09=5½ inches. I am aware that this target is not as fine as the Gove target published by Maj. Merrill some time since, but it must be taken into consideration that it was shot with a light gun, without cleaning, and no artificial rest was used. By shooting from a dead rest a closer target could be made.

The breechloader is eminently fit to do the finest work at target, as the inside of the barrel is open to inspection at all times. E. A. L.

NORRISTOWN, Pa.

RANGE AND GALLERY.

THE ZETTLERS DEFEATED.—The hitherto invincible team of the Zettler Rifle Club of New York, met with their first defeat on Wednesday evening, March 19, at the hands of the Frelinghuysen Rifle Club, of Newark, N. J., at the range of the latter club. The match was for ten men, ten shots each, on the Massachusetts ring target, highest possible score 120, distance 25ft. The men of each team shot alternately in the following order, and with the appended scores:

Zettler Rifle Club.		Frelinghuysen Rifle Club.	
M Dorrler	112	Wm. Hayes	110
J H Brown	111	S H Shackleford	112
G Joiner	108	G D Weigman	113
P Fenning	114	E O Chase	105
D Miller	109	W P McLeod	113
W Klein	102	J L Tobin	113
C Zettler	112	J K Walsh	114
A Lober	115	R Westerman	108
G Judson	114	W F Lynn	110
M Engel	108—1105	A C Newman	111—1109

A collation was served by the Newarkers, and the visitors expressed themselves as well pleased with their visit and entertainment notwithstanding their defeat.

BOSTON, March 22.—The delightful spring weather of to-day was perfect for outdoor sports, and many riflemen who have failed to visit their favorite range, Walnut Hill, during the recent miserable weather, were out in force, crowding the shooting cottage and keeping the targets busy from early morn till sundown. Perfect as was the weather overhead, it was also grand for shooting purposes, both wind and light being very satisfactory, the former easy to control and the latter giving a soft, pleasant color to the paper and iron targets. The leading scores were all at 200yds.

Creedmoor Practice Match.

J B Fellows	5545444555—46	J Payson (mil)	5434445445—42
L O Dennison	4443544554—44	H A Lewis (mil)	4454445345—43
C B Edwards	4544455454—44	D B Farwell	4555443444—42
O D Looker	5454544544—44	E S Gilmore	4444444445—41
A L Brackett	4555445444—44	W Kirkwood	4454443544—41
W H Morton	4445454444—42	L Herbert (mil)	5444443214—39

Creedmoor Prize Match.

I B Thomas	5455455555—48	B A Lappen	5545444545—45
Re-entry	5555555585—48	A L Brackett	5554444545—45
C E Berry	5555454455—47	G W Whitcomb	5544444455—44
Re-entry	5555455544—47	B L Loring	5455454444—44
R Davis	5555545544—47	W W Grant	5545444451—43
O D Looker	5554555444—46	R D Denver	5444454544—43

Combination (Decimal) Match.

W Gardner	8	9	6	10	10	8	8	6	6	7	—78
A L Brackett	8	8	9	10	8	10	7	10	8	6	—78
B L Loring	7	7	8	5	4	7	5	1	9	8	—61
H Withington	6	5	7	4	8	3	8	8	5	8	—60
W W Grant	5	3	6	5	8	5	7	3	6	9	—57

Combination (Creedmoor) Match.

A L Brackett	4	4	5	5	5	5	4	5	5	4	—47
B L Loring	4	5	4	4	5	5	5	4	4	5	—45
J P Bates	4	5	5	4	5	4	5	4	4	5	—45
J A Cobb	4	4	5	4	4	4	5	4	4	4	—42

Rest Match.

W Gardner, E	8	10	9	10	10	10	10	10	10	10	—97
H Severence, D	7	10	10	9	10	10	10	9	10	10	—95
R Reed, A	9	10	10	9	9	10	10	10	10	8	—95
H Cushing, A	10	9	9	9	10	9	9	10	9	9	—93

BOSTON GALLERY SHOOTING.—The third week for the regular monthly prize shoot at the Mammoth Gallery has shown some very good shooting for amateurs, the best for any one week this season. Mr. A. B. Loring and R. Ford heads the list for first prize, and Mr. H. M. Drew for the third. Following are the scores made:

Amateur Match No. 1.

A B Loring	45	45	46	46	45—227
R Ford	45	45	46	45	46—227
M L Pratt	45	45	45	46	45—226
J T Stetson	43	45	43	43	43—217

Amateur Match No. 3.

H M Drew	43	43	43	42	44—215
E A Peirce	40	44	40	41	41—206
E F Stevens	39	39	39	39	40—196
W Gray	42	41	35	39	39—196

SARATOGA RIFLE CLUB.—The following are the best scores for each man for Wednesday and Saturday, March 12 and 15, 200yds. off-hand, Massachusetts target. Wednesday, rainy and stormy; Saturday, very changeable wind:

I Davis	10	10	11	12	11	12	11	11	10	10	—108
Wm B Gage	11	11	11	11	11	10	12	10	11	9	—107
A G Hull	9	9	10	12	11	11	12	12	7	9	—102
A F Mitchell	9	12	11	10	9	10	10	12	11	19	—102
H Wellington	9	11	9	11	8	11	11	10	10	11	—101
O Wing	9	9	12	10	9	11	10	11	11	7	— 99
J Hays	12	8	10	9	8	11	10	10	6	10	— 94
W Allerdice	6	8	10	11	10	10	10	10	10	7	— 93
A Rich	7	7	8	8	8	7	9	11	7	8	— 80
L Corey	11	9	4	10	8	9	10	0	9	9	— 79

GARDNER, Mass., March 20.—At the last meet of the Gardner Rifle Club, there was a fine attendance of members. The American decimal target was used. The meet was at Hackmatack Range, distance 200yds. Out of a possible 100, shooting off-hand, the following totals were made:

A Mathews	10	10	9	9	8	5	10	9	8	8—86
M Atherton	7	9	9	9	10	10	9	7	8	8—86
G F Ellsworth	9	10	9	10	7	7	9	7	8	8—85
J N Dodge	8	8	8	10	8	8	9	4	10	10—83
D I Norton	10	8	9	9	7	8	8	8	10	8—83
G C Goodale	0	8	10	7	5	9	9	8	10	9—75
W C Loveland	9	9	8	7	9	10	6	7	8	1—74

JAMESTOWN, N. Y., March 14.—In the regular club medal match to-day the following scores were made, 200yds. off-hand, Creedmoor target, 10 shots; wind medium, from 9 o'clock to 3 o'clock changing continually, light good:

H V Perry	4	4	4	5	5	5	4	4	4	5—44
G W Shattuck	4	4	5	4	4	5	4	4	4	5—43
R H Burns	4	4	4	5	4	5	4	5	4	4—43
W H Sprague	4	3	5	4	4	4	4	5	4	4—41
O H Lilly	4	3	3	4	4	4	4	4	4	5—39

ZETTLER RIFLE CLUB.—New York, March 18.—Weekly shoot 12-ring target, possible 120: P. Fenning 113, M. Dorrler 118, H. Oehl 117, G. Joiner 114, C. Judson 113, M. B. Engel 113, H. Holges 105, A. Lober 111, D. Miller 105, P. Steinbach 108, Capt. N. D. Ward 110, C. G. Zettler 112, B. Zettler 108, T. C. Noone 108, J. Adrian 103, H Eiberin 102, H. Von Derlinden 100, Wm. Wiegandt 105.

BULL'S HEAD RIFLE CLUB.—At the regular weekly meet on March 13, the scores stood, 12-ring target, possible 120, gallery distance: A. Lober 119, M. Dorrler 118, C. Rein 116, V. Steinbach 115, G. Zimmermann 115, G. D. Johnston 114, J. Schrarder 113, A. Stolzenberger 106. J. Schneider 106, D. Holland 104, G. Wendelken, 103, S. Mehrbach 103, J. F. Campbell 102, H. A. Wasmuth 101, S. F. C. Weber 100.

A GOOD RECORD.—Company H, Third Infantry, of the regular army, includes in its muster roll two of the eighteen best marksmen in the United States Army, as shown by scores made in the year 1883. These are First Lieutenant Philip Reade and Second Lieutenant F. P. Fremont. No other company in the service has two representatives in the team.

NEWARK, March 22.—The fifth tournament of the Newark Rifle Association ended on Monday evening last, with the Frelinghuysen to the butt: G. D. Weigman, 50; E. O. Chase, 47; Wm. P. McLeod, 50; A. C. Newman, 47; S. Shackelford, 45; F. W. Lynn, 45; George Zimmer, 44; G. Williams, 46; J. K. Walsh, 45; R. Westerman, 46. Total, 465. The Frelinghuysen lead in the five tournaments 18 points. The last match will be shot on the Warren Range.

LOADING CARTRIDGES.—I notice that "W. M. F.," in answer to "G. F. W.," in relation to loading rifle cartridges, says: "In no case compress the powder." Can any one inform me why? I have been crowding 45grs. of powder into a .44-cal. Winchester shell designed for 40grs., and find it increases the penetration, at least with a freshly-loaded shell, which was the object aimed at. Is it dangerous to compress powder, and can compressed powder always be depended upon to give the same result at every shot?—H. C. S.

A NEW GUN CLUB.—A gun club has been recently organized at Perth Amboy, N. J., for glass ball and clay-pigeon practice.

FIRE LOW.—The correspondent at Tonquin have been investigating the tendency of the Chinese troops to fire low in action as the many leg wounds among the French troops showed was the habit, and one who is well qualified to judge says: "The reason why the Black Flags and their allies fire low is due to the fact that the bulk of the Chinese had no idea of the use of the sights on the rifles, and it was almost useless to attempt to teach them the value of such contrivances. Thus, a Chinese soldier, armed with a modern rifle, would never think of raising the sight of his weapon when he was called upon to use it, especially in the face of an enemy. He would fire at an object 600 yards off with the sight down, the consequence being that, the muzzle of the rifle not receiving the necessary elevation to carry the bullet over a long distance, the ball would strike or descend very close to the ground before it reached its destination. It was also asserted that some of the Chinese soldiers actually knocked the sights off their rifles as being useless."

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

BOSTON GUN CLUB TOURNAMENT.—The convenient grounds at Wellington, on the 19th, found assembled representatives from nearly all the important shooting clubs in the New England States to contest the different events which had previously been advertised to take place. Fine weather opened up the day's shooting, but a threatening shower gradually interfered with fine scores. Notwithstanding this, however, a large number of Mother Earth's chickens returned to roost, quite satisfied, doubtless, that tournament days are bad days to be out. A very large number of visitors were present, particularly during the medal shoot. The medal itself is considered a fine piece of workmanship, being simply a gold clay-pigeon pendant from an ornamental bar, while below is another bar of beautiful ornamental design.

First match, 7 single birds, 18yds.

E W Law	7	C F Stark	4
C Wilbar	5	O H Gerrish	6
W S Perry	6	C B Holden	4
A Houghton	5	G Tidsbury	5
M Gilman	5	J Gerr Witherell	4
B Evans	4	T S Hall	4
R Schaefer	5	G A Sampson	4
A F Cooper	6	J S Hart	7
L G White	4	J Williams	5
A H Perry	5	I S Sawyer	6

Ties—Law and Hart first, Cooper second, Tidsbury third, White fourth.

Second Match, 5 birds, 18yds.

DeRochmont	4	Cooper	3
Evans	4	Gilman	3
Jenkins	4	Tidsbury	3
Williams	4	Hart	4
C Wilbar	4	Gerrish	4
Smith	5	Houghton	5
Buffington	3	Holden	3
Sampson	4	Stark	4
W S Perry	4	Law	3
Hall	4	L E Johnson	3
White	3		

Smith and Houghton first, Wilbar second, Tidsbury, Law and L. E. Johnson third, B. F. Johnson and Eagen fourth.

Third shoot, 7 single birds. 18yds, rise.

D Schaefer	5	W S Perry	5
Smith	4	Hart	4
Eager	6	Sampson	4
De Rochemont	5	Tidsbury	6
Houghton	5	Braley	4
Wilbur	5	Gerrish	4
Buffington	4	Witherell	4
Evans	4	G W Cary	6
Law	5	W H Sheldon	4
Cooper	5	H L Palmer	4
Allen	5	E W Tinker	4
Stark	7	Curtis	2

Winners—Stark first, Eager and Cary second, Schaefer, Cooper and Allen third, Sampson, Gerrish and Tinker fourth.

Fourth shoot, 3 pair double birds, 5 traps, 15yds. rise.

Schaefer	11 01 00—3	Sampson	10 10 10—3
Jenkins	01 11 01—4	Decker	01 10 10—3
B F Johnson	10 10 10—3	Evans	11 00 10—3
Hall	10 10 10—3	Law	00 10 11—3
W D Perry	10 11 10—4	Sheldon	10 10 11—4
Cary	00 00 00—4	A H Perry	10 10 11—4
DeRochemont	10 10 11—4	Eager	10 10 10—3
Houghton	11 10 11—5	Smith	11 00 11—4
Buffington	11 10 10—4	Curtis	10 11 01—4
Holden	10 10 10—3		

Winners: Houghton first, Curtis and Buffington second, B. F. Johnson, Sampson and Law third, Cooper fourth.

Fifth shoot, 7 single birds, 18yds. rise. Cooper first, B. F. Johnson and Wilbar second, Sampson and Stark third, Nichols fourth.

Sixth Shoot—Three-men Team Badge Championship match; 3 men teams, 5 single birds from 5 traps, 3 pair double birds and 10 single birds from single trap.

Massachusetts Rifle Association.

Schaefer	01111	11	11	11	1101111111—19
De Rochmont	11111	01	01	11	1110111111—18
Law	00111	11	10	10	1111111111—17—54

Worcester Sportsmen's Club—First Team.

Eager	11110	11	11	11	1110011101—17
Perry	11111	10	00	01	1111101111—16
Holden	01110	11	01	00	1111111100—14—47

Exeter Sportsmen's Club, of Exeter, N. H.

Stark	11111	10	01	10	1111111110—17
Cooper	10111	00	11	11	1110111111—17
Jenkins	11100	00	11	11	1001100911—12—46

Worcester Sportsmen Club—Second Team.

Houghton	11100	01	11	10	1111110010—15
Sampson	11010	11	11	10	0010111110—14
Smith	00110	00	01	11	1111111101—14—43

Narragansett Gun Club of Providence, R. I.

Tinker	01111	11	11	11	1001011111—17
Sheldon	00011	01	10	01	1111111111—15
Cary	01101	00	01	00	0110110011—10—42

Lynn Central Shooting Club.

Evans	11111	10	00	10	1011111111—16
George	01001	10	10	10	1010111101—12
Woodbury	00000	10	01	10	0111101010— 9—37

Boston Gun Club.

Hart	01011	10	10	00	0111101111—13
B F Johnson	01111	10	10	11	0100111010—13
Field	10100	10	00	00	1111100111—11—37

Fall River Gun Club.

Buffington	11	11	00		1000111011—
	00	10	10		1111011110—
Braley	10	00	00		0110011011—w.
Hall					

Shoot No. 7—Five single birds, 18yds. rise.—De Rochmont, Stark and Cary first, Curtis and Nichols second, Law and Tinker third, Eager fourth.

Shoot No. 8—Seven birds, 5 traps, 18yds. rise—Hart and Stark first, Decker and Law second, Palmer third, Field and Cary fourth.

HARVARD CLUB.—At the meet of the Harvard Shooting Club, last week, Mr. Slocum acted as executive officer and Mr. C. A. Brown as scorer. The result of the match was as follows:

Match 1, five balls—First, W. L. Allen, Slocum, second, Abbot, F. Austin, W. Austin, Palmer.

Match 2, Walnut Hill cup, 15 balls—First, C. C. Foster, F. S. Palmer; second, F. Austin, Abbot, Foster and Palmer tied on 11 balls, but on shooting off the tie, miss-and-out, Foster won.

Match 3, five clay-pigeons—First, Palmer; second, Allen.

Match 4, five clay-pigeons—First, F. Austin, Edmands, Slocum; second, Palmer.

Match 5, five balls—First, Foster; second, Slocum.

Match 7, five balls—First, Slocum; second, F. Austin, Allen, Foster.

Match 8; five balls—First, Edmands, Palmer, Slocum; second, F. Austin, Goodwin.

The weather was windy, and the snow which fell made it difficult to see the balls and birds.

FAIR HILL, Md., March 15.—Regular practice shoot, 21yds., glass ball, varying trap.

J Peterson	100101001111011 — 9
F Foote	011001111010111111111111 —20
E Garrett	101111111111111111011111111—35

DELHI, March 19.—At the annual meeting of the Delhi Sportsmen's Club the following officers were elected: President, E. L. Hitt; Vice-President, M. D. Sears; Treasurer, F. H. Griffis; Secretary, G. W. Youmans. Board of Directors—William Millard, G. E. Maxwell and J. N. Arbuckle.

WORCESTER, Mass., March 20.—The series of matches between the South End and the Woodland Gun clubs ended to-day by a victory for the Woodlands. There were five men to each side. Each man had a possible 20 before him. The glass balls were thrown in strings of five each. The result was a victory for the Woodlands, as the clubs had each won a game, although the totals of each club at the close of to-day's shooting were the same, 200 out of a possible 300 points. The following is the details of to-day's work:

South End Club.

Webber	01101	11111	10001	11101—14
Whittaker	11111	11110	01101	01111—17
Whittier	00001	11110	01101	01110—11
Jewett	11100	00010	11010	00010— 8
Davis	11110	11111	11100	01111—16—66

Woodland Gun Club.

Fuller	11110	10101	10110	01101—13
Rice	00111	01111	11101	01111—15
Moscroft	11101	01111	11011	00101—14
Gilman	00001	10011	10111	11101—12
Tongas	11111	01100	10001	11111—14—66

The first meet of this series was at the South End Range, the second at Woodland Range, and the last at Coal Mine Range, the home of the Worcester Sportsmen's Club. The total for the three meets is as follows:

South End Club.	1st.	2d.	3d.		Woodland Gun Club.	1st.	2d.	3d.	
Webber	17	14	14—	45	Fuller	11	18	13—	42
Whittaker	16	12	17—	45	Mascroft	9	15	14—	38
Whittier	15	9	11—	35	Rice	13	14	15—	42
Jewett	12	13	8—	33	Gilman	11	16	12—	39
Davis	11	15	16—	42	Tongas	11	14	14—	39
Totals	71	63	66	200	Totals	55	77	68	200

KNOXVILLE, Tenn., March 14.—At the regular monthly shoot to-day of the Knoxville Gun Club, for the Ligowsky medal, at 15 clay-pigeons, 18yds. rise, from fourth notch, the following scores were made:

Duncan	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0—14
C C Hebbard	1 1 1 1 1 0 0 1 1 1 1 1 0 1 0—11
Nicholson	0 0 1 1 1 1 0 1 1 1 1 0 1 1 1—11
A H Hebbard	0 1 1 1 1 1 0 1 1 0 1 1 1 1 1—11
Slocum	1 1 1 0 1 1 1 1 0 0 1 1 1 1 0—11
Woods	1 1 0 1 1 1 0 1 0 1 1 1 0 1 1—11
Armstrong	1 1 0 1 0 1 0 1 0 1 1 1 1 1 1—11
Eldridge	1 1 1 1 1 0 1 0 1 1 1 1 1 0 0—11
Deaderick	1 0 1 1 1 1 1 1 1 1 1 0 1 0 0—11
French	1 1 1 0 0 1 1 1 1 1 0 1 1 1 0—11
Woodbury	1 0 1 1 1 0 1 1 1 0 1 1 1 0 0—10
McClung	1 1 1 1 1 1 1 1 1 0 0 0 0 0 0—10
Dow	0 1 1 1 0 1 1 1 0 1 0 1 0 1 1—10
Worsham	0 1 1 1 1 1 0 0 1 0 1 1 0 0 0— 8
J M Ross	1 0 0 0 1 1 0 1 1 1 0 1 0 0 0— 8
Jenkins	1 1 1 0 1 0 1 0 0 1 0 0 1 0 0— 7
Kohlhase	1 1 1 0 1 0 1 0 0 0 0 0 0 0 0— 5
Ed Ross	1 1 1 1 0 1 0 0 0 0 0 0 0 0 0— 5

STATEN ISLAND GUN CLUB.—The shoot for the Treasurer's Cup came off on March 15; 10 birds each, handicap rise, 30yds. boundary, 5 ground traps, 7¾lb. guns; ties, miss and out.

Raymond, 25yds	1 1 1 0 1 1 1 1 1 1 1 1 1 1 1—13
Howard, 28yds	1 1 1 1 1 1 0 1 1 1 1 1 1 1 0—12
Boughton, 27yds	1 1 1 1 1 1 1 1 1 1 1 1 1 1 0—11
Stelfox, 27yds	1 1 1 1 1 1 0 1 1 1 0 — 9
Stewart, 27yds	0 1 1 1 1 1 0 1 1 1 — 8
Minto, 28yds	1 1 0 1 1 1 1 1 1 0 — 8
Francis, 28yds	0 1 1 1 1 1 1 1 0 w. — 7
Grant, 27yds	0 1 1 0 1 0 1 1 1 0 — 6
Redmond, 27yds	1 1 1 0 1 0 0 1 1 0 — 6
Thompson, 28yds	0 0 1 0 1 1 1 0 1 w. — 5
Lee, 25yds	0 1 0 0 1 1 0 w. — 3
Thomas, 27yds	0 1 0 0 w. — 1

THE LIGOWSKY TOURNAMENT.—In reply to inquiries it is stated that the rule 1¼oz. shot should read 1⅛oz. per Dixon's measure, 1106 or 1107.

Sportsmen attending this tournament will probably have the opportunity of taking in a general shooting circuit. The Chicago sportsmen are organizing a live bird shoot to precede the tournament, the Louisville shooters have already issued an attractive programme to follow same, and now the Cincinnati shooters are talking of a fourth tournament immediately after that at Louisville.

Henry Miller, Esq., of Chicago, Ill., member of the executive committee, writes as follows: The Illinois Central R. R. grant a 1½ fare to sportsmen attending the tournament; the sportsman pays full fare to Chicago, and upon presentation of a certificate from our executive committee, is furnished a ticket home at ½ regular rate. I expect to get the same concession from all the roads at their next meeting about April 15. All clubs contemplating attending the tournament should not fail to enter by said date, as it will materially assist me in obtaining a like reduction from all other roads.

MALDEN GUN CLUB.—March 22.—The springlike day called together some thirty sportsmen at the grounds of the Malden Gun Club. The first part of the afternoon a cross wind prevailed, which kept down the scores, even below the average. The contests resulted as follows:

First event—badge contest:

J Hopkins, 1st medal	0110110010—5	1011111111—9—14
E J Brown, 2d medal	0011110110—6	0010011101—5—11
Smith, 3d medal	0110110000—4	1000111011—6—10

Second event, five birds—Dutton first, Field and Brown second, Dill third.

Third event, five birds—Adams and Hopkins first, Field and Ellsworth second, Dill third, Taft fourth.

Fourth event, five traps, Chicago rules.—Brown first, Purington second, Field third, Adams and Scott fourth.

Fifth event, five birds—Ellsworth and Dutton first, Purington second, Field third, Hopkins fourth.

Sixth event, five birds—Dutton and Nichols first, Purington second, Adams and Scott third. Dill and Field fourth.

Seventh event, miss and out—Divided by Adams and Field.

WELLAND, Ont., March 14.—The meeting to-day of Geo. Rodgers of St. Catharines and Capt. Ritter drew several hundred interested spectators. The match grew out of a performance of Capt. Ritter in which firing at 30 balls he tied two good marksmen firing at 25. Mr. Geo. Rodgers, of St. Catharines, considered the best shot in Western Canada, immediately challenged the Captain. Two matches were arranged, one to be at glass balls and the other at live pigeons. The stakes to be $100 a side on each match. At a consultation of the friends of the parties, it was decided that the new ball made by the Niagara Target Ball Co., of Niagara Falls, N. Y., would give a fairer and more just test.

Upon the shoot being called, Mr. George Barker, of Niagara Falls, N. Y., was chosen as referee; Mr. John Carlisle, of St. Catharines, judge for Mr. Rodgers; Mr. E. A. Smith, of La Salle, judge for Capt. Ritter.

First Match—Thirty Niagara target balls.

Capt. Ritter	101101111101111011011111011111—24
Mr. Rodgers	010111111111111101110111010111—24

First Tie.

Capt. Ritter	00111—3
Mr. Rodgers	10101—3

Second Tie.

Capt. Ritter	100—1
Mr. Rodgers	100—1

Third Tie.

Capt. Ritter	11001—3
Mr. Rodgers	11000—2

Second Match—Fifteen live pigeons.

Capt. Ritter	010111111101011—11
Mr. Rodgers	011111111100111—12

Each having won a match leaves the matter just as it was before. Their friends are trying to make arrangements for a match to decide it by a shoot at 100 Niagara target balls for $100 a side.

TORONTO, March 18.—A pigeon match between C. Cockburn, of Toronto, and John Forbes, of Woodstock, for $100 a side, took place at John Oulcott's, Eglington, this afternoon. The arrangements were that Forbes was to shoot at 33 birds to Cockburn's 30; Dominion rules to govern; 21yds. rise, 80yds. boundary. The betting was 10 to 7 and 10 to 8 on Cockburn. The weather was fine and the attendance large. J. Wilson acted as referee. Following was the score:

Forbes	011101000111011101010000000010000—15
Cockburn	110101011101111101100100100010—13

Cockburn thus won the match by three birds. The birds were lively, and the wind anything but favorable to shooting.

OSWEGO, N. Y., March 13.—The long talked of match between Ed. Plank and O. S. Osterhout on one side, and G. P. Matteson and L. C. Wright on the other, came off this afternoon on our Leatherstocking Club grounds. The day was all that could be asked for at this time of year, and a good number of spectators were present. Geo. W. Lyman and Owen Matteson acted as judges, P. O. Wright as scorer and referee. The match was 50 glass balls each man, thrown from a Card revolving trap, Card rules to govern. The match was won by Matteson and Wright, they breaking 81 out of a possible 100, against Plank and Osterhout 77. The old-fashioned wide awake fighting fever is visible in all our members this spring.—DAN.



Yachting.

FIXTURES.

May 18.—Eclipse Y. C., Opening Cruise.
May 24.—Oswego Y. C., Opening Cruise.
May 24.—Boston Y. C., Opening Cruise.
May 30.—Knickerbocker Y. C., Spring Matches.
May 30.—Atlantic Y. C., Opening Cruise.
May 30.—Newark Y. C., Spring Match.
May 30.—South Boston Y. C., Spring Match.
May 31.—Boston Y.C., First Match, Connor and Commodore's cups.
June 9.—Portland Y. C., Challenge Cup.
June 10.—Atlantic Y. C., Annual Match.
June 12.—New York Y. C., Annual Matches.
June 14.—Hull Y. C., Club Meet.
June 14.—Seawanhaka Corinthian Y. C., Annual Matches.
June 16.—East River Y. C., Annual Matches.
June 23.—Newark Y. C., Open Matches.
June 28.—Boston Y. C., Ladies' Day.
June 30.—Manhattan Y. C., Annual Cruise.
June 30.—Eclipse Y. C., Spring Match.
July 4.—Larchmont Y. C., Annual Open Matches.
July 9.—Beverly Y. C., Marblehead, First Championship.
July 12.—Hull Y. C., Club Meet.
July 12.—Boston Y. C., Second Club Match.
July 26.—Beverly Y. C., Nahaut, Second Championship.
Aug. 9.—Hull Y. C., Club Meet.
Aug. 9.—Boston Y. C., Open Matches, all clubs.
Aug. 16.—Beverly Y. C., Swampscott, Third Championship.
Aug. 23.—Beverly Y. C., Marblehead, Open Matches.
Aug. 23.—Boston Y. C., Third Club Match.
Sept. 6.—Beverly Y. C., Marblehead, Special Matches.
Sept. 13.—Hull Y. C., Club Meet.
Sept. 13.—Boston Y. C., Second Ladies' Day.

THE GLEAM AND ANETO.

Editor Forest and Stream:

For reasons anticipated in your comments on the offer of Mr. Prague, I unhesitatingly decline the suggested contest.

During the approaching season I will, sacrificing time allowance, give my friend Mr. Lawton every opportunity to redeem his defeat in the chance trial last fall, but the conditions of weather must be the same, such as will bring the Gleam to two reefs.

I suggest, but do not stipulate, in the event of such a trial, the loser shall, to place the result on record, donate $50 to a charitable institution to be selected by the winner.

New York, March 25, 1884. The Owner of the Yawl Aneto.

THE PETREL.

An unfortunate transposition of the types in the table last week needs correction before proceeding. The ballast on Petrel's keel is 5,474lbs., and the amount inside 2,526, which will make the comparison with Gleam more intelligible. The hoist of mainsail is 20ft. against 23ft. of the Gleam, or increasing the latter boat to the length of Petrel, the comparison between hoists would be 20 to 28, and between the areas 800 to 1,106, showing great economy in favor of the narrower boat. The same is expressed by the percentage of sail area to square of loadline, Petrel having 102 per cent. against the 149 per cent. of Gleam. The sail plan of the latter is the largest in proportion to length of any fixed ballast boat of which data are known.

The present mast of Petrel is built of two halves, slightly cored out, glued, doweled and pinned together, with but little taper to mast-head. The object was to combine lightness with the stiffness of large diameter, as the ancient vagary about give and elasticity to spars has about disappeared from the category of fairy tales worshipped among the "intuitive" classes. Spars as rigid as they can be stayed with due regard to lightness are now accepted as equally as necessary to smart performance as flat sitting and broad-headed canvas. The Petrel's experiment seems to have been a perfect success, as her mast never buckles, nor does the masthead twist with exposure to the weather, and the stick never "complains." The building of masts may be considered an improvement, but it should be borne in mind that unless accurate and faithful workmanship can be counted upon to a certainty, a built mast is a treacherous and dangerous affair not deserving to be trusted. Much weight will not be saved, but weight for weight, greater strength and stiffness can be secured by a competent mechanic familiar with spar making. Petrel's topmast is fidded to house and the bowsprit reefs in over the wood boomkin. She has two shrouds and backstays each side, and the jib martingale nips under an iron dolphin striker. The boomkin is steadied by an iron rod jumper or bobstay.

The cabin has 24in. berths each side, 13ft. long and 32in. of floor between. The house overhead is 12ft. long and only 10in. high at after end, being kept low for convenience on deck. A square hatch 16x20in. gives access to the forecastle in which the stove, pantry and cooking gear is located:

Area lower sails	800 sq. ft.
Ratio to square L.W.L.	102 pr. ct.
Area mainsail	522 sq. ft.
Area foresail	132 sq. ft.
Area jib	146 sq. ft.
Mast deck to hounds	25ft.
Masthead	4ft. 6in.
Topmast, cap to shoulder	12ft. 3in.
Rake of mast	1 in 21
Main boom over all	28ft. 6in.
Gaff over all	17ft.
Bowsprit, end L.W.L to cap	5ft.
Jibboom, cap to stay	9ft.
Mainsail on luff	20ft.
Mainsail on head	16ft.
Mainsail on foot	27ft.
Mainsail on leech	32ft.
Foresail on luff	24ft.
Foresail on foot	12ft. 6in.
Foresail on leech	21ft.
Jib on luff	29ft.
Jib on foot	15ft.
Jib on leech	20ft. 6in.

ISIS.

This new cutter is 62ft. 6in. over all, 51ft. loadline, 13ft. beam and 9ft. draft, with a steadier of 16 tons on the keel. She is now being planked up at Poillon's yard, in Brooklyn. The best part of this yacht is her design. Her construction is something enormous. The keel is a balk fit for a seventy-four, the frames are double all through and within an inch and a half as heavy as those of the big schooner Fortuna. The deck frame is a stunner. Beams have been tumbled in at every framehead in profusion, and of a strength and weight astonishing. With such material, corresponding fastenings ought to be expected, to secure the benefit of the extravagant weight; but, strange to say, these beams are merely spiked to the shelf, with no other fastening whatever! Can this possibly be the intention? What is the use of massive material without sufficient connection? Unless some further provision be adopted for tieing the sides, such as thorough kneeing, the first time this cutter gets it rough and tumble she will wring out of shape, open and leak like a basket, for the rig to drive her bulk and beam will be of respectable dimensions. The quarters and transom are one solid mass of wood, beyond anything of the kind put into a similar vessel. Yellow pine filling, into which the forward frames box, is a poor substitute for oak. If the cutter is completed as she has been begun, three tons of weight will have been wasted on her structure, and most of that high up. It should have been in lead low down, for a boat of her beam and displacement requires a deal to correct her "wobbly" tendencies. As to her form, it is excellent and very fair upon her dimensions, but we cannot but think she would have been all the better with 9in. off each side. Deck room would have remained ample and the accommodations below need not have been interfered with at all. It would have given a kinder form to drive and a better shape looking to windward. As it is the forte of Isis will be reaching and sailing in light weather. When it comes to crowding she will choke, because of her exuberance in beam. While her form, and especially her notable fairness, promise general satisfaction, the wasteful disposition of her scantling is certain to detract from her prospects as a flyer. For cruising Isis has scarce an equal. The vacancy down below will give the largest accommodations on record in these waters. Indeed, in the way of room she can compete with the ark. In view of her small hatches there is likewise gangway and passage on her deck, such as New Yorkers have never before seen on the length. She will prove enormously stiff and presumably it will be impossible to carry her rail under. For all of these reasons, it seems as though a more favorable average might have been struck with 11ft. 6in. instead of 13ft. beam. But as an experiment in the way of wide cutters, no one

will withhold full recognition of the owner's enterprise, as he designed the yacht himself. As a wide cutter, we are prepared to say her form is exceedingly pleasing, with the bulk distributed in almost faultless proportion, though for climbing to windward, we might have preferred just a little shorter entrance so far as inspection of the frame served us as a guide by which to pronounce judgment. She is a credit to the yard as a thoroughly fair job, and but for the exceptions before noted, might have been the most sensible vessel yet set up in the establishment. Now that the modern yacht has invaded even this historic old ground, we have no doubt some of the contemplated new cutters will rise in their glory at the same yard. The worthy Mr. Townsend, who presides, knows "how it is himself" after having come across the clipper fleet at sea, and prejudice is fast wearing away. For the rest the yard can turn out the best of work with some one to direct the innovations upon old customs in detail, and Mr. Townsend can be relied upon to see them lived up to in full faith.

THE COST OF YACHTS.

ORDINARY business principles ought to apply in comparing the cost of yachts as in anything else. There is no reason in holding up the first cost of two vessels in comparison without allowing for difference in quality of construction, equipment and cabin fittings and without regard to longevity. It is quite certain that a well-built vessel, thoroughly and completely supplied in every respect with expensive and artistic interior, will call for a greater first outlay than an inferior affair in every respect. But when the lifetime of a well-built and a cheap job are taken into consideration the balance sheet will show in favor of the best boat. Thus, the schooner Columbia was built in 1870 at a cost, as near as is known, of $35,000. She was put to very light service during her career, but in 1884 was found so thoroughly rotten and used up generally that her recent purchaser has been obliged to rebuild entirely. He paid $10,000 for a name and proceeded to build a new boat around the name at a fresh expense of about $30,000. The first owner paid $35,000. The second about $20,000. Loss $15,000. The third owner paid $10,000. Additional loss $10,000, and he has now to expend $30,000 in rebuilding from keel up. Total amount sunk in the Columbia in fourteen years, $65,000! On the other hand, had the Columbia been built originally to class highest in Lloyd's instead of being soft wood thrown together with spikes, the first cost might have been $15,000 more than was paid for her, say $50,000. She would after fourteen years have brought at least half her cost, or $25,000, so that the amount sunk would have been only $25,000. To this add $5,000 for an overhaul, and the saving up to date would have been $25,000. That is to say, the Columbia, well built and fitted in the first place, would have cost $25,000 less to date than the Columbia built as the slop job she actually was.

Further, the cost of the Bedouin, without the extra expense of artistic carvings and decorations, upon which no limit can be set in any yacht, was $34,000. The cost of a cheap sloop of same size with only half the regular equipment will be $24,000. In twelve years from time of launching Bedouin will sell for $24,000, assuming reasonable care in her keep, and the cheap sloop would bring but a nominal sum of say $100, and require another $10,000 to put her into equal condition with the Bedouin. Loss in twelve years on the Bedouin $10,000; loss on the cheap sloop $24,000.

Finally, the type of a boat, the mere shape of the volume enclosed, has nothing whatever to do with the cost of build in the first place, as common sense ought to demonstrate to every one without explanation. The cost is due to amount of material and labor used in the production. In a cutter the material and labor need not exceed the requirements of a sloop. Both call for like expenditures for equally good and complete equipment and wealth of cabin fittings. The larger displacement of the cutter necessitates from twenty-five to forty per cent. more ballast over the sloop of modern proportions, an extra charge which is offset by a smaller sail plain and the easier conversion of lighter material used in framing and finishing an easier form of body. As to yachts even this difference of ballast disappears, since small sloops of recent construction displace as much and in some cases more than cutters of same length. Such boats, possessing in their great beam also a greater stock of material, more labor and a larger rig, must cost quality for quality more than a cutter of same length. We have in recent numbers given many actual examples, showing cutters to be as cheap, and in some instances cheaper, than sloops, and if builders still bid wild on contracts for cutters, or insist upon making a fortune out of one such job, by "milking" rich and inexperienced or financially generous men, the competition of the future will bring about a true balance between the cost and the article rendered therefor.

The cry against cutters on account of their supposed greater cost than other modern types approaching the cutter in performance is a nonsensical bugbear, and is put forward only by illogical persons who know nothing about the matter beyond what they gather and magnify from greenhorns chatting in club rooms. That this or that specific cutter can be pointed out as having cost more than a poverty-stricken sloop is true enough. But others can also be found which, with superior build and equipment, have cost less. Whatever the facts in specific cases may be, common sense is enough to prove that there is no ground why, quality for quality, there should be more than normal difference in first cost of cutter or sloop, and that difference is as often likely to be on one side as on the other. The most expensive yacht is, as a matter of course, the largest on the length, whether the bigness be due to great depth or to great beam. Naturally, boats having both great beam and depth, such as the Itchen cutters or Boston keel sloops, will represent the largest expenditure of material and labor, all upon the assumption that the comparison is between boats of equal strength and grade of material, equally complete in equipment and the luxuries of the cabin.

THE S. S. NORMA.

THE new steamer Norma is now being planked and is about ready to receive her decks at the yard of C. & R. Poillon in Brooklyn. We confess to disappointment in the vessel. It had been expected that emanating from the drawing board of a mechanical engineer, this latest addition to the steam fleet would have had some style and merit in model and build. The very opposite unfortunately proves to be the case, and one more commonplace piece of mediocrity is all the world is to witness in her launching. The vessel is of course whittled away to a knife-like entrance, which seems to be the *summum bonum* of the ambition of all our designers and modelers of steam yachts. She has a long entrance of the usual overdone kind, and from midships aft is a veritable trough with a tiresome flat to the side, ending in a characterless stern of the ancient watermelon pattern borrowed from our gunboats of twenty-five years ago. The only commendable point in her design is good deadrise, and this, we believe, was incorporated at the instigation of Captain Towns, who is now looking after the development of his future charge. The sheer of the boat is most unhappy; a straight amidships, a sudden turn another straight and a short quick scoop upward to the yellow pine planksheire butts into the round head. Another sudden bend on the quarter and a slower sweep thence to the elliptical finish aft. If the sweep is unfair in and out, the sheer is likewise vertically broken. Has art and eye been so completely lost in shipbuilding practice that no one ventured to correct as the frames went up, or was it merely a knot in the battens? In point of design the Norma expresses no ruling idea, no principle, much less ordinary unity throughout. She is devoid of character, much as if built by the mile and sawed off to order, or brought to a close when talent dried up untimely. In point of construction the whole job is of the rough and ready class, at which the nose of a Lloyd's man would turn up involuntarily. The exceptional feature is a fairly good connection between beam ends and the top side as a thwartship tie procured by working two thickstrakes inside the shelf and bolting through all, but this is an antique method also borrowed from old gunboat specifications. The plank is none too thick in the rough, and with one to three eighths dubbed and planed away to smooth up, would not receive a high rating at Lloyd's in view of the material used. The yacht has white pine beams in wake of the cabin, and though tolerably strong throughout for limited runs along the coast, she is far from exhibiting the class of fine workmanship, material or fastenings to be expected in so large and costly a structure. For this the builders may not be to blame. They build for a price, and no doubt have given fair return and fully lived up to their contract.

Those who have seen the exquisite cabinet work put into the frame and fitting of Ileen, Bedouin and their sisters, will contemplate with regret the comparatively rare methods pursued in this new steamer. But when painted up and painted with gorgeous tinsel and lavish display in the cabin and plenty of brass about decks, the Norma will be hailed at her launch by admiring crowds as "another magnificent" addition to the yacht fleet of the metropolis. Concerning the power we cannot speak from personal observation, but as it is to come from Sullivan's hands it is pretty good guarantee that the engines will be fine specimens of the machinist's art. The boiler is to be of steel, 9x15ft., of the pattern known as the "Scotch" boiler. The engines are compound, with 18in. stroke and cylinders 22 and 36, the low pressure being on top, both piston heads attached to the same rod. It will be compact, occupying only 5ft. space fore and aft, and the upper cylinder top will scarce reach into the hatch. It is to drive a wheel 8ft. in diameter. The yacht is to have an open network rail, and unless the hatch coamings are kept of extra height there will be considerable danger of flooding out below, though the vessel is likely to prove a fair performer in a sea on account of her length, deadrise and easy bilge. If she is no better than others of her class she is probably no worse. But there is a great deal of room left for material improvement in every respect. She shows the novice at the business all over, and the sad want of supervision by a real expert in yacht design and construction. But almost anything appears to be good enough as yet, and until some standard sample of well-conceived planning and exacting construction in detail appears in our waters, few will appreciate the difference in the prevailing opinion that "a boat is a boat," and that the only difference between rough, common, short-lived "boat work" and finished shipwrighting is a margin of cost in favor of one and against the other. We trust the wily skipper, who is to be, will keep an eye on the pilot-house and its bracing, and have the well-hole, above which it is to be built, caulked tight from the rest of the ship for reason obvious enough to a sailorman of his experience. Length over all, 150ft.; water line, 130ft.; beam, 19ft.; hold, 12ft.; draft, 9ft.; freeboard amidships, 6ft. Schooner rig. Masts, 64 and 68ft., with 26ft. topmasts; bowsprit, 18ft. beyond stem, lug sails to brail up, having 20 and 24ft. gaffs; keel, 10in. square, with 2in. shoe; stem and post 10in., sided; post, 16in. at shaft. Frames, oak and hackmatack, sided 5in. and moulded 8in. at heel and 3in. at head, double: space 27in. centers, and bolted with ⅝ iron. Clamps, yellow pine, 4 and 3in. thick, 12in. deep each. Plank, yellow pine, averaging 2½in. Tapstrakes of oak, square fastened with ⅞in. locust treenails below water line, and with iron spikes above. Coamings of mahogany, 4x6in., bolted down with ¾in. iron. Accommodations include cabin, 19ft.; owner's room, 12x11ft., with bath and toilet and two staterooms, all aft of machinery. Officers and crew forward. Pilot house 7x6ft., with smoking room, 10x8ft., attached, will be on deck forward.

SOME FINAL GENERAL REMARKS.

Editor Forest and Stream:

I quote from your reply to my last: "Weight in itself, without consideration of form, is not productive of resistance, but form, without regard to weight, certainly is." According to that, no amount of weight will offer resistance, and a square can be driven through the water by the same propelling force, at the same speed, as a triangle. I cannot assent to such a proposition. Departing from theories, I will say in support of my claim that superior weight must offer the most resistance; that upon a certain afternoon in August last, when the wind, though steady, was extremely light, the sloop Lizzie L. met the cutter Oriva off Owl's Head, and in beating down the bay from that place, though never out-pointing her, did out-foot and wind her, and retain the lead throughout the entire afternoon; that the very next afternoon Mr. Lee again brushed with her, and, the wind being much stronger, succeeded in regaining his lost laurels, which, if your theories were correct, he should never have surrendered, particularly when the immense disparity in size between the two vessels is remembered, the Oriva being 50ft. and some inches on loadline, against 42ft. and odd for the Lizzie L.

Again, that the same sloop met the Madge both in afternoon sailing and during her races, and invariably beat her, notably on the occasion of the first Madge-Wave contest, when the Lizzie L., carrying only working topsails ran away from the cutter, which had set at the time the most tremendous club topsail that I have ever seen on a sloop of any size or design; that this superiority was so well appreciated by the Lizzie L.'s owner that on separate times he offered to match her for any amount, she was invariably refused, on the plea that they were not open to any more challenges, having all they could attend to, although the facts were that she did afterward accept the challenges of the little Mistral and, I believe, the Paloma. The above events were all in light airs, and I am convinced were exhibits of the superiority of lightness, in good form, over weight, ditto, in summer zephyrs.

That a well-formed boat, whether weighted or not, will beat a tub, is a foregone conclusion. Where lightness was in good form, I have never yet seen it defeated under the above conditions. The whole issue between us, then, resolves itself into the simple question as to what is or is not "good form." My contend is that it may be secured without going to either extreme depth or narrowness; that a vessel with four beams and one-tenth her length in draft is best suited to our weather and waters. Quoting the knowledge of the ancients and stating that there is "nothing new under the sun," is begging the issue. I claim that the more sensible of our yachtsmen (who were in the minority, of course, as common sense never was "common" on any topic) were fully aware, many years before Anglo-mania-crazed Americans, either in yachts or manners, that a "skimming dish" with sandbags was not practical sailing; that there were a number of sloops in New York Bay of 50ft. and under, prior to '79, with as much draft as I now recommend; that you cannot rightfully claim "double-head rig" as an exclusively "cutter principle;" that double-head rig was in use by sloops before cutters were known, and that cutters themselves are simply variations of a type known as sloops, which had a previous existence and from which they were evolved. You say in regard to this that "no hard and fast line can be drawn," but at the same time leave your reader to infer that, after all, these so-called sloops now building are really cutters in disguise, which the advent of cutters has created and which would never have existed but for that advent. I admit that the cutters did much to accentuate the revolution; but, at the same time, I claim that it was simply the accentuation of a movement already started, and I prove my proposition by pointing to the lists of the New York and Atlantic Yacht Clubs, published in January, 1880, which show quite a respectable fleet of sloops with plenty of draft.

"Extremes are dangerous," is an old and well tried proverb very generally known, and as long as yachtsmen can face the same weather with moderate draft as they can with extreme draft, and at a much less expense for the pleasure, they will surely continue to do so. You say that "mentioning prices of yachts out of hands is not a fair comparison," and that "long after the Gracie is broken up for firewood the Bedouin will have fair market value." I contend that prices are the only comparison possible if we wish to get at the item of expense which is certainly "a consummation devotedly to be wished." I contend that a first-class sloop, which shall be complete in every detail, of the very best construction, of the same loadline length as the Bedouin, can be built, ballasted and rigged for one-half of the Bedouin's cost. That when so built she will be equal to the same exigencies, and remain so for as many years. That the Bedouin may still be good when the Gracie is broken up, is quite possible; the fact that the Gracie was already a very old boat when the Bedouin's keel was laid, making the proposition all the more probable. You state that the Grayling was proclaimed as "uncapsizable while on the stocks." I never heard any one make such a claim, and I witnessed her construction, discussed her model with her owner, designer and a whole host of other yachtsmen. Mr. Fish asked for a light draft boat, and knew that it could be capsized when he asked for it. He has since admitted to me that he capsized her through over-confidence in her ability to take the flaw of wind, the strength of which he did not foresee, and I firmly believe that the Bedouin even, struck by the same flaw, handled in the same way, would either have capsized or carried away her mast. I do not believe in the uncapsizability of any kind of craft. A cutter, in England, foundered at her moorings in a gale of wind last spring without a rag of sail on her; and there are conditions under which a man-of-war can be turned over, *vide* the Royal George, which capsized at anchor with a puff from off the hills.

I notice in your last issue a statement that Captain Joe Ellsworth admitted that the Fortuna had the Gaelet cup race in hand, and only lost it through carrying "improper" sail. I am inclined to think that Captain Joe Ellsworth may have admitted that improper sail had something to do with Fortuna's defeat, but I am positive that he never considered that the sole cause for it, for before Fortuna set the maintopmast staysail, as the very instant that, in rounding the Sow and Pigs Lightship, he learned she had but 12 minutes lead, he expressed his confidence in the Montauk's ability to win, and could not have founded that confidence on anything but his belief in the superiority of his vessel, which was duly verified.

I also notice from "Hand Lead," some quotations as to depths of frequented harbors. That such depths exist I have no reason to doubt, but that they only exist, in the majority of instances, in the narrowest channels, which a yacht "on the wind" could not keep in, is also true, and I still claim that there are twenty yacht-frequented harbors between here and Marblehead, that vessels of 10ft. draft find the greatest difficulty in entering, and even after entrance, are compelled to lay too far off shore for any convenience in hailing, etc. Yachts cannot be sailed within their own widths like steamboats, and unless a channel is 100yds. wide, it is of very little practical use to them, and if a yacht must "come to" beyond hail of the shore she might as well remain outside of the harbor altogether as far as convenience is concerned. FRANKLYN BASSFORD.

[Mr. Bassford's mention of square and triangle is unfortunate, his parallel being directly opposed to the meaning our language conveyed. We suggest a study of naval architecture, which would give a clearer conception on many heads and prevent such absurd guessing as to the possibility of the Bedouin's capsizing, and the citation of the Royal George, who, with her topsides and three tiers of guns, all run across to leeward for listing the vessel to clean bottom, represents the very antithesis to a cutter's stability. It appears that Mr. Bassford has known it all right along, has always been familiar with and appreciated the principles of a cutter and her rig, and that it was quite impossible for him to learn anything new by recent agitation. This is all highly complimentary to Mr. Bassford, only he must not confound himself with the public. It has taken FOREST AND STREAM five long years of the hardest kind of fighting to force from the public *de facto* recognition of cutter principles, old as Mr. Bassford properly claims their origin to be. No one has set himself up as the "discoverer" of cutters or the principles they are built on, since they are based on the laws of nature, which mankind has been learning to master piecemeal through a great many centuries. What we have done, however, is to hasten if not actually compel, recognition of those laws in practice, for which the complete change in yachting architecture in America stands witness, and we only regret that in that hard battle we should have been obliged to work without the aid of a gentleman of Mr. Bassford's ripe and far reaching knowledge which comes before the public a little late in the season. We also regret to find Mr. Bassford giving vent, unintentionally no doubt, to an exceedingly stupid burst of buncombe borrowed from the vulgar, in his reference to "crazy Anglo-mania." The national origin of the cutter ought to be a matter of perfect indifference to so astute a philosopher as Mr. Bassford, for he must feel that the sciences and arts are international in their scope. Does Mr. Bassford repudiate the multiplication table because such forsaken wretches as the English subscribe to its intricacies? And in deigning to accept wicked English precedence in that respect, is he not as guilty of "crazy Anglo-mania" as others to whom the experiences and settled results of the first and oldest and most thorough yachting nation appeal more enticingly than the blind, initiatory floundering of the raw material in America? with whom the "patriotism" of a fresh and green lubber is still deemed a full equivalent, offsetting the mature insight of specialists and experts? That large displacement can be driven as fast as light weight and with no greater sail has been proven by innumerable matches here and in Boston, and this the irrelevant case of the Lizzie L. and Oriva, with the evidence from one side only, which in the least upset. Theory offers a sound explanation, and it is so simple that such a trifle ought not to have escaped a close and comprehensive student like our correspondent. With large weight you can afford to clip beam and still carry sail. Clipping beam decreases resistance of form, as the form of least resistance is manifestly a plane having no thickness or beam at all. But light weight demands beam to carry sufficient sail, and clumsier proportions have to be forced through. Hence, with equal talent in the shaping of a heavy and light boat, one will gain where the other loses and *vice versa*, so that, within bounds, both present like possibilities for speed with important special reservations in favor of weight. First, in light airs, the greater momentum of the heavy boat maintains speed through flaws and let-ups. Witness the manner in which a loaded boat holds her way and the sudden checking of a light catamaran the moment they pass under a lee. Second, the heavy boat can be laid higher and edged up with more noticeable benefit. Third, she can be luffed out on the light boat's quarter and take her wind without fail, as the light boat loses way first. Fourth, the heavy boat is always more certain in stays. Fifth, she will headreach in short work. Sixth, in a sea and light wind she is steadier and gains in speed, as witness last fall matches outside the Hook. Seventh, in a heavy sea her weight rams her along when a light boat will "break up" and pound or spank. Eighth, you can press and carry on with heavy weight on proper form to good purpose, which you cannot with light weight and the required beam, without overdriving and choking up. Mr. Bassford's example of Lizzie L. and Oriva is not good comparison. The Lizzie, being much the smaller of the two, simply found the wind stronger in proportion to her size than Oriva. Had the test been made between two boats of about like size, but differing in displacement, as in many of the official races, his inferences would have been sounder. Did Mr. Bassford see Oriva tan the famous Vixen out of sight in the light wind of the second Seawanhaka Corinthian match last year? That is an offset at once to his own particular observation; and how does Mr. Bassford know what were the intentions of those aboard the Oriva when he met her in the Lizzie? His conclusions are much too hasty, made upon trivial evidence, and in contradiction to the much broader field afforded on the past seasons as a whole have afforded. Beyond this we do not care to refer to our correspondent's letter. For all the other points he brings up answers can be found by the ream throughout our files for five years. The subject has been thrashed so bare that we cannot publish any further reiterations of the issue. It must be as consoling to Mr. Bassford to know that his ideas of more depth and many other cutter attributes, to which he has so long been favorably inclined, are now being generally followed, as it is to us to see our whole fleet approaching step by step to the highest ideal of naval architecture, the well-planned, well-proportioned, well-built and well-equipped cutter.]

THETIS.—The Boston *Courier* has the following concerning this new compromise between cutter and sloop: "The yacht Thetis, now building by Smith, of City Point, for Mr. Harry Bryant, will spread about 3,000 yards of canvas. Her mast will be 61ft. from deck to topmast, and topmast will be 45ft. Main boom 60ft., gaff 36ft., leech of mainsail 72ft., jibstay 72ft., and forestay 58ft. Her topsail will have a 45ft. pole for racing, and 30ft. 6in. for working sail. Jib 40ft.; 50ft. from mast to end of bowsprit, with 28ft. outboard. All told she will have mainsail, jib, 2 jibtopsails, 2 gaff topsails, fore staysail with a spinnaker, with 100ft. on outer leech, 97ft. on inner leech with 72ft. pole, 550yds. of canvas. The dimensions of the Thetis are: 70ft. over all, 64ft. water line, beam 19ft., draft without board 8ft., with board 18ft.; displacement 66 tons, 15 tons lead on keel. In model she is similar to the Shadow, owned by Mr. Bryant's brother, but has less beam and greater depth. Her frame is of oak, 4in. sided and moulded, 6in. at keel and 4in. at head. Plate timbers in one length, 15ft. long by 8in.; floors of wrought iron 5½x¾in., with arms 4ft. long. She is a compromise, narrower than any other sloop; weight on keel greater than on any yacht of same length, and draft greater perhaps than any keel boat of American design."

SEAWANHAKA CORINTHIAN Y. C.—There is a chance of settling upon four or more dates for special races among the fourth class cabin yachts of the club, course to be triangular in New York harbor. A steam yacht has been tendered by the commodore as committee boat. This plan is most commendable, and we hope before long to see such matches fixed for every month from May to November. The expense would be nominal only, and the biggest score for the season could be rewarded with a championship emblem or pennant.

MEASUREMENT.—A gentleman writes he is sorry we have given up bulk measurement. We have not given it up, but recognize that with the prevailing want of knowledge, it is no use trying to push what people are not yet able to contemplate from a philosophical point, and that the best way to have a bad law repealed is to enforce it. By the way, what has become of measurement and the America Cup since FOREST AND STREAM dropped them? Our contemporaries dried up wonderfully quick.

THE FISHING FLEET, TOO.—The move for greater depth and less beam to the Gloucester fishing fleet appears to be gathering force. That some change ought to be made to prevent the frequent disasters by capsizing, all hands are agreed. In spite of the adulation bestowed upon the fishing fleet, there is vast room for improvement in their models and rig in the light of modern knowledge of naval architecture.

SALEM BAY Y. C.—Officers for the year: Commodore, Willard Winslow; Vice-Commodore, G. W. Mansfield; Rear Commodore, Gordon Dexter; Secretary, Robin Damon. Regatta Committee—John Newcomb, W. Winslow, H. A. Brooks, A. M. Liebsch, G. W. Mansfield. The club has voted to join the New England Yacht Racing Association, and has appointed G. W. Mansfield as its delegate.

THE IELEN.—This is the name of the new schooner built by Alonzo Smith, of Islip, for Mr. Middleton, of Philadelphia. She is 70ft. over all, 62ft. water line, 21ft. beam and 5ft. 6in. draft, without board. Mainmast, 83ft.; foremast, 61ft.; mainboom, 44ft.; gaff, 25ft.; foreboom, 31ft.; gaff, 20ft.; topmasts, 30 and 29ft.; bowsprit outboard, 20ft.; jibnoom beyond cap, 16ft.

SLOWLY WAKING UP.—The influence of FOREST AND STREAM upon its minor contemporaries is great. It has moved one of its little friends to boldly declare for racing at sea, though the same little bantling hitherto fought the idea tooth and nail, so far as bantlings can fight. They will get to cruising outside by-and-by, as fast as a new idea can percolate castiron.

THE PROSPECTIVE MATCH.—Series of races between Ileen and Hildegarde have been arranged subject to acceptance of Mr. Padelford. Mr. Wm. E. Iselin backs Ileen for $1,000. Seawanhaka Corinthian Y. C. rules. The match will cause great interest, as upon the result hinges the construction of some new cutters like Ileen.

REAL YACHTING.—The Meta, 374ft. long, is bound on a cruise to Norfolk the latter part of April, with her owner, Mr. Suydam, and Mr. Franklyn Bassford, the marine artist. The Meta will receive double head rig, and with companion made watertight, ought to prove equal to the occasion with her 5ft. of draft.

ANNASONA.—This clipper has topped her boom for the Mediterranean. She sailed from Cowes Feb. 27, bound for the big bag of ducats waiting to be scooped in the Nice international. It will be a very funny day if Annasona does not land the riches.

FORTUNA.—Mr. A. Cary Smith is authorized to deny the untruths circulated concerning Fortuna's behavior at sea. She did not strain or leak, and proved a grand sea boat under circumstances which a centerboard would scarcely have outlived.

MURIEL.—This cutter has been purchased by Mr. Paul Tuckerman to Mr. Charles A. Robbins, S. C. Y. C.; so she remains in the squadron.

NAMOUNA—was expected at Nice about March 20, with the Commodore's burgee of the N. Y. Y. C. at the main.

SURF.—This cutter is fitting out at Bay Ridge. She will be one of the early birds off for an April cruise.

TRITON.—This schooner has become the property of Mr. Henry E. Dodge, Seawanhaka Corinthian Y. C.

SEAWANHAKA CORINTHIAN Y. C.—Annual club dinner at Delmonico's to-night at 7 P. M.

DAUNTLESS—Left Marseilles for Villefranche Feb. 29, and was expected at Nice March 3.

MONTAUK.—This schooner arrived at St. Pierre, Martinique, March 19, from St. Kitts.

LAKE Y. R. A.—Meeting has been called for March 29 at Toronto.

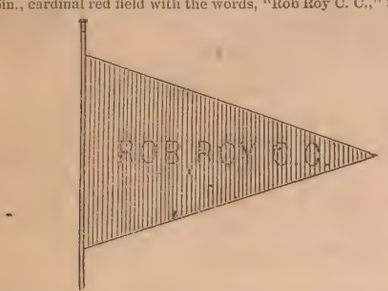
Canoeing.

FIXTURES.

Winter Camp-fire.—Sixth meeting, Wednesday, April 2, 8 P. M., No. 23 East Fourteenth street.

ROB ROY C. C. OF INDIANAPOLIS.

ORGANIZED June, 1883, with twenty members. J. B. Morrison, Commodore; L. M. Vance, Vice-Commodore; Frank Vater, Keeper of the Log and Treasurer; Signal, a pointed burgee 10in.x 15in., cardinal red field with the words, "Rob Roy C. C.," in letters of



gold thereon. The club is governed by six standing committees of three members each, appointed by the commodore at the annual meeting of the club. The committees are: Financial Committee, Inspection Committee, Entertainment Committee, Regatta and Race Committee, Cruising Committee, Membership Committee. A series of meetings is now being held once every two weeks, for the purpose of discussing matters relating to canoeing.

LOCAL CANOE MEETS.

IT will be seen, by a notice in another column, that the Whitehall C. C. have already taken action to arrange for a local meet next summer at Lake George, in connection with the Lake George C. C.; canoeists about New York and the Hudson are ready for a meet at Newburgh on May 30, and the Hartford and Springfield clubs will unite with other neighboring canoeists at some point on the Connecticut on the same date, and several Eastern canoeists have proposed a meet in June on the Merrimack River.

While there are a number of canoeists in New England, they are not united, there are but few clubs, and some such movement as this is necessary to awaken them and draw them together. The Vesper Boat Club, of Lowell, has a number of canoeists among its members, and some of these are ready to start the movement. It is proposed to hold a camp between Lowell and Lawrence, where there are many beautiful sites. Canoeists can center at the former place, paddling down to the camp, continuing later to Lawrence, Haverhill 18 miles, or Newbury port, 36 miles. The Boston & Lowell and Boston & Maine railroads can be taken from Lowell and Lawrence to all parts of New England. The expenses of such a meet would be very small, rates could probably be arranged with the railroads, a few tents could could be hired for those who were unprovided, and the canoeists would need about three days' rations each while in camp. Canoeists throughout New England who favor the scheme are requested to write to FOREST AND STREAM, making any suggestions that may occur to them. For the first year racing may well be omitted, the main object being to promote unity and sociability among canoeists.

With these four meets the East is well provided for, but there are many canoeists west of Pittsburgh who cannot attend the A. C. A. or local meets, and it is highly desirable that they also should unite in some central spot, and we shall be glad to hear also from their representatives. With them it is more important than in the East, as canoeists there will attend the A. C. A. meet, while they cannot do so on account of distance.

Canada also remains to be heard from. Do not all who were present last year wish to go to Stony Lake again on Dominion Day?

Such meetings all over the country can accomplish work that the A. C. A. cannot do in arousing local interest, making converts among boating men and campers out, and increasing the spread of canoeing generally.

THE ALL-AROUND CANOE.

WHAT is the best all-around canoe? Is it the canoe that will just suit everybody for everywhere and everything? If so, it will never be built.

I am very much interested in the canoe articles published in FOREST AND STREAM.

First—Because I am an old woodsman, having taken my first lessons in canoeing in a heavy, cranky dug-out, or the still more tickish spruce bark canoe, where it was necessary to be constantly on guard in fishing and in shooting, lest, when a big one bit and you struck him hard, or when perhaps your chum had put a couple of drams too much powder in the old muzzleloader just to see it kick you, some careless movement should spill you out into four feet of water and ten more of soft mud, I can therefore appreciate the light, steady, beautiful craft of to-day.

Second—Because I am a builder of these modern canoes. It is as a builder that I have studied the points and obtained the information which enables me to speak understandingly on this subject. My correspondence numbers about five thousand letters per year; of this number several hundred go into details, describing "the canoe I want" or "the boats used in this locality." Some contain absurdities, some theories, and some sound information and practical advice. Thus it will be seen that the professional builder has not only his own ideas and experience, but those of hundreds of others, and he is constantly trying experiments either on his own account or in building to order.

He builds a 10ft. 6in.x26in. canoe weighing 15 to 20 pounds for a "Nessmuk," and is told that it is the perfect canoe. He builds an 18ft. x35½ft. sneakbox for "Bojum," and that is the thing. He builds a Stella Maris for the river cruiser, and a 15x31 Princess or larger Pearl for the seaboard, and both suit.

"Nessmuk" is a light-weight veteran well versed in "woodcraft," as many of the readers of the FOREST AND STREAM well know, and his 20-pound canoe is ample for him, while a 10-pound one will do very well.

Mr. C., inspired by the interesting articles written over the signature "Nessmuk," wants a canoe just like his, or perhaps wants to outdo him by getting one 8 or 9ft. feet long. He gets it and finds it practically useless. Why? Because Mr. C. is six feet tall, weighs two hundred pounds, and is stiff and clumsy. He should have taken one 13ft.x30in. at least, or if for sailing, the 18x3½ sneakbox. Mr. D. wants a boat. He is not over strong, light weight, and a little timid. He tries the sneakbox but finds it too large, heavy, and to a certain extent unmanageable. He should have taken a light, open canoe, the Stella Maris, or at most the 14x30 Shadow or Princess.

In naming the best all-around canoe, there are too many things to be considered to have any one craft fill the bill. First, the boat must fit the purchaser's eye. Mind, I say his eye, not yours or mine. We must suit the mental canoeist. Second, we must fit the physical canoeist. That, you will say, is easy; a simple problem in weights and measures. True, if you take care of that other fellow, the mental man; but if you don't, it is about even chances that the mind will insist on cramming the body into a craft but half large enough, or else compel weak and untrained muscles to do the proper work of an athlete. Third, we must consider where the boat is to be used.

The Stella Maris can cruise from Labrador to Cape Cod, and the sneakbox can explore the waters of the upper Hudson; but if the owners of these respective boats contemplate such cruises they would find it advantageous to swap.

For the canoeist of medium weight, for inland cruising, where the paddle is used as much as the sail, and where supplies may be procured easily and often, a canoe 11ft.x26in. or 27in. is the best all-around canoe. For the canoeist of heavy weight, one 14ft.x30in. would be better for the same purpose. For lakes many miles in extent or the seaboard, a canoe 14ft.x33in. is thought small enough, and many would prefer 15ft.x31in., or even larger. If compelled to adopt one size for all men, all places and all purposes, there is no question but that the 14ft.x30in. or 31in. would be the best all-around canoe. Happily, however, the canoeist may suit himself from among the many sizes, models and builders.

I may say in conclusion that I build more canoes either 14ft.x27in., or under, than all others. Probably because there are so many more miles of inland waters than seaboard. RUSHTON.

BOATING TRIPS ON NEW ENGLAND RIVERS.

THE canoeist who reads Mr. Fellows' interesting little book will wonder why he did not choose a canoe for such work, and will feel a desire to convert him from the oar to the paddle. The trips described were made on the Nashua, Housatonic, Sudbury, Concord and Merrimac rivers, and were of that sort most enjoyable to the true canoeist, the lazy loitering on narrow streams, camps in quiet nooks, continual surprises, obstacles to overcome in the shape of dams and shallows, excursions on shore to visit points of interest, and with sufficient work in rapids to give occasional excitement, in fact the cruising described by MacGregor, and for which no boat is so well suited as his Rob Roy. Mr. Fellows seems to have been unfortunate in his craft, owing to the leakage, and his experiences with railways and express companies will awaken the sympathies of many canoeists who have suffered similarly. Without falling into a mere list of stopping places and obstructions, or impairing its interest, minute details are given concerning the waters traversed, and it will prove an accurate pilot to all following the same course, as maps are given of all the rivers mentioned. We hope that when Mr. Fellows next goes afloat it may be in a canoe, and that we can welcome him some day under the A. C. A. flag, for in spite of the heterodox oars on the cover, his book is worthy of a place in every canoeist's library.

ENGLISH AND AMERICAN CANOEING.

IT might indeed be possible to fix to a date when the first canoe club was started in America, and also to record the names of those who took part in the organizing of clubs. Boating in various degrees dates back many years; for instance, to Noah, who built his ark to very correct nautical proportions. But the birth of canoeing in these times dates back to the day when McGregor first stepped into his Rob Roy.

Yet there are many who "canoed" long before the Rob Roy was thought of; who paddled around in birchbarks, presumably for hunting purposes first, and occasionally for the pure love of being on the water. These old stagers no doubt took up the idea when it came over, and possibly such an old hand as "Nessmuk" may have been the first to have a canoe built and covered in with a wooden deck. It is easy to see that a sail would soon follow. Two or three companions become interested, and after, say, one season's desultory drifting around a club is formed, and clubs beget clubs.

Let us take a trip across to the old country for a few hours and visit some of the clubs there. The Royal C. C. has a membership of over 600. Now, one would imagine that there must be at least 50 per cent. of that 600 sufficiently enthusiastic to turn out for the challenge cup race; but, with its members scattered over a large area, and no central club house, is it any wonder that there are not more than, say, one dozen who turn out for the cup? The cup course at Hendon, too, is like—what it really is—a fish pond in very confined limits. Yet, to make all allowances, where could the Royal C. C. find a more suitable place?

Some of the R. C. C. branches are more happily situated for a large entry at races. The Cambridge branch had eleven entries for a quarter mile race in '67, and on no occasion is there any record of two and one-half per cent. of the membership entering for the cup. Why?

Since we are in England let us visit other clubs. The eastern branch of the R. C. C. at Hull has a fairish cruising ground, though awkwardly hampered by mud and sand banks. It has a few active and enthusiastic members and a fair membership, but its percentage is similar to the parent club. The northern branch, or now the Mersey C. C., is still better situated, and evidently more enthusiastic as to entries for races. Go further north a couple of hundred miles and visit the Clyde and Forth C. C. The Forth C. C. is conveniently situated, but rather exposed to south and southerly winds. It has a fair membership and an extra average of interested members.

Go 'cross country and visit the Clyde. This club has the finest, loveliest and most romantic situation anywhere. Its club house is only a few yards from the sea even at low water. It has a most sheltered launching slip, a pretty fair membership, and a very high percentage of active members. With a roll of about thirty-five, it is not uncommon for 10 or 12 to go off on a cruise together or enter for a race. Records are in existence of an attempt to get up an international canoe club cruise, at which not more than eight took part in. Now let us return to the States.

There is a man in America by name of Bishop who took a leading part in getting up an international canoe club cruise, and remark the result—twenty-three canoeists meet at Lake George and organize in 1880. At the last meet of this Association there were something like forty prizes raced for, with as many entries as ten for a single race from an attendance of 300 canoeists. English canoeists seem afraid to take their canoes, say 50 or 100 miles, to attend a meet, while here an average American canoeist thinks no more of going, canoe and all, 600 miles or more for a "meet" of three days' duration. But, hold, we forgot.

There is one English canoeist, to wit, C. W Bush, of the Royal C. C. and the Mersey C. C., who took his canoe to Canada with him. Three cheers for Bush—a man among men. It is doubtful if he would have done so had he not been a Mersey man; but where would a Mersey man not go?

Now what is the result of the institution of the A. C. A.? A healthy growth of canoe clubs all over the States, from Cape Cod to the Golden Horn, from Key West to the St. Lawrence, including of course our good friends the Canadians.

To be a member of a canoe club is no mean attainment. Their doors are not open to everybody, and a would-be member requires certain attributes to recommend him to membership. Then again, there is the club house; and how different from clubs usually called "the club." You cannot buy a drink or a smoke in any of our clubs. You don't find any signs of intoxication, unless it be the effects of exhilaration on the water. There is no dawdling around the club room, but a sprightly hurry to get afloat and away, or a very possible and probable dissertation and explanation on a new kink in a rope or a wrinkle in a sail. You ask did I say healthy? Of course it is, and for proof look at the boys: speak to them, walk or paddle with them, eat with them, and then hear them snore!

Then again, apart from clubs, there are the new winter cruises now becoming popular (like an epidemic) all over the country. The winter camp-fires are certainly the most enjoyable and remunerative way of investing the fly about dollar that could be instituted.

But who else is benefited? Why, canoe builders, who, were it not for canoeing, would have possibly not been so well known. There's Rushton, Smith, James, Waters, Herald, Rogers, and a host of well-known names, who send, or rather give, their help to the ever-growing cause, and who could tell an interesting tale about "how they commenced to build," were they only to take the trouble. But they have not time. You boys all keep them too busy building. WREN.

CANOE VS. SNEAKBOX.

Editor Forest and Stream:

The owner of "Bojum's" old canoe is quite right in declaring for the canoe as a cruising boat. Nobody claims the sneakbox to be better as an all-round boat. Were I to cruise from the headwaters of the Potomac to Point Lookout, on Chesapeake Bay, I should use a canoe, for it could be easily carried around the falls of the upper river, would be pleasanter to paddle along the stretches of smooth water above Washington, and carefully handled, could be sailed with safety where the Potomac is from five to ten miles in width, although it would perhaps be a little wet when a heavy sea was on.

But if I were to cruise from this city down the Potomac and explore the length and breadth of the Chesapeake as well, I should use the sneakbox. When you say that "a boat of 18x5½ft. is larger and should carry more, sail faster and be stiffer than one of 14x2½ft.," you state the very reason why the box is superior for wide waters. "Boats of the same size" cannot be considered in the sneakbox-canoe question, for when you decrease the box's beam to that of the canoe the former is no longer a sneakbox. There used to be a 12½ft. sneakbox somewhere around New York owned by "Snark," and if he has it yet I presume he would accommodate Dr. Neidé with a race from Throgg's Neck or Flushing to New Haven, or perhaps even to Montauk; but the editor surely wouldn't expect "Snark's" 4ft. of beam to be reduced to the dimensions of that of the doctor's canoe. I admit that the merits of the two boats could be thoroughly tested by cruising together, but not that racing together would be a fair test, unless several races were had under various conditions of wind and water, current, tide, etc., and "a little wind and water" won't settle the question either. Mr. Editor, for on the wide waters where we put our trust in the sneakbox there is always a good deal of wind. Has Dr. Neidé ever made a practical test of the sneakbox on wide waters like Ontario or any of the great lakes, Long Island Sound, South, Barnegat, Delaware or Chesapeake Bays? SENECA.

WASHINGTON, March 19.

[For a fair comparison of model it is necessary to consider boats of the same size, and if, for instance, the 18x5½ sneakbox be compared with an 18x3¼ canoe (the same proportions as a 14x30 canoe) there is no doubt as to the superiority of the latter on every point, except draft. This comparison would not be unfair, as the depth of one would offset the extra beam of the other, and similarly the Snark, 12½x4, would be well matched against a 15x31 canoe. Perhaps "Snark" can tell, from previous races, what chances the box would have in such a race. The following letter offers an opportunity to settle the question as far as it can be done by a single race. If the time and place mentioned are not convenient to Mr. Wild, no doubt a race could be arranged nearer home, say in New York Bay.]

A PROMPT ACCEPTANCE.

Editor Forest and Stream:

In reply to your correspondent, Geo. H. Wild, of Red Bank, in to-day's issue, I hereby offer to sail the canoe Guenn, 15ft.x31in., N. Y. C. C., at the Newburgh meet on Decoration Day against his 12.6x3.10 sneakbox. Race to be singlehanded. No shifting ballast—triangular course at least three miles. Sailing regulations of New York C. C. to govern match for a mug; or colors as may be preferred. Other entries permitted at $1 entrance fee.

NEW YORK, March 20. WM. WHITLOCK, Com. N.Y.C.C.

Editor Forest and Stream:

As to the sneakbox vs. canoe I am decidedly of the opinion, as "Bojum" says, that a sneakbox will drown out any other boat of her inches. I have seen them cross our bay to windward when a 20ft. catboat dare not show her nose out of harbor. The bay is five miles wide, and with a norwester there is considerable sea. E. B P.

TOMS RIVER, N. J.

KNICKERBOCKER C. C.

Editor Forest and Stream:

The Knickerbocker C. C. intend removing from their present location at the foot of Eighty-sixth street on or about the 1st of May next. Their house has long been inconveniently small in proportion to their number, and for nearly twelve months they have been considering the advisability of securing enlarged quarters. They have finally succeeded in obtaining the house belonging to the late Resolute Boat Club, at the foot of 152d street on the Hudson River. The building is large and commodious, capable of accommodating fifty canoes, with a large upper meeting room, and is well supplied with racks, lockers, closets and other conveniences. The original cost of the erection was in the neighborhood of $2,200.

By private subscription among the members the purchase money has been raised, and we shall be enabled to enter it in May without one cent remaining due and with all the preliminary expenses of painting, fitting up, etc., paid for in full. It is situated in a sheltered nook on one of the broadest and most beautiful parts of the Hudson. In the neighborhood are many points of interest to the lover of the picturesque and the commanding site of the spot renders it peculiarly adapted to club meets and regattas.

The Knickerbocker C. C. is in a most prosperous and promising condition. It numbers twenty-seven active members, with thirty-six canoes. Many new boats are being built, and the universal activity and interest displayed in regard to better models, new centerboards, improved sailing rigs, unheard of camping kits, and phenomenal water-tights promises a vigorous and enthusiastic summer campaign. We hope to send a fair representation to our coming local meet, and believe the blue diamond on its red field will float from many a masthead this autumn at the Thousand Island. The club has lately been duly incorporated under the State Laws of New York, the board of trustees for the present year being the lately elected officers: Messrs. Brentano, Greenleaf, Martin, Sullivan and Fowler.

We expect a large accession of new members as the season opens, many having expressed their desire to join us. We are one of the four oldest clubs in the United States, the second in size, and the second as a corporate body, but we trust to be second to none in the interest we feel in canoeing, and I may add, second to none in the hearty welcome we shall extend to brother canoeists and members of sister clubs who may visit us in our new home.

E. FOWLER, Sec'y K. C. C.

LARGE VS. SMALL CANOES.

Editor Forest and Stream:

A correspondent asks why the Stella Maris could not be built a little broader and deeper and remain about the same weight. Certainly. Every one knows that it is only the material that weighs, and it takes no more to build a house 30'x40 two stories high than another 20'x40 and one story high. A fat man will weigh no more than a lean one if their height be equal.

Seriously, however, if you add to the capacity of a canoe by adding to either length, depth or beam, you must increase the weight.

BUILDER.

VESPER BOAT CLUB.—The annual meeting of the Vesper Boat Club was held at the American House March 12, with a good attendance of members and Vice-President Harry A. Brown in the chair. Report of last meeting read and accepted. The treasurer's report followed, and showed the club to be in a highly satisfactory financial condition. Receipts for the year were $1,731.88: expenditures, $1,708.41, leaving a balance of $23.47. Canoeing is becoming a prominent feature of the club work, and with about twenty-five canoes in the boat house, it may be advisable to form a canoe division and open communication with the American Canoe Association. Officers were then elected, as follows: President, Paul Butler; Vice-Presidents, Harry A. Brown and Fred P. Marble; Secretary, Walter U. Lawson; Treasurer, Ralph F. Brazer; Directors, C. P. Nichols, A. G. Swapp and C. F. Edwards. Austin K. Chadwick and R. F. Hemenway were appointed a committee to draft resolutions of thanks to Mr. Knapp for his valuable gift. E. S. Sherman and W. P. Kennard were elected auditors. Adjourned.—*Lowell Courier.*

THE WARREN C. C. is now fully organized and ready for exercise and recreation. It members are: William Schnur, Captain; W. C. Warner, Mate; Willis Cowan, Purser; J. P. Jefferson, W. H. Johnson, J. A. Cadwallader, C. H. Noyes, Fred Morck, W. A. Greaves, B. Kittinger, W. A. Talbott, Ed. Wetmore. The club will be represented at the annual "meet" of the American Association at the Thousand Islands next August, and expects to increase its membership this summer.—*Warren (Pa.) Mail.*

WHITEHALL C. C.—At a special meeting of the Whitehall Canoe Club a committee, consisting of F. C. Cooke, W. W. Cooke, Jr., and E. A. Greenough, was appointed to make arrangements for a local meet on Lake George next summer. They will act in connection with the committee of the Lake George Canoe Club appointed for the same purpose.—HAWKEYE.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

W. M., Roslindale, Mass.—For full particulars address W. A. Stearns, Amherst, Mass.

R. C. H., Philadelphia, Pa.—Watch him and correct him every time that he commits the fault.

H. G., Rathrun, I. T.—What is the best work published on breaking a dog? Ans. "Training vs. Breaking," price $1. We can furnish it.

O. G. L., Comstock, Mich.—Would like the latest Michigan laws you can give. Ans. You will have to write to the Secretary of State for copies of bills.

J. B. W., Harrisburg, Pa.—We know of no maker of tubed shells, and presume that you would be obliged to have them specially manufactured for yourself.

S. H. F.—Do not think marine glue can be obtained in this country. Try the large paint and varnish dealers, Pierce or Raynor, Fulton street, or along South street.

J. S., Brooklyn.—Please let me know the address of some one that has game chickens for sale, also common pigeons. Ans. Write to J. & W. Van Wyck, New Hamburg, Dutchess county, N. Y.

F. R. H., Collingville, Conn.—What is the customasy way of choosing referees in gun clubs? Is it usual to choose them for the season or at each practice? Ans. Generally chosen for each match.

M. S. F.—Cost of single-hand yacht of 21ft. loadline, from $700 to $1,000, according to build and equipment. Fairly good boat of moderate type can be built for less if content with small outfit and plain finish.

CONSTANT READERS, Old Subscribers, True Sportsmen, and others, who forget to sign their names to their questions and communications are respectfully referred to the notice at the head of this column.

F. K., Holyoke, Mass.—In loading buckshot, is it right to place a wad between each layer of shot, or only one wad, the same as in ordinary loading? Ans. Either way will do. The first is said to be very good.

BLACK AND TAN, Dedham, Mass.—1. Farrar's Fan was by Dick and out of Thomas's Fan. 2. Grouse (E.K.C.S.B.) was by Rock and out of Floss. 3. There are ten volumes of the English Stud Book. The

second volume is out of print, you can procure the others and also the *Gazette* of the secretary, 6 Cleveland row, St. James, London, S. W.

J. C. F., Brooklyn.—Will you oblige several readers by telling what kind of fish, if any, are contained in Lake Ronconcoma, L. I.; what season is best, and what bait or fly to use? Ans. Black bass are the principal fish, the best season is June to October, and the baits and flies are the usual ones for that fish. There are other native fish in the lake, but not of much account.

SUB., Geneva, N. Y.—1. In a glass ball shoot say that A at 21yds. ties with B and C at 18yds. Do not they shoot off the tie at those distances? 2. Do not others in same contest, tieing for second and third prizes at 18yds., shoot off their ties at 21yds.? 1. The general practice is to fall back three yards in shooting off ties, but the handicap must be preserved. 2. Yes.

FOX, Corning, N. Y.—Can a cheap breechloading shotgun, having a side snap and single butt, be regarded as perfectly safe when using heavy charges? I have such a gun, stamped W. Richards, and, although it is sound and tight, I am afraid of the action. Ans. We should not be at all afraid to use it. But after all you do not tell us much about the gun. We presume it is safe.

COON SKIN, Sharon, Conn.—I have a very fine raccoon, lately caught in a steel trap. She is a very dark color, and I wish to tame her if I can, what shall I feed her and how shall I proceed to get her tame? Ans. A coon will eat anything—bread, meat, vegetables, etc. It will also steal all your eggs if it gets loose. We do not know how to go to work to tame it, though perhaps by patience it might be accomplished.

E. C. C., Westerly, R. I.—Please inform me if there is a Fish Commissioner in Rhode Island, if not how could I get a few thousand trout fry gratis, for stocking the brooks in my neighborhood? Ans. The Fish Commissioners of Rhode Island are: John H. Bardwell, Rockland; Henry T. Root, Providence; Col. Amos Sherman, Woonsocket. If they cannot furnish you trout consult our advertising columns.

W. A. W., Bridgeport, Cal.—1. The word "charge," as used by sportsmenn, means to drop or lie down. 2. The term "bye," used in connection with field trials, signifies that the dog to which it is applied wins his heat without running for it. For instance, supposing that there are nine dogs to run. Their names are drawn in pairs, and the last name drawn, having no competitor, is entitled to his heat just the same as though there had been ten dogs and he had beaten the one drawn against him; or in other words, a "bye."

IDLEWILD, New Castle, Del.—1. Is a .32-caliber, Remington 7½ pounds rifle, a good one for squirrel shooting? 2. What length of barrel would you advise me to get, 26, 28 or 30? 3. About what distance will they kill? 4. What price photographic outfit was it you used from the windows of your office some time ago, of which you mentioned in your editorial columns? 5. Are the $10 outfits of any account? 6. How long does it take to complete a picture? Ans. 1. Yes. 2. It is a matter of individual fancy; we should choose 28in. 3. About 100 yards. 4. $35. 5. Yes, but not a fine lens. 6. To expose, develop and print about two hours.

A. C., Marblehead, Mass.—My best sport is fishing, but the only kind of fish I ever catch are mackerel, cod, pollock and cunner, as they call them. Please inform me what the names of these fish are. I mean what you would call them. 2. What other kind of fish ought I to catch? There is one man that catches one bass or two a summer, but he is the only one I ever knew who ever caught any. 3. What kind of a fish do you call trout? Are they salt-water fish? 4. What kind of fish do you catch with those kind of hooks that you don't have to bait? 5. What time of year do bluefish get here in Massachusetts Bay? Ans. 1. The fishes are named correctly, and we would call them as you do. The cunner is called "bergall" in and about New York, but cunner is just as correct. 2. Catch such other fish as are in your vicinity or go to other places. 3. The trout is a fresh-water fish of the salmon family, inhabiting cold spring streams. 4. Trout, black bass and perch. As a rule salt-water fish do not rise to the fly. 5. Latter part of June and July. They leave in October.

A. B. D., New Hampshire.—Is there any solution of the following lines from "Secrets of Angling," 1613:

"Take gum of life, fine beat and laid in soak
In oyle well drawn from that which kills the oak"?

Also, can you give me directions for making the paste bait used in catching perch? Ans. We have not the slightest idea what drug was meant by "gum of life" in 1613; "that which kills the oak" may mean ivy. The meaning is evidently hidden in the form of an enigma to stimulate guessing. Perhaps some of our readers may know the meaning. Walton says, Chap. VIII.:

"Dissolve gum of ivy in oil of spike,
And therewith annoint your dead bait for a pike."

Again, speaking of scents for baits, Chap. XI., he says: "Did I know any such secret I would not use it myself, and, therefore, would not teach it you. Though I will not deny to you that, in my younger days, I have made a trial of oil of osprey, oil of ivy, camphor, assafœtida, juice of nettles, and several other devices that I was taught by several anglers I met with, but could never find any advantage by them." See also Chap. XVII. These things are not in use now, and we only know of them by reading. Pastes are in the same category. There are no better baits for perch than minnows and worms.

PUBLISHER'S DEPARTMENT.

THE Perfection cartridge loader appears to possess the merits of simplicity and ease of manipulation. It is stated that with it five shells can be loaded in a minute. Such a tool cannot fail to find many buyers among shooters. It is manufactured by the Perfection Cartridge Company, Cincinnati, O.—*Adv.*

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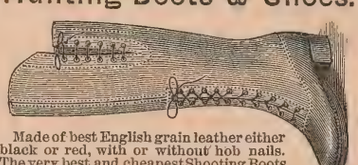
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A WEEKLY JOURNAL OF THE ROD AND GUN.

TERMS, $4 A YEAR. 10 CTS. A COPY. SIX MONTHS, $2.

NEW YORK, APRIL 3, 1884.

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ANSWERS TO CORRESPONDENTS.

IN APRIL.

THE Ram makes way for the Bull; March goes out and April comes in with sunshine and showers, smiles and tears. The sportsman has his gun in hand again with deadly purpose, as the angler his rod and tackle with another intention than mere overhauling and putting to rights. The smiles of April are for them.

The geese come wedging their way northward; the ducks awaken the silent marshes with the whistle of their pinions; the snipe come in pairs and whisps to the thawing bogs—all on their way to breeding grounds and summer homes. The tears of April are for them, for wherever they stop for a day's or an hour's rest, and a little food to strengthen and hearten them for their long journey, the deadly, frightful gun awaits to kill, maim or terrify, more merciless than all the ills that nature inflicts in her unkindest moods.

Year after year men go on making laws and crying for more, to protect these fowl in summer, but in spring, when as much as ever they need protection, the hand of man is ruthlessly against them.

When you made that splendid shot last night in the latest gloaming that would show you the sight of your gun, and cut down that ancient goose, tougher than the leather of your gun-case, and almost as edible, of how many well-grown young geese of next November did you cheat yourself, or some one else of the brotherhood?

When from the puddle, where they were bathing their tired wings, sipping the nectar of muddy water and nibbling the budding leaves of water weeds, you started that pair of ducks yesterday, and were so proud of tumbling them down right and left, you killed many more than you saw then; many that you might have seen next fall.

When the sun was shining down so warm upon the steaming earth that the robins and bluebirds sang May songs, those were very good shots you made, killing ten snipe straight and clean, and—they were very bad shots. For in November the ten might have been four times ten fat and lusty, lazy fellows, boring the oozy margins of these same pools where the frogs are croaking and the toads are singing to-day.

"Well, it's a long time to wait from November till the earth ripens and browns to autumn again. Life is short and shooting days are few at most. Let us shoot our goose while we may, though she would lay a golden egg by and by."

Farmers do not kill their breeding ewes in March, nor butcher cows that are to calve in a month; it does not pay. Why should sportsmen be less provident of the stock they prize so dearly; stock that has so few care-takers, so many enemies? Certainly, it does not pay in the long run.

PROPOSED ZOOLOGICAL GARDEN.

THE suggestion that a zoological garden be established in the Yellowstone National Park is one which deserves careful consideration. Practically, if the law is enforced, the Park is already a great zoological garden, a place where the observer can go and study wild animals in a state of nature. But, if we understand it, Mr. Talbot's plan looks toward the capture and keeping under close surveillance the species which he mentions. This is something that can be readily done, but it is perhaps open to question whether it is at present desirable to do it.

The people now feel that they have got hold of their Park, having wrested it from the grasp of a lot of greedy speculators, and the first thing that they desire is to see that it is properly protected and cared for. That it will be subsequently improved, we do not doubt, though we hope this improvement will never take the shape of anything like landscape gardening. The project suggested by Mr. Talbot will bear discussion, and we shall be glad to have our readers' views on it.

In the list of species of animals stated to be found in the Park the caribou is given, and we should be glad to learn if any of our readers have any knowledge of that species occurring in this region. That it is found a little further west and north is well known, but has it ever been killed in the Park? The moose is fairly common there.

A PLEASANT LETTER.—Such epistles as the one printed below are very grateful to the editorial heart, for it is no small thing after all to feel that by our efforts we help to give pleasure, such as that mentioned by our kindly correspondent.

MARCH 29, 1884.—*Editor Forest and Stream*: Your favor of the 27th is received, and I wish to assure you that anything I send for the paper can take its turn either into the columns of FOREST AND STREAM or into the waste basket, and in your own good time. Of course we all like to appear in the paper, but all correspondents should have sense enough to know that they cannot all be first. The paper is most excellent, and improves all the time, and its arrival in my family from week to week, is looked upon as an important event. All of us read it, and my sons, the daughter and their mother scan its columns with ever increasing interest. My own life is one of study, care and labor, and that paper has afforded me more *genuine relaxation* than all other publications that reach me put together, and I am greatly indebted. I have made the rifle a sort of hobby for many years, and have acquired most valuable information from the pages of FOREST AND STREAM all along. This afternoon I have been out practicing at 200 yards, and came in very much elated; as I made six successive shots at that distance from a sitting position—using a coarse hunting sight on the muzzle and Lyman rear sight—and put them all into a three-inch ring. This with a 50-cal. Maynard, 24-inch barrel. I used a new cartridge of my own make, and have something of interest to write about some of these days, unless I find I am mistaken in some way. ——

FISH AND GAME PROTECTION seems to be rapidly gaining in popular favor in Boston, if not all over Massachusetts. The new game bill reported to the Legislature is received with more favor than its warmest friends dared to hope, and appears to be sure of a passage without essential modifications from the draft already reported in these columns, unless some unforeseen difficulty arises. There is a change of sentiment even among marketmen—the best of them. One of them, a gentleman of integrity, remarked to the president of the Massachusetts Fish and Game Protective Association the other day, that if the new game bill passed it would ruin his business. The bill was fully explained to him in all its bearings. He heard it through, owned squarely that he had been mistaken, and wound up with desiring to be proposed as a member of the Fish and Game Protective Association. He will be received gladly, and christened as another friend of the good work. Boston is going to get rid of the name which has been put upon her of being the "dumping ground" of all the illegal fish and game of the country.

WHAT IS THE USE?

WHAT is the use in legislatures enacting laws for the protection of fish and game if those laws are not enforced? What is the use in the appointment of game constables, who are laggards in the performance of their duties and perhaps wink at violations of the laws, which it is their special office to enforce? What is the use in the formation of fish and game protective associations, which are not protectors of fish and game, and whose only business is eating and drinking and shooting glass balls and pigeons of flesh or clay? What is the use in two or three earnest men bestirring themselves to organize a club which starts with the honest intention of enforcing protection, when none of the twenty or thirty or fifty members besides themselves will do aught but sit still and grumble at what is done by them, and tell what should be done, what they would do! Well may these faithful few ask this question; when their associates, after the first warmth of the club's new life has vapored itself away, grow cold and stand aloof, never helping, but ever finding fault, and perhaps are known to break the laws which simply as good citizens they are bound to abide by, and have also given their word of honor to uphold.

Laws unenforced are worse than no laws, and worse than useless; so are unfaithful officers, and so are societies living only in name, and so are cold or only lukewarm members of societies, from which the living spirit has not entirely departed, and pretenders and hypocrites ten times worse. But it is always of use to urge the enforcement of good laws, the appointment of faithful officers to back them with aid and sympathy, to believe that laws were made for our observance as well as that of others, to endeavor to arouse the apathetic and instruct the ignorant, always of use to preach earnestly, and above all to practice as faithfully as we preach earnestly.

Preach to all men, practice, *practice*, PRACTICE! whether the eyes of men be upon you or not.

A SUMMER TRAMP IN THE ADIRONDACKS.—The annual "summer tramp" of Professor Jordan and party will be in the Adirondacks this year, instead of in Europe. These "tramps" are organized to combine pleasure with the study of natural history, and have been successfully conducted for the past three years. The circular says: "The total distance traversed on foot will be about 300 miles, the itinerary depending somewhat on the desires of the party and on the condition of the weather. The number of members of the party will be limited to about fifteen. The total expenses (from Fort Ticonderoga) will not vary far from $65. This includes a director's fee of $15. This tour is designed especially for those who enjoy walking and find pleasure in woods and rocks, and who are willing in some degree to 'rough it' for the sake of being brought close to nature. Those who prefer hotel-parlors to mossy logs should not join us." The director is David S. Jordan, Profesoor of Biology in the Indian University, Bloomington, Ind., and his assistant is Cornelia M. Clapp, teacher of zoology at the Mount Holyoke Seminary. The party will meet at Fort Ticonderoga, June 28. Spending the Sabbath there, they will proceed on foot to Crown Point, Bulwagga Mountain, Moriah, Crowfoot Pond, Deadwater, Euba Mills, Bouquet River, Hunter's Pass, Chapel Pond, Roaring Brook, Noonmark Mountain, Keene Flats, Au Sable Ponds, Mount Marcy, Avalanche Lake, Calamity Pond, the Deserted Village, Indian Pass, Clear Pond, North Elba, John Brown's Grave, Lake Placid, Old White Face, Au Sable Chasm, Port Kent, and across Lake Champlain to Mount Mansfield and Camel's Hump; leaving the mountains July 28.

HENRY BAINBRIDGE, the senior partner of one of the most prominent wholesale stationery firms of this city, died at his residence, No. 76 Lefferts place, Brooklyn, Saturday, March 29. Mr. Bainbridge was a genial hearted and social man, and was held in high esteem by his extensive circle of business associates and friends. One of his most marked characteristics was a genuine love of truth for its own sake—a keen sense of honor. He was an enthusiastic sportsman, and much of his leisure was devoted to his dogs and his guns. He was one of the earliest subscribers to FOREST AND STREAM, and even during his last illness looked forward to its weekly coming, as one of his friends says, "with singular eagerness." Mr. Bainbridge was a diffident and sensitive man, but greatly beloved by those who knew him intimately. He leaves a widow and two daughters, one of whom is the wife of Col. I. M. Faville. His funeral was very largely attended, from St. Luke's Episcopal Church Clinton avenue, Brooklyn, on Tuesday last, April 1.

THE LAKE YACHT RACING ASSOCIATION.

THE formation of an association by the yacht clubs on the chain of fresh-water lakes, is now an accomplished fact. At a spirited meeting held in Toronto, Saturday last, representatives from the principal clubs, both on the Canadian and American shores, drew up a constitution for the proper government of the new union. With the customs and laws of racing assimilated, a new era has opened for the prosperity of the sport. Through the adoption of the length and sail area rule of measurement, competition between the representatives of different types can now be undertaken with something like rational interpretation to the results. Individuals will not be forced into the construction of the largest sail carriers for the only purpose of racing, but can suit their preferences in all respects, and build to meet other requirements besides. The custom of making the rounds, which is the very life of match sailing, will now take a fresh hold upon lake yachtsmen, and the voyages and passages such undertaking entails, is certain to bring to the fore that boat best suited for the fresh-water seas. The constitution we will print in full next week with some further material bearing upon the subject.

"WOODCRAFT."

WE are pleased, but, we confess, not very much surprised, at the interest manifested by the general public in the little volume which we shall soon issue. Those who read it will find that it is very different from any book of the kind that they have ever seen. The striking feature of the book is that there is no waste about it, no writing to fill up, no padding. If the author had anything to say which did not teach some lesson he just left it out. Those who are familiar with "Nessmuk's" writings will understand that the style of the book is very attractive. Those who know that it is the outcome of fifty years' experience will understand that the book is replete with information. To give some notion of what may be found within its covers, let us quote from a letter received some time ago from the author. He says:

> And let me say that I have not tried to emulate Carlyle or Emerson in style. My purpose has been to make the book plain, simple and concise. Never to use three words or syllables where two will serve.
>
> To give such directions as will enable the average outer—
>
> To make his outing a pleasure instead of a misery, a comfort instead of a calamity;
>
> To sleep on a fragrant, elastic bed and pillow at night, instead of abrading his æsthetic vertebræ with roots and stubs;
>
> To go light;
>
> To keep warm and dry;
>
> To cook plain, wholesome meals;
>
> To come out of the woods refreshed and comforted;
>
> To get a dollar's worth of recreation and rest for every dollar spent;
>
> To learn Nature in her secret ways.
>
> To teach something of all this, "Woodcraft" is written.
>
> Let the great army of outers decide whether the book is worth taking into the woods. NESSMUK.

As he says, it is for the public to decide whether the author has accomplished his purpose. That we believe that he has done so goes without saying. "Woodcraft" will probably be issued in a week or ten days. The reader is referred to our advertising columns for further information.

The Sportsman Tourist.

MAJOR JOSEPH VERITY.

SOME OF HIS SPORTING ADVENTURES, AS MODESTLY SET FORTH BY HIS OWN HAND.

Chapter VIII.

SOMETHING which I hinted at in my last chapter I may as well enlarge somewhat upon now as at another time, and that is of the manner in which things, animate as well as inanimate, are drawn to one another. By some invisible impulse the polar bear and seal are drawn to frozen salt water, and seafowl to salt water unfrozen, just as strongly and surely as the needle to the pole, smoke to the sky, sparks toward their kindred, the stars, and water ever downward by some unseen power. Thus, also, according to my belief, by some intangible, ethereal attraction, and not, as commonly supposed, by a base, sanguinary desire, the hound is led toward the hare, the fox and the deer; the pointer, setter and spaniel drawn to game birds. For when each has come to his so-called prey, he is satisfied with merely mouthing it or smelling it, when each body becomes equally changed and the attraction ceases. This power of attraction acts on the dead dog, or part thereof, in proof of which fact I call to witness the undisputed account of a famous German baron concerning his jacket made of the skin of a celebrated pointer, which, when he wore it, always led him to game. For this reason, I have heard it whispered, the dogskin jackets are now in such favor with sportsmen, though the dealers in this article hesitate in this skeptical age to set forth this virtue in their advertisements. And, furthermore, if the fact became well known it might lead to the suppression of the sale of them.

Now this influence, whatever it is, is not only exercised by such bodies on such objects, but also by inert and inanimate articles of food on the animal when dead, and even on parts of it. For instance, I have seen a raccoon skin cap irresistably drawn to an ear of boiled green corn, and a dish of frog's legs, although there was so ponderous a body as a man's head inside the cap. And when the corn and the frog's legs had drawn the man's mouth over them and had then fallen into his stomach, the cap was so strongly pulled downward by the force of their attraction, that it required all the strength of his arms to push it off his head. There is also an antagonistic fluid, principle or whatever it may be called, contained in some bodies. I have seen cat skins hanging against a wall swell up their tails and strive to climb higher when a dog came into the room, and any one may see by waving the wing of a hawk or a large owl over grouse, duck or woodcock feathers, or any such, how they will flutter away and disperse in all directions. Sometimes, when I have myself pointed a gun, no matter with how little care, the lead has gone so directly to the mark that I have thought some such subtle influence draws shot and ball to game, but when I have seen some others shoot, I have thought differently, and that possibly there was a repellant power existing in and perhaps exercised at will by the object, which made the missiles diverge or broke their force so that they were made harmless. May it not be that the lead becomes charged with a positive or negative force by being in contact with the person of the shooter, wherein the one or the other is engendered?

But such matters I would better leave to be settled by minds more schooled in philosophy than mine, for I am in no wise fitted to discourse concerning them, being only a plain old hunter with little knowledge got of books, and as all may see, of but few words. With my hunting mates I could never more than half hold my own in story telling and argument, with anglers not even this much, though they are ever modest and truthful men who exaggerate nothing, to their own belittling or their craft's. Just and honest men they are too, for they cheat no fish of their own catching of their full weight, nor the count thereof of the highest number. I have never known an angler worthy of the name who would not honor a fish of his own taking with twice the weight another man would award it, and who, if he lost a fish, would not be so generous as to give the escaper credit for the wiles of a serpent, and the strength, if not the bulk, of a whale. I love, honor and admire the angler. I love him for his patience, never losing his temper whatever befalls, and for his gentleness, as shown, for instance, in his tender and compassionate treatment of live bait. I honor him that he never tells a lie to glorify another, nor owns that he has told one to glorify himself, and I admire him for his skill in invention, not only of rods, flies, hooks and so on, but in other matters pertaining to his pastime, and for the even balance of his brain, whereof he is himself so well assured that he scorns all brazen and steel contrivances for determining the weight of fishes, showing therein a triumph of mind over matter.

I would that I might count myself a true angler, but though I have caught many fish in my day, I never had a right to claim that name, for reasons which my readers may guess. But doubtless the craft has reason to be thankful that I am not of it, for if I had turned my attention to the beguiling of simple fishes, it is possible that there might be prayers for more fish and one the less angler.

Once in my life I thought I had achieved glory enough in the capture of one trout to make my name forever famous in the annals of angling. And I think now that if this fish had been caught by an approved and acknowledged member of the fraternity, and the story told by him, the feat would have been considered remarkable. But in the unembellished narration of facts which I must give, I fear the reader will find nothing unusual, nor hardly worth the reading.

In my wanderings in Adironda I discovered a kind of very large worms feeding upon the leaves of a species of wild mulberry which grows there, the fruit of which, resembling in shape that of the common wild mulberry, is as big as a saucer. This worm is as large as a man's wrist and a foot in length, and has been named by scientists *Vermis giganteus veritii*, whatever that outlandish title may mean. Noticing that they resembled silk worms, I conceived the idea of drawing gut from them, and so tying one end of a worm to a tree with a strong cord, I made fast another longer cord to the other end, and severed the skin all about his middle with my hunting knife. Then putting this long cord over my shoulder, I went forward at a steady pace with an even pull, the worm shrieking and groaning so piteously when his bowels first started asunder that I was near abandoning my experiment out of weak tenderheartedness. But the worm presently gave up the ghost with a great moan, and I held on my course for a half mile or so, when I came to the shores of a small lake, and the gut, so called, being drawn out to nearly the desired fineness and very even and well-looking withal, I fastened the end to a tree and let it dry. The pond or little lake which I had never before examined much, seemed to be alive with what I took to be very large trout, and here I thought was a very convenient and proper place for a trial of my new gut, where there were none but myself and the fishes, and herons and kingfishers to witness the failure of my experiment, if so it should turn out. So I cut a straight dry cedar about fifteen feet in length for a rod, and taking a fair-sized hook from my pocket I tied upon it a fly made then and there of some duck feathers drifted ashore, and a bit of red flannel from the lining of my coat, and when finished was well calculated to excite the curiosity and wonder of any fish that ever swam. My worm gut being now as dry as my own intestines, I having been some hours from camp, I cut off twenty feet of it and made an end of it fast to the rod, and fixing the hook to the other, began to cast. At the first cast there was a boiling of the water as if the infernal fires had set it seething, and directly I became aware that I was fast to a very goodly fish, and one that with my poor rod without a reel, I was in great danger of losing. Looking about for a beach where I might strand him and kill him with my knife, I saw an inlet of the pond a couple of yards wide at its mouth, and it occurred to me to lead him thither, and I succeeded in doing so. Having got him headed up it a rod or so, he could not turn about on account of his length being twice the width of the stream, I wound the gut upon the end of the rod by turning it in my hands, and shoving the point of it before me I waded to my hips into the stream behind him and guided him up the current before me, hoping to find it presently so narrow that he would be wedged between the banks. After some tedious labor, and being all the while in danger of having my shins broken by the blows of his caudal fin, his dorsal fin splitting the swift surface and his belly grinding and grating along the pebbles of the bottom, I succeeded in accomplishing this and had him jammed fast between the steep banks. Then I walked along his side till I came to his head, which I mauled with a great rock till the kick was all taken out of him. I was well pleased with the behavior of my new gut, which had borne such a strain, and I was somewhat proud of having killed such a fish, and was admiring him, and perhaps myself, when a splashing of the water above me attracted my attention. Then wading down with rod and creel appeared the Rev. Doctor Rodster, whom I had heard was fishing in the region. "Why, Major," he cried, "is this you? I was not aware that you were an angler." I assured him that it was no one else, and showed him with some exultation my catch. Coming up alongside of the fish, and standing about midway between the head and tail, he viewed it for a moment with an ill-concealed expression of contempt on his countenance, and said, "Surely, Major Verity, you do not think of killing this poor little fellow; but will return him to the lake!"

When I told him, with some shamefacedness, that the fish was already dead, he went away exceedingly wroth, muttering something about "trout hogs."

Since then I have fished only for my stomach's need, and never for sport. MAJOR JOSEPH VERITY, U.S.H.M.

ADIRONDA.

DOWN THE YUKON ON A RAFT.

BY LIEUT. FRED'K SCHWATKA, U. S. ARMY.

Eighth Paper.

OUR last article left us drifting down stream as fast as the current would pack us, and the gravel and sand bars would permit, while a big buck moose was drifting up the valley of a tributary as fast as his legs would pack him, and the underbrush and fallen timber would permit.

This was not far from a bold, high bluff of yellow sand and clay that the Indians use as a conspicuous landmark in their wanderings up and down the river, and to which they give the name of Hoot'-che-koo. The river from here on for quite a ways is very picturesque, and looks like the views on the Lower Juniata, Pennsylvania's pretty stream, until one steps ashore in the soft, marshy moss of the tundra land that exudes an ooze and mosquitoes, that makes him think that he has one foot in New Jersey and the other in the Dismal Swamp of Virginia. I believe one miner traveling through here had expressed an opinion that settlers might raise wheat in the bottom lands. I think I would agree with the comments of another on the opinion of the first that wheat could possibly be raised—to five dollars a bushel if there were enough miners to want it. Traveling on during the disagreeable, rainy afternoon, we sighted an Indian house of logs, about 8 in the evening, and with the usual hard pulling we soon found ourselves alongside the place. A rapid inspection showed it to be deserted, and from my Indian guides and workmen I ascertained that it was chiefly used in the winter by a sort of mixed population of Ayan and Tahkheesh Indians, both of which tribes are called the "Sticks," I believe.

We had passed through the land of the Tahkheesh from the time we left the Chilkoot country to about this point, for savage tribes seldom have any very definite boundary unless determined by high mountain chains or prominent waterways. From here down the river for two hundred miles the Ayans, or Iyans, held the river and its valley, and extended quite a way up the Pelly, the local Indian of which is, I believe, the Ayan River. The particular local name of this village (if one house can be called a village) is Kit'l-ah'-gon, which I believe means a house or village in a cañon, or between two cañons, or some way relating to its picturesque situation, and in this respect Kit'l-ah'-gon is not inappropriately named. The main basis of its title as a village is the large number of small brush houses that are scattered around near the tolerably well constructed log house, and which from their dried up and dilapidated looking character, we took at first for smoke houses in which they would probably dry their salmon and other fish when caught, until our Indians enlightened us. The log house was quite airy and ventilated for a winter residence in sub-Arctic America, and it seemed to be better adapted for a summer abode in Arizona or Florida, but it was a palace compared with the brush houses that clustered around it, and shows how degraded and lazy these Indians are, with plenty of timber for log houses, and a peat-like moss for chinking, that with a very little labor would have rendered them perfectly comfortable, they neglect to build them. Over these brush piles of strong poles are thrown a number of thick caribou or moose skins, and when the snow falls in the autumn it gives them an additional covering of four or five inches, and they live a sort of a life that is a cross between that of an Esquimau and a gypsy. The house itself was about fifteen by thirty feet in plan, and with the one on the bank of the short river connecting lakes Tahko with Marsh, makes up the sum total of all the permanent houses in the Tahkheesh country, along the Yukon River, for a distance of about five hundred miles. Inside the house, through a low door—although some persons of less pretentious proportions than the writer might have crept in between some of the logs—the only floor was that made by nature and beaten down by the constant tramping of feet, while around a portion of the sides was a shelf-like structure, which may have done duty at one time as a bunk place, but in its present broken up nature would have puzzled a civilized chicken to have found a sleeping place on it. It may have once extended clear around, but the last persons that slept there found it warmer as fuel than as a bedstead. Overhead the house was covered in with three or four clapboards and a couple of clouds—except in fine weather.

We did not try the experiment of sleeping in the house, but put up our tents at a good respectable distance therefrom and snoozed comfortably through the night, for the rain kept the mosquitoes down. There was an insignificant looking stream coming in alongside of the village, and curiously enough the valley it drained was a very conspicuous one, much more prominent than the Pelly valley some twenty miles further on, although the two streams themselves would be like comparing Niagara with a mountain brook. This was one of those canal-like streams, that I described in a previous article, as common in this country, just too wide to jump and deep enough to drown a flagstaff, and slower than mid-winter molasses. There may have been a larger stream coming in through the valley, and this have been only one of its delta mouths, for the grass was too high and thick, and the rain too recent to make further hydrographic explorations interesting. Photographs were gotten looking up and down the river, and also of the Indian house. From our Indians we learned that next day we should reach the site of old Fort Selkirk, and that the chimneys were still standing, and further, that its proper place was on the western bank of the Yukon proper, opposite the mouth of the Pelly, although several maps in our possession had ferried it across, and put it between them at the junction of the two streams. It looked so "kinder" natural to put it there, that we were a little bit inclined to think that the Indians, who had been there did not know, and that the map-makers who had not, really did; and with such thoughts in our mind, we were forced to acknowledge that if we had not traveled over the country itself, we probably would have made no better maps than those in our possession, and probably not as good, if we had interviewed the wrong Indians in another part of the country. But Selkirk was not where it ought to have been, but where the unlearned savages said it was, and next day as we drifted down through a great network of islands, that in a perplexing way kept us edging off to the right, we suddenly saw the bare chimneys loom up out of a thick poplar grove, clear across the river, and be

fore we could navigate across we were nearly half a mile below them, but in a much better place for a camp after all. It almost seemed as if we had landed in New York city, so welcome did it appear to be on land where explorers had preceded us, for now we knew the "coast was clear," clear to the coast, and it was a mere matter of drifting with the current to our destination and completing our work while *en route*.

The history of old Fort Selkirk has been slightly outlined in previous articles, so important a spot was it with regard to our expedition as a point of reference. Here we ceased to be explorers, and became only surveyors to old Fort Yukon, some 500 miles beyond, and from there the river had been very well surveyed to its mouth, another 1,000 miles in distance. In 1851 a party of Chilkats and Chilkoots that had crossed the Kotusk Mountains to trade with the Tahkheesh, exasperated by finding so few of the latter on the old trading grounds, and rightly conjecturing from the reports of these few that this falling off of their commerce was due to an opposition that had been started at the junction of the Pelly and Yukon some few years before, and was slowly making inroads upon their business, trading had at last reached the point where it was no longer remunerative to bring a hundred pounds of trading material on their backs over the snow and ice of the mountain passes for nearly as many miles. So these Indians made a sudden resolution characteristic of Indian action, and exchanging their goods for canoes instead of furs, and well armed, they made a descent on the unprotected fort, if it could be called such, surprised it early one morning in the summer just after the annual supply of goods had been brought in. Finding but three or four white men in attendance they were securely bound, the store was pillaged of all its contents and then burned to the ground. The white men were then released and allowed to return to Fort Pelly Banks, an older trading station on the head of the Pelly, and from which Fort Selkirk had been thrown out as an advance post. Much of the plunder was given to the local tribes or traded to them at a profit they had never dreamed of, and a thirst was planted in them for such easy methods of collecting necessaries from civilized traders, which finally culminated in the destruction of the fort at Pelly Banks, and thus the "coast" was completely cleared.

The adventures of these old Hudson Bay posts and their daring traders would be an intensely interesting volume could it ever be collected and written. Many a hunting and fishing adventure could be told that would absorb the attention of the readers of FOREST AND STREAM as they read of these adventurers shoving their merchandise through the great unknown Northwest territory to the Arctic Ocean itself. Every one is familiar with the Canadian voyageurs, or French half breeds that formed the great bulk of the Hudson Bay Company, under the direction of hardy Highlanders, who, in their turn, lorded it over the Indian workmen under them. Along the great broad streams like the Athabasca, the Peace River, the Mackenzie and many others their work was simple enough, and strongly resembled the good old boatmen's days on the Missouri and Mississippi, yet preserved in many a tale and story, but as the heads of these sub-Arctic rivers were reached in the hills and mountains and rapids and cascades commenced, they found obstacles to surmount that were not easy. Such was the road that led from Pelly Banks to Selkirk. Everything was carried in bundles of a hundred pounds, called a "pack."

I met an old Hudson Bay trader on the Lower Yukon, who told me a laughable incident connected with his first initiation into the duties of the company, some thirty or forty years before. Having determined to join it and, in the exuberance of youth, to work his way to the most northern posts where the adventure which he sought was most likely to be found, he presented himself at a station on the Red River, and being a strapping young fellow, he was at once enrolled. He knew a little about the company, having "knocked around" in its neighborhood from a boy, and had seen many a "pack" handled, and thought himself perfectly presentable for a situation when he could do the same, and not until that time did he solicit employment. Everything was arranged, and he had been booked as a "voyageur" at $35 a month, I think, and everything went on swimmingly for a week or two when the first portage was reached. This extended around a series of boiling rapids some five or six miles long, and his heart sank within him at the thought of carrying a number of the huge "packs" this long distance. A number of boats had gotten in ahead of the one to which he belonged, and as their loads were taken out he saw their crews of voyageurs without any delay prepare to carry across, for the army-like discipline of the company allowed no loitering. His surprise may be imagined when he saw one, two, three, and even a half a dozen of the men put two of the 100 pound packs on their backs; but no pen can portray his consternation as he saw them one after the other take up a good steady run over the hills and far away, and before he was really ready with his first "pack" be back for another load. He struggled with the new developments manfully, however, but before he had gotten half way across, amid the jeers and taunts of his fellow packers, he had to give it up, and depositing his 200 pounds against a stone, he walked back to the trader in charge and after a short preliminary conversation stating the case, said he was willing to pay $35 instead of receiving it, if he could only be counted as a passenger thereby. A proposal which was accepted, and the chief trader pocketed the money.

In the burning of old Selkirk in 1851, the Chilkats knew that they had the sympathy of the Russian traders at Sitka and other posts on the Pacific, who were rivals to the Hudson Bay Company, but to say, as has been done, that these traders instigated and concocted the plan is carrying statements further than the evidence will warrant. Much has been said regarding the efficient and admirable manner in which the Hudson Bay Company has, in the past, conducted its relations with the Indian tribes, with which it has from time to time found itself in contact, these criticisms, ninety-nine cases out of a hundred, arising from a discussion of our own Indian question, and with deductions, as a general result, badly against us as a nation. The pioneer fur traders of a wild country have but one object as regards the Indians in their front and civilization at their back, and that is the closest and most friendly and intimate terms with the former and the most deadly hatred to the latter. As civilization crowds forward on his ground, the trapper takes his place as well as that of the Indian, and the two—the trapper and trader—are often spoken of as synonymous, although as far apart in their feeling toward the Indians as the two poles. The true trader is never a trapper, the Indian doing that business for him. With the latter he therefore has no object but that of friendship, or to be more accurate, apparent or superficial friendship, for no man on the frontier has more contempt for the very Indians that have made him rich than the fur trader, as evinced by their conduct and conversation after abandoning or retiring from the business. In case of possible hostilities with a tribe, or even an individual member of it that stands well among his savage brethren, he is the most cringing creature on face of earth, and when actual hostilities are inevitable, however brave he may be personally—and all the elements of bravery are needed in their peculiar craft—their actions must be governed by the monetary object in view, and the most cowardly surrender of the field often takes place. The trader knows that, if no blood is shed, sudden and transitory outbursts of Indian wrath soon pass away, and he can then return to his money getting. Should an Indian be killed, however, it may take decades to settle the matter with the tribe, while as a family feud it never would be settled by less than an equivalent life, and this is too much to spare, when but two or three often make up the sum total of post or station. Much as the trader hates the Indians, he hates civilization much more. One simply interferes with them now and then, while the other completely obliterates his employment, and it is with zealous eye he keeps all his disagreements with the former from the ears of the latter. It is no wonder then that the relations between the trader and his Indians are so little known that they are held up as a model to those who know still less, when, if the truth were known, these relations are in many respects abominable. Such has been the history of the Hudson Bay Company to a greater or less extent, and such has been the history of all fur-trading companies, and such were the musings brought forth by a revery in the shadows of the blackened chimneys of old Fort Selkirk, and over which the poplars waved their tops, so long had they battled with the elements.

Not far from here was another sign of death, in the shape of an Indian grave peculiar to this part of the country. Knowing a little something of the mode of burial of white men from ancient intercourse with them, they had made some very rude and rough attempts at imitating it in the shape of an inclosure not unlike our own, but made of rough-hewn boards. It was impossible to completely rid themselves of savage ideas, and from poles near by, so close that any one would know they were a superstitious part of the grave, flaunted red and white rags, while on the top of one was an image of a bear or a fish or a goose, I have forgotten which. Approaching to see if there was anything else on the rough board fence or elsewhere expressive of savage rites and ritual, a combination of hieroglyphics met my eye on one of the upright planks that looked as if it might have been done by a lead pencil, or in the absence of such articles of civilization in this vast wilderness, the untutored savage might have used a piece of graphite from some mineral source near by. A sketch of the inscription is given as near as I could draw it. Running from left to right like English writing it ran:

"NOT DED YeT BY A DAM SITE OLE ARESONY. JuLY 83."

And in fact had some resemblance to ancient English in a few words. Looking across the river at the islands there could be seen more than enough driftwood on their upper ends to make a good dam, but it was a very poor place for a dam site, as far as I had been taught in hydraulic engineering, if this was what the inscription referred to; and in general the whole effect was so intangible that one could not pin it down to that exactness of meaning that is demanded by modern science, and it was passed by. Formerly, so my Indians informed me, these same natives buried in scaffolds in the trees, not unlike the Indians on the great Western plains, and inscriptions were rare.

It is at about this point on the river that birch-bark canoes commence, and were first seen among the Ayans, a band already alluded to, and whose principal village was some twelve miles below, and it might also be said that where they are first encountered. They are decidedly the neatest, the trimmest, the smallest, and the best in workmanship and construction, and from here down the stream all of these qualities slowly become less noticeable, although it would hardly be proper to say at any time that the majority of canoes among any tribe on the river are not of a substantial build. The sewing is done with long withes so fine and pliable that the work looks as if it had been done with sinew, and even this characteristic degenerates as we descend the river. These withes are made from the roots, I think, of some trailing plant, and are minutely sub-divided before being used. These pretty canoes, as light and graceful as a bird on the water, were a wondrous change from the heavy, cumbersome, water-logged canoes of wood that we had been used to up to this point. As with his cottonwood brother, so is the birch-bark canoe patched with spruce gum, but it does not seem to be done on such a wholesale scale, and it is worked down and polished off until it looks like a patching of glass when completed.

The river down which we had drifted so far on the raft, and which I have constantly mentioned as the Yukon, was called by the old Hudson Bay traders the Lewis River, they knowing it in and around old Fort Selkirk, and it was supposed to join the Pelly and form the Yukon. In fact, in the very oldest accounts the Lewis River ran into the Pelly, a smaller stream, and it was called Pelly to its junction with the Porcupine, at old Fort Yukon, and from there was called the Yukon. The comparative sizes and volumes of water of the Lewis being unknown, I had decided to make the most thorough investigations, should they be necessary, to determine which was really the Yukon proper. In sight of the two rivers, at their junction, it was quite evident that the Lewis was the larger; but Mr. Homan, being sent across to make measurements of the other, and ascending the Pelly a short distance, even gave up that part, so evident was it that this Pelly was the smaller of the two. Of course I was glad enough to get such news, for the Pelly was an unsurveyed stream, and had it been the greater I would have had to content myself with exploring one of its tributaries and only a part of its course, whereas I now had, and would have, all the data for a survey of the whole Yukon from source to mouth.

Trout lines put out over night caught a sort of nasty looking eel pout, each hook baited with meat having one, that were so uninviting in appearance that one would have to border on starvation before taking them by any of the usual methods of cooking. Grayling were still to be had in limited numbers, and one big salmon trout gave the Doctor a scientific struggle lasting nearly half an hour before he could be induced to "come in out of the wet." Fresh moose tracks were to be seen but no one seemed inclined toward moose meat with mosquito accompaniment. Astronomical observations were taken to determine the point and everything was prepared for another movement forward on the morrow.

[TO BE CONTINUED.]

Natural History.

PRESERVATION OF SONG BIRDS.

Editor Forest and Stream:

Having read with considerable interest the article over the signature of "X.," I must say that I indorse the whole. Let us have a law to prevent the shooting, by men as well as boys, of the insect-eating and song birds of our land. That ornithology consists in filling the skins of slain birds is the merest nonsense. Let, as your correspondent remarks, men as well as boys, go into the fields and woods without gun, but with note book and pencil, study the habits of the birds, and they would gain more information in a week's time well spent than from a whole life spent in stuffing skins. How many persons who fill the skins of birds with cotton, tow and straw, could draw the forms of the same? There was one English artist who excelled in drawing the human form; that could, and did, draw the human skeleton in one colored ink and clothed it with muscles in another colored ink. Such perfection is rarely attained. Still, young men, and older ones also, might do a little to rob their killing propensities of its sting. The dialogue of "X." is a complete answer to all quibbles. Let boys and men learn. X. Z.

UTICA, N. Y.

Editor Forest and Stream:

"A bird never flutters unless it is hit." As I wish to flutter, I will begin by considering myself hit, although as I am not a taxidermist nor milliner's collector, and am somewhat past the age of sweet sixteen, where the average "boy with a gun" is supposed to do his worst, it is evident that it is only by a stray pellet and not by the center of the charge, which "X" in your issue of March 20, and which others in previous ones, have fired promiscuously among all who desire to make even a limited collection of skins, or eggs, or both. Why is it that all unite against youth? Is youth a crime to be laid at the door of its possessor? Were Wilson, Audubon, Baird, Coues and others, never young? Did they not begin their studies as young inexperienced boys? There must be a beginning. There must have been a first awakening of that love of nature, of that irresistible desire to know more of her feathered subjects, which has caused our most distinguished naturalists to turn away from the masses who strive only for the "almighty dollar," and to take to themselves want, discomforts, bodily peril, and sneers and the rebuffs of their more practical money-making fellow-men.

When we remember the earnest researches of Wilson and Audubon, the many days of patient study they devoted to live birds, let us also remember that one of them at least was a nest-robbing boy, without any show of scientific propensities, for we read of his "strings" of birds' eggs. To read some of the articles which appear from time to time, one would suppose that every one who shot a bird or took a set of eggs did it either from a wanton desire to destroy, or for money. It is this sweeping condemnation which I resent as unjust to some of our young collectors, who, I think, are actuated by as sincere motives as ever moved Wilson, Audubon, or any of their successors. I believe that among the rising generation may be found some of our most observing ornithologists. Many have already been mentioned in various publications as having made important discoveries. The subject of the migrations of birds, which is now receiving more than ever before, the attentions of naturalists, both in Europe and America, depends largely on the observations of collectors in different parts of the country. The FOREST AND STREAM has a natural history department of constantly increasing interest. How many of the notes contained therein are contributed by the younger members of the fraternity? There are those now, who are no doubt working faithfully, though unknown to fame, who will yet win their laurels, but who are young and so inexperienced that they deserve the censure administered about a year ago by "Homo," when he complained that they were shooting birds whose sex they were unable to decide.

I do not believe the bond proposed in the Massachusetts law will have the desired effect any more than the plan suggested by some of your correspondents of taxing the gun to prevent market hunting. The professional market hunter would pay the tax, the sportsman, who could use his gun at most but a few times each year, would not pay it. Result—market hunter gets all the more birds, the limited sportsman gets none. The professional "hat bird" collector will find some means of evading the consequences and will shoot all the more during any opportunity that presents itself, while the student, who desires specimens for the specimens themselves, will be the sufferer.

And now, speaking of hat birds, do the ladies themselves really care for the birds? Are they sincere? Let any one walking our streets notice the ladies' hats and he will have strong reasons for doubting the sincerity of the fair sex.

I have no doubt that if it could be positively known how many birds were killed for private collections and study, and how many were killed for ornament, that it would appear that the latter far exceeded the former. I know I am taking sides against public opinion, but I don't blame public opinion; I blame those unscrupulous persons who, to put a penny in their pockets, will destroy anything; who while pretending to be interested in the study of the birds are interested only in the dollars and cents their stuffed skins will bring to them, and I sincerely believe that it is this wholesale shooting for the purpose of supplying milliners and other similar purposes that has caused a decrease in the number of our song birds. It is the old "trout hog" in a new form, the pot-hunter bringing disgrace on the sportsman.

Suppress, if possible, the barter in skins, in hat birds, and other similar "gewgaws," but don't shut out the earnest, diligent student, who, if he occasionally shoots a bird or takes a set of eggs, does so with a higher purpose than that for the love of money. The birds have no better friends than are those who study their habits, and I doubt if any class would more deeply deplore the loss of the birds than the very class so often unjustly assailed, young and inexperienced though they may be. SIALIA.

[We are sure that a large majority of the writers on this subject are animated by a sincere desire to protect our insectivorous birds from wanton slaughter. The honest, faithful student should undoubtedly be permitted to collect bird skins, but how is it to be determined that any supposed student is honest? How do we know that he is not collecting merely for the hat men? Since our correspondents are working for the same end, it is not worth their while to waste their ammunition on each other.]

THE DEADLY MINK.

I NOTE with regret, the loss of Mr. Fred Mather, of Cold Spring Harbor, N. Y., of his flock of beautiful wood ducks. Too bad!

A few years ago, I had some fifty of these birds, collected and caged for stocking other localities. One night about midnight, I heard a rushing and roaring of the birds in their room; within three minutes of the first alarm I was at the pen, with light, and a heavy two-foot knife. I let down the door, and put light, knife, head and shoulders inside. Around to me came the birds; behind, and driving them was a large mink, which came near enough, and I split his head with the knife, and left him heels up, kicking. I could see that the floor was about covered with ducks, heels up, and kicking too. In the morning we found over thirty birds killed by the "varmint," or so badly wounded that we thought best to kill them, as they would die of their wounds. The fiend had cut the throats of most of them, and some were bitten in the head. None seemed to be dead when I first got out, but he might have killed some before they gave the alarm, but I believe not. The mink did not notice me or the light, except when I struck him, then he stuck up his bloody teeth at me, for a fight, apparently.

I have handled these birds since, sometimes, for breeding and domestication, but like Mr. Mather, I "covered the well since the calf was drowned," and at night confined the birds in a room that is mink, weasel and rat tight, the only safe way in this wild-woods country. At Cold Spring Harbor, I expected a better civilization. LOUIS A. LELAND.

MICHIGAN, March 26.

STEARNS'S NATURAL HISTORY OF LABRADOR.

IN the fifth volume of the Proceedings of the United States National Museum, there is a paper of twenty-seven pages, entitled "Notes on the Natural History of Labrador," by W. A. Stearns.

Mr. Stearns made a summer excursion to Labrador in 1875, and spent nearly a year there in 1880-1881. He also visited the coast again during the summer of 1882. His examinations were confined to the vicinity of the seaboard. The results of these investigations are contained in this paper; and are presented in the form of briefly annotated lists of mammals, birds, "reptiles" and batrachians, fishes, and plants. In his introductory remarks, Mr. Stearns states that the spring catch of the Newfoundland and other sealing vessels is from thirteen to sixteen thousand young seals. As a matter of fact, a single vessel sometimes procures double this number. The annual catch of the Newfoundland sealing fleet rarely falls below two hundred thousand, and commonly ranges between three and four hundred thousand. Twelve times during the present century it has exceeded five hundred thousand; four times it passed six hundred thousand; and once it reached the extraordinary number of seven hundred and forty-six thousand!

In the list of mammals, the silver and black foxes are accorded varietal distinction.

The ringed seal or floe rat (*Phoca fœtida*) is given as "not uncommon in harbors in spring and fall. Distinguished from last species [*P. vitulina*] only on close examination." In view of the fact that this seal does not rank among the migratory species, is it not possible that a still closer examination would demonstrate its identity with *P. vitulina?* If Mr. Stearns brought back so much as a single skull of the animal in question, and will submit it to either Mr. Allen or myself for examination, the matter can at once be settled.

The absence of the large gray seal (*Halichœrus grypus*) from the list is surprising. I know from personal observation that it is common at some of the localities mentioned.

Our author says: "Regarding the deer of Labrador some confusion exists. Two species, about equally common, are found throughout the peninsula in small, or less frequently in large (300 or 400) herds. They are probably the following: *Tarandus rangifer*, Brookes, var. *Caribou*, woodland caribou; and *Tarandus rangifer*, Brookes, var. *Grœlandicus*, barren ground caribou; *Alces malchis* (Linne) gray, the moose, and *Cervus canadensis*, Erxleben, the American elk, have both been reported as found on the southwest portion of Labrador, about north from Anticosti, but they are doubtless very rare and occasional."

I regret that I cannot agree with Mr. Stearns in considering it probable that both the woodland and barren ground caribou are found in Labrador; and his remarks concerning the moose and elk are most unfortunate. I have seen no evidence to indicate that the elk ever inhabited the area under consideration; and the moose is known to be restricted in its eastern range (along the north shore of the St. Lawrence) by the Saguenay.

We are informed that the white whale (*"Delphinapterus" catodon*) is "common in the St. Lawrence River, at least as far as Anticosti." It is equally common at certain seasons off the entire Labrador coast, and great numbers of them annually pass through the Strait of Belle Isle.

"Gray squirrels are said to occur here also, but I did not see any," writes our author. The failure to inspect the gray squirrel on the far-off rocky coast, should not be attributed to negligence or bad eyesight; for Labrador is not only far north of its known range, but the physiographical conditions that obtain there are such as would preclude its occupancy by this animal, even if the area were not latitudinally excluded from its habitat.

The concluding mammal is the little brown bat (*Vespertilio subulatus*), and the record would be more acceptable were it accompanied by the name of the person who identified the specimen.

The list of birds contains one hundred and eleven species, and some startling statements.

The record of the wood thrush (*Hylocichla mustelina*) has already been queried by Mr. Ridgway, and I will only add that I have found both the hermit and the olive-backed thrush breeding along the north shore of the Gulf of St. Lawrence.

The pine grosbeak (*Pinicola enucleator*) is given as "common in fall and winter." It unquestionably breeds throughout Labrador, and I have myself found it breeding near Point de Monts.

The common *Junco* is said to be "not rare in spring and fall." Of course it breeds. The rock ptarmigan (*Lagopus rupestris*) is stated to be "not rare. Generally common in winter."

When the author, in referring to the discovery of the nest of the king eider (*Somateria spectabilis*) on an island off Mingan, says that he believes this to be "the first record of this rare nest found on the Atlantic," he must employ the term Atlantic in a somewhat restricted sense, for the species is known to breed abundantly in Hudson's Bay and Davis Strait, and probably along Northern Labrador as well.

Mr. Stearns makes the extraordinary announcement that the Pacific eider (*Somateria v-nigra*) is "abundant in large flocks in spring." If this statement can be authenticated, it is certainly a most interesting and valuable contribution to ornithological science.

The Arctic tern (*Sterna macrura*) is given as "an abundant spring and fall migrant in the Gulf." Large numbers breed at certain places along the coast.

Under the head of "Reptiles and Batrachians," our author tells us that he heard frogs "in the marshes about the mouth of Pinway River," and enumerates *Rana septentrionalis* and *Plethodon glutonosa* as having been found by Dr. Packard. Without mentioning a single reptile he goes on to say, "The reptilian fauna will probably be enlarged, but not to any great extent," and passes directly to the consideration of fishes.

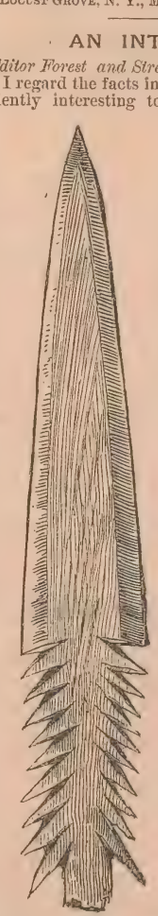
Turning to the list of plants, we find 157 species enumerated, twenty-eight of which are glumaceous and cryptogamous. Hence, omitting the grasses and sedges, we have but 129 flowering plants, more than fifty of which are included on the authority of the Rev. S. R. Butler, whose list was published in the *Canadian Naturalist*, in 1870. This leaves less than eighty species as the result of our author's botanical investigations during one entire year and two summers. That this is not wholly attributable to the meagre flora of Labrador is evident from the fact that I have myself found, in an hour's time, nearly this number of species growing in a single locality not remote from the seat of our author's labors. C. HART MERRIAM, M.D.

LOCUST GROVE, N. Y., March 12, 1884.

AN INTERESTING RELIC.

Editor Forest and Stream:

I regard the facts in the case I am about to report as sufficiently interesting to be worthy of publication in your columns, believing they will be received with appreciation by the general subscribers to your issue, and afford material for speculation to those who may regard the matter from an ethnological or ornithological point of view.



About a fortnight since, while on a gunning expedition to one of the small islands in Chesapeake Bay, Mr. James Frick, of this city, captured a specimen of the wild swan. Though I did not have an opportunity of examining the fresh specimen, when brought down, I am informed that it was of average size. There were no observations made to determine the sex or probable age. The curious feature of the case was disclosed, however, after the bird was prepared for the table, and subjected to the carving knife, when an iron arrow or spear head was discovered beneath the pectoral muscles, and lying against the breastbone. The sharp end was buried in the bone to the depth of a quarter of an inch, and when extracted showed a slight bend near the tip. The whole instrument was covered by a membranous sheath, no sign remaining in the region of the original wound by which the probable time of its infliction could be approximated.

The accompanying sketch I have made in exact accordance with the shape and dimensions of the original, trusting that it may be given in accompaniment with the relative statements. The iron is $\frac{1}{16}$ of an inch in thickness.

Since the range of territory frequented by the swan during the breeding and migratory seasons is very extensive, it becomes an interesting problem to assign the origin of this bit of iron, unless these facts come under the observation of one familiar with the implements characteristic of Indian, Esquimaux or other savages. P. BRYSON WOOD, M.D.

45 FRANKLIN STREET, Baltimore, Md.

BIRD NOTES.

WOODCOCK are here, so are robins, bluebirds, song sparrows and fox sparrows, red-winged blackbirds and golden-winged woodpeckers. I have also seen lesser redpoll linnets, and quite a number of yellow-rumped warblers (*D. coronata*). A good deal of ice in our ponds, but the snow is fast disappearing. X. Y. Z.

SALEM, Mass., March 22, 1884.

Wild ducks were shot here on the 17th inst.; two out of a flock of six. They were black ducks. DELL WELLS.

MANTORVILLE, Minn., March 22.

Saw first wild geese Monday, March 17, bluebirds, robins, blackbirds, March 19, black duck, mallard, whistlers and bluebills March 23; there is a good flight of ducks here now. W. M. G.

WOODVILLE, N. Y., March 23.

Geese and ducks put in an appearance on the 20th; 21st robins and blackbirds, and the familiar "scaipe" of the snipe was heard. This morning blue and other birds, and the air is full of song. Crows remained with us all winter.

ROSENDALE, Wis., March 22. S. B. D.

Though snow is still on the ground, some of our songsters have arrived, viz., robins, blackbirds, and what is known here as the Canadian nightingale. The quail that were imported and turned loose at Lachine about three years ago have all gone. TUQUE BLEUE.

MONTREAL, Canada, March 28.

Up to a week ago the season was backward, but since then it has been much more forward, and woodcock have been frequently seen; but last night very suddenly the weather changed, and people upon getting out of bed this morning found a raging snow storm with drifts two to four feet deep, all done in a night. Curious to see if I could find any woodcock, I took a walk this afternoon, and just as I was leaving the last piece of cover up went a woodcock, I think a male bird. A number of flocks of black ducks (*A. obscura*) were seen yesterday. March is going out like a lion this year. X. Y. Z.

SALEM, Mass.

Here at St. Cloud, Minn., I have seen the following birds: Jan. 9, raven; Feb. 1, crows; March 14, one flock of seventeen ducks flying south; March 17, one duck flying west; March 23, one flock of geese, lit in farmer's field; March 24, one flock of geese (wanted to light in Lake George at St. Cloud) and one meadow lark; March 25, killdeer plover, robins and blackbirds. That first flock of wild geese were reported to me by the farmer himself; he shot at them but missed. We are having very nice weather here now.

ST. CLOUD, Minn., March 26. LARK.

Robins appeared here to-day. Crows were first heard on March 17. K.

CENTRAL LAKE, Mich., March 25.

A rapid tour through Prospect Park this afternoon gave promise of the early arrival of the birds. Robins were quite plentiful, and I saw a yellow-shafted flicker. Rather early for him, is it not? Song sparrows sing cheerfully their quaint little song, and early in the morning the gray squirrel scampers about in play. JOHN BARRETT.

BROOKLYN, N. Y., March 22.

A PROPOSED ZOOLOGICAL GARDEN.

THE following letter has been sent to several Congressmen at Washington, and sufficiently explains itself:

Hon. W. B. Allison, 1,124 Vermont Avenue, Washington, D.C.:

DEAR SIR—Permit me to offer you the following suggestion respecting an amendment to the bill now before Congress relative to the National Park. During the past summer while I was viewing the National Park scenery, I conceived the idea of how valuable this Park would be to scientists, and consequently the world at large, provided that a part of it was set apart for a grand zoological garden. And that, since there seems to be some guarantee that the birds and animals—the latter such as are without claws—are to be preserved, at least so far as it is possible without strict confinement of these birds and animals, I think that for the present only such a garden should be established as would keep within its bounds the following described animals, mainly: The grizzly bear (*Ursus horribilis*), black bear (*U. americanus*), cinnamon bear (*U. A. var. cinnamoneus*). And of the deer family the following: Moose (*Cervus alces*), wapiti or American elk (*C. canadensis*), woodland caribou or reindeer (*C. tarandus*), mule deer, (*C. macrotis*), black-tailed deer (*C. columbianus*), common or Virginia deer (*C. virginianus*), barren ground caribou (*C. tarandus*). All of these and many other animals could be confined in a park or garden within the boundaries of the National Park, and by placing some one—an honest, competent observer—in charge, great benefit would be derived from the notes he would make, and which could then be published in like manner as the reports of the Smithsonian Institute.

At present but little is known respecting the hibernating of various animals, and particularly of the several species of bears. In the zoological gardens in this country and Europe these animals are so closely confined that but little opportunity is given the animal to present his natural inclinations, or that which might be considered his instinctive qualifications. Again, I can find no record that a bear has ever given birth to a cub while in confinement. Lions are not so disposed and more readily adapt themselves to the conditions of life into which they are placed, and often give birth to young while in confinement. A very interesting study is that of torpidity of animals, and one which in the near future will be of great service in working out many vexatious problems connected with the study of Nature. The location of the National Park is of very great value for this particular study; not that animals (and perhaps birds) do not hibernate in warmer climates as well as in that latitude and altitude, but that the periods of hibernation would be much longer and thereby give greater length of time for study; and further, that for study during the summer (or breeding months) there could be no better place found. It is well known that just such surroundings as are found in the Park—the caves, dreary and lonely places amid rocks and underbrush, plenty of clear, cold mountain water, and with the ever cool atmosphere of the high altitude there found—is Nature's breeding place for the largest of the animals we call "game." And while this is the fact respecting the advantages there found for the preservation of the family of bears, it is equally as serviceable for the propagation of the various deer of America. With the exception of that very valuable report upon the study of "The Antelope and Deer of America," by Judge Caton, of Illinois, we have but little knowledge respecting the habits of the antelope or deer of America; and this work is none else than Judge Caton's report of his study of the animals in question while in his private park in Illinois. Outside of this monograph we have absolutely nothing describing accurately these animals, and were it not for the energy and studious nature of Judge Caton, this interesting family of animals would have been but very little known.

But a few years longer can we expect, with the grand waves of immigration now moving from East to West and West to East, that bears, deer and many other interesting animals can be found in the wild state; and shall we let them meet the ill-fated hand of destruction, and to be known then in history only as the "extinct animals?" I earnestly hope some action can be taken that will preserve at least a few of these noble representatives of the fauna of this country, and that, too, in connection with our park, which, like our *Ursus horribilis*, is without equal. All the animals above named can be raised in the National Park, and I might add the "mountain buffalo" is found on Specimen Mountain, and it is claimed cannot be found in any other part of the world. Other animals I might mention which that climate would be suitable for raising in, and would alike prove of great service to the scientific world, are antelope (*Antilocapra americana*), mountain sheep (*Ovis montana*), mountain goat (*Aplocerus montanus*), buffalo (*Bos americanus*). The last I think would prove of very great value by crossing with our native cattle for the purpose of producing a hardier breed of cattle.

Merely as a suggestion I submit the above, and if consistent, desire that an amendment be added to the bill now before Congress, embracing the substance of the above suggestion, or as may be improved upon by a more worthy hand.

I am, very truly, D. H. TALBOT.

SIOUX CITY, Iowa, March 6, 1884.

[The establishment of such a garden we believe to be perfectly feasible, and there can be no doubt that in proper hands it would be of great benefit to science. Undertaken at first for the purpose of preserving our native mammals, it might afterward come to have a much wider scope].

FLEW AGAINST THE WINDOW.—Yesterday, April 2, two yellow-bellied woodpeckers (*Sphyrapicus varius*), still warm, were brought into this office. A few moments before, the birds, one pursuing the other, had flown against the plate-glass windows of the *Times* office and been killed. It was rather an odd place for this to happen, in the heart of the city. They must have been resting in the City Hall Park, and, chasing each other either in sport or rage, have so met their death.

GOV. CLINTON ON THE MUSKRAT AS A DESTROYER OF FISH.—Since writing the article published in your last issue upon the muskrat as a fish eater, I have discovered important additional testimony. In the year 1820 there appeared in a New York newspaper (*The Statesman*) a series of articles of no ordinary interest. They were entitled "Letters on the Natural History and Internal Resources of the State of New York, by Hibernicus." They attracted so much attention, and the demand for them was so great, that they were reprinted in book form in 1822. Their real author was Gov. DeWitt Clinton, a man of letters, eminent as a statesman, distinguished as a scientist, and justly celebrated as a philosopher. In the ninth letter he speaks of the muskrat as the most formidable foe of the canal, stating that it perforates the banks and thus lets off the water. Respecting this animal as a fish eater, he says: "In winter, when the water is frozen, muskrats go under the ice and prey on the fish. They are very destructive to trout, which is already in the canal." —C. HART MERRIAM, M.D. (Locust Grove, N. Y., March 29, 1884).

ALBINO ROBIN.—A robin, with white wings and tail, was observed in a flock of robins here on Wednesday, March 19. I regret that we were unable to secure it, although we did succeed in getting one long shot at it.—H. W. C. (Rye, N. Y.).

Game Bag and Gun.

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

I have read with keen interest the discussion in your columns on the "Choice of Hunting Rifles." Having been absent in Canada since last November, whither FOREST AND STREAM does not follow me, being too readily appreciated to reach me in a transient wrapper, I have read the whole series almost at a single sitting. I have found a great deal to instruct, some things to amuse, and one thing which astounds me; and this last is the statement that twenty-six repeating rifles were every one rendered perfectly useless by a four days' march. The first repeating rifle I ever owned was a Henry, which had seen four years' service and something like eighty engagements in the 1st Maine Calvary, and was in perfect working when I got it, although I was obliged to get a new magazine spring shortly afterward, the old one being worn out by its friction against some slight dents in the side of the tube. Repeating rifles hang on the saddles of vaqueros for weeks and months, and are always ready for use, unless filled with sand, which will disable any breechloading gun.

Of all the articles written, the first two of Mr. Van Dyke's came the nearest to my views on this subject; but I utterly dissent from his deductions contained in the third. I firmly believe that a .40-caliber bullet propelled by the same amount of powder will strike with greater force than a .45, or any larger caliber. We are taught that the striking force of a projectile is the square of its velocity multiplied by its weight, and the resistance of the atmosphere as the square of its diameter, without regard to length, unless there may be a slight increase of friction in very long bodies, but probably not to be estimated in bullets. If these premises be granted, then it follows that the proper mode to get the greatest amount of force from a given weight of powder and lead is to put the latter in the form of a long projectile of small, rather than a short one of large, diameter. And now, as I believe in one's having the courage to state one's convictions, however startling, I am going to say that I do not believe in the "shock" theory; and by that I mean that no ordinary rifle ball will "paralyze" a deer, if not placed in a vital spot, or to make my meaning clearer, I do not believe that a deer will stop any quicker or die any sooner with a .60-caliber bullet through it than it will with a .40-caliber, provided both go exactly in the same place; and when I speak of parts "not vital" I do not mean the hips, as that is one of the deadliest of places to strike a deer, moose, or caribou when standing broadside to.

The first wounded deer I ever followed was an old doe in October, shot through and through by a young fellow armed with an old U. S. army musket, called in those days a "hoop gun," carrying a ball of about 1½ ounces. She bled freely from both sides, seemingly but little back of the shoulders, but after tracking her a mile the blood almost ceased to flow, and we finally lost her after spending half a day scouring the woods in every direction. My experience and belief in the superior killing power of the small-bore rifle over that of the large, owing to the greater velocity at which the former can be propelled, was acquired thirty years ago by mere accident, and as practice is always better than theory, I will give the facts.

At that time I owned a beautiful "double-shooter" muzzleloading rifle, made to order for me by H. L. Leonard, the well-known maker of fishing rods. Probably many of the older readers of FOREST AND STREAM will remember those rifles. They were invented in Pennsylvania by a brother of Leonard's. Two charges were loaded in a single barrel, the bullet of the back charge serving as a breech pin for the forward one. A second tube and cylinder was inserted at this point, connecting with the hammers by a slide, which was thrown up by loosening a catch when shooting the back charge. All the advantages of a single barrel were retained by these rifles, but great care was necessary in loading the back charge to prevent a double explosion, often resulting in blown out cylinders and a recoil that would knock down an ox.

At the beginning of the hunting season of 1854, while hastily loading this rifle, with a big buck standing in full view, the ferrule came off the end of my starter, and stuck firmly around the end of the pointed bullet. Instead of going home and removing the obstruction by taking out the breech-pin, I did what I fancy most hunters would do under the circumstances—rammed the whole thing down and fired. The bullet was forced through the ferrule about midway the length of the barrel, bulging it to such an extent as to be easily seen on the outside, and the bore, on looking through it, looked exactly as if a piece three inches long had fallen out all around it. I couldn't hit a flour barrel half the time at 100 yards. I was obliged to carry the gun to Bangor at once to have a new barrel fitted. The only one I could get which fitted the stock was a beautiful cast steel Remington barrel, carrying 86 bullets to the pound (avoirdupois) by actual weight. This, I take it, is about .38-caliber. On loading this new barrel I found that the same charge of powder that I used in the former barrel not only filled the small bore up so far as to bring the bullet opposite the forward cylinder, thus rendering double-shooting impossible, but also blew unburned powder out on the snow.

To remedy this defect, I had a hole the size of the bore drilled back, an inch and a quarter, in the breech pin. This brought the fire nearly into the middle of the powder, and the result was so surprising and unlooked for, that it completely revolutionized all my ideas on the subject of rifle bores. On testing it I found that more powder would burn than I cared to stand up against, although the rifle weighed ten pounds. I sighted it to a point-blank at 50 yards, with a pointed bullet of extra length (1¼-inch) using about 3 drams best F dead shot powder. At 52 rods, holding the same as at 50 yards, the drop was just nine inches. I used this gun for nine years, and its killing power exceed that of any gun I ever saw. I fired at sixteen moose with it during that time, every one of which I killed; using the second shot on only three. Can any bore show a better record? Many a time I have put my fist through the hole made in a deer's "lights" by this bullet. Twice I killed two deer at one shot with it, the bullet passing through both deer in each instance, and it would crash straight through the shoulders of the largest bull moose, and out on the further side. I parted with it on going into the service, and have never yet seen its equal. At present I am using a .40-60-260 repeater, and its performance is very satisfactory. I killed ten deer with it last season at thirteen shots, one of which was a miss; and five this season at six shots, the sixth being an unnecessary one at an old buck, already pierced within two inches of his heart by the first bullet. My ideal repeater is .40-caliber, 80 grains powder, 240 grains lead.

In my opinion, the greatest desideratum next to accuracy is a flat trajectory, and in the above rifle you obtain it, with sufficient force for any game short of grizzlies, and deadly enough for them if a man has the nerve to stand their charge coolly, and none others ought to hunt grizzlies. I have no belief that a rifle can be made that will kill large game immediately when not hit in a vital spot, and only ask for one that will send direct to the spot aimed at, with the least possible drop or variation, with sufficient force to go straight through the game. Many hunters lay great stress on a large bullet letting out the blood. Any bullet is large enough to sever the arteries, and the blood flows the same, whether inside or out; and the most fatal wounds rarely bleed much outside.

I hope that some of our repeating-rifle makers will make a rifle of the above proportions, if only for experiment, to try the range, trajectory and penetration, and let us know the result. PENOBSCOT.

Editor Forest and Stream:

I have been greatly interested in the discussion that has been going on in FOREST AND STREAM in regard to the hunting rifle, and although the subject has been almost exhaustively treated by several of your able correspondents, one idea seems to have escaped their attention.

For target shooting no one has need of a repeater, and for ordinary hunting, such as we have this side of the Rocky Mountains, I cannot see why the better-proportioned single-loading breechloader does not answer every purpose. Those who favor the repeater for dangerous game are in a fair way to obtain just what they want, for the discussion has made it apparent that one that takes from 90 to 120 grains of powder, and a bullet of from 300 to 500 grains, of from .40 to .50 and even larger caliber, is what is wanted, and the probability is that the manufacturers will supply it.

For dangerous game it does not seem to me that any rifle with but one lock is quite safe, for a gun lock is liable to fail at any moment. A hammer may break, or the firing-pin or some spring may give out, or a shell stick, and it is just at such a critical moment that the second barrel is needed. It is clearly evident to my mind that a double express rifle, all things considered, of large bore, is the arm for the sportsman to depend on while hunting large game. This rifle, if well made, will shoot with great accuracy at all hunting distances, but the trouble is, an imported arm costs so much that none but well-to-do sportsmen can afford them.

If some of our manufacturers would place on the market, or make to order a double express for about $150, the barrels of which should be so set that both would shoot alike at hunting distances, a good sale for them would be certain.

There is an art in setting the barrels so they will shoot as accurately as the high-priced English guns of course, but ingenuity can overcome all the difficulties so that a good rifle at even less than the price named, can be manufactured. Those who desire may have interchangeable barrels—one set of large caliber and the other of small, or a pair of shot barrels may fit the same stock.

I have always preferred the Maynard, on account of this feature of the arm, as the barrels may be changed in a moment. I have one barrel of .50-caliber with a slow twist —one turn in 60 inches—for round or light conical bullets, and at all hunting distanses the round bullets are perfectly accurate. The shell is loaded full (70 grains, or 100 if so chambered) with powder, and a thick leather wad, and the balls are inserted in the barrel at the breech, which when closed seats them firmly in the grooves forward of the chamber.

The .32-caliber barrel has been rechambered for Farrow's new cartridge, which, for the 115-grain bullet, gives a very flat trajectory, and is just the thing for target and squirrel shooting. He has brought out a new bullet of .32-caliber, about 2¼ diameters long, that flies with remarkable precision at all ranges up to 500 yards, but it would be better if the cartridge would take 50 grains powder, instead of 35, for that 150-grain naked and grooved bullet, and I hope to see such a cartridge ere long.

I have used all sorts of sights on my rifles, but have adopted the Lyman adjustable rear sight, and a hard rubber fixed sight in front of breech, made as described in Van Dyke's book—"The Still Hunter"—"plain and flat on top," with the addition of the platinum line down the middle of it, but not reaching the top within a twentieth of an inch, after the English method. Block tin is just as good, and will keep bright, and costs nothing. These and an ivory sight on the muzzle, or an iron or steel one faced with platinum, or block tin, complete the set. A person who is at all near-sighted and wears glasses, must have the middle sight set well forward or it will not be clear. For hunting, the muzzle sight should not rise more than three-sixteenths or a quarter of an inch, and the middle sight be so set that the point-blank will be fifty yards. Then when 100 or 150 yards intervene, throw up the Lyman sight. If longer distances are required, make the point-blank 100 yards, and set the rear sight for 150 or 200. There is nothing new in all this, but many who read the FOREST AND STREAM, have not had experience enough to have proved the utility of this simple arrangement of sights, so some of those matters bear repeating.

Some one has advocated .25-caliber, and when one is produced, I hope the cartridge will be made long enough to give a powder and bullet proportion of at least one to three, and one to two and a half or even two, would be better still, as the resultant trajectory would be very flat. A bullet well hardened would give excellent results, and a pop-gun would be secured for small game that would be first-class. I tried in vain to get good shooting from my .32-caliber rifle with the bullet that was furnished me, that had a nick at the base, and not until I altered the molds at that point, and enlarged the front of the bullet so it would seat firmly in the rifling, was it secured. This is referred to, that whoever puts a new bullet on the market, may not make a mistake in its form.

TUNXIS.

RIVERTON, Conn., March 17.

Editor Forest and Stream:

Let us have a little discussion upon the subject of hunting rifle cartridges. They do not contain sufficient powder. A proper charge of powder for rifles, from .22 to .40-caliber, will fill the bore a distance of five times its diameter, and the lead should be sufficient to fill the bore for the space of two diameters. The gun ought to weigh one quarter as many pounds as the caliber is hundredths of an inch. These proportions in cartridge and gun will give better average results than any others I have tried.

Nearly all the cartridges offered by manufacturers of less than .40-caliber, do not have a reasonable amount of powder to give the gun a possible chance of doing decent execution at a greater distance than fifty yards. If we are using a .44 gun, they are willing to do up our powder in liberal packages, 100 grains or more, but when we take out our .32 rifle, we are compelled to use squibs, or load from the muzzle.

None of these calibers are large enough for deer or heavier game. A .50-bore, with about one and a half calibers of lead, and all the powder the shooter can endure, will kill more large game than any smaller gun. However, when the caliber is enlarged beyond .40, either the gun, or cartridge, or man, is not in good proportion, and if you give the ball a low trajectory for two hundred yards, the inevitable result will be a high initial velocity of the man and *vice versa*.

Give the .32 rifle 50 grains of powder and 150 of lead and then test its shooting from one hundred to three hundred yards. L. C. C.

ST. PAUL, Minn.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

Doubtless most of the different "shotgun" reports that have appeared in the FOREST AND STREAM of late, are from actual tests, and therefore valuable, as showing the opinions of the different shooters, as well as the performance of the different guns. But when "Ogeechee" and "Mark Ivel" report killing deer, geese and ducks at 100 to 120 yards, one cannot help thinking they are writing for the first prize in the next "Camp Fire Flickerings," where facts are at a discount. Such guns—being sure death to anything they are held on at 100 yards—ought never to be fired at game till the 100 yards are passed, in order to give it at least a small chance for its life.

My experience covers over fifty years of shooting, and embraces all gauges, from 6 to 16, both inclusive, flint locks, muzzle and breechloaders, and my vote is for breechloader first and at all times; both for safety and convenience. But as to gauge, that depends entirely on the purpose of the shooter. If he shoots for the market or slaughter, he will be satisfied with nothing smaller than an 8 or 10-gauge. But if for sport and recreation, he needs nothing larger than 12 to 16-gauge. What sportsman would not rather bag a dozen birds with fifteen to twenty shells—which will be a full average, on ducks, at least—with a small gauge, rather than get the same, or twice the number, from one or two shots into a flock, with a small cannon? I say nothing of the cripples that are sure to be made in flock shooting.

At present I own but a single gun, which is a W. & C. Scott & Co. 12-gauge 30-inch.

My charge for ducks is 3½ drams powder, 1½ ounces No. 6 shot, and I am able to report a success that ought to satisfy any reasonable sportsman. J. H. D.

POUGHKEEPSIE, N. Y.

Editor Forest and Stream:

Guns have very aptly been divided into classes, and it might not be inappropriate to divide sportsmen, or rather, the owners of guns, into classes. Your practical sportsman, he who loves the invigorating and healthful exercise of true sport, that delights in ranging field, forest and stream in quest of whatsoever game may fall to his lot or share, is the type of one class. To the other belongs the man who is content with the evanescent glory of being called a sportsman. Such are the men who have owned boats they could not sail; if by any chance, cast upon their own resources, on their own craft, struck with a capful of wind, they would know not what to do; owners of fly-rods and fishing tackle they could not manage; of blooded race horses they could neither ride nor drive, and last but not least, of guns they could not shoot, or if perchance they did, it would solely be for the purpose of making a noise and displaying "a thing of beauty," but alas! not always "a joy forever."

To the latter class it is a matter of indifference, whether in point of practical performance the gun is a good one, choked or unchoked, or what not; so that it has what is rather erroneously termed a reputation, particularly if its praises be extensively sounded as endowed with all sorts of qualities which it may not possess, and moreover, if it be "fair to look upon," that is enough. Your drawing-room sportsman is ready on any and every occasion to rise and maintain the pretentions of the thing, however preposterous they may be in point of fact.

I think it may be fairly assumed that your true sportsman is, as a general rule, intensely practical; he delights in examining into the why and wherefore of things; the chief happiness and enjoyment in his pursuits depends in a great measure upon this very faculty, upon it hangs all success. His working tools must be up to the highest standard possible to attain; if they fall short in any particular, he casts about to know why, and to remedy the evil if possible. Theory to him is bosh, if the idea involved can neither be carried into practice by himself nor any of his co-workers.

It is not proper to dub such men old fogies, stubborn, prejudiced, ignorant, and all that. Ignorant we are of many things, if we knew it all we would cease asking questions or trying to learn. If the worthy experts in the art knew it all, the many faults and errors that have from time to time obtained a footing, would have been entirely done away with long ago.

In making comparisons as to performance between dif-

ferent guns, the only fair and equitable basis upon which we can act, in order to obtain any definite result, is to fire the guns respectively under the same conditions identically as to distance, size of target, weight and caliber of gun, quantity and quality of charge, and method of loading. Range, distribution and penetration can then be all or severally compared upon a basis of equality. To alter the conditions, for instance, to shoot a 4-gauge duck gun, against a light 12-gauge fowling piece, even should all other conditions be equal, would necessitate an allowance in favor of the lighter gun by reason of the enormous extra weight, caliber and charge of the larger gun.

This, I maintain, is the only way in which a just comparison can be made. The testimony of those who have at one time or other made what they consider an extraordinary shot, or who own some wonder of a gun, is irrelevant; it affords no basis for a comparison; under these latter circumstances you can scarcely compare successive shots with the same gun with any certainty; probably not a man who has handled a gun but has made some such shots; I could relate several I have made; they are abnormal, out of the usual order of things; the man may fire in mere wantonness, the excitement of the moment, or probably despairing of obtaining any other or better chance, for instance, at a flock of wild geese at a great distance, he fortunately bags one, paces off the distance perhaps, finds he has killed it at 100 paces or more, in ecstacy at his totally unexpected success he sets his gun down as a 100-yard gun, and good for that all the time. The probability is that same gun, charged in the same way and well held on the game, might be fired 100 rounds at the same distance and not bag another bird.

There is a limit, an average killing distance, at which we may expect certain results; make comparisons at that range, if the gun performs well at that, all well; you then have just as good chance for making an extraordinary long or good shot as any man with any gun whatsoever. I take it as an indisputable fact, proved by the long experience of every man who shoots a shotgun, of whatsoever style or make, that if the gun performs well and is a good strong shooter at the average range or distance, it will prove a good performer at even greater or less distances, with charges altered to suit the designs to be accomplished, provided you do no material violence to the proper proportions suitable therefor. Our best shots and most successful sportsmen frequently are men of one gun.

I cannot altogether agree with the views expressed by many that slight inaccuracies or deficiencies in loading are responsible for failure in performance. That such errors will and do affect the shooting to a limited extent I admit, but they will not produce a complete failure at both target and game.

Let us call up the old muzzleloader again at the risk of being charged with prejudice. I merely do so to institute a comparison. For several years I used a muzzleloader, 10-gauge, 30-inch laminated barrels, weight about 8¾ pounds. I have used it on the Delaware marshes shooting rail and reed birds, charging with barely an ounce of No. 8 or 9 shot, same measure or bulk (not weight) of Dupont's No. 2 duck powder. Did you run out of cut wads, utilize the old newspaper that chanced to be in your pocket. Under such circumstances I never could discover any very material detriment to the shooting. I shot away and bagged my game as usual. I used the same gun for upland shooting of all kinds; in wild duck shooting on the Sassafras and Elk rivers, loading it on such occasions to its full powers, with 1¼ ounces No. 4 shot and 4 drams powder. If using a wire cartridge for long shots, I put in every grain of powder the gun would comfortably bear. I used the same gun in West Virginia deer hunting, using a wire cartride charged with buckshot, backed with a heavy charge of powder as above, and have killed over forty deer with it. With such a charge I always considered myself sure of venison, with anything like a fair shot at 60 yards or under, and I have made a few chance shots at greater distances. I never had the least cause to complain of its performance under any of the various circumstances and conditions. I was "right there" all the time, and it was just such a gun as one could tie to.

Now, I firmly believe, and am satisfied that a good breechloader will not do as well, but much better, by reason of its many decided advantages. But, as the complaint comes up on all sides of wretched failures as to shooting qualifications, there must evidently be a deeper seated cause than a mere error in loading. My own observations and tests lead me to believe that excessive choke-boring cannot be enumerated as one of the advantages of the breechloader. It is a positive disadvantage when carried to the excess of what is termed a full choke—an abomination. I have tested some guns that would gauge 10 at the forward end of the chamber, and scarcely 14 at the muzzle, a difference in diameter or gauge of strong four sizes, with all of that choke at the muzzle, or within from a half to three-quarters of an inch of the muzzle and drawn down or rounded off quite short. This is what I presume is called a full choke. I am not equal to the task nor shall I make any attempt to use technical terms, nor to describe other systems of choke, etc. Most manufacturers of prominence have their own ideas and systems, and we can afford to take their word for whatever they represent their guns to be; but the system I have here briefly and crudely described is what will be found in the common run of guns that are called full choke. Guns bored upon this system will, nine times out of ten, prove to be greatly lacking both in force and closeness (the very essentials they are reputed to possess) and no possible method of loading them will remedy this defect where it exists.

There is a notion prevalent with many that chokeboring is a new idea, introduced and contemporary with the recent general introduction of the breechloader; this is an error, it is simply an old idea in a new dress. In some of its various modified forms it was tested and used years ago. It frequently happened that the muzzleloader shot wildly or scattered its charge too much to be effective; an examination of the bore would sometimes disclose it to be contracted at the breech, not a true cylinder throughout; the boring out of this contracted part, or probably as sometimes done, enlarging it the least appreciable degree at the breech, and drawing toward the muzzle would generally remedy the defect. If the job were overdone, however, the contrary effect was apt to result, an aggravation of the defect. This was termed by some gunsmiths drawboring, by others jugboring, and others may have had other terms expressive of the same idea.

In looking over an old volume of United States Patent Office reports, some thirty years back, my attention was attracted to specifications of a patent issued to an American gunsmith for a system of boring shotgun barrels in a series of sections of their length, alternately large, then smaller in gauge (a succession of chokes and open cylinders as it were), claiming the effect to be, greatly increased force and closeness of distribution. I don't suppose his idea ever reached much beyond the pages of that dusty record. I suppose practically the verdict was, "weighed in the balance and found wanting." So it will be with the full choke, time and a few more practical tests will decide it.

Upon the recent general introduction of the breechloader, in some inexplicable way, chokeboring systems put on new garments and took front rank; having long before been demonstrated that in some cases a small degree of choke improved and increased the effectiveness of the gun, the deduction therefrom was easy and natural; a little being sometimes good, more would be better. We at once had full choke on us, assuming the features of a popular furore. The whole thing was comparatively new to the masses. Full choke was heralded as the cardinal virtue of the new breechloader; if the sportsman had an old cylinder bore that shot ever so well, he must procure a gun of similar size full choked, and the shooting would be doubled in range, force and closeness in every point that goes to make up effectiveness; that seemed to be the popular and almost universal opinion immediately. A general demand sprang up for it at once, many stopping neither to test nor consider. As a consequence, many got just a little too much of it. Manufacturers are not to be growled at for the failures; the public made the demand; they got just what they wanted for their money. Time enough has elapsed for the ardor manifested in favor of this chimerical notion to have cooled off.

I have extended this article to much greater length than I intended, and have merely to say, in conclusion, that from the experiments some of my friends and myself have been conducting, my advice to all who have guns that are heavily choked that fail to come up to even a mediocre performance, have your gunsmith take out at least a portion of that choke, and you will be astonished at the improvement in the shooting. BACKWOODS.

BEVERLY, W. Va.

Editor Forest and Stream:

The discussion on the performance of shotguns in the columns of FOREST AND STREAM will do much toward educating young sportsmen up to the necessity of exercising care and judgment in the selection of a gun. There is everything in the "individual" gun, and more in choosing a gun adapted to the individual. Every sportsman knows what he wants for a gun, and his want is based on his personal experience, and there are very few who have had precisely the same experience. In the last five years I have experimented with at least ten guns of different make, weight and gauge, and as a result have settled down on two guns. The first for wing shooting is a Buckley hammerless, 10-gauge, 30-inch barrels, weighs 9¼ pounds, light at the muzzle, broad and heavy at the breech, and though a large gun, handles very light and easy. I load with 4 drams powder, 1¼ ounces shot, and use 3 Ely's p. e. wads on powder. I think I can show as good results with 4 drams of powder and three wads, as with 5 drams powder and two wads, and I find no wads equal to Ely's. With above load, using No. 9 shot, this gun patterns with right barrel 487 pellets, and with left barrel 549 pellets in 30-inch circle at 40 yards, very evenly distributed. I have frequently broken glass balls on a stick at 60 yards. I can fire 100 shots without the least inconvenience from recoil. This fills my idea of a gun.

My experience with a 12-gauge gun was very unsatisfactory. The gun made a very good pattern, but I had no confidence in it, and therefore no success with it. It was not suitable to my size and weight (6 feet, 170 pounds), and length and strength of arm, there wasn't gun enough for the man. I have a friend who is a short, light weight, who does excellent work with a 7-pound 12-gauge, which indicates that the gun and gunner must be suited to each other in order to obtain satisfactory results.

My second gun for all-round shooting is a Baker, three barrel, 10-gauge, 30-inch barrels, and weighs 10 pounds. The rifle takes a .44-40-200 cartridge, is very accurate, has put three bullets in succession in a 6-inch ring at 275 yards, and has killed rabbits at 100 yards; 10 foxes have fallen to the shotgun this winter, one at 75 and one at 80 yards, measured. For buckshot it excels. I load with 5 drams of powder and 21 No. 3 buckshot, and can put 18 into the forequarter of a deer at 40 yards, or 5 into an 8-inch ring at 50 yards. Would like the opinion of some old hunters on how to load a buckshot gun for deer. W. J.

BOSTON, Mass.

Editor Forest and Stream:

"California" says that he has not been able to discover the difference between one wad and two over powder. There is a vast difference with my gun, but it is in favor of one wad. I can do much better shooting with one wad over powder than two. I tried one shot without any wad between the powder and shot. I shot it in a board 18 inches square, distance 40 yards, 3½ drams powder, 1¼ ounces No. 5 shot. There were only 5 shot struck the board, and they only stuck. I would not be afraid to let "California" shoot at me at 50 yards with that kind of a load. I have been trying to get up a bet with some of the boys around here that I can kill two chickens (one year old roosters) out of three, at 70 yards, to be shot at separately, with a charge of 3¾ drams powder and 1¼ ounces No. 5 shot, but I cannot get any one to take me up, because they know what my gun will do. I have shot at a sugar barrel head at 80 yards, and put 10 No. 5 shot in it. Four of the shot penetrated the wood (sugar pine) ¼ of an inch, all of them were driven in more than the depth of the shot. My gun is 12-30-8½; there are no shell chambers in it. I do not think that the chambers are any benefit to any gun; I will shoot my gun against any 12-gauge gun for penetration, "Ogeechee" excepted. I hope this discussion may lead to good results. GREEN WING.

FREESTONE, Cal.

Editor Forest and Stream:

One thing I would insist on in this discussion, and that is accuracy, not mere supposition or guess work, will do when facts are wanted. There are many who give a gun a record because they have been successful with it afield. If you think one gun is much superior to another, the pattern paper and penetration pad will settle it. I have always thought the shell chamber or conduit from it to the barrel or bore proper was in great measure to blame for much bad shooting. My attention was first called to this in a Roper four-shot shotgun, 14-bore, in which a continuous surface (practically) was presented to the load from the time of starting until it arrived at the terminal choke. This gun astonished several fine muzzleloaders while I was hunting squirrels. I also tested it at the penetration pads and pattern paper, with flattering results, only using 2½ drams powder, 1 ounce shot. Another, a Parker gun with good weight of barrels, had been so badly neglected that rust beds had formed to great depth. I undertook to bore them out. After hard work and long boring I had nothing but a shoulder thickness of metal shell left of former taper from chamber. I could put in 30-inch circle, 40 yards, No. 8 drop shot (Tatham's), 406 pellets, and penetrate five pads of bookbinders' board with 3½ drams powder and 1¼ ounces shot, and to-day the owner of this gun would not part with it for three times its first cost to him.

Now, if we could get some of our gunsmiths to talk, it would be very entertaining, but they fear some other fellow would know just how they do this or that particular part, and they let us do the talking, knowing full well we cannot hurt any one. Loading has much to do with good shooting. I have never targeted a Colt's or Parker that I did not improve upon target record that came with gun. I would like very much to hear from the Pieper "rifled choke," and glad to hear of L. C. Smith's improvement in shotguns. We want a hammerless at $75.00, well made, good material, safe, and know it will be made before long. VOX.

MT. STERLING, Ky.

Editor Forest and Stream:

Good pattern and penetration seem to be the desideratum aimed at in selecting shotguns. I have used a great many pounds of ammunition experimenting within the last thirty years, and now for the first time to record the results.

I have owned guns with light muzzles, and my experience with them is this: The moment you commence to use anything more than a small or medium charge of powder, such guns will not make good patterns, and will sometimes swell or become larger at the muzzle, and thus become useless. A prominent American gunmaker, when asked why he did not make guns with heavier muzzles, said it was because he could not sell them, "the trade calls for light muzzles." At another time, when a gun was being examined with a view to purchase, the question was asked, "Can you choke that gun so as to make it a close shooter?" The answer was, "No, because there is not strength enough in the muzzle."

At the present time I own a chokebored 12-gauge, 28-inch breechloading shotgun, weighing 8¼ pounds, with heavy muzzle, which will make a much better pattern with 4 drams of powder than it will with 3 or 3¼ drams. I also own a 12-gauge, 36-inch, chokebored, 10-pound, breechloading shotgun, with heavy muzzle, which will make a better pattern with 5¼ drams of powder, than it will with a smaller charge. I have the best success with paper shells, and for 4 drams of powder or less I use one pink-edged, No. 11, wad on the powder, and when the charge is increased much above 4 drams, two pink-edged wads; because heavy charges of powder will tear one wad in pieces, and the pattern will be anything but good.

When guns group their shot and leave bare places on the target, I have always found that the shot used were of exactly uniform size, and fit the bore of the gun in such a manner as to have the shot in each layer in the charge fit in the interstices of the layer beneath it. The difficulty can be easily remedied by mixing two or more sizes of shot. POP-GUN.

TYNGSBOROUGH, Mass.

UTAH FISH AND GAME LAW.

THE following bill was passed March 8, 1884, by the Legislature of Utah Territory:

SECTION 1. *Be it enacted by the Governor and Legislative Assembly of the Territory of Utah*, that every person who, between the fifteenth day of March and the fifteenth day of August, in each year, wilfully takes, kills, destroys, or offers for sale quail, partridges, or grouse; or who between the fifteenth day of April and the fifteenth day of September, in each year, wilfully takes, kills, destroys, or offers for sale any kind of wild ducks, or who shall at any time rob the nest of the above mentioned birds; *or who shall kill any wild duck between one hour after sunset and one hour before sunrise;* or who shall kill any quail or any imported *game* birds or their progeny for *three* years next ensuing the passage of this act, shall be guilty of a misdemeanor.

SEC. 2. Every person who, between the first day of December of each year and the first day of the *September* following, takes, kills, or destroys any elk, deer, mountain sheep or antelope; or who shall at any time kill any of the above animals for their skins, is guilty of a misdemeanor: *Provided, that persons camping in the mountains may, during the months of July and August, kill sufficient of the males of the above animals to furnish themselves food while so camping.*

SEC. 3. Every person who buys, sells, or has in his possession any of the game enumerated in the two preceding sections, taken or killed within the time during which the taking or killing thereof is prohibited, except such as are tamed or kept for show or curiosity; and every person who buys, sells, or offers for sale the skin of any animal, the killing of which is herein prohibited, is guilty of a misdemeanor.

SEC. 4. Every person who at any time takes or kills any fish, except with hook and line, or with seine, as hereinafter provided, *or who shall catch or kill any trout in any way between the fifteenth day of March and the fifteenth day of June of each year*, is guilty of a misdemeanor. *Provided*, that seines not more than 200 yards long and twelve feet wide, with meshes not less than *one and a half* inches square for fifty yards in the center, and meshes not less than *two* inches square in the wings or ends thereof, may be used in Green River, and Bear and Utah Lakes only, between the first day of *October* of each year and the *first day of June following. Provided, further, that nothing in this act shall be so construed as to prevent any person from taking fish from the public waters of the Territory for the purpose of stocking private fish ponds, or to prohibit any person from managing and controlling his private pond or taking fish therefrom.*

SEC. 5. Every person who at any time catches or kills any fish with set line or lines is guilty of a misdemeanor.

SEC. 6. Every person who puts into the waters of this Territory any poisonous or explosive substance or anything that is injurious to fish, or that renders the water unfit for household purposes, is guilty of a misdemeanor.

SEC. 7. *Every person who at any time takes any fish from any private fish pond or stream, without the consent of the owner, is guilty of a misdemeanor.*

SEC. 8. Every person, corporation or association who shall construct or continue to keep any dam across any of the streams of this Territory in which fish migrate in such a manner as to hinder or obstruct the migration of fish to or from their spawning grounds without providing a fishway and keeping it in repair, as provided in the following section, is guilty of a misdemeanor.

SEC. 9. The fishway for the passage of fish in large streams of water, mentioned in the preceding section, must be made in the form of a box, open at each end, not less than four feet wide and three feet high, and of plank not less than two inches thick; and it must be fastened in the water at the top of the dam, and the lower end must extend to and be fastened in the pool below the dam at any angle not exceeding 35°. Inside this box, fastened at the bottom and at one end to the side of the box, there must be pieces of plank four feet apart, placed transversely so as to cause a riffle not less than ten inches high. These pieces of plank must be thirty inches long, and so fastened as to be at right angles with the sides of the box, alternately fastened, one at one side the other at the other side of the box. Whenever the stream is small, the County Court of the county in which the dam is, or is to be constructed, may permit the box to be of less dimensions.

SEC. 10. That any person, corporation or association who has taken or may hereafter take out the waters of any stream or lakes in this Territory that contains fish, shall be required to place across the head of such canal or ditch a grating of horizontal bars not more than one inch apart, sufficiently secured on the sides, to prevent fish from escaping into said canal or ditch. Failing to comply with the provisions of this section is a misdemeanor.

SEC. 11. *The provisions of this act apply to Indians who kill deer for their skins.*

SEC. 12. *All former laws for the protection of fish and game are hereby repealed.*

The alterations and additions are printed in *italic*.

FISHER ISLAND CLUB'S QUAIL.

THE Fisher Island Club has, up to date, received about five hundred and fifty quail, from Tennessee mostly. We have had them sent in four shipments, and our birds have arrived in good condition in the majority of cases, and were a fine lot.

The sexes were well matched, leaving a few hens without mates. There is quite a difference noticeable in the size of birds, showing plainly that some are of a very late hatching, while there seems to be none or very little difference in the size of the old birds from those killed here in our State.

The mortality I consider very light for so long a confinement, the birds being in cages two months and over. Nevertheless, we have not lost more than about one hundred, while I know that dealers and clubs have, for several seasons in succession, not been able to save one hundred quail out of four or five hundred. I know of one party who has lost every bird he had last season.

We have taken the best of care of our birds in every particular; have kept them as clean as possible, fed them early in the morning with wheat screening, buckwheat, and now and then some chopped beef; then watered them about 10 or 11 o'clock, and fed in the afternon some greens, sprouts, apples, field salad, etc. The water dishes were removed before the green stuff was given, and the birds had never any filthy water in the coops and cages.

I found that the birds have a habit of standing in the water dishes at night and were soiling them badly, so I came to the conclusion this was the cause of a great deal of disease among birds that were allowed this habit, and I know of some that had died with bowel diseases. Next in importance to clean water is plenty of sand and gravel, which they enjoy very much.

Most of our dead birds showed injuries about the head, or had broken legs, and were trampled to a pulp almost, in a short time. I also believe there is a good deal of fierce fighting among the birds, with fatal results, conditions over which we have no control and for which there is no remedy. Too much dry feeding kills many birds also, and green feed is enjoyed very much by them and is no doubt a better bowel regulator than bad water. We have over 400 birds yet, ready to liberate in a few days.

MAX WENZEL, Secretary.

HOBOKEN, N. J., March 26.

MUCILAGED WADS.

TWO articles have recently appeared in your columns under the head of "Mucilage-Edge Wads." Being the inventor of the wad referred to by "Sycamore," I naturally felt an interest in the subject. I have been careful to submit my wad to the examination of many experienced sportsmen, and in every case the verdict has been favorable.

Last fall I loaded forty shells with my wads, put them loosely into a leather pouch, threw it across my shoulder, mounted my horse, and galloped four miles into the country, allowing the pouch to bob freely all the while. A practiced gunner joined me, and we spent several hours in wing-shooting. About one-half of the shells were fired. On my return the wads in the loaded shells were as firmly seated as ever. Those shells which had been discharged, although second quality, and not such as the manufacturers claim can be reloaded after having been crimped, were apparently in as good condition as when first put into the pouch.

My invention consists of an ordinary pasteboard wad upon which is glued a round piece of cambric (thin, strong paper will do) about three-fourths of an inch greater in diameter than that of the disc, leaving a margin all around of about three-eighths of an inch. From four to eight equi-distant triangular pieces of the margin are cut out, preferably the latter number. The projecting portions of cambric or paper ("fulls" "Falcon" calls them) between these kerfs are thin coated with mucilage. The wad is inserted in the shell cambric down, and when discharged the parts holding the mucilage are reversed, so that the gum does not come in contact with the barrel of the gun. This is of vital importance, as otherwise the moisture engendered by the explosion would cause the gum to adhere to the barrels and quickly foul them. That would be a fatal objection to "mucilage-edge" wads; but mine is not properly a "mucilage-edge" wad. The wad proper holds no mucilage upon the edge.

I have also taken out a patent on a loader which moistens the wad automatically, facilitates loading, and will be found desirable by the fastidious sportsman who dislikes the licking business. Being a combined implement, it may also be used in loading both shot and powder.

M. S. ALEXANDER.

MOOREFIELD, W. Va.

CAMP COOKERY.

Editor Forest and Stream:

As the fishing and camping season is approaching I thought a few hints on camp cookery would not be out of place at this season. One never looks for home comforts in camp, but there are many little details, which, if attended to, render camp life more enjoyable. Cooking is one of the most important of these in my opinion. To make good coffee, I put the ground coffee into the coffee pot with cold water and set on the fire, as soon as it has boiled take it off, pour in a little cold water to settle it and it is done. Coffee made in this way pours clear and loses none of its aroma. Coffee boiled too long loses its delicate aroma. It is bitter and black, and in my opinion is unfit to drink, and I think bad for digestion. I have found it so. Two ounces or more of ground coffee to a quart of water is my rule. Try this, ye campers, and report to FOREST AND STREAM.

Few are prepared to make bread in camp, so I will dispense with directions for making same, though I can make good bread and biscuit.

Irish potatoes should be peeled and the large ones cut to conform to the size of the small ones, that is, all should be as near of a size as possible, to insure their cooking done at the same time. They should be put into the water while it is boiling, a handful of salt should be added to the water when the potatoes are put in, this will render ordinary watery potatoes quite mealy and palatable. Sweet potatoes should be cooked in the same way.

Birds, such as quail, snipe, plover and all such, I think, are best broiled. They should be dressed by picking the feathers off and drawing, then split up the back; the blood, etc., should be wiped off with a clean cloth. It improves the flavor of the bird to be dressed in this way; if washed the water is detrimental to a good broil. They should be turned frequently, until done to taste, when they should be buttered and seasoned with pepper and salt. Some people season while cooking, but if such persons will try the above way I am confident that they will always follow it. Teal duck done as above are the best thing in the line of duck that I have ever eaten. A bright bed of hickory coals is the best for broiling.

If desirable in my next will be pleased to give recipes for cooking mallard duck, making Irish stew and a few camp luxuries. K. 9.

LITTLE ROCK, Ark.

PHILADELPHIA NOTES.

SNIPE have arrived in considerable numbers in the Delaware, Maryland and New Jersey meadows, and on the grounds about our city a few have been killed. The meadows are very wet and the birds are scattered. Many geese flew over Philadelphia last week during the night. Some flocks were very low, judging from the gabble they made, which woke the writer from his sleep.

A letter from a sportsman friend residing in the Lehigh Valley states that the snow is still plainly showing itself on the northern sides of the mountains about him, and the winter has been a very severe one. Over one hundred quail trapped by their club have been kept over and will soon be liberated. Nine prairie chickens have been put out in lower Maryland, very near the same section where Dr. Pursel's birds were planted and bred. These birds will be protected by the farmers themselves, the whole neighborhood having been interested. It is unfortunate so few prairie hens were secured, and that at least fifty pairs were not liberated. The wildfowl in our river appear to have already paired off, as the flocks seen at rest on the water are broken up into couples, and indicate that before many days they will be on their northward flight. We have every indication of an early and mild spring. In the New Jersey swamps nesting woodcock have been found within a week. Baymen at Barnegat and Tuckerton state that the spring and autumn flights of redheads appear to be growing greater each year in their section. This spring the flight was enormous. The fowl, however, did not stop long, and were evidently travelers. Box or battery shooting on their regular feeding grounds may have occasioned this notable change of habit or movement. HOMO.

PHILADELPHIA, Pa., March 28.

AN EXPLANATION.

THE article under my signature in your issue of March 13, headed "A Taxidermist's View of It," was not intended as an opinion to favor any class. It was unfortunate that it appeared under that title. It, however, carried with it a meaning likely to be misconstrued by some, and thus at the outset placed the writer in the light of "a man with an axe to grind."

I do think that all law-abiding sportsmen, ornithologists and taxidermists, should have the benefit of laws that will favor their pastimes or occupations, if such laws are made as will not be detrimental to the general good.

I cannot quite agree with my unknown friend from Worcester, in FOREST AND STREAM of March 20, who would allow a naturalist or taxidermist to be unlimited as to the time for procuring his specimens. For I do believe in shutting off everybody from shooting between June 1 and Sept. 1, and it would be still better if this latter date could be made October, or even November. Exceptions to the summer shooting of all birds should only be allowed to the very few who are making a study of their food for the benefit of the general public. While I believe what I wrote March 13 regarding the time for the open season, yet I hope it has not yet come to that pass that the season must be cut so short. But it is evident, as the shooting of guns is improved and the number of gunners increase, that the time for shooting must be more limited.

The proposed Massachusetts law makes no improvement for the protection of that class of birds which most need it, the shore birds. Consider the narrow belt they have to traverse and the destruction wrought upon them as they pass leisurely by in the summer and early fall, in contrast with the quickness with which they go by in the spring. Also, how unsuspecting in summer, and how wild in spring. On every hand we learn of their rapid decrease. What shall be done? The protection of this class of birds is most urgent. Who will not do what he can to make laws that shall protect them? We all know that the summer shooting is thinning their ranks yearly. Will not the change of open season to spring help their increase? Let the shore shooters who read this paper give their opinions about it.

The laws should be kept on all of our game birds until such time as they may all be shot, for if taken off one earlier than another it permits of the shooting of everything under guise of that one. The later the law goes off in the fall the more protection it is to our small birds also, for in general when it goes off of partridges in September it gives the opportunity to every boy to kill anything he wishes to. The majority of our small birds pass south in September, and few are left after October.

Another bird demands protection at once, and that is our wild pigeon. Formerly very abundant, it is now a scarce bird except in a very few places. Probably the largest roosts left are in Pennsylvania and Michigan. When the birds begin to breed their nesting places are entered, and the birds killed in every possible way, their tails pulled out, and they are packed in barrels, large numbers of which are sent to New York and Chicago. Numerous eggs ready to be laid are taken from these birds.

What will Florida scenery be with the beautiful herons and other tropical birds exterminated? And yet the breeding places are entered and the beautiful birds slain by hundreds and thousands for the few plume feathers growing upon their backs, and also by the visitors there just for sport. The writer was informed, and has no cause to doubt it either, that an Englishman visited Pelican Island, in Indian River, with some 2,000 cartridges, nearly all of which were used on the pelicans, and he left the ground strewn with the dead. No words seem adequate in condemning such an act as this. But so it is in many other places also.

The same dates that apply to one locality will not exactly fit another. The author takes for a standpoint the Middle States and New England, between the fortieth and forty-third parallels. The North or South will require later or earlier dates.

The only object the writer has in placing himself antagonistic to public opinion is to try to assist in the better protection of our birds, and in the making of laws that shall be just to all of the gunning fraternity. F. J. TINGLEY.

TINKERING THE WOODCOCK LAW.

Editor Forest and Stream:

I notice here a bill introduced in the Senate by Senator Otis, Chairman of the Senate Committee on Game Laws, relating to Suffolk and Queens counties, limiting the partridge season to November and December, but allowing July woodcock shooting.

Allow me to ask through your columns if you know anything of the history or object of this bill?

It looks at this distance like a trick or scheme by some hotel interest to draw New York patronage thither to dine on woodcock "chicks" on the "half shell" out of season, or a pretext under which pot-hunters and law-breakers may operate over the surrounding country to supply that particular market at enhanced prices.

The subject is worth consideration, since schemes of this kind are constantly pouring in from that vicinity, to the prejudice and demoralization of the best efforts for protection.

Do the better portion of the sportsmen of these counties really desire such a law? Is it justified by any sound reason or condition of things?

If I understand the history of woodcock, they frequently hatch a second brood in July. If such be true in that section, it is a good reason against the bill, impatience of individuals to shoot before the season opens to the contrary notwithstanding.

The original game law opened the season July 4. It was changed by common consent of sportsmen as being in every way bad practice. The bill being a local one, is of doubtful constitutionality. I think the people of these counties will soon want it repealed, because there will be nothing left when August comes, and September will probably be barren of sport. Perhaps that is the very object of the law. I wait to see whether or not Senator Otis is lending his name and position to a mere scheme of this sort to gobble up my chicks. MOTHER WOODCOCK.

ALBANY, N. Y., March 20.

CRUISING IN FLORIDA.

ARRIVED here last night after a very pleasant trip by way of Clear Water Harbor, Tampa Bay and Charlotte Harbor. Found abundance of game on the way. Plover, snipe (Wilson's), curlew, humility, etc., etc., for birds; deer, 'coon and bob cats on the river. Have surfeited on wild turkey since leaving Fort Myers.

The Caloosahatchee is a beautiful river. I think it far superior to the St. Johns. Game is plenty; fish few and far between. Scenery delightful. Mosquitoes are somewhat troublesome, but nothing to what I have seen in New Jersey.

Our party consists of two gentlemen from the Hub and myself. We left Tarpon Springs, Fla., on the 20th of February bound for Kissimmee; leave here to-day by way of the canal for Okechobee. Have had glorious sport, and expect more of it. The weather is all that could be desired; southerly winds, days clear and pleasant, nights cool and sleepful Healths all are A1. Appetites good, provisions ad lib.

Any of your readers who wish a pleasant cruise and "heaps o' fun," should try Charlotte Harbor and the Caloosahatchee.

You will probably hear from me again when I reach Kissimmee, when possibly I may have more to say. Till then *addio*. TARPON.

HEADWATERS CALOOSAHATCHEE RIVER, Fla., March 14.

LONG ISLAND NOTES.—I took a stroll on the meadows the other day with my old setter to interview that mythical snipe, but he scaiped; I did not see any markings, nor borings. We have very few snipe around this locality, and ten guns for each bird. Crows are abundant and many carcasses lie on the meadows. There are a few hawks, redwing blackbird, bluebirds, robins and other birds. Meadow larks stay all winter. I have not seen any woodcock; in fact don't look for them. I hope that the sportsmen of Pennsylvania, New York, New Jersey, and Conneticut will unite and abolish spring and summer shooting. October 1 is early enough. I wish that all clubs would offer bounties for owls, hawks, skunks, foxes, weasels and snakes. This would help increase game mightily.—FRIAR TUCK (Flatbush, L. I., March 21.)

I fail to agree with your correspondent, signed "16-Bore," in your last issue, who writes of summer woodcock shooting. I have always been in favor of July shooting. And as far as my experience goes, have found the birds well grown, and frequently able to fly well by May 1, and if we miss the July shooting we miss all, as we never get any fall shooting. He speaks of the partridges being diminished by summer woodcock shooting; it may be so in some localities, but not here. We might have some of the best partridge shooting in the State of New York if snaring could be prohibited. I have known between two and three hundred partridges per week shipped from this depot to the New York market, and between two and three thousand during the months of September and October, and so long as the season continues to open September 1, the snaring will continue, and I know of no reason why the law should not be amended for the season to open November 1, or at the same time of quail shooting, as then the partridges would be preserved, and not snared under cover of killing to escape the penalty of the law. This is applicable to Queens and Suffolk counties.—G. W. R. (Manorville, L. I.). [We have seen very good woodcock shooting on Long Island in October and November. There is no doubt that, were spring and summer shooting abolished, birds of all kinds would sensibly increase.]

HE AGREES WITH "CHASSEUR."—Allow me to applaud "Chasseur" in his utterances anent the improved breech-loading rifle, .44-90-500-60-496-393¼ craze. What in the name of common sense is anything more effective than we now have, or as much so, needed for? Simply to add to already plethoric bags and to utterly annihilate game. This it is, pure and simple. Better far were it, for keen enjoyment and satisfaction, that there were no repeating rifles. If it were absolutely necessary for the glory and renown of Me Lud, or anybody else, to penetrate the fastnesses of the mountains in search of the cougar and grizzly, let him take his life and singleshot in his hands and fight it out on that line. It is entirely probable that some dudes would turn up missing, but that wouldn't hurt. It is a characteristic American idea to get all that is to be had in the shortest space of time, whether in domain of sport or business. It is unhealthy. The candle burns too fast. Call a halt.—S.

DUCKS IN IOWA.—Marshalltown, Ia., March 27.—Ducks are beginning to come in in goodly quantities, but so large a territory is covered by water that one cannot get near them. —L. T. D.

NORTHERN MINNESOTA NOTES.—As may be imagined, bird life in this boreal clime is not very abundant, it being not uncommon for the thermometer to be 30 and 40 degrees below zero, and once this winter it has registered 52 degrees below. Prairie chickens, or pinnated grouse, and sharptails, stand the cold well here and are abundant. They roost in the snow, and also remain there during a blizzard. The bluejay can be heard uttering his chatterings on most fine days, that is, with the thermometer about zero in the shade. The chickadee endures the severest cold bravely, and is as pert and merry as though it were forty degrees above. The red-headed woodpecker is found tapping the trees, in the bush which borders on the rivers, during the severest storms. Snow buntings are to be seen here every day now, they are becoming rather mottled in color. A month or six weeks ago, the markings were confined to a very slight blotch on the nape of the neck and shoulders, and some were so slightly marked that they appeared to be pure white. These birds before a storm are particularly active, and flock around the homesteads, uttering a sharp, twittering note. Only last December a bear of the red nose species was killed, eight miles east of here. It was found in its winter den, weight 300 pounds; exactly the same appearance as the common black except two or three inches of the muzzle, which was a rich chestnut brown color. They are said not to be uncommon, but are more fierce than the common blacks. Perhaps some of the readers of FOREST AND STREAM can tell me whether this is a distinct species or merely a variety of the common black; if the latter, what originally produced the variation? Question for Darwinian devotees. At least twelve species of birds, and possibly more birds winter here, but I cannot positively identify more than I mentioned in these notes till I get "Coues's Birds of Northwest."—BOREO MINNESO. (Hallock, Kittson county, Minn., March 18). [The "red nosed" bear is the common black bear. Almost all black bears have tan or chestnut muzzles. Those without these markings are the exception to the rule.]

A KENTUCKY GAME BILL.—By a vote of 42 to 32 the Kentucky Legislature has passed a game bill, of which the following is a synopsis: It provides a penalty for hunting or having in possession any fawn or deer between March and September; turkeys between February and September; ducks, geese and teal between May and August; woodcock between February and July; quail, pheasants, etc., between Feb. 1 and Oct. 15; doves between February and August. Hunting song or insectivorous birds is prohibited, except where they are destructive of fruit or grain crops. Rabbits and squirrels are protected, except when they are destroying crops. An amendment forbidding the selling of game from other States during the close time was passed, as were other amendments excepting certain mountain counties from the provisions of the act. It is stated that this game bill was prepared after careful consideration by the Louisville Sportsman's Club, the Newport Club, the Daviess County Hunting Club and the Shelbyville Gun Club, and embraces the best provisions of similar bills in other States.

SPRING IN KENTUCKY.—I have inquired carefully of the farmers concerning the partridges (*Ortyx virginianus*), and have not received a single bad report. They have wintered well and many fine coveys exist throughout this country, although we have had one of the severest winters known in this latitude for over thirty years. Ducks have passed, with good shooting on water courses. Snipe (*S. wilsonii*), in fair numbers; two of our club bagged, in half a day, thirty-two last week, and two others did not bag so many is the writer's recollection. Our legislators have passed a good game bill. Inclosed is synopsis. I hope they may make a fair appropriation for our fish work. Spring is here, grass green, and a certain something in the air that causes a careful inspection of fishing tackle and inquiring after the stage of water in adjacent streams, and all the small boys of a Saturday and little niggers every day are sneaking to some pond or stream with pole and string. To follow soon is the intention of—VOX (Mt. Sterling, Kentucky, March 24).

SPRING SHOOTING IN JERSEY.—I was out for snipe Tuesday, and considered myself lucky; I bagged three English snipe and one gray duck. Snipe were quite plentiful, but the meadows were overrun with poor shots and still poorer dogs, flushing everything in the neighborhood. In the evening I thought I would try for ducks, supposing I would be the only one on the meadows, but, bless you, there were three hunters for every duck I saw, and still worse, they would shoot at ducks three miles up, frightening them so that I don't suppose they returned, at least I did not see them. Coming from the meadows after dark, I flushed two English snipe, but I could not see to shoot. Heard a few woodcock "squeaking" last night.—16-BORE (Madison, N. J., March 27).

LONG ISLAND PROTECTION.—I am heartily glad to find in your issue of March 10 another letter bearing upon game and game protection, and being one of the many who enjoy a few weeks of fall shooting, and who are opposed to the destruction of our birds, am very happy to hear from our friends Messrs. Lane and "C." (Manorville). In the issue of March 27, I see that Mr. Whitaker attempts an explanation why the offenders are not brought to justice. I would suggest to that gentleman that inasmuch as his jurisdiction is so large that he cannot attend to the vast amount of miles at one time, let him, while there is no land shooting, attend to our bays.—DICK (Brooklyn, March 29, 1884).

FLORIDA SHOOTING.—The fishing in Lake Monroe is very fine. Mr. Benson, of Brooklyn, N. Y., caught seventy-eight bass in the lake several days ago. Hunting is also good; deer are found in the scrubs, which are three miles from here. Ducks are not as plenty now as they were in December, but enough can be found for a day's shoot. A flock of over seventy geese passed over the lake Wednesday on their way north. Any person wishing good duck shooting should come here in October.—G. G. J. (Enterprise, Fla., March 24).

MINNESOTA.—The ducks have already arrived. Though there are but few just yet, in three or four days we will have them down on us by thousands if the weather continues warm, as the river is just breaking up.—A. W. S. (Long Prairie, Minn., March 28).

MARYLAND.—Fair Hill.—First snipe here March 26. They are more plentiful this year than for several years.

THE NEXT MAN TO DIE is just as likely to be yourself as any of your neighbors, and unexpected death is continually happening. Take a combined life and accident policy in the Travelers, of Hartford, Conn.

Sea and River Fishing.

OPENING THE TROUT SEASON.

THE opening of the season for trout on Tuesday last sent many anglers from the city to Long Island, but does not seem to have disturbed the even flow of events in other parts of the State. The evening before the opening we stood in the station of the Long Island Railroad at Hunter's Point, which the road has tried to deodorize by calling "Long Island City," and at 4:30, when the trains were about to depart for the South Side, the North Shore, Port Jefferson branch and the main line, we counted seventy-eight rods passing the wicket-keeper. Besides this, we nodded to a score or more of anglers without rods, who were going down to the clubs, where their tools were kept. How many went by the way of the Brooklyn station, or by earlier or later trains, we do not know.

On Wednesday morning, we came in on the Port Jefferson branch, and examined several fine baskets of trout, taken along the North Shore. We saw a fine specimen of two and a half pounds, which was taken by Mr. Henry Smith from the ponds at Glen Cove. Mr. John Cashow had a good creel taken from Shoe Swamp brook, one of which weighed one and a quarter pounds. The day was cold and blustery, and not at all a desirable one for trouting. The South Side Club was well represented on the road the evening previous, and the waters gave up some exceedingly fine specimens.

In the city the display in Fulton Market brought a crowd of visitors, as usual. Among those we recognized at Blackford's were: Henry Ward Beecher, Henry Irving and Miss Terry, Prof. Bickmore, of the American Museum of Natural History; Prof. Rice, of the Fulton Market Laboratory; Monroe A. Green, of the State hatchery at Caledonia, Hubert O. Thompson, Prof. A. M. Mayer, Dr. Kingsbury, Francis Endicott, John Oakey, William Mitchell, Erastus Corning, Jr., John J. Bloomfield, James Vallotton, George Shepard Page, Thomas Jones, and many others.

Mr. Blackford's slabs and tanks were given up entirely to trout, and the display, while not so great perhaps in point of numbers of trout, exceeded that of any previous year in the variety of species. The decorations were very tasteful. Over the door hung a great floral bass, with a body of red roses, fins of white daisies, and a stripe of yellow buttercups. All the woodwork and railings of the various stalls were twined with smilax, and between the loops hung dainty little Japanese glass acquariums in which tiny minnows wriggled merrily about. The larger glass boxes were banked in ferns. The white axolotls were quite lively, and were always the center of a curious crowd. If the two alleged white elephants now in the country are "sacred," then certainly these animals, which are really white, are entitled to some consideration. One of them stood on his tail in a corner of the tank all the morning, with his hand folded over his breast and an expression of sanctified grief upon his countenance, which excited much pity and sympathy from the ladies.

Among the fish the post of honor was awarded to some Irish trout from Lough Neagh, sent by Mr. T. J. Moore, of the Liverpool Museum, one of which weighed eight pounds. A fine salmon from the same place was also shown. The Cold Spring hatchery of the N. Y. F. C., F. Mather, Superintendent, sent live German trout one year old, which were greatly admired, and also fry of the same ten days old, rainbow trout of one year, and salmon fry. The Caledonia hatchery of the N. Y. F. C., S. Green, Superintendent, sent dead brook trout, rainbow trout and hybrids, all fine specimens, of two to four years old.

The best display was made by James Annin, Jr., of Caledonia, N. Y., who exhibited silver trout, brook trout, lake trout and rainbow trout, all alive, and of large size, as well as trout eggs in a package to show the mode of transportation. The United States Fish Commission exhibited live Rangeley trout and rainbows. Other exhibitors were: G. H. Dickerman, New Hampton, N. H.; Myron Green, U. S. F. C., Baird, Cal.; E. B. Sutton, Babylon, L. I.; South Side Club, L. I., and J. B. Hewlett, Hewlett's Station, L. I. Wild Canada trout were on hand, and could easily be told by their dark color. They had evidently been frozen.

Mr. Blackford sent duplicates of everything to Prof. Baird, who made an exhibition of trout in the National Museum at Washington, on Wednesday. Specimens of each kind were also sent to Lauber's restaurant in Philadelphia, where a display was also made. Taking all things in consideration, we regard the trout show of this year as equal to, if not superior, to any former one.

MICHIGAN LAKES.

THE Michigan fish law says: "From now until June 15 next it is unlawful to catch any black, green, silver, rock, or white bass, pickerel, pike, salmon, grass bass, sunfish, perch, or any food fish. Parties fishing through holes in the ice please take notice, as the State Fish Commissioners are determined to prosecute any one so doing."

How well the law is enforced I will not say; of the open and flagrant violations I can speak from personal knowledge. The labors of the Fish Commission are bearing fruit. Scarcely a day last summer that the crew of the United States Life Saving Station did not haul shore seines of one and a half and two inch meshes that caught hundreds of small whitefish from one-half to one pound weight, herring, perch and any and all that came into the net. Swedes, Polacks and other foreigners likewise are seiners.

Ausauble Lake, twelve miles long, and one of the largest inland lakes in the States, is alive with fish, which will soon be cleaned out. A lumber company some years since dammed the outlet, and no fish that comes out of Lake Michigan can get above the dam. Last spring the outlet was literally jammed with fish trying to get up to spawn. They were speared, clubbed and netted by the wagon load. The past winter the lake has been covered with the shanties of the spearing and netting gangs. Gill and trap nets are all over the lake. The daily catch averages two tons of fish, which are shipped to Chicago, Detroit, etc. Very few are sold to local marketmen.

Birch Lake is now being raided by the advance corps of the Detroit fish monopoly. This lake is the one alluded to by the Detroit dailies as being the recent discovery of a Buffalo firm, which had given the Detroit fish firm the agency of handling the enormous catch of fish the lake was said to contain. We are of the opinion that the Buffalo firm is a myth, and as for the lake being away in the Northwest, I think that Ed. Gillman, of Detroit, will say that Birch Lake is in Michigan. I may be mistaken in regard to Mr. Gillman's knowledge, but am inclined to think he has fished those same waters. Perhaps "Delta" could throw some light upon the location of the lake. To satisfy the insatiable maws of fish dealers one by one, all of our Northern lakes are cleaned out by persons either directly or indirectly connected with some firm of fish dealers. One of our Commissioners, Mr. Kellog, resides in Detroit, perhaps he could enlighten the readers of FOREST AND STREAM why this slaughter from year to year goes on without an effort being made to stop it. Not till the sale of fish is stopped during the close season for Michigan fish will the end come. A few prosecutions aimed at the heads of the fish dealers will check the slaughter.

S. E. B.

MANISTEE, Mich.

TROUTING ON THE BIGOSH.

THE DOCTOR'S STORY.

THE Doctor and I had exchanged our wet clothing for more comfortable garments, while listening to the Colonel's chaff, and were snuffing the odors of our trout which Jack had dressed, while Uncle Ben was making the bread and coffee, which were sending savory odors from the frying pan, making hungry fishers impatient of not only minutes, but seconds. The Doctor sententiously remarked that eating was a duty that we owed to our grosser natures, and that he was ready to meet his liabilities in this line at the earliest possible moment, and he had no sooner declared his readiness than Uncle Ben gave him the opportunity. How many trout and hot biscuits were eaten I will not say, because I did not keep count. The Colonel, next morning, pretended that he had kept tally, and produced a stick notched on two sides; one side of which he declared was the Doctor's record, while mine was on the other. If he ever publishes this record I ask that judgment be suspended until mitigating circumstances on our side can be shown, and besides it will not do to tie too fast to the Colonel's statements, or his stick.

After supper we stretched ourselves on the hemlock boughs and smoked, one of the party declaring himself "too full for utterance." The sun had gone down, and the strange call of the whippoorwill on the hillside seemed to rejoice at its disappearance.

"Doctor," said Jack, "tell us how you fish a stream."

"My son, beware," exclaimed the Colonel, "you do not know what an infliction you may bring on us. If the Doctor gets started on that subject, there is no telling when he will stop."

"That's so," said I, "there is no end to the Doctor's stock of fishing lore. He is chock full of information now, and you can make it flow by tapping him with a question, but the trouble is that you cannot turn the stream off as easily as you turn it on. I think we will have to let it flow and listen to it, or hoop him to keep him from bursting."

"Gentlemen," calmly answered the Doctor, "my young friend has asked me a question about stream fishing. My answer may be of use to the boy, if not to any confirmed boat-fishers and grovelling bait-fishers who might be near. He is young in angling and should be allowed to learn that the highest form of angling to wade a stream."

The Colonel repeated, "boat-fisher," and pointed at me; "grovelling bait-fisher," and said: "That rubs us both hard, doesn't it? But, Doctor, spare us, please, all the hackneyed mush about the 'indescribable turn of the wrist which cannot be explained, but which the born angler instinctively knows,' and we will listen and try to profit by your talk to Jack."

The Doctor looked up in surprise, and asked: "Do you deny that a turn of the wrist will hook a fish?"

"No," replied the old soldier, "I don't deny anything you may state about fishing, only that striking a fish by an upward and backward turn of the wrist has been magnified into an art that only few can attain, if not born with it, and against that nonsense I wish to enter a demurrer. The facts are, as I believe, that nine fish out of ten hook themselves, and the tenth one gets away. The mysterious 'turn of the wrist' is easy enough to explain, or to perform, but the stroke is too late to be of service; a fish seen to break water has the hook in his jaw or has cast it out before the motion of the wrist has obeyed the command of the eye and has communicated its action to rod, slack line and hook."

"We differ so radically on this point," said the Doctor, "that there is no use in arguing it by the camp-fire. Come with me on the stream to-morrow and we will try it there."

"No stream-fishing for me, with my rheumatic leg," replied the man of war, "but don't let me interrupt your talk with Jack, his mind is a blank on stream-fishing, and you can give him page after page of whatever you wish to print on it, and he will never be as critical as his parent."

"Well, Jack!" began the Doctor, "these two companions of ours are wedded to their idols and it would be time wasted to try to convert them. To you, however, I will say that fishing for lake trout is about as much sport as dredging for oysters, and boat-fishing for brook trout is merely a refinement of sitting on the corner of the dock and bobbing for eels. In wading a stream all the muscles are called into play and the mind is strung so tightly with anticipation of a rise, new views and surprises, care where the feet are planted, and watchfulness that the bushes do not capture the flies, that there is a sense of generalship in steering clear of all dangers and in capturing your game. Perhaps the best way to illustrate this is to tell you how I fished the stream to-day, from its mouth to its head, where I met our friend, the boat-fisher, who, unfortunately, thought the stream longer, and had aimed to strike it higher up and missed it.

"To begin with, the day was favorable; the light night before had kept the fish quiet by the bright moonshine, and the cloudiness of the day raised their courage to seek for food. I started in from the mouth of the stream and took a few fish in the first pool without much trouble from trees, as the pool was deep and wide, but taking the bank around this pool, I came to a smaller, shallow pool overhung with bushes. Here I could not cast over twenty feet, and as my rod was nearly half that in length, it was done in this way: I took my fly, for I used but one in such a thicket, in my left hand, and holding my line with the forefinger of the right hand, I held the rod parallel with the surface of the water, and drawing back the fly until the arch of the rod would throw the fly by its springing to the natural position, I let go. Several casts of this sort brought a trout out of this pool. Passing on up stream a cedar log was found with one end in the water and the other end on the bank. A bend in the brook threw the current under the end that lay in the water, and consequently a hole must be washed out under it; taking the opposite bank I stepped ashore, and advancing cautiously so that no jar should alarm the fish, the fly was dropped above the log and played on the surface, and two fish captured by keeping a taut line and not allowing them to get under the log. A third fish succeeded in reaching the timber and escaped with the fly and half of the leader.

"What fly had you been using all this time?" inquired Jack.

"A yellow drake, for the day was dull, and the overhanging bushes deepened the shade, and in such cases a light fly is usually the most killing. After losing this fly I put on an oak fly, a small fly with a yellow body and a brown wing, although I had more of the kind lost; I cannot say why the change was made, unless to try the merits of the two, and I cannot say which proved the most killing on this day. There are no doubt certain flies which are adapted to different days, although there is much nonsense in the rules laid down by different persons, and these rules vary as much as the persons. The idea that each month has its own killing flies is sheer nonsense, a fly that is good on a bright day in the spring is good on any bright day, although it must be admitted that trout are fickle in their tastes."

Here the Colonel snored so loudly that I was aroused from what I considered merely a lethargic state, but what both Jack and the Doctor declared was sound sleep. Our heated debate over this question roused the Colonel, who said: "Go on with your story, Doctor, I'm listening," and was indignant when the party laughed at him and accused him of sleeping.

"I haven't slept a wink," said he. "I know what you were talking about. You were telling Jack that a light night followed by a dark day made the fish feed."

"That was an hour ago, wasn't it, Doctor?" said Jack.

"Well, it's all the same, I heard it; but for goodness sake let up on that dry, musty old lecture, and sing us a song. What do you say?" (This question to me.)

"A song by all means. We can hear all the lectures we want at home, curtain and other, but a camp-fire is no place to bore a man with 'turns of the wrist,' and how the big one would have been caught if it hadn't been for the turn he gave the leader around the root.

And so it came to pass that the Doctor's lecture was cut off and he was made to sing, for both the Colonel and myself vowed that we would not be bored any longer. I told him that we—for I knew that I had the Colonel to back me—liked to catch trout, real live trout, or to see him take them, but to sit and hear a man catch post-mortem trout, which no one but himself enjoyed, was more than we could stand, in camp at least. He took the hint and behaved as decently as any of us during the remainder of the evening.

FRED MATHER.

GOOD WORK IN MASSACHUSETTS.

THE Committee on Fisheries of the Massachusetts Legislature, has reported a bill making the close time for trout and land-locked salmon begin September first, instead of October first, as under the existing law. This will make the season for catching these fish begin April first and end as above. The bill is altogether likely to become a law, as it will meet with but little opposition. The marketmen will not oppose it, since they have not been in the habit of doing anything in September trout. It has been generally agreed among the friends of the trout that so scarce have these fish become in Massachusetts, that another month should be put on for their protection.

A hearing was had on Tuesday, before the Committee on Agriculture, in regard to the lobster question. A close time is earnestly desired by those who see that the lobster is disappearing before continuous fishing, but such a provision is opposed by fishermen and dealers. There is little prospect of getting a close time at present, though other sea-board States have one. But those who would save the lobster hope to have the Commissioners of Inland Fisheries made to have charge of the lobster also. The present lobster laws of the State are easily evaded, for the reason that there are no officers vested with authority to look after them. With the Fish Commissioners in charge, it is believed that much of the illegal catching and selling can be stopped. The existing laws of the Commonwealth forbid the retaining of any female lobster bearing eggs, caught when fishing in the month of July. But the fishermen evade the law by brushing away the eggs with a corn brush, although the law provides that such lobsters must be immediately returned to the water alive, under penalty of not less than $10 nor more than $100, or by imprisonment in the house of correction for not less than one nor more than three months. The law prohibiting the sale of lobsters less than ten and a half inches in length is constantly broken for the want of proper officials to enforce it. Indeed, its enforcement has been for some time spasmodic, being done by the earnest friends of the protection of the fish, during intervals of business and moments snatched from business, when reports of glaring breaches of the law come to their ears. At such times the dealers have generally succeeded in hustling the small lobsters out of sight, and escaping the punishment.

SPECIAL.

BOSTON, March 31.

THE DOWEL QUESTION.

Editor Forest and Stream:

I notice in your issue of Feb. 21 a letter from Mr. H. P. Wells, of New York, deprecating the use of the dowel pin in fly-rods, as having a tendency to weaken the joints, and also on account of the difficulty experienced by an amateur in repairing a breakage when angling at a distance from a professional rod maker. I will not attempt to follow your correspondent in all the imperfections and difficulties he refers to, but may say that I have a rod which is so constructed as to obviate all the difficulties referred to. It is fitted with the new waterproof lock joint, patented by Mr. E. Perk, and purchased from a local firm, in which is now vested the sole right to manufacture.

The patent lock joint referred to possesses all the advantages of the "Irish screw ferrule" without its disadvantages. Instead of the screw, a stud is placed on the inner or male ferrule, which fits into a groove in the outer or female ferrule, thus making it a perfect lock and waterproof joint without weakening the rod; it is moreover readily adjusted without the tediousness of screwing as in the Irish ferrule, it is impossible for it to get out of order.

The ferrules are tapered as in the case of ordinary ferrules, the "dowel," which is the great source of weakness in ordinary rods, is superseded by a small stud at the end of the inner ferrule, which only requires a bore of one-third of an inch instead of one and a half, and sometimes two inches, and thus adds considerably to the strength without interfering with the pliability so necessary in a good fly-rod.

As an angler and lover of a really first-class fly-rod, I send you these remarks in reply to your correspondent, as likely to benefit my brother anglers.

ANGLER.

REDDITCH, England, March 3, 1884.

COMPARATIVE WEIGHTS OF FLY-ROD MATERIAL.

BELIEVING that to some of your readers exact information in reference to the comparative weights of the more commonly used fly-rod materials, would be of interest, the following specific gravities were computed with the kind assistance of Mr. E. S. Hopkins and Mr. W. G. Levison, of the Cooper Institute Laboratory.

Distilled water was the standard. The determinations were made with great care, and are believed to be reliable, for the specimens tested, to within at least the third decimal place. Different samples of the same species differ somewhat from one another in weight. The woods which were the subject of this experiment, were carefully selected for the express purpose of fly-rod making, and were, as far as was possible, the very best of their kind. It is, therefore, believed that the following determinations more correctly represent the comparative weights of such material as is used for this purpose, than would any samples selected at random in the wood market, or any table computed therefrom.

The split bamboo was of excellent quality, of my own preparation. The six-strip hexagonal piece was taken from an old and well-tried middle joint. The angles of this were slightly rounded. The four-strip piece was put together with the rind inside for the purpose of comparison.

The cedar was taken from a very choice piece from Florida.

The different materials are arranged in the table in the order of their weights, the heaviest first. To facilitate comparison on the part of such as may be unfamiliar with the use of specific gravities, the weight of a cubic foot of each is also given, in pounds and hundredths of a pound.

Material	Specific Gravity.	Weight of one Cubic Foot.
Snakewood	1.3718	85.74
Bethabara	1.2140	75.98
Greenheart	1.0908	68.18
Lancewood	1.0335	64.59
Split bamboo, 6-strip, hexagonal, rind outside	0.9915	61.96
Split bamboo, 4-strip, rind inside	0.9678	60.49
Ironwood (hornbeam)	0.8184	51.15
Hickory	0.7963	49.78
Ash	0.7786	48.66
Mahoe	0.6607	41.29
Cedar	0.6396	39.98

At the first convenient opportunity it is proposed to compute a table of comparative elasticities. Will some of your readers be kind enough to supply me with a piece of first-class ironwood (hornbeam) for this purpose? It should be from three to four feet long, and so as to admit of being planed to a true square of three-eighths of an inch. Similar pieces of the smooth and shag-bark varieties of hickory would also be thankfully received. But to be of any value for this purpose the wood must be well seasoned, and fairly represent the merits of the species to which it belongs.

HENRY P. WELLS.

NEW YORK, March 29, 1884.

IT WAS LEGAL.—The paragraph in your last issue, from one "C. G. G.," is entitled to a reply from its embodying a slander upon a gentleman, Mr. Hannibal Hamlin. Mr. Hamlin did not go to Moosehead Lake, but to the West Branch Ponds, some few miles from Katahdin Iron Works. He brought home a few dozen small trout, which, as a citizen of Maine, he had a right to take under the following law: "Provided, however, that during February, March and April, citizens of the State may fish for land-locked salmon, trout, and togue, and convey the same to their own homes, but not otherwise."—E. M. S. (Bangor, Me., March 23).

PHILADELPHIA NOTES.—The big shad seine at Gloucester, N. J., fishing shore has been overhauled and tarred, and wise ones expect a much better season than last year. An exhaustive lecture on "The Fishes of the United States" was given several evenings since before the biological and microscopical section of the Academy of Natural Sciences by Mr. Lockington. The lecturer used preserved fishes to the number of one hundred and more to illustrate his lecture, and it is hoped he will be induced to continue these discourses.—HOMO.

GOLD MEDAL AT CALCUTTA.—We learn that Messrs. S. Allcock & Co., of Redditch, England, have received at the Calcutta International Exhibition for fish hooks, fishing rods, and fishing tackle, a gold medal and first class certificate, this being the highest award.

Fisheculture.

PROGRESS IN FISHCULTURE.

THE *Century Magazine* for April contains an article entitled "Progress in Fishculture," with twenty-three illustrations, by Mr. Fred Mather. It shows what has been done in the last ten years, both in Europe and America, in the way of implements to simplify the work, and notes the important steps in bringing new fishes to yield their secrets of propagation to the fishculturist. No attempt is made to give statistics of the numbers of fish hatched in any land, as the different reports of governments and States furnish these. The article is written more to show the general reader what has been done than to enlighten the expert, and this is all that can be expected in a popular magazine article.

The limits of the article forbid more than the briefest mention of the many noteworthy things which have been done and discovered within the last ten years, and the only thing of importance which seems omitted is the introduction of the trout of Europe, *Salmo fario*, into America, from both Germany and England, and which promises to be of great value. Possibly the article was in type before the arrival of these fish.

There are so many things of interest to the fishculturist in the article that we cannot select any for quotation, those interested will read it. In closing it says that fishculture "has not cheapened fish food to any extent, owing to the growth of population, but it has increased the supply in American waters, which were becoming exhausted in both the older and some of the newer States, and promised to become entirely barren. It restored the salmon to the Connecticut River, where they were taken and sent to market for three years, until the rapacity of the fishermen exhausted the supply by cutting off the fish from their spawning grounds. It has placed shad in San Francisco markets, where they were before unknown, and has materially added to the supply of our lake and river fishes, and now promises to increase those of the sea coast."

The illustrations and diagrams show most of the important points described, and, like all of the *Century's* work, are well done. The picture of the New York State hatchery at Caledonia, was made just before the new building was put up, therefore the latter is not shown. "Jagging salmon," and "stripping shad," are good character sketches.

SALMON AND TROUT FOR WESTERN NEW YORK.—On the 25th of March the transportation car of the U. S. Fish Commission left the hatchery at Wytheville with salmon for the tributaries of the Oswego River. On the way 250 rainbow trout, 50 Rangeley and 50 common trout, all one year old, were planted in a tributary of the Shenandoah, in Clark county, Va. The stream was a limestone brook which is well preserved, and Col. McDonald thinks that these yearlings will prove of as much value for stocking purposes as one hundred times the number of fry. The car then went by way of Harrisburg and Williamsport to Oswego, N. Y., where it was met by Mr. Lester Wright of the Leather-Stocking Club, and 500 yearling rainbow trout were placed in Lewis Creek, a stream controlled by the club. Three miles above Fulton 70,000 Penobscot salmon were placed in Eleven-Mile Reach, near the mouth of Ox Creek.

TROUT IN WISCONSIN.—The State Fish Commissioners deposited 40,000 young trout in the streams in this vicinity yesterday, March 25. Waupaca has some fine streams in a radius of eight miles that are suitable for trout, and we anticipate fine fishing in a few years, if the fish do well, and we have every reason to think they will.—C. F. C. (Waupaca, Wis.).

THE PENNSYLVANIA COMMISSION.—The Fish Commission of Pennsylvania has nearly finished the work of removing the fish from their abandoned station at Marietta to the new hatchery near Allentown. They have begun the distribution of trout from their western hatchery at Corry.

The Kennel.

FIXTURES.

BENCH SHOWS.

April 3, 4 and 5.—The Cleveland Bench Show Association's Second Bench Show. Charles Lincoln, Superintendent. C. M. Munhall, Secretary, Cleveland, Ohio. Entries close March 24.

April 22.—The St. Louis Gun Club's Bench Show, St. Louis, Mo. Entries close April 14. J. M. Munson, Secretary.

May 6, 7, 8 and 9.—The Westminster Kennel Club's Eighth Annual Bench Show, Madison Square Garden. Entries close April 21. Chas. Lincoln, Superintendent. R. C. Cornell, Secretary, 54 William street, New York.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1010.** Volume I., bound in cloth, sent postpaid, $1.50.

EASTERN FIELD TRIALS CLUB.

Editor Forest and Stream:

The quarterly meeting of the E. F. T. C., for social intercourse, exchange of views and experiences, and to promote friendly discussions on general shooting topics, has been postponed until May, and will be held some evening during the holding of the New York show, at Madison Square Garden, and notice will be given through the mail one week previous to every member. This postponement was effected to give many of our non-resident members, who will probably attend the show, the opportunity of meeting the club members while in New York.

WASHINGTON A. COSTER, Sec'y and Treas.

FLATBUSH, March 29.

I. C. S. ASSOCIATION.

Editor Forest and Stream:

Please publish the following notice to the members of the International Cocker Spaniel Association:

In accordance with the provisions of the constitution and by-laws of the above association there will be an annual meeting of the I. C. S. Association at Natatorium Hall, in the city of St. Louis, on the 22d of April next, during the bench show to be held in that city. The executive committee of said association will hold its annual meeting on Wednesday evening, April 23 at the same place. As business of importance will be presented it is hoped that every member of the committee will be present. The judiciary staff, as provided for by the constitution, should be elected at this meeting.

E. C. FRANKLIN, Sec. and Treas.

ST. LOUIS, March 28.

CHAMPION BEAGLES.

Editor Forest and Stream:

Being an admirer and owner of beagles I should like to ask for an expression of opinion, from those interested, upon the following subject, and that is asking our bench show managers to adopt a different rule—to apply only to beagles—than the one already adopted, which is as follows: "A dog to compete in a champion class must have won a first prize at * * * and a dog having won a prize at any of the above named shows cannot compete in an open class when there is a champion class for its kind, but must compete in such champion class." For the following reasons I think under the rule quoted it cheapens the honor champion, for, as is very often the case, a dog is entered in the open class with perhaps only one or two (sometimes none) competitors, and being the best of the class (at times a poor one), is awarded first prize. When the dog is entered again for competition it must enter in the champion class, when the same thing might be repeated, and it win in that class, then it is proclaimed a champion beagle. I think it will be to the interest of the admirers of the beagle to adopt a rule having a dog win two or three times (two at least) in an open class before competing in a champion. I, as an exhibitor, would willingly agree to such a rule, and would then look upon them with pride, and value a dog who won champion as one who was entitled to the honor. It is for the breed I am writing and not any personal glory (for I have won twice in the open classes with Bush and Myrtle), and under such a rule dogs would find their proper places.

W. H. ASHBURNER.

POINTERS AT CINCINNATI.

Editor Forest and Stream:

In your issue of the 13th inst., under the caption of "Setters and Pointers at Cincinnati," Mr. Munson says of Lamplighter, who got a vhc. (a Ranger ex Queen), "He is a good looking, big dog, but coarse, as the general run of Ranger dogs." While he has an undoubted right to give an honest opinion of dogs that he has seen, and those exhibited more particularly, I do object to an erroneous impression being given of what has not been seen—"the general run of Ranger dogs." (Your report of Lamplighter says "he was a very useful looking dog.") The Ranger dogs are too well known among practical sportsmen who use them afield to not appreciate that quality Mr. Munson terms "very coarse." The many first prize winnings at bench shows held at Chicago, New York, St. Louis, Boston, Baltimore, Syracuse, St. Paul and San Francisco, with the field trial winnings at the Pacific coast of Beautiful Queen (a Ranger ex Queen) second in free for all, his grand progeny a first and second there too, stamp Ranger one of the most successful stud pointers of America. The breeding and selection of this blood (the "Ranger dogs") has been especially for

field work, and they have filled the bill for shooting, during the hottest of weather and in all its variety, on the game birds of the Northwest and other latitudes where they are owned. My experience with them has not been limited. Season after season the many years past, in the best of company, they have held their own, and when all good quality coupled with endurance were the test, they have not been found wanting, but always in the lead. And for that finer (?) quality, their bench show record speaks for itself, being judged by English as well as the many American judges competent to render an opinion. *Si monumentum quæries circumspice.*

S. B. DILLEY.

ROSENDALE, Wis., March 17.

ENGLISH KENNEL NOTES.

IT will be my endeavor in these fortnightly notes to keep my readers *au courant* with all that is going on in the English kennel world.

In order to start fair I think it will be advisable to commence with a retrospect. The year 1883, which seems to have come to an end so little time ago that I have not yet got into the habit of writing 1884, was the biggest show year we have had, and the owners of large exhibition kennels must positively dread the approach of the 1884 show season.

Apart from the usual shows, those at the Palace and Birmingham, the greatest successes of 1883 were scored by Warwick, York and Sheffield. The first named rejoiced in the patronage of a Prince, and that in the land that gave birth to the author of "The Book of Snobs" means gate money.

Warwick, from its midland position, was sure to draw a big entry, and then, besides the presence of our "fiddling" Prince, they were clever enough to secure the catch-penny attraction of Lady Florence Dixie's heroic St. Bernard, who from his bench held quite a levée, and received with conscious dignity the homage of the credulous.

Encouraged by success the Warwick committee have this year erected their own building and issued the most liberal schedule that I have yet seen. Even Japanese and truffle dogs have separate classes. Where the truffle dog entries are to come from, *gourmets* only know. Added to its other advantages, Warwick is first in the field, and I am confident that their liberality and enterprise will be rewarded with a bumper entry. The collie classes are sure to be a leading feature.

I notice that the York committee have been patting their secretary and one another on the back. It is always pleasant to be able to shake hands with one's self. They may repeat their venture, though they will lack the auxiliary aid of the royal show and the royal presence.

Last year H. R. H. the Prince of Wales, and one of the "six hundred" heroes, Sir "Garge" Wombwell, walked through the benches, and I don't think the committee have recovered their breath yet.

Sheffield was a good show and cleverly timed; it just cut in for the York entries; I fear it would not do so well if renewed on independent lines.

How shows may fall off was manifested in a marked manner by Hertford last year. The year before it was covered with compliments, last year they were unfortunate in the choice of their officials, and dire offense was given to exhibitors, at least so I gather from the kennel press, in which I read that their committee were brought before the Kennel Club.

The great trouble with most local shows is that the local personages, the tinker, tailor, and candlestick maker, are all anxious to do their little "strut," and the result is they overact their parts, and give offense to those whose lives and tastes are not cast in provincial places. Hertford has wisely decided not to solicit the support of the "doggy" world this year.

Birmingham made a plucky stand against the increasing arrogance of the Kennel Club, and on the point of entries got beaten from over-confidence. We owe a very great deal to the Kennel Club, many reforms, many beneficial innovations, and I shall always be ready to concede my praise when it is becomingly deserved.

Birmingham was so hard hit this year, and a little below the belt, if the truth be admitted, that I am prepared to take the shortest odds, she will next year set her house in order and be ready to receive her many supporters whose hearts are true to Brum.

So much for the show-world. Now for the positions of the breeds. The demand for good sporting dogs continues, and particularly from abroad. Germany does not buy so many as she used to. Prince Solms's magnificent kennel, at Brauenfels, seems equal to supplying the home wants.

France is England's best continental client, *la vieille noblesse* are still ready to pay their francs in thousands for Gordon setters and Laveracks, though the first named are first favorites. The fancy has just struck them for black spaniels, but they have got on the wrong track somehow, and require black and tan *"spaniels de la race cocker."*

Among the *gommeux*, the all too pschutt who affect buggies, *le high life* and *le sport*, the *bool dogue à l'Anglaise* is the *ne plus ultra* of Parisian dudery.

Fox-terriers continue to add to their numbers, and it is a curious fact that the more common a breed becomes the more money is a really good specimen worth. After all, this admits of a very simple explanation, as the more bitches there are the more money will a decent stud dog earn.

Fox-terrier men must feel bad over the disclosures in the Briggs case. There must lurk a moral somewhere around, when a dog that is purchased from a coal miner for five shillings, and makes a sensation in the fancy, becomes invincible, and is claimed by a noble lord for £200.

Of course a pedigree was hatched. How true it is, indeed, of dogs as of men, that the pedigree is worth more than the dog.

But what a satire it is upon all our scientific breeding directions that this gutter pup should beat our best. The Caucasian is played out. Shut up the brood kennels. Where is the use of breeding champions when with a bit of liver and some anise seed we can go out into the highways and "catch 'em?"

You still continue to absorb our black spaniels, but we will meet the demand. "Where the voice of the dollar calls, etc." If you should weary of your present hobby try Clumbers.

The Duke of Portland showed a beautiful team of those handsome dogs at the Palace. Added to the beauty of the head and the silvery glint of the white hair set off by the lemon markings, there is an indescribable atmosphere in their coats that has been realistically reproduced on canvass by one artist only, Hayward Handy.

This breed was for generations jealously guarded by the Newcastle family, and a tale is told that illustrates the pride they took in keeping this breed to themselves.

The Duke had a house party and, after luncheon, strolled with his guests to see the eyry. On arriving there a groom met him with a basket containing a litter of Clumber puppies, with which his Grace, in a naturally nonchalant manner, began to feed the eaglets. As he was passing the third puppy through the bars one of his guests begged its life and said how pleased he should be to rear it. "Which of my estates would you like?" asked the Duke, smilingly.

Even the large sums that prize dogs are continually changing hands for have not prepared one for the amazement I felt on reading that the American actor Emmet had given £850 for the St. Bernard Rector.

As I presume, he has bought for private enjoyment, that must be considered an exceptional as well as a fancy price. It could only be termed a fair price if breeders in the States are prepared to pay twenty guineas stud fee for him.

Rector's career has been a curious one. I first saw him as an enormous puppy at the Kennel Club Show. I observed that he was all height and bad temper. He tasted one or two people.

He was claimed by Colman, the mustard man, who, favored by fortune and blasé palates, needs must seek the highest. Mr. Colman was already famous for his luscious large grapes, the *Gros Colman*, he had won the Queen's prize with his beautiful heifer, at the Agricultural Hall, and now he purchased for £100 the biggest dog in the world.

He soon returned to the possession of his vendor, Mr. Gould, who, it may be presumed, got him back for much less than he sold him. It is said that the first time Mr. Colman wished to show Rector to his friends, he "went for" them, chased the gardeners out of the grounds, followed his owner and friends into the house, and that they had to save themselves by dropping out of the windows.

Rector next appears hawked about the streets of London for sale—a perfect wreck. He was paraded in the busy haunts of the city and on the railway platforms; £60 they would take for him, but the public don't give £60 for a dog, and the fancy "knew" him.

At last Little Smith, of Leeds (as he is called to distinguish him from Big Smith, of Sheffield), had the audacious courage to buy him. Some months after I remember standing at the entrance wicket of the Sheffield show talking to a well-known St. Bernard man; we were criticising the arrivals. "Hullo," cried my friend, and looking round I saw the object of his surprise. Little Smith leading a magnificent dog. "Who is it?" we both asked. "Rector," replied the smaller end of the chain, beaming behind his spectacles. We were thunderstruck. Rector was fat, his coat had a bright gloss, and he appeared as meek as a lamb.

"How did you manage it?" gasped my friend. "Oh, I cured his temper by punching him, and got him into condition on bread and gravy."

There you are, St. Bernard men, I put you into possession of the secret of success. St. Bernards are notoriously a mangy breed, but the bread and gravy diet can't be beating, and I imagine Mr. Smith forgot to mention arsenic as an important part of the treatment.

With regard to fist versus stick, I had long made the same discovery. It is always an awkward affair to tackle a big dog. If you hit him loose he runs off with a growl, if you take him by the collar and hide him you must be physically capable of the performance; but roll a coat around your right arm and let him have a few from your left, and let your blows fall just above his nose, the novelty of the attack and the sharp pain will cow the largest dog so long as you keep your own nerve.

Since deciding upon a signature for these notes, I have heard that one of the handsomest entries for this year's Derby is my namesake. I suppose it was the Englishman's innate betting instinct that set me off at once to back the coincidence at the modest price of 50-1, and now I can assure his noble owner that nobody would more sincerely rejoice in his victory than

LILLIBULLERO.

LONDON, Eng., March 11.

A NEW AMERICAN KENNEL CLUB.

Editor Forest and Stream:

A letter which appeared in the March issue of the *American Kennel Register* from Mr. Van Schaick, touching the desirability of inaugurating an American Kennel Club, appear to me to be worthy of consideration. I expect I will be drawing down on myself the indignation of the N. A. K. C. for advocating such a move, nevertheless, I do so, and I think I will be supported by a very large number of the breeders of dogs on this continent.

Pointers and setters are not the only class of dogs that need encouragement and protection. Take the catalogue of the New York Bench Show, of 1882; out of 1041 entries there were 508 entries of dogs other than pointers and setters, which shows that even two years ago there were more than one-half of the entries belonging to other breeds of dogs.

The N.A.K.C. have, for the last four or five years, devoted their entire energies and resources to the development of field trials, certainly a most laudable object, but at the same time they have lost sight of one of the first objects for which it was formed, the issuing of a Kennel Register and the furthering of bench shows.

The *American Kennel Register* is doing a good work, and richly deserves the thanks and support of all breeders, but at the same time it is a private undertaking, and consequently it cannot deal with many matters which are of vital interest to dog owners as a whole.

We want a kennel club which shall take up the interest of all breeds of dogs, which will interest itself in the development of dogs, bench shows, collie trials, retrieving trials, coursing, and be a guide to the proper registering of pedigrees, and to see that no frauds are perpetrated on the public, so far as it is in its power to prevent. This club can be established without in any way interfering with the interests of the N.A.K.C., as it need not interfere with the arrangements of field trials for pointers and setters, and I think it ought to have the hearty support of the members of that club.

When the N. A. K. C. was formed, pointers and setters were the most valuable dogs, and the owners of them, the ones who took the most interest in canine affairs. Since then a very great change has taken place in this country among the breeders, owners and fanciers of dogs, which anyone who may attend any of the large bench shows of to-day may see, and if I dare make an estimate of the value of the non-sporting dogs which may be exhibited at the next New York show, I think it would equal the value of the sporting division, and perhaps go much beyond. I would suggest through your widely circulated journal the advisability of having a meeting of owners and breeders at the coming bench show at New York in May next, when steps could be taken for the formation of an American Kennel Club, if such an organization was considered necessary. In the meantime, would it not be beneficial if the numerous fanciers would give their ideas on the subject through the medium of FOREST AND STREAM? J. S. NIVEN.

LONDON, Ont., March 21.

NON-SPORTING DOG SHOW.

Editor Forest and Stream:

At an informal meeting of a few gentlemen, owners and breeders of non-sporting dogs, held last Thursday, the following preamble and resolution was offered by a gentleman present, well-known as an enthusiast on doggy matters:

Whereas, Heretofore the bench shows throughout the country have been given by kennel clubs, whose object is the breeding and perfecting of the various sporting dogs, and

Whereas, In furtherance of that object, the classes and prizes for sporting dogs have been made a feature to the detriment of the non-sporting classes, and,

Whereas, By such encouragement their object has been attained, and the American field dogs stand second to none;

Resolved, That a determined and well organized effort be made, and the assistance of all owners, breeders and admirers of non-sporting dogs be invited to co-operate in bringing about a show in October next, in the city of New York, for non-sporting dogs only.

All persons desiring to respond to the above invitation may do so by addressing, THE CLOVERNOOK KENNEL.

185 FIFTH AVENUE, New York City.

CONDITION FOR BENCH SHOWS.—Mr. Lacy, whose announcement will be found in our advertising department, is represented to us by those in whom we have confidence, to be thoroughly competent to take charge of dogs and put them in condition for show purposes. This will answer the many inquiries that we have received in relation to the matter and we have no doubt that he will have as many animals as he can attend to.

ST. LOUIS DOG SHOW.

Editor Forest and Stream:

The dog show prospects are very flattering. More entries are already in than was expected at this time. One hundred dollars has been donated by a gentleman here to be given in specials for Canadian dogs. We hope this will induce a good number of entries from Canada. Special rates have been secured on all the railroads and express companies entering St. Louis. The special prizes, from present indications, will reach fully $2,000. The *Globe-Democrat* donates $150 for a special premium, but it has not been assigned to a class yet, nor has it been decided what will be purchased with the money. But very probably it will go for a solid silver and gold collar. Mermod Jaccard Jewelry Company donate a $75 prize in silverware. The collie classes will have a number of special prizes worth coming a long way to win. None of the dogs will be forgotten. A thousand prize lists have been sent out already, and inquiries are coming in daily. Carpenters begin work at the show building next week. The office of the dog show is at 313 North Third street. J. W. MUNSON.

ST. LOUIS, March 29.

THE NEW YORK DOG SHOW.

THE entries for the eighth annual bench show of the Westminster Kennel Club are coming in rapidly, and the indications are that the show will be the most brilliant that the club has yet held. In addition to the liberal prize list there have already been offered a large number of valuable specials, and many more are promised. We have received the list of them to date, but too late for this issue. They will appear next week. Any one wishing to offer a special prize is requested to do so before April 12, in order that it may appear in the catalogue. The list of judges is now complete, and the club may congratulate themselves upon securing the services of gentlemen so well and favorably known. Following is the list:

Mastiffs, Newfoundlands and pugs, Mr. Paul Dana, New York.

St. Bernards, berghunde, spaniels, beagles, basset hounds, dachshunde, fox-terriers, collies, bulldogs, bull-terriers, and all other terrier classes, Mr. James Mortimer, New York.

Greyhounds, deerhounds and Italian greyhounds, Mr. Jos. R. Pierson, Buckingham, Pa.

Pointers, Mr. E. C. Sterling, St. Louis, Mo.

English setters, Mr. John C. Higgins, Delaware City, Del.

Black and tan setters, Irish setters and foxhounds, Hon. John S. Wise, Richmond, Va.

Chesapeake Bay dogs, Mr. Isaac Townsend, New York.

Caniche poodles, Mr. John G. Heckscher, New York.

TORONTO DOG SHOW.

THE second annual show given under the auspices of the Dominion of Canada Kennel Club was held in Toronto on March 26 and two following days, and proved to be a great success, as well in the number and quality of the entries as financially. The building selected for the exhibiton was the Concert Hall in the Horticultural Gardens, one admirably adapted for the purpose, owing to the excellent light and ventilation. It proved to be rather too small, however, for the number of dogs, and some of these were necessarily benched in a dark passage way. It had been arranged that Mr. Lincoln should come on and superintend the show, but he failed the committee at the last moment, and they had to trust to their own resources. Mr. Jas. Spooner took Mr. Lincoln's place and left little to be desired after the dogs were benched. Mr. W.S. Jackson, the secretary, and Messrs. Cassells, Boyle, Malloch, Postlethwaite, Tinning, Kirk and others lent valuable assistance, and the only thing really to find fault with was the acceptance of late entries after the catalogue had been made up. This caused trouble in the judging ring now and again to find out what certain animals were that came in minus number or any clew to their identity, and in the case of Mr. Lindsay's collies, the man who brought them on knew nothing about them and the owner suffered in consequence. The committee of the Kennel Club can now see that there is no need to accept late entries, to make a show a financial success, and should be governed accordingly in future.

Rain fell heavily on the first day, but cleared off before night, and from then until the close on Friday night the weather and the attendance were excellent. On Thursday nearly 5,000 paying visitors passed through the gates, and when we left on Friday afternoon it looked as if there would be as many present again ere the show came to a close at 10 o'clock. The judges announced to officiate were Messrs. J. M. Taylor, William Hendrie and James Watson, but the former had to ask the committee to relieve him, and Mr. John Davidson, of Monroe, was asked to fill the vacancy, and at once accepted. It was a pleasure to see him again in the ring, and the many expressions of satisfaction from the exhibitors indicates that his popularity as a judge has not diminished. His classes were all setters and pointers; Mr. Hendrie covered foxhounds, harriers, deerhounds, greyhounds, bull-terriers, Skye terriers and Dandie Dinmonts, and Mr. Watson went through the remainder of the long catalogue. To Toronto belongs the credit of bringing together the largest display of field and cocker spaniels ever seen in this country, the prize list having provided liberally for the breed, ten classes being on the catalogue. The following summary of the entries will be of interest:

Setters	75	Newfoundlands	13
Pointers	23	Collies	40
Spaniels	75	Bulldogs	4
Hounds	50	Terriers and Toys	80
Fox-terriers	42	Miscellaneous and foreign	25
Mastiffs	15		
St. Bernards	10		

ENGLISH SETTERS.

In champions, Lava Rock was an absentee, as usual, and Dick Laverack scored first blood for Mr. Davey over London and Mingo. Dick's kennel companion, Liddersdale, failed, however, to defeat Lady May, a wonderfully smart bitch, for the championship honors of her sex. Nellie May, also very good, was the third entry in this class. In the open dog class, Cambridge got the blue. He is a fine, upstanding dog, with rare working development, but he lacks quality in head and was not in good coat. Hughes's Paris III. is heavy in head, but was well shown. Kink, a brother to Mingo, we liked very well, and Dashing Storm got the reserve, which seems to be his lot. He is a taking dog, and has yet time to improve and fill out. Cambridge II. has a plain head, and might be better on his forelegs and have greater depth of chest. Prince Phœbus was shown in excellent condition. Grouse wants more character in head, but has good body and legs. The bitches were, in the opinion of the judge, a very fine class, and he picked out a good one in Belle for first. She has a good deal more substance than Genevieve, who is rather light, but looks like traveling. Forest Dora takes after her sire in type. Abbie we did not think much of, as she lacks quality, and next to the winner, or very close up to her, we should have placed Lucy Bee, a nicely marked black, tan and white, particularly good in head. The puppies were very moderate.

IRISH SETTERS.

Chief, shown in superb condition, was alone in champion dogs. We have never seen him looking better. There were no champion bitches. Chief II. was an easy first in open dogs, and after mentioning Belle as an equally safe first in her class, the others may be dismissed as of moderate pretensions, sadly deficient in the style and finish seen in the best setters seen at shows this side of the line, and on which the Elcho stamp of fashion is set.

BLACK AND TAN SETTERS.

In the Gordon or black and tan class the exhibits were mod-

superior to the Irish. Argus was the only one in the champion class. Pride of Canada, good in color and head, and well shown, was well ahead of Brant. Major is a strong, upstanding dog, but his coat lacked lustre. Grouse is weak in head for a Gordon. In the bitch class, Lottie was superior to June in condition, both being very good in color. Jason is a promising puppy and a credit to his sire, Argus.

POINTERS.

King Bow was in anything but good shape, and was removed from his bench, leaving Knickerbocker and Dick to contend for the championship. The former very properly received the award, Meteor, entered by Col. W. E. Hughes, was decidedly the best in the open class. He wants squareness in muzzle, and we thought he might be improved in body. His legs and feet are of the best. Ranger we liked very much, and it was a close thing between him and Bang for second place. Duffer, unnoticed, is aptly named, and Rex, though plain in head, is otherwise a very fair specimen. Shot was not on his bench when our notes were taken. The bitches were decidedly inferior to the dogs, and we were not very much impressed with Mr. Munson's brace, though they rightly enough took first and second prizes. Snipe was the best of the puppies.

SPANIELS.

In Irish water spaniels, Driver was better in head and size than Rocky, and third prize might have been withheld. Jack was a very poor Clumber, and although the only one shown, all he was entitled to is third prize. Benedict had not arrived when champion field spaniels were judged, and first went to Bob, Jr., over Toronto Beau, who is not right in coat. First was withheld in the large size class for other than black or liver, and second was given a strong, leggy dog of the type generally styled Norfolk. Black Mack is short and thick in head but of good length, has a flat coat, and was well shown. King Beau is too high on the leg, and his coat was rather faded. Beau is so bad on his forelegs that he can never get high on the prize list. Burdette Bob is very bad in coat, and the scarred condition of his face suggested the dog pit more than the field as his strong suit. In the black and liver bitches, Flora, a black and tan, was in the wrong class, and Midnight was underweight, so that Maggie had a walk over. She is good in coat and feather, but her head wants length. Bene, though she has not fulfilled the promise of her youthful days, is much more of a cocker than Brahmin, whose proper place is among the field spaniels. He was well shown, a remark that applies to all the exhibits from the Woodland Kennels. Raven was overweight, and was therefore put out of the small black class. Hornell Silk took first. He wants more character in head, but is otherwise a good dog, having straight legs, good body and flat coat. Hornell Sam has a short, wedgy head, and is light of bone. His best point is length of body and straight coat. Young Obo has a dome skull and wedgy muzzle, but is otherwise a most promising youngster, standing on short, straight legs, and his coat is of the best. Jack is full in the eye, and has rather too much white on his breast and feet for a black spaniel. Dick and Garnet, two of the unnoticed division, looked more like stunted Gordon setters, and were in the wrong class anyway on account of their color. Woodstock, the winning black cocker, was heavy with whelp, but for all that had no trouble in getting the place. Hornell 101 is poor in head and light-boned, but has good length and coat. Nelly, like a good many of Rollo's progeny, has a faint showing of tan through the black which does not improve her appearance. Woodstock Flirt is too high on the leg, and her coat is inclined to curl. She has time to improve, and if she grows on will be better in the large class. Cocker dogs, any other color, were a mixed lot. Sport, a black and white, is deficient in character. Speed was not well shown, and there was little to choose between these. With the exception of Hornell Rattler, the other entries were half bred water spaniels. Rattler we did not like; his head is coarse, and is not improved by his bloodhound eye; legs good, with plenty of bone, and he is also fairly well in length of body, but he fails to impress one with the idea of his being a spaniel. Bitches, other than black, brought Daisy, the Montreal winner, to the front. She has not improved since then, and besides being a trifle leggy for the present style, is deficient in coat and feather for a bitch of her age. Woodstock Nellie is a promising youngster, and if she does not get too large, will prove troublesome in this class in future. Luna is coarse in head and has a terrier body. Busy is too full in the eye, and they are placed too wide apart, which makes her appear monkey-faced. Her coat is none of the best, but she is a fair specimen of a cocker. The leaders of the puppy class have already been referred to in connection with the open classes.

FOXHOUNDS.

This was the first class Mr. Hendrie had to handle, and it is a pity he did not feel more at home in the ring, for he had a difficult lot to deal with; indeed, an old stager would have had to put on his considering cap before arriving at a conclusion. The handlers crowded in so that it was really impossible to get a good look at the dogs, but from what we saw of them we preferred Macklem's Sam and O'Shea's Forester II. Both were passed over, and first went to Tanner, good in front but weak behind. Ringwood has very open feet, and Clarebank does not stand on his hind legs as a good hound should. Driver getting a vhc. was certainly a mistake, as he could not compare in any way with the same owner's Sam. The two puppies shown were only three months old, and an opinion upon their merits is hardly necessary.

HARRIERS AND BEAGLES.

There was much diversity of type in harriers, and Mr. Hendrie picked out the best shaped ones. Rattler again beat Music in beagles, and Dell did not show so well as we have seen him; the journey from New York having left him in poor shape.

DEERHOUNDS.

Lance, now well known, headed the list, and next to him came a grand puppy shown by Mr. Dundas. Both Wyvis and Lorna II. lacked coat.

GREYHOUNDS.

The sexes were divided in the champion class, so Friday Night and Dorothee had each a walk over. In the open class we preferred the unnoticed Robert the Devil to any of the others, and there seemed to be some mistake in withholding second while three dogs were very highly commended.

FOX-TERRIERS.

Fennel had no opposition for his championship, and both Jaunty and Tip were wrongly entered in the champion bitch class in which Thistle beat Lyra. There were some extra good ones in the open classes. Mixture has the best legs and feet we ever saw on a terrier, and looks all over a workman. Vakeel is out at elbows, and his feet are open; in these points Belvoir Jim beats him, but the former is the more taking dog of the two. Brokenhurst Bob is coarse in head, but is a good terrier nevertheless. Richmond Olive was not to be denied in the bitch class; this is a grand bitch, but we would like her better if she had more bone. It was very hard on Village Belle meeting such an opponent, for in ordinary company she is a sure winner. Nellie is also a very good one, indeed it was a grand class so far as the noticed division were concerned. The puppies were not much to boast of.

MASTIFFS.

Although entered without pedigree, Nelson shows good breeding and deserves his place. Agrippa's size will always be against him, but his points are bound to secure recognition. Jumbo had something the matter with one of his eyes, but in selecting him, Mr. Watson stuck to the type of those placed ahead of him. Lion is a good little dog, but lacks character, and Duchess is weak in head.

ST. BERNARDS.

Lady Abbess being withdrawn, left Priam to walk over for the championship. Hermit beat Noble in the open class in head and size, but they are neither of them first-class. The others were an odd lot of berghunde.

NEWFOUNDLANDS.

This was one of the strongest classes in the show, and ten out of the thirteen led into the ring received cards. First was given to Mr. Kirk's Jim, a fair-sized dog with a grand head and coat, and shown in perfect condition. Leo is larger than Jim, but does not show his quality, nor had as much attention been paid to his appearance. Third went to Juno, a bitch of great substance and heavy in whelp to Carlo, also a good dog, though showing his age a little. Bruce is a youngster that promises to make a fine dog, and the others that received commendations were deserving of their honors.

COLLIES.

Quality was sadly lacking in the collie classes, there being a lot of indifferent specimens shown. Rex beat Lorne for the champion honors, Chieftain being put out on the score of lameness. The winner was looking well, but carried a gay flag in the ring. Herdman's Laddie, though coarse in ear, is a taking dog, and was decidedly the best in the open dog class. Sly is plain in face, heavy-eared, and Rough and Help are faulty in the same way. Miss Timmins was by long odds the most typical collie shown, having perfect ears, well carried, and the right kind for head, but she had no upper coat, and could not obtain the place and honors she would otherwise have been entitled to. Fairy, the winning bitch, is good in shape and coat, but lacks character in head, and her ears are not right. Lassie is one of the plain, sensible-looking sort, and her owner said she was the best for use he had ever seen. Miss Timmins won in the puppy class, and of the two very highly commended, Leila promises to grow on into the better dog if he is not undersized.

BULLDOGS AND BULL-TERRIERS.

Bellisima, shown for the first time in this country, was placed in front of Tippoo and Romulus. She is a grand bitch, but her maternal duties had pulled her down very much, and it will take all the time between now and New York to get her in proper shape. Young Bill was the only good bull-terrier shown. Spring is a weedy fellow, and Billy showed too much of the bulldog about the head and chest.

TERRIERS.

The best classes in terriers were the Bedlingtons, which have been taken to by the Toronto fanciers. In the dog class Flint won by condition, though it is our opinion that Blucher, shown right, is the best of the lot, but he was put back to third, behind Mr. Scholes's other dog, Jerry. Both in the dog and bitch classes there were some nice puppies out of Tynesider II., but the dam had not got sufficient coat on her to dispose of Stonehouse Lass. The Torontonians will learn before long that they have taken to one of the most difficult breeds to show right, and that to win they must devote the greatest attention to the condition of their dogs. There were several nice Skyes shown and one good Dandie, but Mr. Hendrie did not consider him entitled to a prize. Norah was placed over the weedy Erin in Irish terriers, and Teaser, of course, won in black and tans. Montreal fanciers carried off the honors in Yorkshires, the best of the lot being little Fritz, who, as usual, was short of coat. The pugs and toys were poor, but there was a grand-headed King Charles to the front in the spaniel class. We take a great fancy to the black Thibetian sheep dog with his black tongue and mouth, and he was given first in the foreign class, and there was also a good large-size Russian poodle in the miscellaneous class. Following are the

AWARDS.

Class 1. Champion English Setters, Dogs.—1st, T. G. Davey's Dick Laverack, blue belton, 4½yrs., Thunder—Peeress.

Class 2. Champion English Setters, Bitches.—1st, Henry Pape's Lady May, blue belton.

Class 3. English Setters, Dogs.—1st, Montague Smith's Cambridge, blue belton, 4yrs., Gladstone—Clip; 2d, F. G. Hughes's Paris III, white, black and ticked, 2yrs., Paris II.—Lady Princess; 3d, Wm. B. Wells's Kink, lemon and white, 6yrs., Druid—Star. Very high com. and reserve, R. W. Boyle's Dashing Storm, white, black and ticked, 15mos., Royal Sultan—Reign; T. G. Davey's Prince Phœbus, black and white, 4yrs., Tam o' Shanter—Prue; A. Wyness, Jr.'s Cambridge II., black, white and tan, 14mos., Cambridge I.—Smith's Belle. High com., Thomas Hutchinson's Paris III., black, white and tan, 2yrs., Paris Belle; H. H. Curtis's Grouse. Com., Fred A. Sullivan's Doctor, liver and white, 7yrs., Billy—Bell, and Colonel, liver and white, 4yrs., Doctor—Nellie.

Class 4. English Setters, Bitches.—1st and very high com. reserve, Montague Smith's Belle, blue belton, 3yrs., Dime—Princess Blanche, and Abbie, blue belton, 4yrs., Gladstone—Mersey; 2d, T. G. Davey's Genevieve, blue belton, 22mos., London—Dawn; 3d, C. A. Stone's Forest Dora, A.K.R. 500. Very high com., Jos. Kime's Lucy Bee, black, white and tan, 2yrs., Paris II.—Romp. High com., T. G. Davey's Canadian Queen, black, white and tan, 17mos, Lava Rock—Liddersdale; D. O'Shea's Lilly, lemon and white, 2yrs., Dick Laverack—Louie.

Class 5. English Setter Puppies, Dogs.—1st, C. A. Stone's Forest Blue, blue belton, 10mos., Prince Royal—Forest Fly; 2d, J. F. Kirk's Royal, liver and white, 8mos., Royal Sultan—Woodstock Belle. Third prize withheld.

Class 6. English Setter Puppies, Bitches.—1st, J. F. Kirk's Carrie Roy, blue belton, 8mos., Royal Sultan—Woodstock Belle; 2d, Lalor & Wells's Queen; 3d, H. H. Curtis's Black Bess. High com., F. E. Curtis's Flo, 4½mos., Jef—Flo.

Class 7. Champion Irish Setters, Dogs.—1st, M. Wenzel's Chief, A.K.R. 231.

Class 8. Champion Irish Setters, Bitches.—No entries.

Class 9. Irish Setters, Dogs.—1st, Max Wenzel's Chief II., A.K.R. 232; 2d, Sam Stanelandt's Sam, red, 3yrs., Bang—Spot; 3d, William Raper's Bruce, red, 2yrs., pedigree unknown. Very high com., Henry Watson's Jerry, red, 16mos., Shot—Belle. High com., John C. Forbes's Dick, red, 3yrs., Lord Dufferin's Dog—O'Connor's Bitch.

Class 10. Irish Setters, Bitches.—1st, J. Algernon Temple's Belle, red, 4yrs., Heward's Belle—Heward's Bob; 2d, Henry Watson's Belle, red, 3yrs., Bang—Duggan's Flos; 3d and very high com., Jas Kennedy's Alice, red, 5yrs., imported, Rock—Belle, and Kate, red, 1½yrs., imported, Dick—Alice.

Class 11. Irish Setters, Puppies.—1st, D. O'Shea's Mattie, 8mos., Rory O'More—Trix; 2d, A. Purse's Grouse, 8mos., Forbes's Dick—Belle. Very high com., H. Watson's Bang, 8mos., Forbes's Dick—Belle.

Class 12. Champion Black and Tan Setters.—1st, John E. Thayer's Argus, 5yrs., Blossom—Moll III.

Class 13. Black and Tan Setters, Dogs.—1st, H. H. Curtis's Pride of Canada; 2d, E. Tinsley's Brant, 2yrs., Blossom—Mollie; 3d, J. N. Hickey's Major, 5yrs., Jerome Marble's Grouse—Queen Bess. Very high com., W. B. Wells's Grouse, 5yrs., pedigree unknown.

Class 14. Black and Tan Setters, Bitches.—1st, F. W. J. Ball's Lottie, 20mos., Bran—Charmer; 2d, J. D. Thompson's June, 4yrs., Cockburn's Sam—Thomson's May; 3d and very high com., reserve, P. H. Hart's Diana, 2yrs., Jack—Gyp, and Gyp, 2yrs., Jack—Gyp. Very high com., W. C. Niblett's Medea, 3½yrs., Chang—Venus.

Class 15. Black and Tan Setters, Puppies.—1st, Roy V. Somerville's Jason, 9mos., Argus—Medea. Very high com., R. J. McKie's Medea II., 9mos., Argus—Medea.

Class 16. Champion Pointers.—1st, Knickerbocker Kennel Club's Knickerbocker, A.K.R. 19.

Class 17. Pointers, Dogs.—1st, Col W. E. Hughes's Meteor, liver and white, 3yrs., Garnet—Jilt; 2d, J. W. Munson's Bang, liver and white, Bang—Luna; 3d, John Hall's Ranger, lemon and white, 2½yrs., Revell's Dash—Hall's Vic. Very high com. reserve, Thomas Winfield's Shot, liver and white, 2yrs., imported Shot—imported Belle; James Purse's Shot, liver and white, 3yrs., out of imported Nellie; Joseph Winter, Jr.'s, Rap, 3yrs., Jim—Louisa. High com., George Gouinlock's Rex, liver and white, 5yrs., pedigree unknown.

Class 18. Pointers, Bitches.—1st and 2d, John W. Munson's Vanity, liver and white, 2yrs., champion Bang—Pride, and Spinaway, liver and white, 3yrs., Garnet—Keswick; 3d, Chas. G. Ritchie's Duck, white and liver, 3yrs., no pedigree. Very high com., John Hendry's Nellie, liver and white, 20mos., Hudleston's Spot—Juno.

Class 19. Pointer Puppies.—1st, R. S. Cassels's Snipe, liver and white, 10mos., Sport—imported bitch; 2d, C. A. Stone's Beauty, lemon and white, 10mos., Bob—Beauty. Very high com. and high com., C. R. Smith's Tiger, lemon and white, 10mos., Bob—Beauty, and Jack, brother to Tiger.

Class 20. Champion Irish Water Spaniels.—No entries.

Class 21. Irish Water Spaniels.—1st, John Seager's Driver, liver, 3yrs., Drake—Buck; 2d, H. E. Kersteman's Rocky, brown, 4½yrs., pedigree not known; 3d, W. F. Dyson's Duck.

Class 22. Clumber Spaniels.—1st and 2d, withheld; 3d, Geo. Chillas's Jack, white and lemon, 2yrs., out of Judy.

Class 23. Champion Field Spaniels.—1st, J. Luckwell's Bob, Jr., 2yrs. 10mos., Bob III.—Black Bess.

Class 24. Field Spaniels (other than Clumbers, black or liver).—1st, withheld; 2d, Owner's Spot, liver and white.

Class 25. Black or Liver Field Spaniels, Dogs.—1st, R. J. McKie's Black Mack, black, 2yrs., Bob, Jr.—Maud; 2d and high com., J. F. Kirk's King Beau, golden liver, 18mos., Toronto Beau—Negress II. and Beau, black, 5½yrs., Bob—Nell. High com., Hornell Spaniel Club's Burdette Bob, A.K.R. 132.

Class 26. Black or Liver Field Spaniels, Bitches.—1st, Hornel Spaniel Club's Maggie, black, 2yrs., Bob III —Fannie.

Class 27. Champion Cocker Spaniels (any color).—1st, J. S. Niven's Bene, black, 2½yrs., Bob III.—Black Bess.

Class 28. Black Cocker Spaniels, Dogs.—1st and 2d, Hornell Spaniel Club's Hornell Silk, black, 19mos., champion Obo—Chloe II., and Hornell Sam, black, 18mos., Bonanza—Pansy; 3d, Andrew Laidlaw's Young Obo, A.K.R. 861. High com., Geo. P. Reid's Jack, black 18mos., pedigree unknown.

Class 29. Black Cocker Spaniels, Bitches.—1st, James Luckwell's Woodstock Queen, black, 1yr. 8mos., Bean—Black Bess; 2d, Hornell Spaniel Club's Hornell 101, black, 16mos., Benedict—Prin; 3d, Cleveland V. Hall's Nelly, black, 3yrs., Rollo—Roxie. High com., Andrew Laidlaw's Woodstock Flirt, A.K.R. 651; David Durward's Oxie, black 17mos., Kellie's imported dog—Laidlaw's Beauty. Com., F. A. Campbell's Dido, black, 3yrs., Rollo—Bessy.

Class 30. Cocker Spaniel's Other than Black. Dogs.—1st, F. E. Curtis's Sport, black and white, 13mos., Jet—Daisy; 2d, Geo. McBride's Speed, liver, 16mos., Kellie's Tippoo—Laidlaw's Beauty; 3d, withheld. High com., Hornell Spaniel Club's Hornell Rattler, chestnut and tan, 11mos., Hornell Dandy—Dinah.

Class 31 Cocker Spaniels Other than Black. Bitches. 1st, Geo. Payne's Daisy, liver and white, 4yrs.; 2d, J. W. Kelly's Woodstock Nellie, liver, 7mos., Toronto Beau—Toronto Jet. High com., Geo. Schofield's Luna, black and white, 3yrs., Jack—Jessie; Wm. Farrar's Busy, liver and tan, 5yrs., Dash—Daisy.

Class 32. Field and Cocker Spaniels, Puppies.—1st, Andrew Laidlaw's Midnight, A.K.R. 656. Very high com., John W. Kelly's Woodstock Nellie, liver, 7mos., Toronto Beau—Toronto Jet; Andrew Laidlaw's Young Obo, A.K.R. 861. High com., E. A. M. Gibson's Ruby, liver, 9mos., Macbeth's Doctor—Niven's Dollie; R. Tinning's Strathaven, black, 4mos., Kirk's Beau—Creole; Dan O'Shea's Rosey, black, 9mos., Doctor—Niven's Dolly; Hornell Spaniel Club's Hornell Rattler, chestnut and tan, 11mos., Hornell Dandy—Dinah. Com., J. Scanlan's Arthur, black and white, 4mos., Jet—Floss; J. McKay's Flirt, liver and white, 6mos., Sam—Ruby.

Class 33. Foxhounds.—1st, John Hammon's Tanner, black, white and tan, 3yrs., Dan—Beauty; 2d, D. O'Shea's Ringwood, black, white and tan, 3yrs., Forrester—Lady; 3d, John Halligan's Clarebank, white and black, 3yrs., Vampire—Captious. Very high com., A. V. Macklem's Driver, white and black, 4yrs., pedigree unknown.

Class 34. Foxhounds. Puppies.—1st, D. O'Shea's Ringwood II., white, black and tan, 3mos., Ringwood—Gyp.

Class 35. Harriers.—1st, Alex. Stiver's Leader, spotted, 8yrs; 2d, D. O'Shea's Frank, white, black and tan, 2yrs., Tomboy—Gypsey. High com., Wm. H. Hall's Ranter, black, tan and white, 3yrs., Ranter—Gypsey.

Class 36. Beagles.—1st and 2d, D. O'Shea's Rattler, white, black and tan, 2yrs., Rover—Music, and Music, white, black and tan, 2yrs., Rover—Music; 3d, W. E. Livingstone's Dell, A.K.R. 319. Com., A. Harris's Lu, black, white and tan, 11mos., Flute—Ringwood Lucy.

Class 37. Beagles, Puppies.—1st, A. Harris's No Name, black, white and tan, 8mos., Flute—Queen. Very high com., D. O'Shea's Kino, white, black and tan, 10mos., Rattler—Vixen.

Class 38. Deerhounds.—1st and very high com., Jno. E. Thayer's Lance, fawn, 4yrs., and Lorna II., brindle, 3yrs., Bruce—Lorna; 2d and very high com., Thos. G. Dundas's Bran, light brindle, 7mos., champion Bruce—Wyvis, and Wyvis, brindle, 4yrs., Torrum—Lufra.

Class 39. Champion Greyhounds, Dogs.—1st, H. W. Smith's Friday Night, A.K.R. 753.

Class 39A. Champion Greyhounds, Bitches.—H. W. Huntington's Dorothée, A.K.R. 72.

Class 40. Greyhounds.—1st, H. Howard's Misterton, fawn, 16mos., Erin—Fly; 2d, not awarded. Very high com., W. H. Hall's Neptune, fawn, 2yrs., Ringwood—Jessie; M. J. Graham's Ringwood, fawn, 6yrs., Ringwood—Nellie; Alexander Ford's Arabi Bey, fawn, 12mos., Pilot—Speed.

Class 41. Champion Fox-Terriers, Dogs.—1st, Richard Gibson's Fennel, white and tan, 2yrs., champion Spice—champion Bloom.

Class 42. Champion Fox-Terriers, Bitches.—1st, Richard Gibson's Thistle, black and white, 3yrs., champion Rattler II.—champion Tipsey.

Class 43. Fox-Terriers, Dogs.—1st, John E. Thayer's Mixture, black, tan and white, 4yrs., by champion Spice; equal 2d, John T. Cabel's Vakeel, E.K.C.S.B. 12,352, white, black and tan, 2½yrs., champion Volo—champion Spiteful, and Richard Gibson's Belvoir Jim, white, black and tan, 1yr., Spigot—Lily. Very high com., A. Z. Palmer's Brockenhurst Bob, E.K.C.S.B. 8,901, white, black and tan head, 5yrs., Brockenhurst Joe—Gamesome. High com., Goodwin Gibson's Bowler, A.K.R. 666. Com., W. M. Mills's Punch, white, black and tan, 2yrs., Rattler—Daisy; J. Massey's Chico, white, black and tan.

Class 44. Fox-Terriers, Bitches.—1st, J. E. Thayer's Richmond Olive, white, black and tan, 2½yrs., Olive Tart—Jess; 2d, Jno. T. Cable's Village Belle, white, black and tan, 2yrs. 9mos., champion Volo—champion Beauty; 3d, D. Booth's Nellie, white and black, 3yrs., Trap—Nettle. Very high com., G. May's Nellie, black and white, 2yrs., pedigree not stated; John T. Cable's Busy, A.K.R. 435. High com., A. Z. Palmer's Ruby, white, black and tan, Brockenhurst Bob—Ruby. Com., Arthur Boulton's Mab, white, Gibson's Patch—Patteson's Stiug.

Class 45. Fox-Terriers, Puppies.—1st, John T. Cable's Spy, white and tan, 10mos., Silver—Busy, A.K.R. 435. High com., John E. Thayer's Rascal, black, white and tan, 10mos., Naller—Diana; Richard Gibson's Rose, white, black and tan, 10mos., Fennel—Thistle; A. R. Palmer's Ruby, white, black and tan, 10mos., Brokenhurst Bob—Ruby.

Class 46. Mastiffs.—Hugh Scott's Nelson, fawn, 7yrs., pedigree not given; 2d, Shaw & Bates's Agrippa, A.K.R. 469; 3d, Wm. Mellis's Jumbo, fawn, 3½yrs, sire and dam imported by Lord Dufferin. Very high com., Jas. H. Lynch's Lion, fawn, 2½yrs., Salisbury (E. 9,335)—Tigress II. (E. 10,596). High com., Shaw & Bates's Duchess, A.K.R. 260. Com., J. Ross's Barney, fawn, 4yrs.

Class 47. Champion St. Bernards.—1st, F. W. Rothera's Priam, A.K.R. 485.

Class 48. St. Bernards, Dogs.—1st, Chequasset Kennel's Hermit, A.K.R. 23; 2d, J. F. Hanrahan's Noble, 3½yrs., Rigi—Bertha.

Class 49. St. Bernards, Bitches.—1st, withheld; 2d, W. A. Damer's St. Bernard.

Class 50. Newfoundlands.—J. F. Kirk's Jim, black, 3yrs., Bruce—Kate; 2d, W. J. L. Milligan's Leo, black, 5yrs., Simon, imported—Nell; 3d and very high com., W. D. Forbes's Juno, black, 5yrs., and Carlo, black, 11yrs. Very high com., G. W. Verral's Bruce, black, 6mos. High com., J. Harris's Victor, 8yrs.; F. W. Wilding's Oscar, black, 3yrs., Major—Fan; James Luckwell's Jack, black, 2yrs., Jim—Princess. Com., Thomas Tivey's Jacob, black, 2yrs, 1mo., Captain—Lass; Henry Brock's Carlo, black, 7yrs., pedigree unknown.

Class 51. Champion Collies.—1st, J. Lindsay's Rex, A.K.R. 149.

Class 52. Collies, Dogs.—1st, W. M. Adams's Herdman's Laddie, imported, black, tan and white, 15mos., no pedigree; 2d, Donald Mackenzie's Sly, imported, black and white, 3yrs.; 3d, E. Morris's Rough, black and tan, 1yr. High com., Thos. G. Dundas's Help, black and tan, aged, pedigree unknown. Com., J. G. Williamson's Ken, black, white and tan, 2yrs.

Class 53. Collies, Bitches.—1st, J. Lindsay's Fairy, sable and white, 9mos., Rex—Kitty Mac; 2d, T. G. Dundas's Lassie, black and tan, 18mos., pedigree unknown; 3d, Ontario Collie Club's Miss Timmins, sable and white, 10mos., Cockie—Fan. High com., L. V. Percival's Lassie, black and tan, 11mos., Bob—Luna, and Thos. Jackson's Fan, black and white, 5yrs., Welsh Collie—Fan.

Class 54. Collies, Puppies.—1st, Ontario Collie Club's Miss Timmins, sable and white, 10mos., Cockie—Fan. Very high com., Richard Gibson's Laddie, black and tan, 11mos., Bob—Luna; Fred. W. Rothera's Lella, white, black and tan, 6mos., Lorne—Lassie. High com., Arthur G. C. Bates's Jock, black and tan, 10mos., Major Lloyd's Lark—Fan II. Com., Robert McEwan's Nettie, black and tan, 9mos., Bob—Peggie.

Class 55. Bulldogs.—1st, 2d and very high com., J. E. Thayer's Bellissima, Tippoo, A.K.R. 390—Romulus, A.K.R. 389.

Class 56. Bull-Terriers.—1st, Frank C. Wheeler's Young Bill; 2d, Archie Whyte's Spring, white, 3yrs.; 3d, A. Scholes's Billy, white, 1yr., Juggler—Kitty. Very high com., Glover Harrison's Grip, brindle, 4yrs.

Class 57. Hard-haired Scotch Terriers.—1st and 2d, D. O'Shea's Boxer, red, 18mos., Major—Lady, and Lady, red, 5yrs.

Class 58. Dandie Dinmonts.—Prize withheld.

Class 59. Skye Terriers.—1st, A. T. Ogelvie's Ugie, blue, 2yrs.; 2d, J. M. Rogerson's Shagg, blue, 5yrs. Very high com., W. Dicks's Puneh, blue, 18mos., Pepper—Whiskey.

Class 60. Bedlington Terriers, Dogs.—1st, L. H. Irving's Flint, blue Newcastle Lad—Tweezers; 2d and 3d, J. F. Scholes's Jerry, liver, 3yrs., Sting—Wasp, and Blucher, liver, 2½yrs., Peachem—Batty Jess. Very high com., W. S. Jackson's Elswick Lad II., dark blue, 6mos., Elswick Lad—Tynesider II. High com., J. Massey's Sea Dog, dark blue, 6mos., Elswick Lad—Tynesider II.

Class 61. Bedlington Terriers, Bitches.—1st, 2d and 3d, W. S. Jackson's Stonehouse Lass, light blue, 3yrs., Tamar Lad—Blue Belle Tynesider II., dark blue, 2½yrs., champion Piper—Topsey; and Elswick Belle, dark blue, 6mos., Elswick Ladd—Tynesider II.

Class 62. Irish Terriers.—1st, J. S. Niven's Norah, red, 4yrs., Sting—Nettie; 2d, D. O'Shea's Erin, red, 2yrs., Rock—Norah.

Class 63. Black and Tan Terriers.—1st, J. T. Heasley's Teaser, A.K.R. 665; 2d, Mrs. Scholes's Bessy, 2cmos., Nep—Top.

Class 64. Yorkshire Terriers, Blue and Tan.—1st, Mrs. B. J. Holbrooke's Fritz, 3yrs., by Diamond; 2d, W. H. Doel's Tom, 2yrs., imported Dog—Maggie. Very high com., Mrs. B. J. Holbrooke's Tatters. High com., W. H. Doel's Una, 4yrs., imported Dog—Belle; H. G. Jackson's Toby, 5yrs., Charley—Ruby.

Class 64A, Yorkshire Terriers, Silver and Gray.—1st, Mrs. B. J. Holbrooke's Charley, 4½yrs.; 2d, T. Kelley's Juliet. High com., Mrs. B. J. Holbrooke's Nellie, 4yrs. Com., T. Kelley's Teutonia.

Class 65. Rough Terriers, over 8lbs.—1st, J. F. Scholes's Sandy, 5yrs., Jack—Fan; 2d, Mrs. E. A. Downey's Pat; 3d, G. McDermott's Prince. High com., G. Clarke's Tiny, 4yrs; E. Bond's Needle, 3yrs., Sandy—Princess.

Class 66. Pugs.—1st, J. F. Scholes's Echo, 3yrs.; 2d, D. O'Shee's Judy, 3yrs. Very high com., Chequasset Kennel's Treasure, A.K.R. 472. High com., E. O'Keefe's Tip.

Class 67. Smooth-Coated Toy Terriers.—1st, Mrs. J. H. Mead's Tizzy, 5yrs.; 2d, J. F. Scholes's Tiney, 2yrs., Ted—Daisy. Very high com., 3yrs. R. W. Boyle's Major, 5yrs., Bob—Ettie. High com., Miss Mary Stack's Topsy, 1yr., Bob—Ettie. Com., Mrs. H. Kennedy's Bob, 3yrs., Bob—Ettie; C. Seymour's Tiney, 1yr.; Mrs. S. G. Wood's Shivery.

Class 68. Rough-Coated Toy Terriers.—1st, Mrs. B. J. Holbrooke's Nellie, 4yrs.; 2d, J. F. Scholes's Floss, 16mos., by Spink. Very high com., J. Kelley's Jessie. High com., G. McDermott's Minnie, 2yrs., Prince—Monkey. Com., J. F. Scholes's Jack, 5yrs.

Class 69. Toy Spaniels.—1st, Mrs. Maclean's Charlie, black and tan; 2d, J. Gherson's Toby, black and tan, 8½yrs.

Class 70. Foreign Bred Dogs.—1st, Owner's Sambo, Thibetean sheep dog, black, 3yrs; 2d, G. May's Zulu, dachshund, black and tan. Very high com., M. Bushnell's Jerry and Tommy, white poodles. High com., J. C. Carlarey's Flo.

Class 71. Miscellaneous Class.—Equal 1st, J. F. Scholes's Hornet II., English white terrier; M. McCanon's Sam, black poodle; D. O'Shea's Foreigner, English bloodhound. High com., Miss M. Scott's Robin, Spitz.

SPECIAL PRIZES.

A.—The Dominion of Canada Kennel Club, cup for the best six dogs of and bred, not awarded.

B.—Mr. Roger Lambe, silver cup, value $25, for the best setter of any breed owned in the Dominion; won by Dick Laverack, T. G. Davey.

C.—For the best matched pair of English setters, Messrs. Woltz Bros. & Co., jewellers, Toronto, a bronze electro statuette, subject, "The Hunter;" value $20; won by Cambridge and Belle, Montague Smith.

D.—For the best matched pair of Irish setters, Messrs. Godard & Elgie, Toronto, a gentleman's easy chair, value $20; won by Jerry and Belle, Henry Watson.

E.—For the best matched pair of black and tan setters, Messrs. Jewell & Clow, pair of Parian marble figures, value $15; won by Gyp and Diana, P. D. Hart.

F.—For the best foxhound, dog or bitch, the Davies Brewing and Malting Company, a silver cup, value $15; won by Tanner, John Hammon.

G.—For the best cocker spaniel in the open classes, Mr. A. H. Sims, Toronto, silver cup, value $15; won by Woodstock Queen, J. Luckwell.

H.—For the best St. Bernard, Mr. C. H. Gooderham, Meadowvale, $10 cash; won by Hermit, Chequasset Kennels.

I.—For the best collection of collies, not less than three, Mr. T. McIlroy, Jr., of the Gutta Percha and Rubber Manufacturing Company, a rubber coat, value $10; won by J. Lindsay.

J.—For the best King Charles spaniel, Messrs. Fraser & Sons, photographers, Toronto, a photograph of the winner, value $10; won by Charlie, Mrs. Maclean.

K.—For the best fox-terrier in the open classes, Taylor & Wilson, cigar manufacturers, $5 cash; won by Richmond Olive, J. E. Thayer.

L.—For the best terrier, any breed, owned and entered by a lady, Mr. James H. Samo, a lady's easy chair, value $10; won by Bessy, Mrs. Scholes.

M.—For the best collie puppy, the Mail Printing Company, one year's subscription to the daily *Mail*; won by Miss Timmins.

N.—For the best rough-coated toy terrier, Mr. John F. Scholes, Toronto, a medal, value $10; won by Dolly, Mrs. Holbrooke.

O.—For the best white Pomeranion puppy, owned and entered by a lady resident of Toronto, Ald. H. L. Piper, a silver cup; no award.

P.—For the best fox-terrier dog, Mr. E. King Dodds, one year's subscription to the *Canadian Sportsman;* won by Mixture, J. E. Thayer.

Q.—For the best fox-terrier bitch, Mr. E. King Dodds, one year's subscription to the *Canadian Sportsman;* won by Richmond Olive, J. E. Thayer.

R.—For the best Clumber spaniel, Messrs. Williamson & Co., booksellers, Toronto, a copy of "Toronto of Old"; won by Jack, George Chillas.

S.—For the best Newfoundland dog, Messrs. Jewell & Clow, Toronto, box imported cigars; won by Jim, J. F. Kirk.

T.—For the best Irish water spaniel, Messrs. Taylor & Wilson, a box of cigars; won by Driver, John Seager.

U.—The Ontario Kennel Club, for the best English setter in the show, $20 cash; won by Dick Laverack, T. G. Davey.

V.—For the largest dog in the show, the *Grip* Printing and Publishing Company, first two volumes of *Grip* cartoons; Leo, W. J. L. Mulligan.

W.—For the best Dachshund, Mr. C. Blackett Robinson, publisher, *Rural Canadian* for one year; Zulu, Geo. May.

X.—For the sporting dog or bitch shown in the best condition, Mr. J. F. Kirk, a handsome collar; won by Chief, Max Wenzel.

Y.—For the best Skye Terrier, Mr. E. Buchan, $5 cash; won by Ugie, A. T. Ogilvie.

Z.—For the best Scotch deerhound, Mr. Robert Cochran, $5 cash; won by Lance, J. E. Thayer.

AA.—The Toronto Gun Club, a handsome silver cup, value $50, to be known as the Toronto Gun Club prize, for the best kennel of sporting dogs, owned by one exhibitor; won by the setters Dick, Laverack, Liddersdale, Prince Phœbus, Canadian Queen and Genevieve, owned by T. G. Davey.

BB.—His Excellency the Governor-General, $25 cash, for the best pointer, won by Meteor, Col. Hughes.

CC.—His Excellency the Governor-General, $25 cash, for the best collie; won by Fairy, J. Lindsay.

DD.—For the best setter, between 12 and 18 months of age, owned in the county of York, Ontario, Mr. John Young, a cup, value $25; won by Dashing Storm, R. W. Boyle.

EE.—For the best pair of sporting dogs, owned in Toronto by one exhibitor, Mr. M. McConnell, a gold medal, value $25. To be won twice in succession before becoming the property of the winner; Vakeel and Village Belle, fox-terriers, J. T. Cable.

FF.—For the best fox-terrier bitch and puppies, Mr. James H. Mackie, of the American Hotel, a cup, value $20; won by Thistle, R Gibson.

GG.—For the best dog in the show, of all classes, Mr. W. R. Bingham, of the "Hub," a gold medal, value $20, to be known as the "Hub Medal"; won by John E. Thayer's fox-terrier bitch, Richmond Olive.

HH.—For the best brace of pointers, Mr. R. Davies, of the Dominion Brewery, a medal, value $15; won by Meteor and Vanity, J. W. Munson.

II.—For the best collie that has never won a first prize, Mayor Boswell, the president, $10 cash; won by Fairy, J. Lindsay.

JJ.—For the best setter and pointer owned by one exhibitor, Mr. R. S. Cassels, vice-president, $10 cash; won by Corbey and Snipe, R. S. Cassels.

KK.—For the best Laverack setter, Ald. Maughan, a silver medal; won by Dick Laverack, T. G. Davey.

LL.—For the best field spaniel owned in Toronto, Mr. James Snooner, a meerschaum pipe, value $12; won by King Beau, J. F. Kirk.

MM.—For the best cocker spaniel of all classes, Mr. C. A. Brough, $10 cash; won by Bene, J. S. Niven.

NN.—For the best cocker spaniel owned by members of the club, the American Cocker Spaniel Club, $10 cash; won by Bene, J. S. Niven.

OO.—For the best Irish terrier, Mr. M. A. Thomas, of the English Chop House, a box of cigars, value $10; won by Norah, Dr. Niven.

PP.—For the best collie owned in the Dominion (the winner of special prize CC. to be excluded), the Ontario Collie Club, a silver cup; won by Herdman's Laddie, W. M. Adams.

QQ.—For the best blue and tan Yorkshire terrier, Mr. Charles Doherty, a terra cotta statuette, value $10; won by Fritz, Mrs. Holbrooke.

RR.—For the best black and tan terrier bitch, Messrs. Woods Bros., cigar manufacturers, a box of cigars; won by Bessy, Mrs. Scholes.

SS.—For the best smooth-coated toy terrier, owned by a lady in Toronto, Mr. James Stewart, a horshoe ottoman, value $10; won by Tizzy, Mrs. J. H. Mead.

TT.—For the best bulldog or bitch, Messrs. Robinson Bros., of the Sheffield House, a bronze dog, value $10; won by Bellissima, J. E. Thayer.

UU.—For the best bull-terrier, Messrs. C. & J. Allen, a cup, value $5; won by Young Bill, F. C. Wheeler.

VV.—For the best Bedlington terrier, Messrs. Hart & Co., a Globe scrap file; won by Flint, G. H. Irving.

WW.—For the best Newfoundland bitch, the Acadia Kennels, of Boston, a handsome collar; won by Juno, W. D. Forbes.

XX.—For the best terrier, in class 65, Mr. John Cooper, $10 cash; won by Sandy, J. F. Scholes.

YY.—For the best mastiff, Mr. Dave Ward, a fish knife and fork, value $15; won by Nelson, Hugh Scott.

ZZ.—For the best pair of setters of all classes, the property of one individual, Messrs. J. E. Ellis & Co., fruit stand, value $15; won by Cambridge and Belle, Montague Smith.

AAA.—For the best Irish setter, the Copland Brewing and Malting Company, a silver cup, value $15; won by Chief, Max Wenzel.

BBB.—For the best black and tan terrier, Messrs. H. A. Nelson & Sons, a pair of statuettes, value $10; won by Teaser, James T. Heasley.

CCC.—For the best kennel of English setters owned in the Dominion, Messrs. Davis & Sons, of Montreal, silver plate, value $50, not less than five to compose entry; won by T. G. Davey.

DDD.—For the best toy spaniel owned by a lady, Mr. John Ross Robertson offers a prize, value $10, in cash or plate; won by Charlie, Mrs. McLean.

EEE.—For the best in the miscellaneous class, Mr. H. C. Hammond offers $10 cash. Divided between Foreigner, D. O'Shea, Hornet II., J. F. Scholes, and Sam, M. McCarron.

BEAUFORT'S CONDITION.—*Editor Forest and Stream:* In your last issue you say that Beaufort has nearly recovered from an attack of inflammation of the bowels, and that he did not, when exhibited at New Haven, carry himself in the faultless manner he affects when at his best. Though the dog has been sick, inflammation was avoided. Beaufort weighed sixty two pounds when exhibited at New Haven. I can show him at seventy-two pounds, and it was a pleasure to see him, when thus handicapped, win the special prize for the best sporting dog in the show.—CHAS. H. MASON (New York, March 24).

PEDIGREE OF LIT LAVERACK.—*Editor Forest and Stream:* In your paper of March 27, I notice that Mr. Thos. F. Connelly claims the name of Lit Laverack for a bitch puppy, and gives the pedigree as by Tempest (Pontiac ex Fairy II.) out of Lilly (Carlowitz ex Queen Bess). I saw these puppies advertised out of Lilly (Carlowitz ex Princess Nellie). Which is corret, and is Lilly a pure Laverack if her dam was Queen Bess?—G. R. NICHOLS (New Haven, March 31).

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, of breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Ravenswood Kennel. By Mr. C. B. Faxon, Boston, Mass., for his kennel of English setters.

Beauty and Black Diamond. By Mr. J. P. Willey, Salmon Falls, N. H., for black cocker spaniel bitches, whelped Feb. 13, 1884, by Obo II. (A.K.R. 432) out of Lofty (A.K.R. 431).

Emperor Frank. By Mr. Edward A. Todd, New Haven, Ct., for black and white English setter dog, whelped Nov. 28, 1883, by Tempest (Pontiac—Fairy II.) out of Lilly (Carlowitz—Princess Nellie).

Princess Lilly. By Mr. Edward A. Todd, New Haven, Ct., for black, white and tan English setter bitch, whelped Nov. 28, 1883, by Tempest (Pontiac—Fairy II.) out of Lilly (Carlowitz—Princess Nellie).

Dash IV. By Mr. D. A. Goodwin, Jr., Newburyport, Mass., for black, white and tan English setter dog, whelped Feb. 12, by Dash III. out of Matchless (Roderick II.—Jennie).

Colonel Cool. By Mr. W. B. Gates, Memphis, Tenn., for black, white and tan English setter dog, whelped June 3, 1883, by Gath (Count Noble—Peep o' Day) out of Lit (Gladstone—Juno).

Dash, Juke, Pete, Cork aad Kate. By Major Lovejoy, Bethel, Me., for red Irish setters, four dogs and one bitch, whelped March 14, by Ned Elcho (A.K.R. 984) out of Bridget O'More (A.K.R. 964).

NAMES CHANGED.

☞ *See instructions at head of this column.*

Hornell Obo to Obo, Jr. Imported black cocker spaniel dog, whelped Feb. 3, 1883 (Obo—Nellie), owned by Mr. J. P. Willey, Salmon Falls, N. H.

BRED.

☞ *See instructions at head of this column.*

Carrie J.—Paul Gladstone. Mr. W. B. Gates's (Memphis, Tenn.) English setter bitch Carrie J. (Count Noble—Peep o' Day) to his Paul Gladstone (Gladstone—Lavalette), Feb. 23.

Belle of Hatchie—Count Rapier. Dr. W. J. Cannon's (Lambert, Tenn.) English setter bitch Belle of Hatchie (Scout—Lady S.) to Mr. W. B. Gates's Count Rapier (A.K.R. 498), Feb. 25.

Morning—Plantagenet. The Ravenswood Kennel's (Boston, Mass.) English setter bitch Morning (Racket—Petrel III.) to champion Plantagenet, Feb. 22.

Rose—Bang Bang. The Westminster Kennel Club's pointer bitch Rose (A.K.R. 214) to their Bang Bang (A.K.R. 394), March 22.

Moonstone—Sensation. The Westminster Kennel Club's pointer bitch Moonstone (Bang—Luna) to their champion Sensation (A.K.R. 217), March 18.

Daisy Deane—Bang Bang. Mr. Elliot Smith's (New York) pointer bitch Daisy Deane to the Westminster Kennel Club's Bang Bang (A.K.R. 394), March 21.

Dot II.—King. Mr. G. L. Barnes's English beagle bitch Dot II. (Ringwood—Dime) to Mr. N. Elmore's King (Victor—Lucy), March 23.

Brenda—Nevison. Mr. J. A. S. Gregg's mastiff bitch Brenda to Mr. Chas. H. Mason's champion Nevison (Gurth—Juno), Jan. 3.

Dorcas—Beaufort. Mr. John Mathews's pointer bitch Dorcas to Mr. Chas. H. Mason's Beaufort (A.K.R. 694), March 21.

Juno—Young Toby. The Forest City Kennel's (Portland, Me.) pug bitch Juno (A.K.R. 406) to the Chequasset Kennel's (Lancaster, Mass.) Young Toby (A.K.R. 473), March 22.

Polka—Emperor Fred. Mr. Wm. A. Burns's (Brooklyn, N.Y.) English setter bitch Polka (A.K.R. 115) to Mr. E. A. Herzberg's Emperor Fred (A.K.R. 33), March 31.

——*Dorr.* Mr. F. W. Dunn's (Battle Mountain, Nev.) black and tan setter bitch —— to Mr. Fred. A. Taft's Gordon setter Dorr (Don—Lady), Jan. 14.

Kitty Clover—Dash III. Mr. E. C. Freeman's (Cornwall, Pa.) English setter bitch Kitty Clover (Thunder—Livy, A.K.R. 593) to Mr. A. M. Tucker's Dash III.

Oma—Cæsar. Mr. C. F. Wilson's (Palmyra, O.) mastiff bitch Oma (A.K.R. 261) to his Cæsar (A.K.R. 12), Feb. 21.

Irma—Cæsar. The Chequasset Kennel's (Lancaster, Mass.) St. Bernard bitch Irma (A.K.R. —) to the Forest City Kennel's Cæsar (A.K.R. 22), March 16.

Queen—Dorr. Mr. A. E. Brown's (Rocklin, Cal.) English setter bitch Queen to Mr. Fred. A. Taft's (Truckee, Cal.) Gordon setter Dorr (Don—Lady), Feb. 28.

Daisy—Dorr. Mr. E. J. Hein's (Carlin, Nev.) red Irish setter bitch Daisy to Mr. Fred. A. Taft's Dorr (Don—Lady), March 24.

Grace—Beaufort. Mr. Luke White's (Bridgeport, Ct.) pointer bitch Grace (Match—Nell) to Mr. C. H. Mason's Beaufort (Bow—Beulah), March 29.

Graceful—Bang Bang. Mr. Luke White's (Bridgeport, Ct.) pointer bitch Graceful (Sensation—Grace) to the Westminster Kennel Club's Bang Bang (A.K.R. 394), March 23.

WHELPS.

☞ *See instructions at head of this column.*

Lizzie Hopkins. Mr. W. B. Gates's (Memphis, Tenn.) English setter bitch Lizzie Hopkins (Gladstone—Clip), Feb. 20, ten, by Mr. W. J. Crawford's Gath (Count Noble—Peep o' Day); one living.

Queen. Mr. N. Elmore's (Granby, Ct.) English beagle bitch Queen (Victor—Lucy), March 24, nine, by his Flute (Rattler—True); all white, black and tan.

Thorn. Mr. N. Elmore's (Granby, Ct.) English beagle bitch Thorn (Victor—Lucy), March 25, eight, by his Flute (Rattler—True); all white, black and tan.

Lark.—Mr. George H. Whitehead's (Trenton, N. J.) collie bitch Lark (A.K.R. 7), March 26, seven (four dogs), by his Kelpie (A.K.R. 6).

Yolande. Mr. W. H. Tuck's (Wilkesbarre, Pa.) cocker spaniel bitch Yolande (A.K.R. 533), March 27, eight (three dogs), by Colonel Stubbs (A.K.R. 302).

Queen Bess. Major Lovejoy's (Bethel, Me.) greyhound bitch Queen Bess (A.K.R. 905), March 25, seven (one dog), by champion Friday Night (A.K.R. 753).

Theon. The Chequasset Kennel's (Lancaster, Mass.) St. Bernard bitch Theon (A.K.R. 94), March 21, twelve (seven dogs). by Cæsar (A.K.R. 23).

Lorna Doone. Mr. S. M. Nash's (Southampton, L. I.) English setter bitch Lorna Doone (A.K.R. 39), March 29, ten (five dogs), by Mr. J. H. Goodsell's Prince (Pride of the Border—Petrel).

SALES.

☞ *See instructions at head of this column.*

Roland. Fawn mastiff dog, whelped Jan. 12, by Agrippa (A.K.R. 449) out of Rena (A.K.R. 262), by the Riverview Kennel, Clinton, Mass., to Dr. C. F. Hubbard, Taunton, Mass.

Raleigh. Fawn mastiff dog, whelped Jan. 12, by Agrippa (A.K.R. 449) out of Rena (A.K.R. 262), by the Riverview Kennel, Clinton, Mass., to Mr. L. F. Kinney, Grand Rapids, Mich.

Alta. Fawn mastiff bitch (A.K.R. 686), by the Riverview Kennel, Clinton, Mass., to Mr. L. F. Kinney, Grand Rapids, Mich.

Dashing Dan—Daisy Starlight whelps. English setters, whelped December, 1883, by Mr. H. W. Durgin, Bangor, Me., a lemon and white dog to Mr. R. L. Henry, Hamden, Ct.; a lemon and white dog and a black, white and tan dog to Mr. F. H. Gibbes, Columbia, S. C.; a black, white and tan dog to Mr. Twombly, Boston, Mass.; a black, white and tan bitch to Mr. Lockwood, Boston, Mass., and a lemon and white bitch to Mr. Chas. York, Bangor, Me.

Ireland Dick. Red Irish setter dog (A.K.R. 977), by Major Lovejoy, Bethel, Me., to Mr. Chas. B. Lancaster, Boston, Mass.

Juno. Fawn pug bitch (A.K.R. 406), by Mr. A. S. Potter, Lewiston, Me., to the Forest City Kennels, Portland, Me.

Jenny. Pug bitch (Tony—Beauty), by Mr. H. E. Stares, Deering, Me., to the Forrest City Kennels, Portland, Me.

Game. Lemon and white English setter dog, whelped December, 1883 (Dashing Dan—Daisy Starlight), by Mr. H. W. Durgin, Bangor, Me., to Mr. F. S. Davenport, same place.

Gun—May B. whelp. Black, white and tan English setter bitch, age not given, by Mr. H. W. Durgin, Bangor, Me., to Mr. Jarvis, New York.

Cæsar. Mastiff dog (A.K.R. 12), by Mr. W. Wade, Pittsburgh, Pa., to Mr. C. F. Wilson, Palmyra, O.

Emperor Frank. Black and white English setter dog, whelped Nov. 28, 1883 (Tempest—Lilly), by Mr. Andrew J. Ward, Boston, Mass., to Mr. Edward A. Todd, New Haven, Ct.

Princess Lilly. Black, white and tan English setter bitch, whelped Nov. 28, 1883 (Tempest—Lilly), by Mr. Andrew J. Ward, Boston, Mass., to Mr. Edward A. Todd, New Haven, Ct.

Lion. Black Newfoundland dog, whelped Sept. 30, 1879, by the Strawberry Hill Kennels, Leicester, Mass., to Mr. Jasper Murphy, same place.

Beauchief. Black and tan collie dog, whelped April 25, 1883 (Gyp—Buttercup), by the Strawberry Hill Kennels, Leicester, Mass., to Mr. W. L. Craig, New York.

Frank. Black, white and tan English setter dog, whelped Feb. 12, 1881 (Yale Belton—Lill), by Mr. Edward A. Todd, New Haven, Ct., to Mr. Andrew J. Ward, Boston, Mass.

DEATHS.

☞ *See instructions at head of this column.*

Daisy. Pug bitch (A.K.R. 468), owned by the Chequasset Kennels, Lancaster, Mass., March 7.

KENNEL MANAGEMENT.

☞ **No Notice Taken of Anonymous Correspondents.**

A. D. W., Warren, Pa.—See answer to "W. H. H."

J. W. A., New Bedford, Mass.—Your dog probably has a slight attack of distemper.

W. D. B., Westfield, N. J.—Give a teaspoonful of cod liver oil three times daily for a week or two.

G. W. A., Boston, Mass.—Let the bitch pass one season and she will probably then breed all right.

ONONDAGA, Syracuse, N. Y.—Feed your dog mutton and barley broth. For the trouble in his ear see answer to "Night Hawk" last week.

C. B. M., Madison, Ga.—Wash the dog thoroughly with strong soap suds, then sop on freely sulphurous acid, one part to four of water; repeat every day for three or four days, and follow with sulphur ointment.

W. F. T., Altoona, Pa.—Your dog probably has distemper. The partial paralysis of his hindquarters is a symptom often accompanying the disease. A liveral diet and the use of tonics with careful nursing will probably bring him out all right.

W. H. H., Hartford, Conn.—1. The abscess which you describe is of very common occurrence among dogs. When forming it should be carefully watched, and as soon as a soft place can be detected, showing that pus has formed, it should be opened at its lowest or most pendant point and the pus allowed to escape naturally without squeezing. This is often one of the milder forms of distemper. 2. Distemper assumes so many forms that it is impossible for any one to intelligently prescribe without an examination. It is always safe, however, to recommend careful nursing, a warm kennel where plenty of pure air can be had, and in cases of debility, tonics may be given

Rifle and Trap Shooting.

FIXTURES.

First International Clay-Pigeon Tournament, at Chicago, Ill., May 26 to 31. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

POWDER IGNITION.

Editor Forest and Stream:

As there seems to be great diversity of opinion as to the distance that the flash of a primer will penetrate the powder charge, I have made a few experiments to satisfy myself on the subject, and send you the results.

To show what wild statements experienced riflemen will make, I will quote the observations of two expert marksmen on the subject: One says that the flash of a Berdan No. 1 primer will permeate the entire charge to the base of the ball. The other that the force generated by the explosion of the same primer will throw a .45-caliber ball from the shell out of the muzzle of a military rifle. Both of these statements are wrong. And here I wish to make the point, that because a man has the natural gift of "holding well," he is by no means qualified to give points on scientific rifle shooting, rather the contrary, as he acquires his object without the study and painstaking required by others.

Now for my experiments: I took a quantity of sand carefully sifted to the same granulation as FG powder, and heated it thoroughly to exclude moisture and prevent cohesion. Then some .45-caliber government shells (U. M. C.), capped with Berdan No. 1 primers, were loaded as follows:

No. 1. 10 grains of sand (by measure) on top of this 10 grains FG powder, then 1 felt wad.

No. 2. 15 grains of sand; rest the same.

No. 3. 20 grains of sand; rest the same.

No. 4. 30 grains of sand; rest the same. The sand in each case was poured in lightly to avoid compression; powder the same, and the wad was lightly seated.

The results were:

No. 1. Powder ignited, and wad blown from gun.

No. 2. Powder not ignited, wad thrown about an inch beyond mouth of shell, space between grains of sand and powder filled with smoke.

No. 3. Powder not ignited, wad started but did not leave shell, smoke arose when wad was removed.

No. 4. Powder not ignited, wad not started, smoke arose from sand when poured out of shell.

10 grains of sand occupied 1/4in. in length of .45 cal. shell.
15 grains of sand occupied 3/8in. in length of .45-cal. shell.
20 grains of sand occupied 1/2in. in length of .45-cal. shell.
30 grains of sand occupied 3/4in. in length of .45-cal. shell.

Whence I think that we may reasonably infer that the flash of a Berdan No. 1 primer, penetrates the charge less than 3/4in.

Your correspondent, "J. J. P." raises some interesting points in his "Rifle Queries," in your issue of Feb. 21. I shall answer one or two of his questions when I have had time to calculate a few tables to illustrate my position, provided always, that some one does not cover the ground in the meantime. Further experiments and more accurate measurements than I had the means of making when I last wrote on the subject, incline me to the belief that Mr. Dodge is right in attributing the good performance of bullet No. 6 in my experiments to less friction. I find that the diameter of No. 6 is 0.438in. against 0.405in. for No. 4. If decreasing the diameter 14-10,000in. produces such a marked improvement, the question naturally occurs, what is the most efficient diameter? Will Mr. Dodge and our other friend who are experimentally inclined help us to a solution?

JAMES DUANE.

MARCH 25, 1884.



Fig. 1.

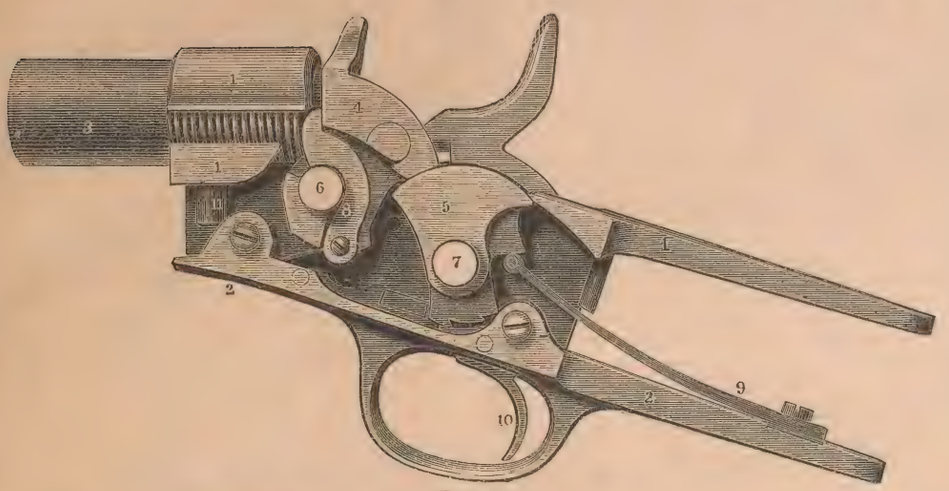


Fig. 2.

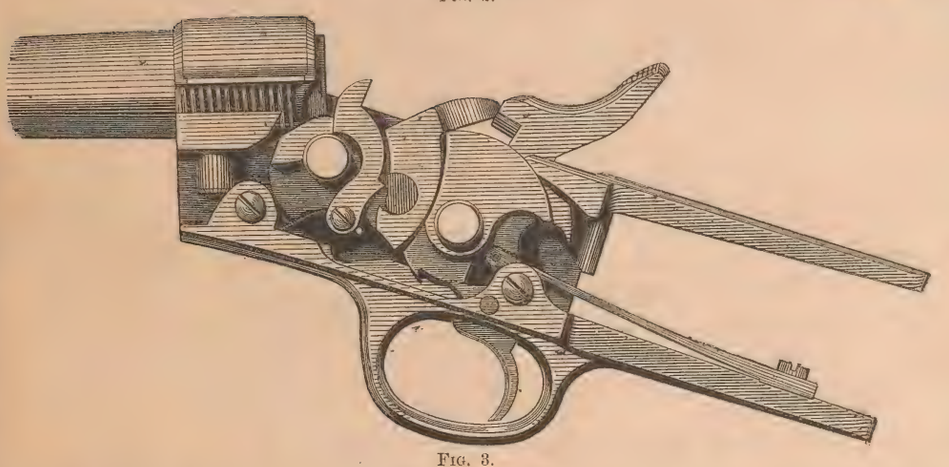


Fig. 3.

RIFLES OF TO-DAY.

THE WHITNEY RIFLE.

To tell the story of the Whitney arm in its entirety would give opportunity to rehearse the entire history of American small arm manufacture, besides leading us away into many interesting by-ways and opening up chapters of American skill in invention and production.

Eli Whitney, the elder, is probably best known as the inventor of the cotton gin, and the Whitney works started for the purpose of producing these machines, was opened in 1798. He soon turned his attention to fire-arm manufacture and was the first to recognize the importance of using hardened jigs or sample pieces of each part of an arm, so that the pieces might be interchangeable. He also applied machinery to the making of the different parts, and many features of rifle manufacture which are now regarded as standard in the different works, took their start in the Whitney Armory. While Thomas Jefferson was Secretary of State he requested Mr. Whitney to undertake the manufacture of these arms and interchangeable parts. The idea was laughed at by the English and French military men who had been accustomed to the old system, but upon the model of the old Charville flint lock. Mr. Whitney demonstrated the entire feasibility of the system demonstrated, and when the Springfield armory was established in 1800, this idea of making the corresponding part of each arm exactly alike was put in force and is now the system throughout the world. In fact the making of breechloading arms compels its use. No patents have ever been placed upon the old Whitney inventions, they remain the free property of all who care to improve upon them.

The Whitneyville Armory, near New Haven, is now one of the largest in the United States, and has a working force of over 350 men. The water power is ample, and many interesting and ingenious bits of mechanism are to be studied there. The name is still retained in the persons of the son and grandson of the original inventor, and the name of Eli Whitney is still a dominant one in the management of the works.

The system of breechloading small arm, with which we have specially to deal, had its start in the inventions made by Mr. J. Stillman, of the Springfield armory, in 1865, and by Col. T. T. S. Laidley, U. S. A., in 1866. At that time it was patented in the United States and also in foreign countries. It was the system of a breech-block pivoted below the barrel, moving upward and toward it in closing the breech. At the time of its invention the arm was put to the most severe test, not only by the United States boards of examination, but by foreign boards as well, and many favorable reports have been made upon it as an excellent arm for military service.

Col. Laidley's first models were in form very like the present Whitney rifle, and this form was subsequently adopted by the Remington Company for their arm, after the Laidley models had been made and exhibited.

There have been many modifications placed upon the original Laidley invention. It is claimed that it can be loaded and fired with a rapidity equal to that of any other single breechloader, and for continuous firing that its rapidity cannot be excelled even by any repeater or magazine arm. It has very few parts, indeed. The firing pin is withdrawn by positive motion and is not liable to remain projecting and thus reach the primer and ignite the cartridge prematurely. The ejector has a strong hold on the cartridge head, and by it the shell is withdrawn and ejected clear of the chamber. Special care is taken in the materials used and in the workmanship. It has been fired on the first trial by a person strange to the arm as often as twenty-three times per minute, and when "time" was called a cartridge was waiting in the chamber. For a severity test upward of a thousand shots were fired from a rifle without the failure or injury of a single part.

All the motions of loading and firing are performed with one hand. To load the hammer is cocked and the breech block thrown back. This withdraws the firing pin and ejects the empty cartridge shell. The new cartridge is then inserted in the chamber and with the closing of the breech block the arm is cocked ready for firing, or it may be let down to the half-cock notch and the arm is then in a condition for safe carriage by a competent rifleman.

With such large works and the facilities for turning out great quantities of arms, special effort has been made to secure contracts for military arms, and many have been filled with foreign countries. To Mexico over 20,000 of the Whitney musket and carbine have been sent. Madagascar has taken a consignment of 5,000 for the use of the native troops, while scattered about other foreign nations 50,000 of the arms may be found. It would be an interesting point to have some return reports from the several native armies, which have been supplied not only with the Whitney, but with other American rifles. As a target rifle on American ranges, the Whitney has not been pushed, and records are not as numerous as with other makes. It has done good work, however. At Marinette, Wis., Rifle Club range on May 5, 1877, James Watson made 99 in a possible 100 at 800yds., following it up with 73 in a possible 75 at 900yds., and Mr. Watson at 1,000yds., scored 59 in a possible 60; at 500yds., H. O. Fairchild led off with a close center and then put in 15 consecutive bullseyes.

The arm may be seen in its complete state in cut No. 1, which is a target rifle model. E. A. Leopold, of Norristown, has done much shooting with the Whitney arm, and very good shooting too, 49 out of a possible 50 at 200 on Nov. 1, 1878, at 100yds.; 15 consecutive shots were put into a 4-inch circle. From that time to the present all manner of matches have been shot by Mr. Leopold and with great success.

Cut No. 2 represents the arm in section showing the breech action with block down. In it the parts are numbered as follows: 1, receiver; 2, guard; 3, barrel; 4, breech block; 5, hammer; 6, breech-block pin; 7, hammer pin; 8, extractor; 9, main spring; 10, trigger; 11, ramrod stud.

Cut No. 3 is the arm opened, showing the disposition of the parts when the weapon is ready for the reception of a new cartridge. It will be seen that the force of the recoil is carried down through the breech-block to the hammer block, and in that way transmitted to the hammer pin, and so to the breech frame ane stock. The arm is one of the simplest to take apart in case of necessity. To do so turn the screw in the side of the receiver that holds in place the two large pins (hammer and breech-block pins) sufficiently to release the heads or flanges, then turn them away from the screw. Bring the hammer to full cock, take out the extractor screw (found on the side of the receiver below the breech-block pin), take out the breech-block pin and remove the breech-block and extractor together. Let the hammer down so as to relieve it from the pressure of the main spring, take out the hammer pin and the hammer.

To assemble the arm put the hammer in position in the receiver, pressing it forward so as to avoid the pressure of the main spring, put in the hammer pin and cock the hammer. Put the breech-block and extractor into the receiver together, as when taken out, and after replacing the breech-block pin and extractor screw, bring the flanges of the two side pins together and tighten the screw that holds them.

The arm is a comparatively cheap one, the prices running:

Muskets—.433-caliber, length of barrel 33in., weight 9lbs. 5oz., $15; .45-caliber, length of barrel 33in., weight 9lbs. 3oz., $15; .50-caliber, length of barrel 32½in., weight 9lbs. 3oz, $14. *Carbines*—.433, .45 and .50-caliber, length of barrel 20½in., weight 7lbs. 2oz., $13; .50-caliber, with rim and center fire breech-block, $13. *Light or Baby Carbines*—.45-caliber, rim fire, length of barrel 19½in., weight 5lbs. 13½oz., $13; .44-caliber, extra light, either center or rim fire, length of barrel, 18½in., weight 5lbs. 7oz., plain military finish, $13. The .44-caliber carbines are chambered for the .44-rim fire shot, long and extra long Winchester, and the .44-rim fire flat (Winchester '66 model). The .44-caliber center fire Winchester '73 model, or the .44-caliber central fire Smith & Wesson cartridges. When ordering, it must be stated which of the above cartridges it is desired to use, as they are not interchangeable. *Sporting and Target Rifles*—.38, .40, .44, .45 and .50-caliber central fire; .33 and .44-caliber rim fire; barrels 26 to 34in. long, weight 8 to 10lbs.; .44-caliber central fire, chambered for 40, 60, 77, 90, 100, or 105 grain cartridges; .40-caliber central fire, chambered for 50, 70, or 90 grain cartridges; .45-caliber central fire, chambered for 60, 70, or 100 grain cartridges; prices from $18 for round barrel, open sights, to $38 for Vernier and wind-gauge sights, spirit level.

.22-caliber long,	rim fire,	24	inch octagon	barrel,	weight	7	lbs..	$20
.22	"	"	"	28	"	"	"	7¼	"	..	20
.32	"	"	"	28	"	"	"	7	"	..	20
.32	"	"	"	30	"	"	"	7½	"	..	21
.38	"	"	cen'r fire,	30	"	"	"	8	"	..	21
.44	"	(44-40)	"	30	"	"	"	8	"	..	21

RANGE AND GALLERY.

SARATOGA RIFLE CLUB.—Score of the Saratoga Rifle Club Wednesday and Saturday, March 19 and 22. On Wednesday the severe snow storm so interfered that at times it was impossible to see the bullseye. Saturday the light was good and the wind was fairly steady—200yds. off-hand, Massachusetts target:

J Hays	11	10	10	11	11	10	11	11	10	11	—106
F D Wheeler	10	12	11	11	10	10	11	10	10	11	—106
Wm B Gage	12	10	11	12	11	11	11	9	11	8	—106
I Davis	10	11	10	9	12	11	11	10	11	10	—105
H Wellington	11	9	10	11	11	9	10	10	10	11	—102
W H Gibbs	11	11	11	10	11	10	10	11	9	8	—102
A G Hull	10	10	12	10	9	12	9	10	12	8	—102
F A White	7	10	12	8	10	12	9	12	12	10	—102
A F Mitchell	11	12	9	9	8	10	9	10	10	8	— 96
A C Rich	8	10	9	9	9	9	11	9	7	7	— 88

BOSTON.—Some very fine shooting has been done the past week at the Mammoth Gallery, as the scores will show. Mr. M. L. Pratt has the lead for the first prize, and A. B. Loring for the second, and H. M. Drew for the third in New Beginner's match:

Amateur's Match No. 1.

M L Pratt	46	46	46	47	48	—233
A B Loring	47	47	46	46	46	—232
R Ford	46	46	46	46	46	—230
B W Gardner	45	45	45	47	47	—228

New Beginners—Amateur's Match No. 3.

H M Drew	43	43	43	42	44	—215
E A Peirce	41	44	41	41	43	—210
W Gray	42	41	42	42	40	—207
E F Stevens	39	40	40	41	40	—200

JAMESTOWN, N. Y., March 27.—At our club medal shoot to-day the following scores were made, 200yds. off-hand, 10 shots on Creedmoor target, wind light 5 o'clock:

A F Warner	5	5	4	5	3	4	4	5	5	5	—45
R H Burns	4	5	4	5	4	5	4	5	4	4	—44
G W Shattuck	5	4	4	3	4	5	g	4	5	4	—43
S N Ayres	4	4	4	4	3	4	4	5	5	5	—42
O H Lilly	3	4	4	5	3	5	4	5	5	4	—42
W Sprague	4	4	3	4	4	3	4	5	4	4	—39
H Briggs	3	4	4	3	4	4	4	4	4	3	—37

NEW YORK, March 20.—Regular weekly shooting of the Bullshead Rifle Club, 322 Third avenue, 12-ring target, possible 120: G. Zimmermann 118, M. Dorrler 118, C. Rein 118, A. Lober 117, J. F. Campbell 106, J. Jordan 106, W. D. Seltzer 101, S.F.C.Weber 96, D. Lowinskie 97.

GRAND CENTRAL TOURNAMENT.—The following are the best scores made in the tournament at the Grand Central Rifle Range, No. 5 Vanderbilt avenue:

J H Brown	67	67	67	66	66	—333
A Oehl	68	65	65	64	63	—325
G Zimmerman	65	65	64	64	64	—322
W M Farrow	66	63	63	63	62	—317
Wm Kline	62	62	60	60	59	—303
C Rein	61	60	60	60	59	—300
Wm Simpson	62	60	58	58	57	—295
M Dorrler	64	58	57	57	55	—291
C E Keator	62	62	57	55	55	—291
A J Howlett	61	56	55	54	52	—278
W H Dumlap	59	54	53	53	52	—271
N O Donnell	62	56	51	51	47	—267
C M Honeywell	61	55	49	50	46	—261
D F Manice	59	53	53	44	44	—253
S Buzzini	58	51	50	48	45	—252
C Edgar	57	53	53	51	42	—256
Dr Toal	51	50	50	49	47	—247

For the week ending March 31.

MINNEAPOLIS, Minn., March 28.—To-day the first long-range shooting for 1884 was done on our range; wind very fishtaily and strong from 5 to 8 o'clock, and bright sun at 800yds.; both wind light; much better at 900yds.; only one flag on the range. Great difficulty was experienced in finding the target, and to the surprise of all the elevations at 800 were up to one or two points of our figures of last summer's 900yd. elevation. The following scores, considering the weather condition and the first practice of the season, does not discourage us. No sighters at 900yds.:

	800yds.	900yds.
Cale Maudlin	5355544555355385—69	5355555555355555—71—140
C M Skinner	5355455445455559—68	5255555555573555—70—138
C W Weeks	5445555555555505—66	4545454545545554—68—134
I A Dexter	5535555544445357—67	5545445455554543—67—134
A F Elliot	5352455545535545—63	4554544445425443—63—126
J Cooley	4525555544435054—62	5555315503453415—61—123

Wind Gauge.

BOSTON, March 29.—At Walnut Hill to-day the conditions of the weather were not good for high scores. The light was good, but the wind blew from 12 o'clock, and was tricky, and spoiled good holding. J. B. Fellows, with his new .32-caliber Maynard, made a clean score of ten bulls, counting 88 out of a possible 100 on the paper target. This was his first clean score, and it is the first clean score ever made with a gun of this description. Capt. H. G. Parker, of the Carson City Rifle Club, of Carson City, Nev., who is visiting friends in Boston, was present and made some good shots. He stated that he thought the range the finest of any he had seen in this country.

Creedmoor Practice Match.

H Cushing	4454544545—44	H G Parker (mil)	4454534444—41
H A Barnes	4544545445—44	D F Farwell	3544554434—41
T C Field	5354445453—44	J Payson (mil)	4434434535—39
C A Andrews	5444454444—43	A Keach	4454354345—39
Henry Dennison	5454445444—43	G H Bond	5255335543—39
B A Lappen	5444445444—42	F W Fowle (mil)	4443443344—38

Creedmoor Prize Match.

J B Thomas	5545545544—46	B A Lappen	5454445445—44
G W Locke	5555544444—45	H A Barnes	4444544545—43
J P Bates	4145544455—44	Henry Dennison	4435544444—41

Rest Match.

J P Bates	8	9	7	9	9	9	8	9	7	10	—85
A L Brackett	5	9	9	9	6	10	7	9	6	9	—79
C W Locke	9	5	9	7	7	9	6	8	9	8	—77
J A Cobb	9	7	7	7	9	5	5	8	8	10	—75

Victory Medal Match.

J B Fellows	8	10	8	9	8	9	9	8	10	9	—88
C W Locke	9	10	10	8	7	6	2	5	7	7	—74
H A Barnes	5	5	8	4	7	9	9	7	8	4	—66

The West Medford (Mass.) Gun Club has elected the following officers: President, C. H. Parker; Vice President, E. F. Kakas; Treasurer, J. E. Ober; Secretary, W. T. Morse; Executive Committee, J. A. Rockwood, E. G. Morse, F. O. Brown.

THE TRAP.

ST. CLAIR, Pa., March 29.—Fourth monthly contest for club's silver medal, was held by the St. Clair Sportsmen's Club, Feb. 22, resulting as follows:

Sproats	0001101100—4	Daddow	0111001011—6
Farne	00100100w—2	Evans	0000101011—4

Daddow won the medal.

Fifth contest took place to-day with following result:

Evans	1001111100—6	Sproats	1011100111—7
Long	1000101101—5	Walker	0110100111—6
Daddow	0000010110—3	Lee	0001110000—3
Little	0010011110—5		

Both shoots were at clay pigeons, 18yds. rise, 2 Ligowsky traps screened, 3d notch, angle 30 degrees, direction of flight changed for each shot.

COLLEGE MARKSMEN.—Harvard has a live corps of marksmen. Last year the shooters in college were found to be numerous enough to warrant the formation of a shooting club. Now some of the riflemen of the club propose to organize a rifle team, with an eye to intercollegiate matches. Friday afternoon last the gentlemen interested met in the room of J. A. Frye to talk over the project, and the outcome was that it was decided to send letters to Yale, Columbia, the University of New York and the University of Pennsylvania in regard to forming an intercollegiate rifle association. The University of Pennsylvania already has a rifle team, and possibly such teams exist at the other colleges. If favorable replies are received, the Harvard boys will put a team in training at once. Where they will shoot is not yet decided. There is a range up toward Arlington, used by the militia companies in Cambridge, which may be secured, or perhaps the arsenal range in Watertown may be used. If a team can be got together, however, it will not be very hard to find a place to practice, and there are plenty of teams in and around Boston to compete with. The shooting club use the grounds of the Middlesex Club at East Watertown, and are very handy for the college men. A

month ago a friend of the shooting club, a graduate of another college, manifested his interest in their work by offering a cup, called the Walnut Hill Cup, to be given to the man winning in three competitions. W. L. Allen, '86, won the first, breaking 12 balls out of 15 at 18yds., five traps, W. H. Slocum, '36, second, with 13 out of 15; C. C. Foster, '87, third, and in shooting off a tie with F. S. Palmer, '87, both having broken 11; the fourth was won Thursday last by W. H. Slocum making his second victory. The next match will be held April 10. The club has about sixty members, mostly in the lower classes. The officers are: J. A. Frye, '86, President; H. S. Abbott, '86, Vice-President; E. B. Austin, '86, Secretary; J. G. Abbe, '86, Shotgun Executive Officer; J. A. Frye, '83, Rifle Executive Officer; W. H. Goodwin, '86, F. S. Billings, '85, J. S. Russell, '86, Directors; E. J. Sartelle, '85, J. C. Bradley, '86, W H. Slocum, '87, Match Committee. A great deal of the credit for the formation and prosperity of this club is due to its president, Mr. Frye, whose scores at Walnut Hill have made him a creditable name as a rifleman. He is as active in the Harvard Club as his father is in the Massachusetts association.

TORONTO, March 28.—The match pigeon shoot between J. C. Cockburn, of Toronto, and G. Wayper, of Guelph, came off to day at John Oulcott's shooting grounds at Englington. The weather was all that could be wished for, the attendance large and the birds first-class. Match for $100 a side, 35 birds each, 21yds. rise, Dominion rules:

Wayper	111011010101110101111101101010101—24
Cockburn	101011010101111111010111111101010—24

In the shoot off at 26yds., the following was the result:

Wayper	0 1 1 1 0—3
Cockburn	0 0 0 1 1—2

FAIR HILL, Md., March 29.—We had a glass ball match here today, two men on a side, 25 balls, 21yds. rise, straight away trap.

J Peterson	0110110001101101000111 1—15
E S Garret	1110111111111011111111 1—23—38
J Warren	0100100011101111010000111—12
F Foot	1111111 1111111111110111—24—36

UNKNOWN GUN CLUB.—The regular monthly match held at Dexter, Long Island, March 27. Weather clear with a strong blow, making the birds go like blue rocks. Twenty-eight members participated in the match, this being the second shoot for three extra and three regular prizes. Vogelsang took first; Smith, Rathjen and Monsees divides second; Van Staden, Knebel, Layton, Tomford, Herman, Stillwell, Muller and Detlifsen shot off for third prize, miss and out. After one round, Knebel, Layton, Tomford and Herman divided. The next shoot, April 24, will decide who will be the lucky ones for the three extra prizes. The conditions were handicap rise, one barrel, club rule and classified.

THE LIGOWSKY TOURNAMENT.—Some objection being made to the use of Dixon's measure in the shot of the tournament, Mr. J. E. Bloom, the president of the company says: "The sportsmen hereabouts whom I have consulted on the subject, are unanimously of the opinion that whereas said Dixon's measure 1106 or 1107 is now the common standard throughout the country, it should remain the standard for the tournament, but that the subject should be brought before the assembled sportsmen at Chicago for action as to future tournaments." This appears to be equitable. This question affords another argument, why we should have a National Association to adopt a common code."

MERIDEN, Conn.—Shoot for Individual State Medal, at Meriden, Wednesday, March 26. The medal was held by E. A. Birdsey, of Meriden, who won it at Wallingford two weeks before. He was challenged by thirteen men to shoot on the 26th. Although it rained hard they shot for it at the Park, at 50 clay-pigeons each, and it was won by E. A. Folsom, of New Haven. Following are some of the best scores out of a possible 50: E. A. Folsom 45, L. L. Baker 44, C. M. Spencer 42, H. Nichols 42, J. K. Camp 41, J. F. Ives 41, E. A. Birdsey 40, I. Ferguson 40, J. Talbot 38, G. A. Strong 36, H. L. Roberts 34. The medal is to be shot for every second and fourth Wednesday of each month.

PAWTUCKET R. I., March 13.—Union Club, match for State Badge, weather stormy: C. B. Payne, Union Gun Club, 23; W. H. Sheldon, Narragansett, 23; C. M. Sheldon, Narragansett, 18; C. C. Gray, Narragansett, 22; G. F. Butts, Narragansett, 16; E. S. Luther, Watchemoket, 20; F O. Wehoskey, Narragansett, 15; G. W. Barney, Watchemoket, 17; E. W. Tinker, Narragansett, 23; M. P. Cornell, Mashapang, 9; J. F. Elderkin, Union, 7; C. B. Potter, Narragansett, 18; E. H. Roberts, Union, 20; F. S. Tingley, Watchemoket, 17; G. W. Cary, Narragansett, 22; F. Baldwin, Narragansett, 20; H. L. Palmer, Narragansett, 24; J. R Payne, Union, 11, A. F. Salisbury, Union, 14; J. H. Brady, Union, 18.

BOSTON, March 26.—The clay-pigeon and glass-ball matches at Walnut Hill to-day called together a large attendance of shotgun men. Sixteen matches were shot, and the result's in each are appended:

First event (five clay birds, 11 entries)—Stark first, De Rochemont and Bancroft second.

Second event (five clay birds, 11 entries)—Stark and Short first, Johnson second, Bancroft third, De Rochemont and Cutting fourth.

Third event (five clay birds, 23 entries)—Stanton and Field first, Stark and Decker second, Cutting, Jameson and Nichols third, and Bancroft fourth

Fourth event (three pair birds, 19 entries)—Sawyer first, Stanton second, Stark, Hutchinson and Hart third, Knowles and Short fourth

Fifth event (five glass balls, 18 entries)—Decker first, Hutchinson and Johnson second, De Rochemont, Lovejoy and Newton third Short, Sawyer and Russell fourth.

Sixth event (five clay birds, 25 entries)—Sawyer first, Tinker and Adams second. Decker and Stark third, Short and Shattuck fourth:

Seventh event (three pair clay birds, 24 entries)—Stark, De Rochemont and Hart first, Stanton, Law, Knowles and Short second, Decker and Johnson third, and Jameson fourth.

Eighth event (five glass balls, 20 entries)—Tinker and Henry first, Stark and Field second, Lovejoy, Shattuck and Lewis third, and Moore fourth.

Ninth event (three pair balls, 13 entries)—Decker first, Lovejoy second, Law and Hutchinson third, and Newton fourth.

Tenth event (seven clay-birds, 29 entries)—Decker and Stark first, Nichols and Lovejoy second, Tinker third, and Bancroft fourth.

Eleventh event (five straightaway birds, 29 entries)—Stark, Shattuck and Dodge first, Stanton and Short second, Nichols, Russell and Newton third, Bancroft and Henry fourth.

Twelfth event (five clay-birds, 27 entries)—Field first, Stark and Johnson second, Parker and Lovejoy third, Decker and Newton fourth.

Thirteenth event (five glass balls, 18 entries)—Sawyer, De Rochemont and Johnson first, Henry and Moore second, Decker and Nichols third, and Knowles fourth.

Fourteenth event (three pair clay birds, 20 entries)—Decker first, Parker, Favor and Sawyer second, Tinker third, and Bancroft fourth.

Fifteenth event (three pair glass balls, 13 entries)—Law first, Bancroft second, De Rochemont third, and Knowles fourth.

Sixteenth event (five clay birds, 14 entries)—Field first, Stanton and Stark second, Johnson and Russell third, Warren and Noyes fourth.

Yachting.

BUSINESS.

THE efforts in these columns looking toward the general practice of racing and cruising outside are bearing excellent fruit. The mere thought of such a thing still sends a shudder through the antique relics of a past age, and some people in their nautical swaddling clothes. But the world does not stop progressing for them, which is fortunate. The number of races outside is constantly increasing, and whole fleets now cruise along the coast. Long Island Sound is fast becoming to be regarded only as the Swash Channel of the East, and nothing more than a fairway into port, excellently suited to beginners practicing in small traps and sailboats, but quite *infra dig* for that yachting in which men prefer to engage. The American is ambitious, and the notion that the brawn and muscle and enterprise of a live crowd of sea-loving people could forever be pent up in a little stretch 90×10 miles always struck the genuine yachtsman as supremely ridiculous, to say nothing of the impossibility of reaching the Sound from distant ports without a passage at sea.

However, counterfeit yachting is losing its charms with the rising generation. We hail with pleasure the proposition of Mr. J. D. Smith, of the Estelle schooner, to offer a cup to sloops and cutters for a grand scramble round Long Island by the outside route. The New York Y. C. has abandoned play sailoring in the Sound, and will hereafter meet in Newport harbor preparatory to the regular annual cruise along the coast. It is proposed to give the sloops and cutters some inducement to make the voyage to the rendezvous an interesting event and with great benefit to the sport, and for these innovations upon ye ancient customs of drifting, the club has earned recognition from all go-ahead people. With sea cruising and ocean races a prominent feature, perhaps in the end to the entire exclusion of smooth-water play, we may look for rapid strides in the improvement of model and equipment, and the crews of our yachts, professional and amateur, will develop into regular shellbacks even before they know it. Then will come the consummation of our wishes, yachting real instead of yachting sham.

WEIGHT FOR LIGHT AIRS.

IF there is one thing which experience has settled beyond the possibility of doubt, it is the value of weight for speed in airs and light breezes. Practice affords such incontestable proof that writing these lines ought to be superfluous work. And yet the culpable ignorance among builders and amateurs is such that valuable space must be occupied, to teach what the tyro ought to known by mere intuition. Why people, who have been successful in other walks of life, refuse to apply to the matter of yachting a single turn of their brain, and not only refuse to think the most trifling kind of a thought, but persist in clutching wildly at that which is diametrically opposed to the commonest process of logic and familiar facts enacted under their very noses day after day, is a poser in the study of human nature we are totally unable to fathom.

If there is one kind of boat which excels in a most notable degree in lightness and in large sail area in proportion to her displacement, it is the catamaran. According to the hallucination of those people who ever and anon pop up before the public with the same old, daft illusion which mixes up weight and resistance, the catamaran ought to be a streak of lightning incarnate in trifling winds and in the coyest of catspaws, in the merest breaths trembling through the atmosphere, should show at her best and fly from heavier boats so as to knock them stupid. There is no boat in existence which can be expected to substantiate the "light weight for light airs" fallacy in more drastic and unchallengeable manner. And now what is the truth concerning the sailing of catamarans? They are slow, excessively and annoyingly slow, and notoriously so in light airs. They cannot be depended upon to stay and they are left out of sight by almost every hulk, tub, scow, box or fright which has weight and reasonable area of sail.

Why is a catamaran slow in light airs? It cannot be because of clumsy lines or unfavorable form. Her body is leaner, her lines are finer and more suited to speed than those of any other type of yacht in our waters. It cannot be a want of driving power, for measured by any standard whatever, by length, by bulk, by displacement, by stability, by area of skin, by draft, she has a larger sail plan than any other style of vessel, and she has *not* the weight. And to the very lack of that weight her sloth in light airs must be attributed. To nothing else whatever.

When a boat has got on full headway the force of wind will allow, she develops "momentum" in strict proportion to her weight. The effect of that momentum is to keep up her rate of speed. She is possessed of a desire to continue, and if the wind were cut off in an instant as with a knife, she will keep on moving, slowing up gradually as she uses up her momentum in overcoming resistance to onward passage until there is no momentum left to draw upon. Then she stops.

Now, all winds, especially light winds, are a series of rapid impulses, whose energy is transmitted to the hull through the sails as a medium. When a boat has acquired full way every succeeding impulse finds the boat already on the move, and in striking the sails has not to start a dead body into life and overcome "inertia," but the energy of succeeding impulses is utilized in re-supplying the waste of momentum which is continuously being eaten into by the opposing resistance. If a surplus of energy remains the boat will be impelled at an increased speed. Now, it is plain enough to see that the boat possessed of the greatest momentum in proportion to resistance will have her store of moving force eaten into least by the opposing resistance, and that there must be a larger surplus of wind impulse left to be utilized toward speed than in a competitor having a less favorable ratio between momentum and resistance.

But resistance at low speeds is mainly, if not entirely, due to friction between the water and the skin of the hull. Now, the area of skin will vary directly with the dimensions, but the momentum of displacement or weight, which is the same thing, varies in a higher ratio, in similar forms it varies as the square. Thus, two boats of circular section having diameters as 1 to 2 will vary in circumference or skin as 1 to 2, and so will their resistances at low speeds. But the areas of the two circles will vary as the squares of 1 and 2, or as 1 and 4, so will the bulk on any unit of length, and so will the momentum of those bulks.

It follows in direct consequence that, with a given sail area per unit of skin surface, the boat having the *greatest weight* is possessed of an innate advantage for speed in light weather.

Furthermore this advantage may be so great that even with a less area of sail per unit of skin, the heavier boat will still in practice prove the faster. Henee the catamaran, in spite of large sail area in in proportion to wet surface, is overcome in a contest by heavier boats driven by actually less power in comparison.

It is true that secondary attributes may in particular instances neutralize and even more than wipe out the innate advantage of weight. A boat may be so crank or so modestly sparred that the gain due to weight is more than lost by the deficiency of driving power. Or in the other direction, she may have large sails, but her hull may be so extravagant in contour that a superabundance of skin will be a drawback, overbalancing advantages of weight. When such boats are beaten their defeat is not to be laid in truth to their great weight *per se*, but to the fact that opportunity to display the benefits of weight is denied the boat through irrelevant conditions having no connection with the question of light versus large displacement.

By inference from the foregoing, it follows that the problem of speed in light weather is to be solved through working up as near as possible to the subjoined axiom.

"The *greatest* weight *in proportion* to the resistance, coupled with the *greatest* sail area *in proportion* to skin friction."

And a corollary to the above is this: The mere comparison of weights, ten tons against twenty tons, has no meaning whatever, one way or the other, unless the citation be made in connection with the resistance. And under no circumstance does twenty tons in itself indicate a bar to speed in comparison with ten tons, for it is always possible that the excess of the momentum of twenty tons beyond the resistance it experiences may be greater than that of a boat displacing only ten tons, in which case, so far from being a bar, the greater weight is by the foregoing an actual advantage, and upon the assumption of equal sail to wet surface, an actual, positive benefit to speed. The opposite is equally true. Light weight, or in our example, ten tons, considered by itself, is not to be accepted out of hand as a bar to speed for lack of weight in comparison with twenty tons, for it is also possible that in proportion to the resistance of a particular boat there may be a greater excess of momentum on ten tons displacement than on twenty.

So far then as the theory of speed in light winds is concerned, the conclusion is, that weight by itself affords no true inference for or against, but that the answer depends upon the relation between momentum and resistance in each individual vessel, and that unless acquainted with that relation, no decision in the case can be rendered for want of necessary data upon which to construct a verdict one way or the other.

We are then in need, not only of the weights of vessels, but also of their resistances to pass judgment between a light and heavy competitor. It has already been mentioned that at low speeds resistance varies with the area of wet surface. Hence, of two designs, that one possessed of the greatest weight per unit of skin is the winning boat, *providing* she can spread to equal effect as much sail per unit of wet surface as her opponent, and upon this the designer must scheme his hopes for success in light weather. It will be readily seen that in theory the advantage may rest in one case with the heavier boat and in another with the lighter, according as they meet the stipulations set forth.

Now turning to practice, we find the application of the last paragraph exemplified in the apparently contradictory performance of vessels. Upon one occasion a heavy boat has decidedly the heels of her lighter competitors, and upon some other occasion just the reverse is observed between another batch of racing vessels.

But those contradictions are between yachts approaching one another in their principal elements, so that a slight variation upon the relation between momentum, resistance and sail will bring down the balance on one side first and then again upon the other.

For a broad conclusion, the evidence should be taken between boats differing quite radically, so much so that the prominence of their peculiarities cannot be overthrown by trifling variations between momentum, resistance and sail. And such comparisons manifestly offer all the more positive answer to the issue between light and heavy displacement, surrounded, as it must be, by those features which design demands for practical purposes.

We have already instanced the performance of catamarans. Exactly the same behavior is found in light boats of any description. It is well enough known that the sharpie, the canoe, the whaleboat, the buckeye, and similar boats, one and all, fall prominently in competition with yachts of usual form in light weather. By comparison the light boats are tediously disappointing, and no matter how much pains and thought may be bestowed upon their planning, it is from the very start a physical impossibility to attain speed with them in paltry breezes. And this is due to the lack of as much weight and as great momentum in proportion to resistance just as explained in the case of the catamaran. Most prominently does this want make itself felt in beating to windward. The lines of such boats, are, in themselves, highly favorable to speed, and the sail which racers spread is enormous, and far beyond that of usual yachts in proportion to skin, as witness the racing rigs of some canoes in New York waters. While they occasionally do well with lifted sheets in winds of good working strength, all collapse in light airs and when sheets are trimmed in.

It is a familiar fact to yachtsmen who have met the much lauded sharpie in Long Island Sound, that, unless a strong quartering wind be blowing with the water smooth, the sharpie has no chance whatever with the heavier craft, and the lighter the wind, the slower the sharpie proves herself to be.

Theory explains the source of value in weight and practice, common, everyday practice, transacted under the nose of every person afloat, backs theory in its decuctions and *defends and directly counsels* the incorporation of weight in vessels intended for speed in light winds.

The builder who declines to enter upon a course of logic for fear he may be only theorizing after all, and the yachtsman who is too shiftless to think for himself, may possibly be excused upon the ground that in the pursuit of yachting they undertook no other contract than to loaf. But when such persons not merely refuse to mentally imbibe the kaleidescope of facts developing daily before their eyes, but aggressively storm in a path barred at every step with insurmountable facts, and pilot themselves into a foggy realm of dogmatic myth, then, we confess, then it makes us very tired.

DRAFT.

Editor Forest and Stream:

Mr. Bassford's letter contains one point which perhaps needs attention in addition to the remarks you appended. He says the channels with 10ft. water leading into the harbors are so narrow that a keel boat drawing that amount could not work in them. A centerboard drawing only 7 or 8ft. would have to show some of her board to get in and out, and would draw just as much, and sometimes more than the keel boat, so she would be no better off. MINX.

[We add that there is from 3 to 7ft. of tide in all the Sound ports, and it would only be one case in many when a yacht would try to make certain harbors with narrow approaches at dead low water, and the width of the channels would be greater at quarter or half tide. But even in this respect we are better off than our English cousins, who have to depend upon many harbors which are tidal altogether, and dry or nearly so at low water. Same holds good of the Dutch, Belgian and French coasts. Besides, it seems better policy to have the right kind of boat for sailing anyway, and make harbors as best you can. The test of a good boat is not how little water she can float in, but her adaptability to cruising in whatever depth she happens to need. Designing boats to meet secondary requirements at a sacrifice of the principal object of their existence, is getting the cart before the horse.]

PETREL ON A CRUISE.

Editor Forest and Stream:

I see you have the lines of Petrel in FOREST AND STREAM, and as you laud her performances highly, I thought an account of the three first days' cruise of the Seawanhaka Y. C. in 1880, so far as Petrel and Vivien took part in it, might be interesting. Vivien I do not consider very fast. She is a pieced-out boat, having originally been a 24ft. cat. She was raised 8in. and pieced out aft so as to make her 25½ft. waterline and 28ft. over all. This left her very full forward, and brought her board entirely too far forward, which made her steer hard and work bad, as an old sail from another boat was put on her which did not fit. She is a veritable little tub, but here is an account of her performance in company with Petrel, these two boats being the only boats of that class in the cruise. The account was furnished me by her skipper.

The yachts met at Glen Cove. The next morning they were ordered to make a run to New Haven. There was scarcely any wind until some time in the afternoon. There was not a ripple on the water. They all drifted on toward Eaton's Neck. Vivien had no light sails, but a very small topsail with no yard, so she set it as best she could on an oar. She had but just been launched after being altered, and there had not been time to finish her for the cruise.

Petrel had a good outfit of light sails, so she worked away somewhat from Vivien. When near Eaton's Neck the latter struck across for the north shore, thinking the wind would come out from that way, and Petrel kept the Long Island shore. Finally the wind came out fresh from south and Petrel of course got it nearly half an hour before it reached across to Vivien, and by that time Petrel was nearly out of sight ahead. Besides this Vivien was so far to leeward that she could but little more than lay her course, while Petrel was running with sheets lifted. Vivien arrived at New Haven about six minutes behind. The next morning the fleet was ordered to New London and the two little ones were given the privilege of starting ahead. It was blowing fresh from southeast. Petrel got away first with a reef down. Vivien had run further up the harbor, so was some distance astern and to leeward. It was a dead beat out the harbor, and Vivien, under full sail, caught up to Petrel, who then shook out her reef, but Vivien was getting away from her in the meantime and when a good distance ahead the wind suddenly died out.

A while after there came a rain squall from the southwest, and both had to double reef. Then they were shut out of view by the rain until well on toward New London. The wind once more died out and the rain ceased, and it was discovered that Petrel was hull down astern, but much further to the south, or out in the Sound, than Vivien. Again they lay becalmed, and again the wind came up from the south and took Petrel long before it did Vivien, but she got it at last, and arrived at New London about 7½ minutes ahead of Petrel. The next morning the larger yachts had arrived, and Petrel and Vivien were told they might see as much of the race as they liked, and then run to Newport, which the larger yachts would do later in the day. Petrel soon started out, as was supposed by Vivien, to see the race, but when Vivien left later she found Petrel had made a straight wake for Newport. So she concluded not to go any further east and ran over to Greenport, leaving the fleet, as she then had no cabin on, but was an open boat. DAVID KIRBY.

[Since then Vivien has received a cabin, and will come out in a new rig and general overhauling this season. Mr. Kirby does not state whether Vivien shifted ballast or not, though the presumption is she would not do such a silly thing.]

STYLE.—To a man of taste, there is nothing uglier than paint about decks and deck fittings. It gives a boat an old and cheap appearance, and shows the blacking off lubbers' longshore brogans. Remove the old paint and varnish or keep "bright," and the yacht will appear rejuvenated. To remove, either apply heat carefully by means of a hand brazier and then scrape; or pay with one part pearlash mixed with three parts of quickstone lime, by slacking the lime in water and then adding the pearlash. Allow to remain half a day, till the paint softens, then scrape with scraper, or glass and sandpaper smooth. Varnish hatches, houses, bits, cockpit and inside of bulwarks, but leave the decks and the caprail natural wood. Keep them white by scrubbing frequently, and then the boat will "brace up and have some style about her." It is just as easy to keep her in that condition as to keep paint clean, and the boat will sell for 20 per cent. more. To paint the side, scrape very carefully and lightly. Broken glass is the best tool. Don't dig into the wood. All paint need not come off, but the rough should be smoothed away. Then sandpaper, put on a light coat with plenty of oil. Let it dry well, for which time is required. Then give finishing coat with varnish enough to give a gloss and drier enough to harden, as the oil will not sink into the wood as with first coat.

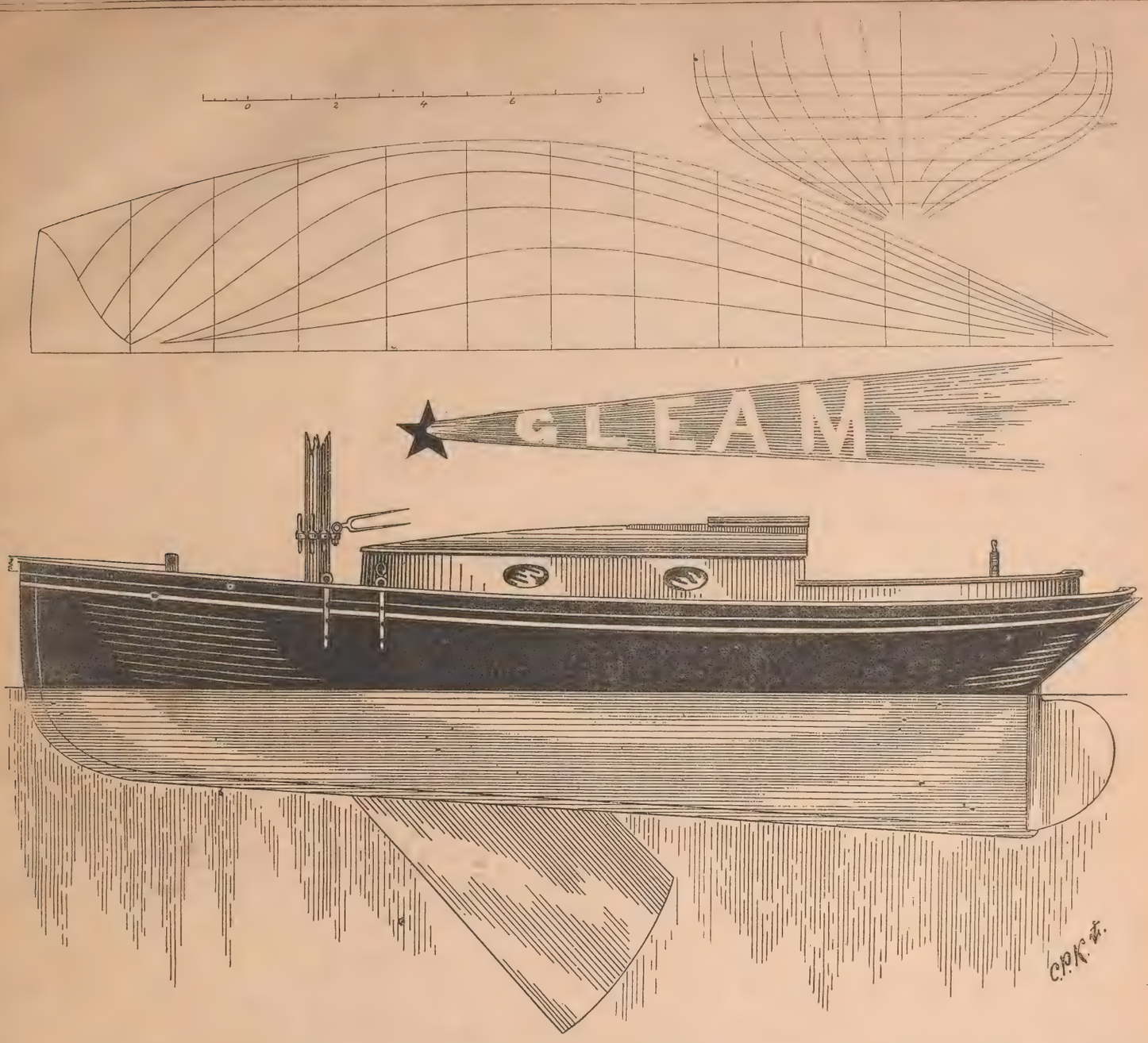
ARRIVED.—The handsome s. s. Santa Cecilia arrived in this port March 27 from Havana, and took up a berth in North River. She was built by John Elder, of Glasgow, in 1881 for Lord Alfred Paget. Is 163ft. long, 23ft. 7in. beam, and 12ft. 3in. hold. Compound engines 18 and 36in. cylinders by 33in. stroke, of 80 horse power. Rigged as a three-masted schooner. She is a cruising steamer with a maximum speed of thirteen knots, and a sea speed of nine to ten knots on very small consumption. As a cruising steamer she is an age ahead of the costly and ugly failures at high speed in this country so extravagantly advertised by newspaper reporters.

NEW BEBFORD, Y. C.—J. C. Rhodes, Commodore; David L. Parker, Vice Commodore; Frank E. Sawin, Rear Commodore; John H. Barrous, Secretary; Executive Committee, Francis Hathaway, Willard Nye, Jr., Edward S. Brown, Horace Wood, George M. Crapo, Richard S. Taber, E. Stanley Willis, George W. Parker, Richard H. Morgan, Edward W. Hart and the officers. Membership, 258. Fleet includes 57 yachts. Measurement one-quarter overhang added to loadline.

NEW JERSEY Y. C.—Annual match fixed for June 19. Officers for the year: Commodore, John H. Longstreet, catamaran Duplex; Vice-Commodore, R. F. Rabe, sloop Minnehaha; Recording Secretary, John D. Goetschius; Corresponding Secretary, George E. Garrison; Treasurer, Charles J. Rogers; Financial Secretary, Henry H. Stilling; Measurer, William S. Dilworth; Regatta Committee, Edward W. Kecham, Henry C. Dilworth and Edwin A. Barkelew.

NEW MAGAZINE.—We learn that a Boston publishing house will issue an illustrated yachting monthly early in June. There is room for an independent publication of the kind with literary merit, and it ought to be a success if it will steer clear of the breakers of "partisanism" and covert advertising in its leading pages, which have wrecked such feeble attempts as have been made to catch public support.

TOLEDO Y. C.—Has leased Guard Island for club purposes. The fleet includes ten yachts, with one cutter now building by Messrs. Hepburn Bros. Officers for the year: Commodore, F. W. Kemp; Vice-Commodore, A. W. Macken; Rear-Commodore, Prof. L. Mathews; Secretary, Harry Pratt; Treasurer, John W. Kelsey; Measurer, Joseph Hepburn.



GLEAM.

As a centerboard yacht considerably advanced beyond the orthodox trap, the Gleam can be taken as an excellent representative of recent date. She is of more than ordinary shapeliness, with claims to style in her whole make up. Her lines will prove of special interest to those who have to moor in shoal water, or cannot avail themselves of the keel for particular reasons. The Gleam is a copy of one of Philip Ellsworth's small boats, with some minor modifications introduced by Mr. N. D. Lawton, for whom she was built last spring. Clumsier dimensions could scarcely exist, yet in spite of their exceptional proportions the Gleam exhibits that unrivalled clean cut fairness of body for which we have often put the Ellsworth models on record. This extreme fairness, which scarce any man can equal, coupled with enormous light weather rigs, is the real secret of the success of the Ellsworth boats so far as speed is concerned, and it is almost a hopeless task to expect to beat such beautifully chiselled masterpieces with other craft many rungs lower on the ladder of perfection in fairness of form, and this is without any reference to type. In view of the varied results of trial races during the past few years, we are more than ever convinced that far too much stress is laid upon mere type by itself when the question of speed is agitated, and that the clue to success should be sought in the most perfect distribution of bulk and general symmetry of hull, let the cardinal dimensions be what they may. We have all seen square races won by out and out cutters, by half-breeds with and without keel and with a little of both, by orthodox traps of a past epoch, and by all kinds of go-betweens.

Extensive and close observation will, in the long run, justify our views that all types within certain not well defined limits, can be made to reach equally high rates of speed, though some will excel under certain conditions, and others again under an opposite state of affairs. But it will ever be a losing game to pit against perfection of one type anything of another possessed of less sweetness of form. So far as speed is the issue, it may be laid down as a truism that a good cutter will beat an inferior sloop, and a good sloop will beat an inferior cutter, and a good cutter and a good sloop will make an even sail, extraneous influences left out of consideration. In point of type all stand alike, and the victory will perch upon the most symmetrical arrangement of bulk, with no reference to the dimensions. In more detail, though, there seems to be evidence enough at hand that the deep, narrow keel has the call in light and baffling wind, and in any kind of weather accompanied by a sea, while the sloop's especial opportunity will be found in smooth water, and good whole sail breezes. All of course subject to more or less modification, as facts are sprouted by events in the future.

With this in mind it is an easy matter to find good cause why Gleam, upon very uncouth dimensions, should nevertheless show excellent speed in the weather she likes. Not one man in ten thousand could produce her equal in form on the length, beam and depth she possesses. For this reason alone, if for no other, the boat which tackles Gleam tackles a Tartar, and the boat which beats her has something about which she may lustily crow. We are far from indorsing Gleam's proportions. The same bulk, ballast and rig could have been disposed to much better advantage in a longer, deeper body of easier fashioning, with a gain in performance and accommodations, but then the odious length rule steps in and threatens a tax for any such choice. The designer finds himself shackled in face of that foe to good proportions, which compels him to stunt his ideas in length and squat out in beam for the size he must have in search of power and general ability. Consequently the Gleam is the reverse of an economical boat in any respect, and for her size and the money expended does not represent the best attainable by any means, though she may be the best or nearly the best on the length. It is unfortunate that a rule which hampers independent development of form and fosters false standards of excellence should prevail, but at present there seems little hope for a change, so that we may dismiss further speculation as to what Gleam might have been but for the prejudicial interference of length measurement.

If the official record of the Gleam has not been especially brilliant so far, it is owing to lack of opportunity more than to want of speed in the boat. Her debut in the A. Y. C. match of June 19, found her pitted against two rather unpretending cruisers, the Lois, of uncertain antiquity, and the Amazon, not known to racing fame. After an unsatisfactory day Gleam finished second, beating the Lois, but having to give in to Amazon, some 3ft. longer, by scant 8min. Her second test was in the Seawanhaka Corinthian race June 23, which turned out such a howling fluke as to be void of meaning, though Gleam proved lucky enough to lift the prize in the class. The third trial found her off with the Larchmont fleet in the annual open match sailed July 4. It was blowing a stiff breeze with a jump out in the Sound. Upon this occasion Gleam suffered a round defeat at the hands of two cruisers, the keel Varuna and Amazon, coming in a poor third, near 7m. astern of the second. Both her competitors were longer by several feet, and size will often make amends for poor model in blowy weather.

The impressions received upon the occasion were that Gleam's towering stick punished her severely, and that her beam caused her to swing as if on gimbles, while the sea stopped her at every bounce. It was noteworthy that in the same race, the Crocodile, another Ellsworth boat, suffered in like manner, and lost to Wave and Schemer, while she had shown herself more than a match for Wave in smooth water. During the remainder of the season Gleam got on a couple of local fights with ancient specimens, and sadly squandered them for their temerity, and likewise had one sail over, capturing the club championship in her class. Late in fall she got underway in company with the tidy little yawl rigged cruiser Aneto, of the deep draft keel persuasion and 21ft. loadline, in a two-reef snorter, and after a struggle Gleam retired discomfited and hugely surprised at the wholly unexpected issue. Gentlemen who witnessed this little surprise lay it to the load of spars Gleam had to whip, and to the antipathy of her beam for the sea there was running. To sum up, the Gleam, owing to reasons already mentioned, should be considered fast and close-winded in smooth water, but not a likely boat at all when brought down to more exacting work, which is the real test of merit. And this reputation holds good until the popular verdict can be shown to be mistaken.

As our plans will explain, Gleam is one of the few, very few, sloops entitled to the claim of being handsome. In her depth, high side and comparatively liberal displacement, and in the absence of flare can be traced commendable properties in accordance with the precepts ruling these columns. In her stunt body and great rig is seen the cloven foot of length measurement. This year Gleam is to try 1,500lbs. lead on the keel, which ought to make her display more mind of her own in lumpy water, though what effect it will have upon her footing of a summer's day is not so easy to foretell. If we do not care to hazard a prophesy, there are also no clear facts known why she should not benefit by the change at all times. Though the idea of "lugging" ballast outside instead of lovingly carrying it along in the hold is high treason according to persons who appear to have served their apprenticeship aboard the Ark, and though Mr. Lawton may forever fall from high grace with that school, there are those willing enough to give him credit for experimenting with a somewhat bold innovation, whatever the upshot may be.

Length over all	25ft. 10in.
Length on L.W.L.	23ft.
Beam on L.W.L.	9ft.
Beam extreme	9ft. 6in.
Depth, top of deck to keel	4ft. 9in.
Draft without board	3ft. 3in.
Least freeboard to plank sheer	1ft. 9in.
Displacement	11,000lbs.
Ballast inside	3,000lbs.
Ballast on keel	1,500lbs.
Area lower sail	788sq. ft.
Mast deck to hounds	29ft.
Boom over all	26ft.
Gaff over all	16ft.
Bowsprit outboard	15ft.
Topmast over all	16ft.
Hoist of mainsail	29ft.
Jib on luff	31ft.
Jib on foot	20ft.

The keel is of white oak, 8x8in. amidships, frames 3½x3 at heel, 3x2 at head, oak. Extra frame on bilge, 2x3, of hackmatack. Deck framing, 3x3 and 2x3, oak. Bed pieces for centerboard trunk, 7x4in., oak. Stem, post and rudder of oak, with locust stock. Plank, 1⅛ yellow pine, no butts above waterline. Deck stuff, 1¼ white pine, square, no butts. Trimmings, hatches and rail in mahogany. Cabin roof is of three layers thin boards, with canvas between. Sails of 10oz. duck, double bighted, also storm jib. Club topsail of 8oz. duck, single bighted, and spinnaker, balloon jib topsail of stout drilling. The bowsprit is a bright spar, run out nearly horizontal. Decks and interior of bright finish. The cockpit floor is 1ft. above waterline, and the centerboard trunk is kept low in the cabin, the top being "sealed" and caulked.

ANETO AND GLEAM.

Editor Forest and Stream:

Since the appearance of my letter in your last issue I have received a note from Mr. Lawton, from which I learn for the first time that he disagrees with me as to the result of the trial last fall, believing that the towing of a boat by the Gleam more than counterbalanced the disadvantage to the Aneto of lesser size and inferior rig for speed.

His letter exhibits much feeling, and satisfies me that the subject cannot be pursued with advantage to yachting interests. I accordingly withdraw my last letter to you in its entirety, and so retire from all discussion.

The Owner of the Yawl Aneto.

New York, March 31, 1884.

[It is strange that so much feeling should have been exhibited in this case, and other contracts from which the owner of the Gleam has withdrawn. The settled conviction of good judges is that the Gleam cannot be driven at high speed on account of her chubby form, and that the least chop completely breaks up her sailing. We make this statement in the interests of a proper appreciation of the question of design, as the personal prejudices of yacht owners are of no concern whatever to us. We should think every yacht owner would be glad to discover and admit the faults of his boat from an innate desire to further the truth. In the long run, this is bound to come out, and no super-sensitiveness or petty vanity of any individual can obscure or delay a correct estimate in the case. As a number of proposed trials with the Gleam have been lately rescinded, we desire to emphasize the fact that boats like the Gleam, however successful in light airs through the benefit of extravagant rigs, have generally collapsed in a breeze and sea.]

HULL Y. C.—Officers for the year: Commodore, Charles A. Perkins; Vice Commodore, W. B. Crane; Rear Commodore, D. Hall Rice; Secretary, Peleg Aborn; Assistant Secretary, Frank C. Brewer Treasurer, W. H. Litchfield; Regatta Committee, M. J. Kiley, P. M. Bond, J. A. Osgood, W. K. Millar, H. N. Curtis, F. M. Griffen, E. A Doe. The club voted to join the New England Yacht Racing Association, and elected as delegate Charles A. Perkins, and as alternate, D. Hall Rice. Membership, 437. Fleet includes 64 cats, 63 sloops, 24 schooners, 2 cutters, 1 yawl, 10 steamers—total, 164 vessels. Of these 75 are keels and 89 centerboards.

THE RIG OF RIGS.—The keel yachts Sunbeam, Mr. W. L. Wellman and Emily, Mr. A. McManus, are both to be be rigged as cutters, with new outfit of sails from McMannus & Son. The same loft will supply a complete rig to Mr. H. D. Burnhams new 115ft. schooner, building by Robert Palmer's Sons at Noank.

NEW CUTTER.—We hear that Mr. E. W. Syer, of Chicago, is having a smart ten-ton cutter built on the Thames, England, and will import her in time for the season. She will be a great addition to the Chicago fleet, and take for lake sailing, where a deep, able boat is much needed.

THE SEASON.—Attention is directed to yacht property offered for sale in another column. A fine semi-cutter can be purchased at a bargain, owing to departure of owner. She is a boat of three beams, quite new, and has an excellent reputation for strength and seaworthiness.

NEW YORK Y. C.—Has elected Mr. Edward E. Chase, schooner Clio, Vice-Commodore, in place of Mr. W. P. Douglass, resigned, owing to sickness. Also adopted protest and measures against the compulsory pilotage bill now pending before Congress.

ILEEN.—This fine clipper cutter has returned from her Southern cruise, and will receive a general overhaul for the season. A gentleman who went out in the cabin, is to have a similar cutter built at once, though somewhat smaller.

CAROLINA Y. C.—Officers for the year: Commodore, C. H. Glidden, sloop Wildbird; Vice-Commodore, H. M. Tueller, sloop Flirt; Secretary, W. D. Porcher; Treasurer, W. W. Shackelford, Jr.; Measurer, W. Lawton Mikell.

MATCH OR REGATTA.—We note with pleasure that our esteemed but very slow contemporaries, are copying from us the introduction of the term match in place of the homely appelation regatta. Yacht clubs should follow suit.

THETIS.—The accommodations of Mr. Henry Bryant's new compromise include a cabin 11ft. 6in. long, starboard stateroom 12x8ft., port stateroom 6x7ft., and captain's room 7x8. She is to be launched the latter part of April.

MARIANA.—The Herreshoffs have launched the cruising steam yacht Mariana. She is the first bona fide cruiser in America. High speed has not been the only consideration, but accommodations and long time steaming.

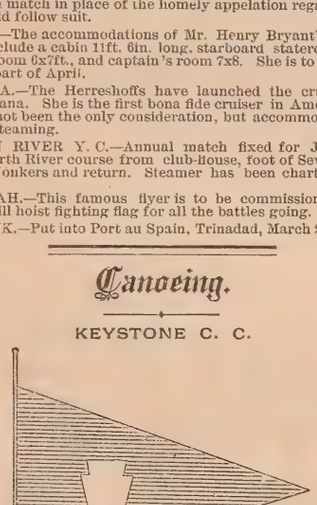
HUDSON RIVER Y. C.—Annual match fixed for June 11, over regular North River course from club-house, foot of Seventy-fourth street, to Yonkers and return. Steamer has been chartered for the spectators.

WENONAH.—This famous flyer is to be commissioned this season, and will hoist fighting flag for all the battles going.

MONTAUK.—Put into Port au Spain, Trinadad, March 25.

Canoeing.

KEYSTONE C. C.



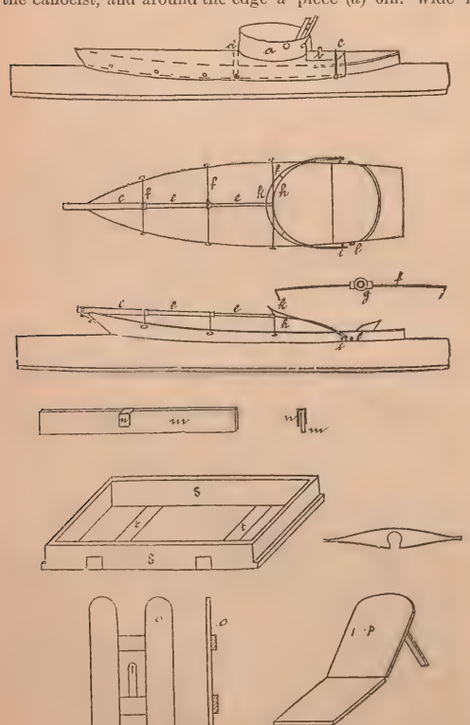
KEYSTONE C. C., Philadelphia, Pa. Organized November, 1883. Captain, Woodward T. Norgrove. Signal, white keystone on blue field.

AMATEUR CANOE BUILDING.

Twelfth Paper.

APRONS.

IN rainy weather or in rough water it is necessary to cover the well entirely, either by hatches or by an apron fitting closely around the body. The simplest form of apron, and one especially adapted to the pointed coaming, is a cover of cloth, cut to the shape of the coaming and turned down on the edges, to button over screw heads in the latter, near the deck. It also extends aft about 6in. over the hatch or deck immediately behind the back. A hole is cut for the body of the canoeist, and around the edge a piece (*a*) 6in. wide is



stitched, so as to be drawn around the body. This piece is long enough to lap, as at (*b*), and button on one side. That portion of the apron abaft the body is held down by a cord (*c*) made fast to cleats or screweyes on deck, the apron not being buttoned to coaming abreast of the body.

A beam (*d*), to which the apron, just forward of the body, is nailed, keeps it arched so as to shed all water. If a forward hatch is used, the fore end of apron may be buttoned to it. In case of a capsize, the after part will pull from under the cord, and the canoeist is free, the apron remaining on the coaming. Instead of a buttonhole on the flap, a loop of light twine should be used, so as to break at once, if necessary.

Another device is the telescopic apron devised by Mr. Farnham, which consists of a wire framework covered with oiled cloth. This framework is composed of several brass or German silver tubes (*e*), one sliding in another, as in a telescope, and also of carlins (*f*) of ¼-in. spring brass wire, soldered or brazed, as shown, to collars (*g*) on the tubes. The ends of these carlins are turned, as shown, to engage under the beading on the outer edge of the coaming, and are also bent into loops to avoid cutting the cloth. On the after end a piece of $\frac{3}{16}$ wire (*h*), bent to a curve, is brazed, being also braced to the after carlin. This wire should extend 2in. aft of the sliding bulkhead to *i*. Forward of the well is a block screwed to the deck, and to it the first tube is pivoted by a universal joint, permitting a side motion to the framework, but holding it down forward, or it may be held by a strap, as shown. When the frame is drawn into position, the ends of the carlins, hooking under the beading, hold it down, and the curved ends of the piece (*h*) hook over blocks (*i*) on each side, keeping all in position.

The cover is of stout muslin, cut about 3in. larger each way than the coaming, so as to turn down, an elastic cord being run in the hem to draw it tight. Before sewing the cover to the frame, the ends of the carlins and all sharp corners or edges are covered with leather, so as to avoid cutting the cover. Extra strips are sewn on the lower side, under the carlins, to hold down the cover. For rough water an extra apron is used, being a short skirt, fitting under the arms, the lower edge gathered in by an elastic cord. An extra wire (*k*) is attached to the framework, forming a coaming on the after end of the apron, and a wooden coaming also runs across the after hatch. The lower edge of the skirt is drawn over these coamings, and also over two knobs (*l*) at the sides, the elastic holding all in place.

The apron on a Rob Roy or small canoe is sometimes held down by a strip of wood (*m*) on either side of the coaming, to which the apron is tacked, each strip having a flat brass hook (*n*) to hold it to the coaming, the forward end of apron being held down by a rubber cord passing around the fore end of well.

The material for an apron should be a stout muslin, and after being cut and sewed it should be stretched tightly, well dampened, and coated with a mixture of turpentine one part, boiled linseed oil three parts, and raw oil six parts, laid on very thin, a second coat being given when the first is perfectly dry. To complete the covering of the well, either with hatches or aprons, a waterproof coat is necessary, made in the form of a loose shirt, opening about 6in. in front, the sleeves being gathered in at the wrists with elastic. The coat is just long enough to touch the floor when *seated*, and it should have a flounce outside, just under the arms, and long enough to fasten over the coamings, or hinged pieces of the side flaps, if the latter are used, the coat being full enough to allow them to be opened inside of it. To put on the coat it is rolled into a ring, slipped quickly over the head, the arms thrust into the sleeves, after which it may be adjusted at leisure. Care should be taken in putting it on, as an upset while entangled in it would be serious.

A seat of some kind is necessary in a canoe; it should be as low as possible, in order to keep the weight down, but still high enough to be comfortable when paddling. In a boat of 11in. or more depth the crew must sit several inches above the bottom to paddle comfortably, and in such a boat a high seat allows the body to lean further to windward; but in a shoal boat all that is necessary is a small cushion on the floor boards.

The tent, clothes bag or blankets may serve as a seat, though it is better that all bedding should be stowed below deck and out of the reach of any moisture. Some canoes are fitted with a seat of pressed wood, such as is used for chair-seats, and in some cases the seat is simply a box without top or bottom, about 10in. square and 3in. deep, the top being covered with canvas, or leather straps.

A feature that is peculiar to the canoe, and that adds greatly to the comfort of the canoeist, is the backboard, usually a framework with two vertical strips joined by two crosspieces, as shown at *o*, and hung from the shifting bulkhead by a strap. The vertical pieces are 2½in. wide and ⅝ thick, slightly rounded on the fore side, and are placed 2¼ inches apart, thus supporting the back on either side of the backbone, and the crosspieces are rivetted to them. Sometimes a flat board, about 8x12in., is used, either with or without a cushion; but the frame is better. For paddling double, an extra beam is used across the cockpit, with a backboard hung on it for the forward man, or a seat is made of two pieces of board hinged together, one forming the back, being supported by a brace hinged to it (*p*). This back may be used at any point desired, being independent of the well and coaming, and the angle of the back may be changed at will, while it is easily folded and stowed away when not in use.

To increase the stowage room and to secure a better disposition of weights fore and aft, hatches are sometimes cut in the deck, but to be really valuable, two points are essential which have never yet been obtained; they must be quickly opened and closed, and airtight when closed. As good a method as any is to make a regular coaming to the opening in the deck ⅝ to 1in. high, the hatch fitting on to this coaming with a beading projecting down, two thumb screws being used to secure it. Its water-tight qualities may be improved by a square of rubber cloth laid over the opening before putting on the hatch. This hatch is heavy and clumsy in appearance compared with hatches flush with the deck, but the latter always leak, and are never to be relied on.

In some cases where it may be desirable to get at the inside of the compartments occasionally for repairs, a hatch may be cut in the deck and covered with a piece of ¼in. mahogany decking, 1in. larger each way than the opening, and fastened by brass screws as the deck is, the laps being first painted. This piece will be airtight and yet can be removed and replaced in a few minutes when repairs are needed.

For transporting the canoe on shore a yoke is necessary, and may be made in several ways, the simplest form being that used for the guides' boats in the Adirondacks, a piece of wood (*r*) hollowed to fit over the shoulders and around the neck, the boat, bottom up of course, resting with one gunwale on each end of the yoke. Another form is a box (*s*) with no top or bottom, long enough to fit in the width of the well, and having two straps (*t*) across one side, which rest on the shoulders; the coaming of the boat resting on the ends of the box.

A plan lately devised by Mr. Farnham employs a frame of four pieces, which also serves in place of a sliding bulkhead. When used as a yoke, two straps are buckled across it and support it on the shoulders, the boat being inverted on it.

PADDLES.

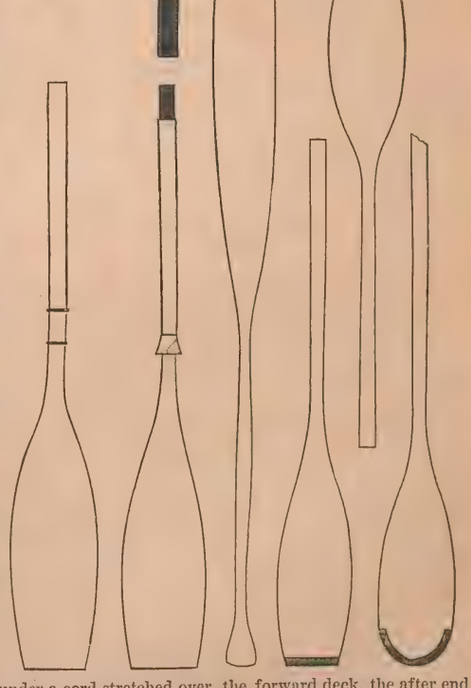
The principal point of difference between a canoe and other boats, is the mode of propulsion, the paddle being held and supported by both hands, while in boats the oar or scull is *supported* on the boat, and its motion is *directed* by the hand. The former is the primitive mode, and even to-day the craft used by savage tribes are propelled almost entirely by paddles, the oar being used by civilized nations

The shape of the paddle differs greatly in various localities, but two forms only are known to modern canoeists, the single blade, shown in the center of the accompanying plate, and the double blade, various forms of which are also shown. The former, derived from the North American Indians, is about 5½ft. long, with a blade 5in. wide, and is made of maple, beech, or spruce The upper end is fashioned so as to fit easily in the hand, the fingers being doubled over the top. The single paddle is used continuously on the same side of the boat, and its motion, in skilled hands, is noiseless.

The double paddle, the one best known in connection with modern canoes from the time of MacGregor, is derived directly from the Esquimau and his kayak. The length varies with the beam of the canoe, from 7 to 9ft., the former size being the one first used with the small canoes, but a gradual increase in length has been going on for some years, and of late many canoeists have adopted 9ft. instead of 8, as formerly, for boats of 30in. beam and over. Various patterns of paddles, as made by different builders, are shown in the plate, half of each paddle only being given. The blades vary in width from 6 to 7in., and in length from 18 to 20in.

Paddles of over 7ft. are usually cut in two and jointed, the joint consisting of two brass tubes, the larger one 5¼in. long and from $1\frac{6}{8}$ to $1\frac{7}{8}$ outside diameter; the smaller one 2¾in. long, and fitting tightly inside the former. The short piece is sometimes fitted with a small pin, fitting notches in the longer piece, so that when the paddle is set, either with both blades in the same plane, or if paddling against the wind, the blades at right angles, no further motion is permitted in the joint; but this plan is not advisable, as when the joint sticks, as it often will, it is necessary to turn the parts to loosen them, which of course the pin prevents.

Tips of sheet brass or copper are put on the ends to preserve them from injury against stones and logs in pushing off. Pine or spruce are the best materials for paddles of this style. To prevent the water dripping down on the hands, rubber washers are used, or two round rubber bands on each end, about 2in. apart, will answer the same purpose. One half of the double paddle is sometimes used as a single blade, an extra piece, similar to the head shown on the double blade, being inserted in the ferrule; or when sailing, one half, lengthened out by a handle 18in. long, may be carried on deck, ready for any emergency, the other half being stowed below. The half paddle, in this case, is held with the blade



under a cord stretched over the forward deck, the after end being held by a cord looped over a cleat abreast the body. For racing and light paddling, spoon blades are used, the general outline being the same as the straight blades, but the latter are stronger and better for cruising work.

CANOE vs. SNEAKBOX.

Editor Forest and Stream:

It would afford me much pleasure to enter into a friendly contest with Mr. Geo. H. Wild, and at the Newburgh meet, May 30, if we are favored with a breeze, I will gladly sail my canoe (15ft.x31in.) against his sneakbox, providing she is not more than 14ft.x4ft. The race to be 3 miles, over an equi-lateral triangle course. "Seneca," "Bojum" and Mr. Wild, all seem to have lost sight of the point of this canoe-sneakbox controversy. "Seneca," in FOREST AND STREAM, Feb. 14, made the assertion that "She will live in a gale of wind that the heaviest ballasted Pearl would not dare to face." It was this point to which I took exceptions in the Feb. 28 number. Nevertheless, as I have said above, I am ready to sail a race against the sneakbox, providing she is not a sloop.

CHAS. A. NEIDÉ.

SCHUYLERVILLE, N. Y., March 22.

THE CHART LOCKER.

VI. WINNIPESEOGEE AND MERRIMAC RIVERS.

W. H. N. asks how much water is likely to be found in these rivers by the middle of June, and whether there are any dams or rapids.

THE GALLEY FIRE.

CANOE AND CAMP COOKERY.

I.—OUTFIT.

FOR canoe cruising it is best to carry a sufficient outfit to cook a meal in a single box or chest, so that when one steps ashore for his dinner he can take in his hands all that is necessary, without continually running back and forth from canoe to camp-fire for materials, and if cooking inside the canoe with a canoe stove, the cover of the box can be opened wide and rested on the knees or some support to form a table, and everything is then convenient at the canoeist's hands. The box must be water-tight, and its size will, of course, vary with the room at the canoeist's disposal, the length of the voyage, proximity to points where supplies may be obtained, etc. I have seen very good chests of wood (Mr. Lucien Wulsin's is, I believe, of poplar), but I prefer one of japanned tin or galvanized sheet iron, as less likely to fracture.

Contained in the chest, in separate water-tight movable tins (japanned) are coffee, tea (or cocoa), sugar, flour (or meal), rice, baking powder, pepper and salt, the latter two in small spice boxes with two covers, the one underneath being perforated. Eggs are safest carried in the tins with the flour, coffee and rice; bread and bacon (or salt pork) are wrapped in macintosh and put near the top of the chest; the vinegar goes in a whisky flask (mark it to avoid mistakes), and canned goods, condensed milk, etc., in their own cans. The alcohol stove, if of the "pocket" variety, may go in the chest, and utensils absolutely necessary to cook a meal, such as coffee-pot, cup, forks, knives, spoon, handleless frying-pan, plates, etc.

The handiest thing about a cooking outfit, and the least in use, is a small pair of blacksmith's pliers. This instrument serves as a handle to the frying-pan and a lifter for everything on the fire, and can be always kept cool. A frying-pan made of a deep tin plate is as serviceable as any, except when broiling or baking in the frying-pan is to be done, then a regular iron one with a cover has to be used. A three-quart pail is necessary for stews, and two others may be nested in it, one of two-quart and the other of three-pint capacity. These and the cups should be of granite ware.

Outside of the chest are kept two tin basins (for baking bread, as per recipe in FOREST AND STREAM for March 8), a jug of molasses, and butter in an earthen jar having a water-tight cover, so that it may be enveloped in a net and sunk to the bottom of the stream.

A really first rate canoe stove has yet to be invented. I have never used the *flamme forcé*, but should think it would be an improvement on many I have tried, among others the Rob Roy. I generally carry two alcohol stoves of small size. Mr. Danforth, the fluid man, as I learned from his agent to-day, expects to perfect something this summer that he considers will fill the bill, be cheap, very portable, and lacking in disagreeable odor. I will announce results after I have tried it.

Now as to grub in general, besides what I have already mentioned, condensed milk is a good thing, but condensed coffee, condensed eggs and condensed beef are abominations. Flour should be of the self-raising kind, Indian meal is very nutritious and easily made up, as it requires nothing to lighten it; scald it before using when it is not fresh. Canned tomatoes, corn, fruits, beans, soups, salmon, etc., are easy to prepare, and vary the monotony of regular camp fare.

The Brunswick goods are excellent, and they make a prepared food called "Brunswick clam fritters," each tin containing material for a dozen fritters, with ingredients and seasoning complete, which can be prepared for eating in five minutes. I never had much success with Warren's "evaporated vegetables for soup," though household cooks use them considerably, I believe. All canned goods have printed directions on the cans. Dried beef, corned beef, lemons and sardines make good additions to the outfit. Potatoes, onions, and other vegetables, if possible, should be procured en route as needed.

The above outfit is only intended for a solitary cruiser like myself. Where there is a large camping party the utensils will have to be, of course, more numerous and of larger size, and an iron pot and Dutch oven should be added. Nothing should be left to stand in an iron pot after it is cooked, or it will become discolored and have an unpleasant taste. If knives become rusty, rub them with a fresh cut potatoe dipped in ashes. SENECA.

CLUB NOTES.—The Deseronto C. C., of Deseronto, Ontario, Can., was organized on March 17, 1884, with F. S. Rathbun, Captain; Geo. Clinton, Mate; E. C. French, Purser.——The Hartford C. C. have sent us a neatly printed copy of their constitution and by-laws.

LANSINGBURG CANOES.—The shop of Mr. C. W. Smith, the builder of these canoes, was burned down on Thursday last. Several boats, with all models, tools and stock being destroyed.

Answers to Correspondents.

H. T. O., Cleveland, O.—There is no such breed.

C. W. C., Essex, Mass.—We expect to publish the sketch shortly.

C. L., Leadville, Col.—Write to Mr. William Loeffler, Preston, Minn.

W. B. P., New York.—Your dog is not what is called a pure Llewellin.

M. M., Girard Manor, Pa.—Flushing signifies starting the bird, retrieving means fetching.

R. B. G., Leavenworth, Kan.—Perhaps if you would advertise your dogs you could find a customer.

WM. M. R., Jacksonville, Fla.—We cannot recommend any particular builder or model. Would advise a boat 14x30 with standing lugs instead of leg of mutton.

D. A. G., Newburyport, Mass.—The Gordon setter bitch Nell, imported by Mr. T. H. Scott, was said to be by Rupert (Shot—Rhona) and out of Rhona (Reuben—Nell).

D. H. S., Rushford.—The correction has been made. The dram by which powder is measured is an arbitrary measure, not a weight. You should measure the powder, not weigh it.

J. G., Metamora, Ind.—I want to get my gun rechoked. Is J. Dannenfelser, No. 9 Chambers street, reliable? Ans. Perfectly so, we believe. He will do it as cheaply for you as any one.

E. C. C., Munising, Mich.—Kindly send me the address of T. S. Van Dyke, one of your writers on "The Choice of Hunting Rifles"; would like to correspond with him. Ans. T. S. Van Dyke, San Diego, Cal.

J. A. O., Boston, Mass.—We know of no sure remedy to prevent your dog from running away. Perhaps if you can induce the friends that he visits to whip him home a few times it may have the desired result.

E. M. S., Dundee, Yates County, N. Y.—I have just finished reading the article on "Amateur Photography" in the last number of your paper, and being desirous of purchasing an outfit, wish to profit by the experience of others so as to obtain the best. Please inform me in regard to the choice of outfits; book of instruction, and such other information as I need. Ans. Would advise your getting a medium sized camera, say with a plate 5x8 inches. You can obtain them of E. & H. T. Anthony & Co., 591 Broadway, or of W. T. Gregg, 77 Fulton street. The outfit can be sent by express. We can furnish the book of instructions, "How to Make Photographs," paper, 50 cents; cloth, 75 cents.

O. B. A., New York.—In your list of open seasons you say "Vermont, bass, pickerel and pike, May 1 to Jan. 1. Does this apply also to brook trout? Ans. The trout season in Vermont opens May 1 and closes Sept. 1.

C. F. N., Syracuse, N. Y.—1. Blue belton is a term used to describe a color which has a ground work of white that is ticked with black. 2. The "Dogs of the British Islands," by Stonehenge, will give you information about the different breeds. We can furnish it, price $7.50.

BOB WHITE, Brooklyn, N. Y.—1. Some breeders feed puppies boiled milk, others give it in its natural state; we have invariably had good success with the latter method. 2. "The dogs of the British Islands." 3. Both are good. 4. Yes. 5. Yes. 6. "The American Angler's Book," by Thad. Norris, price $5 50, will serve both purposes. "Fishing in American Waters," by Genio C. Scott, price $3.50, is also good.

F. E. M., Jerome, A. T.—1. Will you be kind enough to tell me at what season of the year the speckled trout of New York and vicinity spawn? 2. Also the close season? 3. Are there any fish that spawn in the autumn? Ans. 1. From November to March. 2. Sept. 1 to April 1. 3 There is not a month in the year but finds some species of fish spawning. Most of the salmon family spawn in the autumn.

H. B., Holton, Kansas.—1. I had a 12-bore shotgun, J. P. Clabrogh & Bros., but sold it, and now want to buy a 10-bore, at what distance should a 10-bore kill a duck with 4½drs. powder and 1¼oz. shot? 2. Is the Parker as good a gun as there is made, is there any better for shooting qualities and strength? Ans. 1. You should be able to rely on it, if held straight, up to 45 or 50 yards. 2. Yes.

G. W. W., Serana, N. Y.—1. Please inform me where the gummed wads described by "Falcon," in FOREST AND STREAM of March 6, can be obtained. I should like to try some of them, but have never seen any in the market accessible to me. 2. Will you give me some idea of what a paddle should be (single blade)? I am using an open canoe made by Waters, of Troy, N. Y. It holds two persons comfortably, and is fitted with outriggers and oars. I want to make a paddle for all around work on Lake Cayuga. Ans. 1. The gummed wads described by "Falcon" are not yet on the market. When ready they will be advertised. 2. See "Canoeing" on another page.

A STRONG INDORSEMENT.—The following letter explains itself: Boston, March 14.—Massachusetts Arms Company, Chicopee Falls, Mass.: The Maynard rifle with its new barrels was duly received. I wish to thank you for the very prompt and careful manner in which you have filled my order. I purchased a Maynard rifle some years ago, but with a desire which, I presume, all lovers of the rifle experience, to possess the most accurate weapon. I purchased nearly every variety of rifles made in this country and some of English make. All I have ever owned I have shot at target, and most of them on game. I have endeavored to ascertain the true merits of each gun, and after experimenting a number of years I am now fully satisfied that the one that suits me best is the old reliable Maynard. In choosing a rifle I first look for accuracy, and I am certain that none surpass the Maynard. For convenience I have never seen its equal. I have carried mine in my trunk with barrels of different caliber on many business as well as pleasure trips. I am prepared for target or game shooting, and so high an opinion have I of this gun, that I have disposed of all of my other rifles, retaining only my Maynard.—A. C. GOULD.

—THE MILD POWER CURES.—

HUMPHREYS' HOMEOPATHIC SPECIFICS.

In use 30 years.—Each number the special prescription of an eminent physician.—The only Simple, Safe and Sure Medicines for the people

LIST PRINCIPAL NOS.	CURES.	PRICE.
1.	Fevers, Congestion, Inflamations,	.25
2.	Worms, Worm Fever, Worm Colic,	.25
3.	Crying Colic, or Teething of Infants	.25
4.	Diarrhea of Children or Adults	.25
5.	Dysentary, Griping, Bilious Colic,	.25
6.	Cholera Morbus, Vomiting,	.25
7.	Coughs, Cold, Bronchitis,	.25
8.	Neuralgia, Toothache, Faceache,	.25
9.	Headaches, Sick Headaches, Vertigo	.25
10.	Dyspepsia, Bilious Stomach,	.25
11.	Suppressed or Painful Periods,	.25
12.	Whites, too Profuse Periods,	.25
13.	Croup, Cough, Difficult Breathing,	.25
14.	Salt Rheum, Erysipelas, Eruptions,	.25
15.	Rheumatism, Rheumatic Pains,	.25
16.	Fever and Ague, Chill, Fever, Ague	.50
17.	Piles, Blind or Bleeding,	.50
19.	Catarrh, acute or chronic; Influenza	.50
20.	Whooping Cough, violent coughs,	.50
24.	General Debility, Physical Weakness	.50
27.	Kidney Disease,	.50
28.	Nervous Debility,	1.00
30.	Urinary Weakness, Wetting the bed	.50
32.	Disease of the Heart, Palpitation	1.00

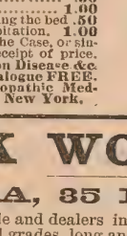
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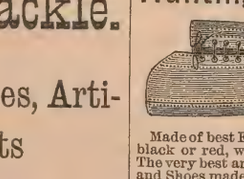
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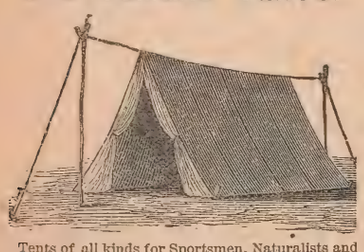
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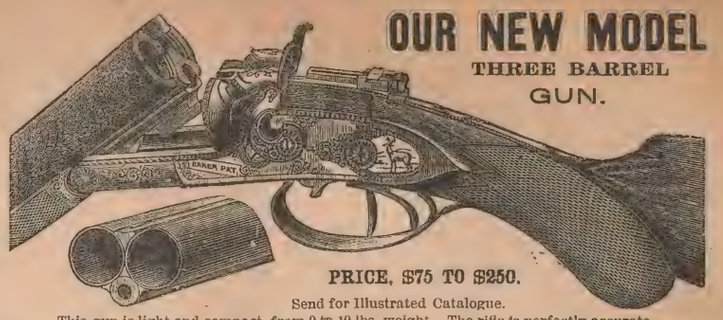
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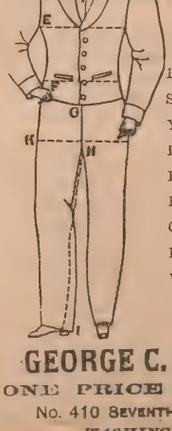
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VOL. XXII.—No. 11. NOS. 39 & 40 PARK ROW, NEW YORK.

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ANSWERS TO CORRESPONDENTS.

THE FUTURE OF THE PARK.

THE Yellowstone National Park seems now in a fair way to be properly administered. The Improvement Company has been from the first a terrible bugbear—the ogre which threatened, at one gulp, to swallow our National pleasure ground. But for the prompt and energetic action of Senator Vest, it might well have irretrievably damaged this beautiful spot. For the present this corporation appears to be fully occupied in striving to find a way out of its own difficulties. A flood of light has been thrown upon it and its doings, which has shown the people very clearly what the methods and intentions of its projectors were. Its hands are tied. Like the bad giants of our childhood's stories, it is at last defeated and crushed. From this danger, which was the most imminent of those that threatened, the Park has been saved.

The state of things now is not very unlike what existed a few years ago. There is a difference, however. At that time, probably not one man in a thousand knew that such a reservation as the National Park existed. Now very few are ignorant of this existence, and almost every one takes an interest, more or less active, in the preservation from destruction of this grand region, in which each citizen should feel that he has a personal ownership.

The Senate has passed a good bill for the proper protection and care of the National Park, and this bill is now in the hands of a committee of the House of Representatives. Senator Vest has appeared before this committee, and has fully explained the character and bearings of the proposed law, and it seems likely that it may be favorably reported.

But when? What prospect is there, in the war of factions which is ever raging in Washington, that a bill, in which there is neither money nor politics, a bill merely for the good of the whole country, will be pressed to a vote before the session closes? It would seem, to one unacquainted with the strangely dilatory methods of American legislation, that it might be an easy matter to carry so important a measure as Mr. Vest's bill, but we are not over-sanguine that this will be the case.

We earnestly hope that the measure will become a law. On many accounts it is of the highest importance that it should pass. Any delay in enlarging the boundaries of the Park will be most unfortunate. The longer this action is postponed, the more difficult it will be to bring it about. Lands taken up on the borders of the Park will be difficult to acquire, and will be held at fancy prices by those who have entered them for settlement.

But what was needed even more than a law on the subject, has been accomplished. The people have been aroused to the importance of preserving the Park, and they have spoken on this subject in tones that are unmistakable. They demand that this Park shall be cared for, and that they and their children's children may have the opportunity to see here for all time what our country was before it had been touched by the hand of civilization; what its fauna and flora were before ruthless butchery had exterminated the one, and importations of species from foreign localities had confused the other.

The number of those interested in the Park is constantly increasing. As more and more intelligent people visit the region there will be constant accessions to this number. We must remember that if the Park is to be guarded as we wish to have it, a constant effort must be made. Influence must be brought to bear on all our legislators; the importance of the Park and its proper care must be insisted upon; the subject must be talked up with neighbors and friends, and they must be interested; there must be no relaxing of our efforts. The matter is not one which interests the professed politician. He does not care for it. To him there is nothing "practical" in it. He even sneers at it as a matter of sentiment. Let him call it so if he will. There is need of a little sentiment in the American life of the day.

Whatever it is, let us continue to work for the accomplishment of the good end we have in view. A good beginning has been made, but it will not do to rest now. Each of us has a duty to perform. And on the faithful performance of that duty hangs the future of the Park.

The proposition to utilize this reservation, or a part of it, as a zoological garden is one which may come up a few years hence with better prospects than it can now have. At this time people are considerably exercised as to how the reservation is to be cared for, and they will have enough to do to see this work properly carried out. It will be a mistake to have the energies which ought to be wholly devoted to one matter, divided and spread out over several. If the efforts of all the friends of the Park are concentrated on its enlargement and proper care, we may hope that before long these efforts will be crowned with success. After we have accomplished this most important work, other minor matters can receive attention, but just now let us waste none of our energy on side shows.

A GUN LICENSE BILL.

ON Tuesday last, a bill introduced by Mr. Moore passed the New York Assembly. Its provisions forbid the shooting of quail or small birds on Staten Island by non residents except on payment of a license fee of $10. This license fee entitles the person paying it to shoot for one year. The bill appeared to meet the general approval of the house, and only sixteen votes were cast against it.

We cannot but regard this measure as an excellent one. By far the greater number of those who go to Staten Island to shoot are of a class very undesirable as visitors to any community. The objects of their pursuit are song birds, and to their thirst for the sparrow's gore they sometimes unite a ruffianly conduct that makes them extremely unpopular with the Staten Islanders. Too often they tear down fences, kill chickens, and alarm the families of the residents. These are the men who make the name of sportsman odious to the farmer, and they should be promptly dealt with.

There is another reason for limiting by every legal means the shooting on Staten Island. Within the last two years a considerable number of quail have been turned out there, and with reasonable protection may do well, but if they are exposed to the attacks of every Bowery gunner who spends his Sunday in tramping over the Island with hired gun and borrowed dog, they certainly cannot last long.

This gun license law has often been spoken of as something that must finally be adopted in America if the game is to be saved from extinction, and it has generally been thought that it would be very unpopular. It will not be long, however, before even the most thoughtless of sportsmen will have to ask himself, "What is to be done to save the game?" Clearly, there is no hope in the self-restraint of those who pursue it, and who are most interested in its preservation, although it might be imagined that this would be the first remedy thought of.

A PITIFUL STORY.

ONE of the saddest features of the collapse of that miserable fiasco, the National Park Improvement Company, is the manner in which this corporation has treated the mechanics in its employ. For eight months prior to March last these mechanics have not received one cent of pay, and their condition at the present time is truly deplorable. It is stated that they are absolutely in need of clothing, that they are without shoes, and this in a climate which is almost Arctic in its severity, the elevation of the Mammoth Hot Springs above the sea level being over six thousand feet, or about that of Mount Washington.

We have recently had an opportunity of perusing a letter written by one of the employes of this company, in which the sad condition of himself and his fellows is described, and the story told in it was very touching in its rugged simplicity.

In their desperation, the men have seized the hotel and intend to hold it, as in some sort a security for what is due them. We fear that this will scarcely help them much, though they may be able to give the Improvement Company so much trouble that they will pay them off to get rid of them. We do not know enough of Territorial law to recommend a course to these unfortunate men, but in older countries they could file a mechanic's lien on this ridiculous summer hotel, which would fully protect their rights. Cannot this be done in the present case?

We have a very sincere sympathy for these poor men. It would be hard to find a more striking illustration of the cant saying that corporations are soulless than is the present case.

IT IS BELIEVED that "Woodcraft" will be ready for delivery to an anxious public by the first of next week at latest. The sheets are now running through the press, and before the first reader of FOREST AND STREAM sees these lines a lot of them will be delivered to the binder. There have been some delays in certain parts of the manufacture of the book, which have kept the volume back a little, but in a very few days all the orders will be filled. The advance demand for the book has already been so large that we have been obliged to increase our order for the original edition one-half, and if the orders continue to come in at the same rate we shall have to double it. Every man who intends to spend a little time in the woods this summer or fall, will want a copy of "Woodcraft," and as the number who annually spend their vacations in camp is very large, we anticipate for the book a sale quite beyond that of any book of the kind which has ever been published. In our advertising columns will be found some information about the work.

THE NUMBER OF DOGS entered in the April number of the *American Kennel Register* is 105, making the whole number entered in the first thirteen issues of the monthly, 1,115. Certainly this is a remarkable showing, and the fact indicates far better than any long-winded argument could, just how much need there was of such a register. Something was required which should be reliable, prompt and up to the times, for it does a man little good to register his dog and not have the registry number published until after the animal is dead. The success of the *Register* is a matter for congratulation to all dog breeders.

THE ACCOUNT given in another column of a Norwalk man who killed at a single shot 27 or 28 broadbills, or 50 old squaws, will startle some of our readers. Before condemning the act let each man examine himself and discover whether he would have refused to take such a shot himself, had the opportunity offered. He that is without sin among us let him cast the first stone. At the same time, we cannot help thinking that if the shooter had used a hundred shots to kill his fifty birds he would have had a great deal more fun out of his shooting.

THE PRESSURE upon our space in all departments, but particularly, for the last few weeks, in our kennel columns, obliges us to hold over a great number of most interesting articles on various topics. We hope that our contributors will understand that their articles are only delayed through circumstances quite beyond our control.

THE PRESENT SEASON has been remarkable for the number and excellence of the dog shows which have taken place. Three only remain to be held, St. Louis, New York and Chicago, the latter some time late in May or early in June.

The Sportsman Tourist.

SPENCE PITCHER'S BEAR.

IT was away back in the days of flintlocks. At that time the northern border of Cattaraugus and Chautauqua counties was mostly a wilderness, with only here and there small openings, which were made in the heavy timbered forest by the early pioneer settlers. This section of country is somewhat rough and broken, although not very mountainous, and was at that early day as well, or perhaps better, stocked with game than any other portion of the State. Here were wolves, wildcats, foxes, raccoons, bears and deer; also marten, which were found in great numbers all through the southern part of the State, as well as in Pennsylvania, and were eagerly hunted and trapped for their skins, which were always a ready sale, and were among the most choice specimens of fine furs that were then being collected in the Northern and Middle States. Those beautiful little animals have become nearly extinct. Perhaps a few may yet be found in the northeastern part of New York or in Northern Michigan. There was one other species of game that deserves mention. This was the panther; but it soon fled beyond the pale of civilization. It was rarely seen and more rarely caught. In every new settlement there were plenty of imaginative individuals who were ever hearing panther screams, and who verily believed that panthers never traveled through the forest without making night hideous with terrific yells and screeching. If there had been no owls there would have been a less number of panthers heard from. I have tramped and camped in the woods more or less for more than fifty years, and I must confess that my ears were never greeted with a single yell or scream from a panther.

The first settlers of this region were men who had energy and perseverance, some of whom immigrated from Rhode Island, and others from the Mohawk Valley. There were but few skilled hunters among them, and their guns were of the coarsest kind—mostly of the old musket pattern. Deer were plenty, however, and they could generally obtain a supply of venison when other supplies failed. It was sometimes obtained by crust-hunting in the month of February or March, when any unprincipled wretch could succeed in killing deer.

I always noticed that the most indefatigable crust-hunters were those that never used a gun, but with knife and axe followed up the dogs until the deer was pulled down. I have been disgusted at the sight of the many fresh (and worthless) deer skins which I have seen hanging around some of the settlers' cabins in the months of February and March.

Bears were frequently caught in traps or log pens, and some were followed up with dogs and shot. I remember of one being caught in a somewhat singular manner, which I believe never had a precedent.

Spencer Pitcher was a noted hunter, who came with the first settlers, and was known far and near only by the name Spence. He was five feet eight inches high and weighed 170 pounds; his speed and endurance were remarkable, and perhaps he seldom, if ever, found his equal. Now the majority of the inhabitants worked most of the time and hunted occasionally, but Spence hunted most of the time and worked occasionally. He was hunting deer one rainy day about the first of November, when he discovered a bear, but his gun missed fire. Ordinarily his flintlock was sure-fire, but the rain had wet the charge, and by the time he found that his gun had become useless the bear had begun to make off. Now a bear when started will almost invariably run up hill; where he has a decided advantage over his pursuer if he has the chance; but as they were then on the summit of a hill, there was no other course open but down hill. So the bear started on a full run, and Spence was close a this heels. There was some three inches of snow, and the continued rain had made it slippery and slushy, and some fallen timber lay in the way, but the bear made good time and Spence kept well up in the rear. At every attempt which he made to crush in the bear's cranium with the muzzle end of his rifle, it would just seem to slip about half a length ahead, and every time he struck it lessened his own speed, so that he had to put in his best to catch up again.

They soon struck level land where the woods were clear of logs and brush. Here they both settled down into a dead run. The bear was rather lean and in good trim for running, and Spence for once had met his match, and so had the bear. The flat extended for a half mile, the course leading toward another hill, at the foot of which runs a small brook. Spence knew very well that when the bear reached the foot of the hill he would soon be left far in the rear, and what he was going to do toward capturing the bear he probably did not know himself, unless he could provoke the bear to turn upon him, in which case we would suppose that the chances would have been more than two to one against him. The small stream before mentioned had a bank five or six feet high on one side, while the opposite side was flat and covered with sand and gravel. Up to this bank they came at a 2:40 gait; the bear plunged down the bank into the water, while Spence, dropping his gun, leaped over the bear, landing on the gravel some ten feet beyond. Here he snatched up a round stone which happened to lie within his reach, and whirling around, threw it at the bear's head, which was not more than six feet distant. The stone struck the end of his nose, probably the most vulnerable part of the animal, when the bear suddenly turned around, dropped his head between his forelegs, and as quick as thought Spence grabbed him by the long wooly hair on each flank, which caused a sudden flank movement that brought them both into the middle of the stream, here about two feet deep. Bruin was caught at a disadvantage, he had a heavy incumbrance tugging at his hindquarters. He tried hard to turn on his captor, he tried to wring out and tried to kick out, but it was no go, Spence hung to him with the tenacity of a forty-pound steel trap.

His success depended wholly on his active muscular power, in keeping the bear's rear end well raised up, which brought his head under water. Then by a mighty effort he succeeded in forcing his head under the edge of the opposite bank, where he held on (as he said) until the bear kicked his last kick. He always asserted that if they had crossed the stream at any other place, that he would have been unable to have overleaped the bear, and if that round stone had not laid precisely where it did lay, he could not have stopped him.

Spence lived to hunt with pill-percussion priming, also until percussion caps were used, and died when about sixty years of age, long before breechloaders came into use.

The region before mentioned is now mostly covered with valuable farms, and wonderfully adapted to dairy and stock raising, and is occupied by the third and fourth generation, who know about as much concerning the first settlers as they do about the Esquimaux or New Zealanders. Now the thrifty farmer gathers his hay and grain into barns, which groan under the burden of plenty, and thinks not, nor knows not, of the privations, toils and hardships endured by the pioneers who first cleared the way and virtually laid the foundation to the present thrift and prosperity of the country. It is not a question with the farmer of to-day whether he will be able to eke out his scanty supplies until next potato harvest, but rather a question whether he will be able to clear as much clean cash from his farm produce as his next neighbor. ANTLER.

GRANDVIEW, Tenn., March 4, 1884.

DEAR SHOOTING.

SEVERAL years ago there lived in Illinois two families by the names of Crickley and Drake. There had always been a fierce rivalry between the two families, both in field and farm pursuits, which rivalry was further intensified when one afternoon Colonel Crickley, having followed a wounded buck for several hours, at last came up with him, and found old Drake and his sons cutting him up. This incident added fuel to the fire, and from that time there was nothing the two families did not do to annoy each other. They shot each other's ducks in the river, purposely mistaking them for wild ones, and then by way of retaliation, commenced killing off each other's pigs and calves.

One evening Mr. Drake, the elder, was returning home with his "pocket full of rocks" from Chicago, whither he had been to dispose of a load of grain. Sam Marston was with him on the wagon, and as they approached the grove which intervened between them and Colonel Crickley's house, he observed to his companion:

"What a beautiful mark Colonel Crickley's old Roan is, over yonder!"

"Hang it!" muttered old Drake, "so it is."

The horse was standing under some trees about twelve rods from the road. Involuntarily Drake stopped his team. He glanced furtively around, then with a queer smile the old hunter took up his rifle from the bottom of his wagon, and raising it to his shoulder, drew a sight on the Colonel's horse.

"Beautiful!" muttered Drake, lowering his rifle with the air of a man resisting a powerful temptation; "I could drop old Roan so easy."

"Shoot!" suggested Sam Marston, who loved fun in any shape.

"No, no; 'twouldn't do," said the old hunter, glancing cautiously around him.

"I won't tell," said Sam.

"Wal, I won't shoot this time, anyway, tell or no tell. The horse is too nigh. If he was fifty rods off, instead of twelve, so there'd be a bare possibility of mistaking him for a deer, I'd let fly. As it is, I'd give the Colonel five dollars for a shot."

At that moment the Colonel himself stepped from behind a big oak, not half a dozen paces distant, and stood before Mr. Drake.

"Well, why don't you shoot?"

The old man stammered in some confusion, "That you, Colonel? I—I was tempted to, I declare! And, as I said, I'll give you a 'V' for one pull."

"Say an 'X' and it's a bargain."

Drake felt of his rifle, and looked at old Roan.

"How much is the horse wuth?" he muttered in Sam's ear.

"About fifty."

"Gad, Colonel, I'll do it. Here's your 'X.'"

The Colonel pocketed the money, muttering, "Hanged if I thought you'd take me up."

With high glee the old hunter put a fresh cap on his rifle, stood up in his wagon, and drew a close sight on old Roan. Sam Marston chuckled. The Colonel put his hand before his face and chuckled, too.

Crack went the rifle. The hunter tore out a horrid oath, which I will not repeat. Sam was astonished. The Colonel laughed. Old Roan never stirred.

Drake stared at his rifle with a face as black as Othello's.

"What's the matter with you, hey? Fus' time you ever served me quite such a trick, I swan."

And Drake loaded the piece with great wrath and indignation.

"People say you've lost your knack o' shooting," observed the Colonel, in a tone of cutting satire.

"Who said so? It's a lie!" thundered Drake. "I can shoot—"

"A horse at ten rods, ha, ha!"

Drake was livid.

"Look here, Colonel, I can't stand that," he began.

"Never mind, the horse can," sneered the Colonel; "I'll risk you."

Grinding his teeth, Drake produced another ten-dollar bill.

"Here," he growled, "I am bound to have another shot, anyway."

"Crack away," cried the Colonel, pocketing the note.

Drake did crack away—with deadly aim, too—but the horse did not mind the bullet in the least. To the rage and unutterable astonishment of the hunter, old Roan looked him right in the face, as if he rather liked the fun.

"Drake," cried Sam, "you're drunk! A horse at a dozen rods, oh, my eye!"

"Just you shut your mouth or I'll shoot you," thundered the excited Drake. "The bullet was hollow, I'll swear. The man lies who says I can't shoot! Last week I cut off a goose's head at fifty rods, and kin dew it agin. By the Lord Harry, Colonel, you can laugh, but I'll bet now, thirty dollars, I can bring down old Roan at one shot."

The wager was readily accepted. The stakes were placed in Sam's hands. Elated with the idea of winning back his two tens, and making an "X" into the bargain, Drake carefully selected a perfect ball, and even buckskin patch, and beaded his rifle. It was now nearly dark, but the old hunter boasted of being able to shoot a bat on the wing by starlight, and without hesitation drew a clear sight on old Roan's head.

A minute later, Drake was driving through the grove, the most enraged, the most desperate of men. His rifle, innocent victim of his ire, lay with broken stock on the bottom of his wagon. Sam Marston was too frightened to laugh. Meanwhile, the gratified Colonel was rolling on the ground convulsed with mirth, and old Roan was standing undisturbed under the trees.

When Drake reached home, his two sons discovering his ill humor, and the mutilated condition of the rifle stock, hastened to arouse his spirits with a piece of news, which they were sure would make him dance for joy.

"Clear away," growled the angry old man. "I don't want to hear any news; get away, or I shall knock one of you down."

"But, father, it's such a trick."

"Blast you and your tricks."

"Played off on the Colonel."

"On the Colonel?" cried the old man, beginning to be interested. "Gad, if you've played the Colonel a trick, les' hear it."

"Well, father, Jed and I, this afternoon, went out for deer—"

"Hang the deer, come to the trick."

"Couldn't find any deer, but thought we must shoot something; so Jed banged away at the Colonel's Roan, shot him dead!"

"Shot old Roan!" thundered the hunter. "By the Lord Harry, Jed, did you shoot the Colonel's horse?"

"I didn't do anything else."

"Devil, devil!" groaned the hunter.

"And then," pursued Jed, confident the joke part of the story would please his father, "Jim and I propped the horse up, and tied his head back with a cord, and left him standing under the trees exactly as if he was alive. Ha! ha! Fancy the Colonel going to catch him. Ho! ho! ho! wasn't it a joke?"

Old Drake's head fell upon his breast. He felt of his empty pocket-book, and looked at his broken rifle. Then in a rueful tone, he whispered to the boys:

"It is a joke, but if you ever tell of it, or if you do, Sam Marston, I'll skin you alive. By Lord Harry, boys, I've been shooting at that dead horse half an hour at ten dollars a shot."

At that moment Sam fell into a gutter. Jed dragged him out insensible. Sam had laughed himself almost to death. H. H.

THE FROG CATCHER.

LITTLE Jean Beghin was born in Belgium and learned the business of catching frogs in the Netherland marshes, but having an ambition above the capture of batrachians had enlisted in the Belgian army. But the light pay and lighter rations of the Leopolds tempted little Jean to desert and tender his services to Napoleon III., not as a purveyor of *grenouilles* for the imperial table, but to become an imitator of Cortez in the conquest of Mexico. But the conquest of Mexico has wrecked the hopes of many a Johnny Crapeau, and our little Jean deserted from the French army in Mexico and sought the liberty of the Stars and Stripes. Such are the vicissitudes of military life. Nothing succeeds but success. Now, and for the last four years, we find little Jean at Arivaca, Pima county, in the southwestern part of Arizona, catching frogs.

The valley is about six miles long by three miles wide, and the *cienega* contains enough frogs to feed the French nation. Little Jean wears India rubber boots, and has made nets, held open by old barrel hoops, which he spreads for the lively frogs to jump into for some vegetables and the sight of red flannel, when up goes the sweep, and little Jean is rewarded with six or ten dozen frogs per net. He then empties the net into a bag, and the bag into barrels, where there is some water and vegetable matter; but the barrel is so high that the frogs cannot jump out. The frog is a great jumper, and Jean has some trained frogs here which can jump from seven to ten feet. He will wager money against any jumping frogs this side of Calaveras county, California.

Jean thinks the frogs breed twice or more a year from eggs deposited in the sac of the female, and estimates the number of each spawn at from fifty to a hundred. As frogs have an amazing longevity there is no danger of the supply being reduced, and the increasing taste for frog suppers is bringing this batrachian into large demand. I can remember when frogs were scarcely considered proper food in America, when the country was overflowing with an abundance of meat quite as delicate as chicken. The French and Chinese have far outstripped us in searching out the bounties of nature for human food.

But to return to the frog catcher who, instead of wearing the decoration of the *legion d'honneur* and a home in *les Invalides* must earn his living by chasing the lively frog, and very poor pay he gets for it, too. Only 50 cents a dozen on the place and 60 cents per dozen in Tucson, sixty miles distant. Jean's frogs go about four or five to the pound, and are esteemed the best in Arizona, as the desert is not famous for producing frogs.

I have endeavored to stimulate Jean's ambition by advising him to go into the canning business, by canning live frogs in the summer time for a winter market, in fact, have told him that frogs would live a thousand years in a hermetically sealed can, and then come out jumping. That may be a lie, but I did not originate the story.

By looking at the "Resources of California," by Hittel, page 386, I find the consumption of frogs in San Francisco amounts to 4,000 dozen at $3 per dozen, with a rapidly increasing demand. If our people would learn to utilize the bounties of nature, there would be no hungry people in America.

I have been on this place twenty-five years ago "out of meat," and Apaches so bad around that we could not go for game; without sense enough to catch the abundant supply of frogs and feast like Lucullus. I prefer them *à la Bordelaise* with red wine.

I forgot to mention that Jean has a team of frogs bridled and harnessed, and when he hitches them up for a drive the bucking beats any bronco team I ever saw crossing the plains.

The temperature here to-day is 70°. Scenery unsurpassed in Italy, Switzerland, or even the fancied valley of Rasselas—not a flake of snow for several years. Plenty of arable land; more grass than millions of cattle can eat, and mines everywhere yielding paying ore; but it is a long ways from New York. CHARLES D. POSTON.

ARIVACA, Arizona, March 1, 1884.

A TAME QUAIL.—I have a quail (*Ortyx virginianus*), male. It was caught Dec. 20, 1882. I keep it in a cage three feet long by two feet wide. He is as tame and contented as he can be. The remarkable point about this quail is that, after moulting, his whole throat and subscilary line came out coal black, and his entire plumage is darker. To all appearance he is strong and healthy. Do they change their plumage this way in captivity? I feed him on wheat shorts, with a little canary seed, and keep tufts of grass in the cage, and wet it down every day. This keeps it green, and he is very fond of green grass. I wish I could get a female, I would try and breed them.—G. W. L. (Gildersleeve, Conn., March 31),

Natural History.

BIRD NOTES.

A SOLITARY robin, the only one noticed this season, appeared here on the 19th instant, and, after hopping about in a subdued kind of way for a few hours, suddenly rose up and disappeared, going south, and has not been seen since. Query—Did that Robin forecast the fearful snow-storm which commenced to rage here on the day following its departure southward? The weather for two weeks preceding the 20th inst. was warm and pleasant. Ducks and geese appeared during this time in moderate numbers and proceeded to occupy the open water places in the lakes and streams, but the snowstorm referred to, which continued for two days and nights, sent them whirling back toward the South. No jack snipe yet. ANDY PAINTER.

FORT RUSSELL, Cheyenne, Wy., March 26, 1884.

The cold winter North sent to Florida great numbers of woodcock, to the joy of the shooters. Quail have been quite numerous, and the gardeners now complain that they take more strawberries than the robins North. The Everglade kite, *Rostrhamus sociabilis plumbeus*, Ridg., has been making us a visit near Jacksonville this winter. Three are now in the taxidermist's hands, taken near here.

GEO. A. BOARDMAN.

JACKSONVILLE, Fla., March 30.

We are once more gladdened by the songs of the robins and bluebirds. They have been with us for nearly two weeks. Crows and redwinged blackbirds are also here. Several flocks of wild geese have passed here, going north. Ruffed grouse have wintered well here, and the prospect for next fall's shooting is very good. A. I. J.

CARLETON, Vt., March 30.

Spring has fairly opened with us here. Many of the migratory birds are now on the wing. During the past week or two large flocks of white-bellied swallows (*Tachycineta bicolor*) and purple martins (*Progne subis*) have arrived. The purple martins breed here in holes in the tops of decayed trees. The woodpeckers seem to be out in full force, and the cry of our northern species (*Colaptes auratus*) is often heard. Redwing blackbirds (*Agelæus phœniceus*), meadow larks (*Sturnella magna*) and bluebirds (*Sialia sialis*) are becoming more plenty every day. I have not seen a robin for several weeks. The weather is very delightful here now. All the wild flowers are in bloom, and the birds' tuneful voices are heard from morn to night. J. C. C.

CHARLOTTE HARBOR, Fla., March 27.

Mr. Peter Johnson, who lives about nine miles from here, yesterday morning shot a golden eagle (*Aquila chrysaetus*), length, 3ft. 1in., extent, 7ft. 1in. Like the one "J. S. P.," of Lockport, reports, this one had its legs and feet full of porcupine quills. It was very poor, having a hard winter of it undoubtedly. The Grand Army of the Republic will have me mount it for their hall. The first appearance of the birds was on March 24, when robins, bluebirds, chipping sparrows and blackbirds put in an appearance. C. F. C.

WAUPACA, Wis., March 26.

I have noticed a habit in the woodcock for several years past that I have never seen reported in your paper. They begin to lay as soon as the snow is off in March, and while the female is sitting, the male, just at dusk, will begin to rise with a chippering noise and continuing to rise in spiral circles out of sight, then it will descend in a straight down plunge, with a short, sharp whistle, and after alighting on the ground it makes a noise very much like the common night hawk. Have other observers noticed it? Saw white-breasted swallow March 21, robins and blackbirds March 10; bluebirds have been with us all winter. There are thousands of water fowl in Narragansett Bay, and off Point Judith the gunners are killing great numbers of them.

WATER FOWL.

SOUTH KINGSTON, R. I., April 2.

["Water Fowl" is notified that this habit of the woodcock has been known for many years, and commented on by all writers on the species.]

"What kind of a bird is that?" said —— this morning, pointing at the same time toward a brown-colored bird then clinging to the side of a small tree.

"That is a scansorial bird of the genus *Picus*," answered the man with spectacles.

"O, yes, so it is, I see now; but really, I thought at first it was a woodpecker." The subscriber moved on.

Chickadees, woodpeckers and killdeers are here, the two latter varieties just arrived, and first noticed about 8 o'clock A. M. A warm wind from the south, well laden with moisture, has prevailed for the past twenty-four hours until about an hour since, when it commenced snowing, the wind changing to the north. The snow is now two inches deep and still falling. ANDY PAINTER.

FORT RUSSELL, Wyoming, March 31.

The woodcock were just a week later in appearing near my home in New Jersey this year. Last year I heard and saw the first ones March 14. On the 23d, our old friends the phœbe birds, were examining their former nesting place over the dining-room window, under the piazza.

GEO. SHEPARD PAGE.

STANLEY, Morris County, N. J., April 2.

March 1, saw a flock of black snow buntings; 3d, first chipping sparrow; 4th, shore larks and snowbirds abundant; 6th, first bluebirds; 7th, saw a song sparrow; 8th, this morning I observed snowbirds and shore larks flying north, and at night they were flying south in large flocks. I observed this for four days; 12th and 13th, song sparrows and bluebirds plenty; 15th, saw first robin; 19th, saw a fine cock grouse or partridge budding in an apple tree, I watched him for several moments and he did not seem in the least afraid; 20th, saw first chipmunk or ground squirrel. It was a gala day for the birds on the 20th, cedar birds, bluejays, bluebirds, robins, song sparrows, purple grackles and cow buntings were abundant everywhere. 21st, saw a meadow lark near Syracuse, N. Y., and have heard of their being quite plenty on the meadows by the Onondaga Creek; 22d, hawks of two species have put in an appearance to-day, the black hawk and the redtail hawk; 23, a phœbe bird took a seat in a hickory tree, where she rocked back and forth with great gravity and had considerable to say about "phœbe, poor phœbe;" 27th, I saw a pair of killdeer plover on a wheat field, and also saw a spotted sandpiper, flying over; 29th, saw two white-bellied swallows to-day. Severe cold weather up to April 1. G. A. K.

ONONDAGA HILL, N. Y.

SOME FLORIDA PETS.

I WAS much interested with "How do They Live," in FOREST AND STREAM of Feb. 7. My heart goes out to the writer, and I warm toward him, or any man who dares express his kindly feeling for our little friends of the woods.

Down here in Florida we have lots of outdoor pets, and although there is no severe cold weather here, yet it is cool enough in a norther to make them seek for shelter. We have three little fellows in particular, who often come to the house for shelter and protection, they are about the size of a wren and of dusky brown color.

The first we noticed them was one day when it was blowing furiously, and there was a driving rain. They came under the veranda, taking refuge under an old rubber blanket, which hung over a chair. There they remained all night, and in the morning, after a hearty breakfast of crumbs, they merrily flew away.

The next cold rain they came again, and failing to find any shelter on the veranda, they came to the window. This being opened they entered without any hesitation and remained all night as before. They have now become so tame, they will come at our call, and will hop about within three feet of us to get the crumbs we throw them.

Not long since, while eating breakfast, a fluttering was heard, and in at the open door came one of our little friends, closely followed by a small hawk. The hawk finding his prey was beyond his reach for the present, retreated in good order to a tree near by, where he sat with great gravity until a charge of shot knocked him over. I set him up and he now sits perched on my inkstand watching me write.

We have two more pets which were very cunning for a while, but they are becoming entirely too familiar. On one side of the house and quite near it stands a large live oak. Last fall when the acorns were full-grown, we noticed two crows coming every day for acorns. When they found they were not molested they became perfectly fearless, and would pick and shell the acorns while we sat on the veranda watching them, occasionally throwing them bits of bread, meat, etc., until now they will come on the veranda, stalk about with great dignity, come into the house, and if no strangers are here, will go on the table, helping themselves to whatever they can get. A crow will steal anything he can carry, whether it be food or not. As I said before, they are becoming too familiar. I don't like to kill them, for I have coaxed them to be friends, but something must be done, as they will turn us out of house and home.

We have mocking birds here which will hardly get out of our way they are so tame. Two black squirrels live in a tree near the house, and are so fearless that they are perfectly at ease within ten feet of us, and will sit and munch a nut with all the coolness imaginable.

This is a new place and very little shooting is done here. I expect, when the place gets well settled, the birds will be more shy. I dread the day when it will be so, for I like to feel that friendship and confidence is the rule rather than the exception. And I want to say to "Nessmuk," that although I have never seen him and don't even know his name, I like him. I should like to meet him in the woods or on some lake. I couldn't believe it was "Nessmuk" if I met him in town or city. We may meet some time and swap hints on cruising. *Quien sabe.* Brave "Nessmuk;" may you and the Sairy find blue water, pleasant skies and easy carries.

I am getting ready for a cruise to the southward. Mean to spend four weeks in Charlotte Harbor and then go to Thousand Islands, perhaps further. Will write you what we see, find, feel and think about; until then, good-bye.

TARPON SPRINGS, Fla. TARPON.

PROTECTING SONG BIRDS.

I AGREE with Mr. Tingley and "F. G. S." in your issues of March 13 and 20, especially "F. G. S." in his last remarks about how few naturalists and taxidermists are to be found in the various towns and cities. The city in which I live at the North is quite a large one, and I know of but two professional taxidermists in the city, and one of these two does not work at his occupation. These taxidermists collect birds when migrating, but do not, I am sure, collect such birds as breed around our homes in summer. I do know of boys and men that shoot robins and our other song birds in the summer just for the mere fun of having some bird to kill. These are the ones that ought to be stopped. There are several young ornithologists in my city, and although their collections are not large or mounted in first-class manner, they show an appreciation and interest in their work. There is one more thing I should like to inquire into. In your issue of March 20, in an artitle entitled "Protecting Song Birds," your correspondent, "X.," gives the reply of a member of the Legislature to a taxidermist, which is as follows: "Well, perhaps you are right; but would you expect a traveler sent out to a far country to study the habits of the people to take a shotgun with him and kill and stuff the skins of all the people he could find? He would come back with a full knowlege of the habits and customs of the people, wouldn't he?"

Now if a traveler was sent out to a far country to study the habits of the people, would he not be among them nearly all of the time, and if he should at any moment want to find out anything about them, could he not do so at once? Can we do this with the birds? Are there not many species that are seen only when migrating, and then only for a brief time? Only men that have plenty of money can follow them thousands of miles from their breeding place to their winter home. Are there not many species which, if they could be caught, would not live in a cage but a very short time? How, then, can these birds be studied without making up their skins? Did not Audubon collect and make up many bird skins? J. C. CAHOON.

CHARLOTTE HARBOR, Fla., March 27.

Editor Forest and Stream:

I have been much interested in several communications and in other articles, which have appeared in the columns of the FOREST AND STREAM referring to the needless destruction of our singing and forest birds. I would like to call attention to something which seems to me to be outrageous and an enterprise deserving the most unqualified condemnation. I refer to the infamous, wholesale traffic in bird eggs, carried on by certain persons in this and other States. I have in my possession samples of circulars which are doubtless scattered broadcast over the land and come into the hands of hundreds of boys, thus stimulating them to engage in the work of destroying our birds in the most effective manner. For it is unnecessary to add that more birds can be destroyed at the breeding season with less labor, than at any other time. A nest is seldom robbed, but its entire contents are taken or injured and in many cases, to conclude the outrage, the parent birds are shot. And for what, pray! In a very great majority of cases, as is well known, merely to satisfy the passing fancy of an idle boy, or at most, an irresponsible and unscientific collector of curiosities. And I do not blame the boys, either, a fraction as much as those who encourage them in such a pursuit, instead of endeavoring to teach that birds should be guarded and protected by everybody. Listen to this from one of the circulars referred to above:

"In order to reduce an immense stock of birds' eggs, the following low prices will hold good until April 15, 1884. * * * We make a specialty of oological specimens. Over 10,000 eggs in stock. Lists for stamp. Collectors having * * * eggs for sale or exchange at low rates, in large or small quantities, will please send their lists and prices."

Then follows a long list of birds and the prices of their respective eggs. They are all there, and apparently can be supplied by the wholesale. Here are some:

Robin	$0 02	Baltimore oriole	$0 05
Bluebird	03	Meadow lark	06
Song sparrow	02	Pewee	08
Rose-breasted grosbeak	20	Etc., etc.	

Now, Mr. Editor, this seems to me a nefarious business. The idea of traflicking, buying and selling, and getting gain out of the eggs of our little feathered friends, who never do us aught but good, and deserve the most jealous protection!

Is it not contrary to law? Cannot it be suppressed?

I do not intend to say aught against the collection of birds and eggs for scientific purposes by duly authorized and responsible persons. That is a very different matter from engaging in bird-nesting as a business, and thus, doubtless, employing directly and indirectly hundreds of skilled laborers, as well as many an amateur and bungling hand, in this atrocious business, H. W. C.

RYE, N. Y.

SHRIKES CATCH MICE WHEN THROWN IN THE AIR.—A few days since I was told by an intelligent young farmer, who is attending the Union school in this city, that while drawing in cornstalks in November he noticed some birds following the wagon, catching the mice that were disturbed when the stooks were removed. So, picking up a mouse, he threw it in the air and the birds would catch it before it reached the ground, when it would fly to the fence, and, after killing the mouse, would return for more, and did so a number of times. The young man did not know the name of the bird, but stated that they breed on the farm every season, and a few remain through the winter. I told him that the bird was the shrike, or "butcher bird," but did not know the same bird that breeds here remained through the winter, although we often have shrikes here all winter. I supposed they were the great northern (*Collurio borealis*), and that the loggerhead (*C. ludoviciana*) were the only ones that breed here. I have found the nest containing eggs on the 24th of April. Recently the young man was looking at my son's collection of birds, and I asked him if he saw any like the birds that caught the mice. He said he had not. I afterward took him to a case containing a number of birds, and among them two shrikes, and as soon as he saw them, he said "those were the birds." Two weeks ago I saw a field mouse impaled on a small pear tree, and concluded it must have been the work of a shrike. The next day it was gone. Is it probable that the loggerhead (*C. ludoviciana*) remains here during the winter?—J. L. D. (Lockport, N. Y.).

AN OLD FABLE.—While riding from the village to our house, I showed to my companion, Mr. B. L. Hall, several fox-colored sparrows, and observed to him that I only saw them during their spring and fall migrations. This led to some remarks about birds, and he astonished me by saying, "I don't suppose you would believe that swallows go into the mud and have been dug out from it." This was not the first time I had heard of such a belief, but it was the first time I ever heard a reliable man say he believed it, and knew a man who had dug them from out the mud. Unfortunately this man, Mr. Benjamin Washburn, is dead. Still the writer remembers him well, and so far as he knows, his reputation for truthfulness was good. It was useless for me to combat this story of Mr. H.'s who declared he was sure that it was as he said, and that others—whose names I have not learned—knew of the finding of swallows in the mud. How so strong a belief could be impressed on a person's mind I cannot imagine. Can any readers of FOREST AND STREAM substantiate this belief? Your correspondent tried to refute it by showing its impossibility, but it was of no use.—MERGUS (East Wareham, Mass., April 4). [This is a belief which is very ancient. See Coues's "Birds of the Colorado Valley."]

COACHWHIP AND RATTLER.—Saw the last robin (flying northward) on the 25th of last month. We have had a great many with us the past winter. A large coachwhip snake over six feet long was seen in a fierce combat with a young rattlesnake to-day. The rattlesnake was probably about two years old, and was eighteen inches long. The coachwhip nearly killed his adversary, when a charge of shot put an end to both. The coachwhip snake is a great chicken eater. We never heard before, nor have we been able to find any one who has, of this snake being an enemy of the rattlesnake. It is well known that the black snake kills every rattlesnake he meets, and that where the former is common the latter are rarely seen. I also killed to-day, and preserved the skin of a very large gopher snake seven feet and one inch in length, and nine inches in circumference in the largest part. I don't want the readers of FOREST AND STREAM to infer by the above that snakes are abundant here, for they are not. This rattlesnake was the second one I have seen in two years, and I believe I am in the woods as much as any one in this section of the country, being engaged in surveying frequently, as well as hunting.—RED WING (Glencoe, Fla., April 1).

SEALS IN THE HUDON OFF SING SING.—During the middle and latter part of March, seals (*Phoca vitulina*) were quite common in the Hudson off this place. They were seen on the cakes of ice that floated back and forth with the tide; few days passing but that some of the duckers saw one or two. I received a carcass of a male that was shot by Messrs. George and Benj. Smith, on March 18, near the channel; the same day one was killed by another ducker. A few days after, when the ice was soft, it was reported that one attempted to climb up in the bow of a duck boat, not seeing the man behind the screen.—A. K. FISHER, M. D. (Sing Sing, N. Y.).

SOMETHING ABOUT THE OPOSSUM.—I have closely watched the habits of opossums and have discovered some interesting traits concerning them. On one occasion a large male opossum was captured in a trap set for rabbits. On lifting the lid the animal was found to be curled up and apparently asleep. When disturbed it slowly raised its head, opened its mouth, and in this position awaited coming events, although it did not offer to bite. In about five minutes it closed its mouth, slowly restored its head to a more comfortable position, and closed one eye as if a single optic was enough to note what was transpiring. On being roughly handled it opened its mouth widely and made a low hissing sound, but did not uncoil its body. Although the animal undoubtedly realized that it was a prisoner, it seemingly had no fear of death, as it made no effort to escape, although entirely uninjured. After waiting an hour and seeing no signs of feigning death, I left the door of the box-trap open, and walked off some distance where I could see the trap and be unnoticed by the animal. In about five minutes the 'possum yawned, stretched its limbs, and then standing up took a survey of the surroundings and walked away. I ran toward it, when it quickened its pace, but I overtook it and seized it by the tail, when it crouched down, partially coiled its body and extended its jaws. When I threatened to violently strike it (without doing so, however), its head slowly sank down, its eyes closed, its breathing was affected, and the condition of the body indicated a temporary paralyzation through fear producing temporary unconsciousness. I have made scores of experiments of reviving opossums when apparently dead by a sprinkle of cold water, and it always restored them to consciousness, having the same effect as on a human being in a fainting fit. The opossum is lazy and timid, and not as intelligent as the otter, raccoon, muskrat or marmot, and in my opinion its habit of feigning death is more attributable to fear than cunning.—*Naturalist, in Germantown Telegraph.*

Game Bag and Gun.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

In the remarks of correspondents on the "Performance of Shotguns," I find nothing as yet to settle the question as to what is the proper bore for shotguns, as each man has his particular size. I have used shotguns for the past twenty years, including muzzleloaders from 10 to 20-bore, and breechloaders from 10 to 16-bore, and my choice, first, last and all the time, is a 10-bore breechloader. Using "Westley's" argument regarding wads, if a 12 is better than a 10-bore, why is not a 14, 16 or 20-bore better than a 12. "Algonquin" says a 12-bore need not weigh over 7¼ pounds, and a 10-bore should weigh 9 or 10½ pounds. I see no necessity for a 10-bore to weigh over 8¾ pounds. He also says, if you tie the 10-bore down to 3 drams of powder and 1⅛ ounces shot, it will be simply nowhere. Now, if he will tie the 12-bore down to the proper charge for a 20-bore, the 12-bore will be in about the same place as the 10. My opinion is that guns of the same dimensions do not always require the same charge to get the best results. The proper charge can only be determined by experimenting with that particular gun.

I would say to "Westley" that the number of wads used over the powder depends much on the length of the shell and the chamber of the gun. If the shell fills the chamber, one wad that will not blow to pieces will answer, but in my experience I find that the best wads will sometimes do this, and therefore I use two. If the chamber is longer than the shell, enough wadding should be used so that the forward end of the wad will enter the proper bore of the barrel before the back part leaves the shell, or there will be an escape of gas past the wad into the shot, which will be detrimental to the performance of the gun. As for target, my idea is to have a gun make an even pattern with good penetration, even if it does not put as many shot in the specified circle.

S. S. W.

OSBORN HOLLOW, N. Y., March 29, 1884.

Editor Forest and Stream:

As so many of your readers are giving their views as to the proper size gun and right charge for different size game, I thought an experience of 25 years might help to solve the problem. For quail I use a 12-bore hammerless, cylinder bore, length of barrels 24 inches, charge 2¼ drams of fine grain powder, and ¾ of an ounce of No. 8 shot. Sportsmen will agree with me that 8 shots out of 10 are made in cover, when snap shooting is necessary. With a close shooting gun in such places the result is either a miss or the bird is torn into fragments. At 20 to 25 yards with my gun I can count on better results than with a close-shooting gun. The above is strictly a quail gun.

I use a 30-inch round barrel, cylinder and left barrel full choke, 14-bore, 6-pound gun for snipe and dove shooting. We bait about one to two acres of ground with wheat in March when the doves assemble in large flocks, and after a few days a party of five or six take stands around the field and shoot them, as many as 500 per day. For snipe and dove you want a closer shooting gun than 24-inch barrels, charge same as No. 12-24, with this difference—use for snipe No. 10 shot, and for doves No. 7. For larger game it has been a question with me whether a 12-bore, 32-inch, 9½-pound, cylinder bore gun will not kill as far as a No. 10, 10-pound, 32-inch gun.

The only advantage I find in large bore guns is, it gives a larger killing circle. It will not kill further. For such a gun, .12-32-9½, I would use 4 drams of coarse powder and 1¼ ounces of lead. The object in using fine grain powder in short barrels is that it burns faster and you get greater initial velocity. In longer barrels coarser powder has time to burn and has more staying power. The above sizes and charges I find sufficient to kill clean (not wound) and that is all a sportsman wants; besides, economy is not to be despised.

The above is for those who can afford to keep an arm suitable for every kind of game; but to those who must make one gun do the work of three I think there is no better gun than the 12-bore, 30-inch barrels, 8¼ pounds, right bored cylinder, left full choked. The charge for such a gun will vary as the size of game demands. The extreme loading of such a gun would be with me: For deer, bear and ducks, 3¼ drams powder, 1⅛ ounces lead; for bird shooting, 2¾ drams powder, ¾ ounce lead. The above is based on twenty-five years' practice in field, extending over fifteen years of carefully conducted experiments at target to get best results as to distribution and penetration, striving to get the best and most economical charge that would do clean work, and without a foolish waste of ammunition. I have never yet seen a chokebore gun that would shoot the larger sizes (6s to buck) shot well. In my opinion cylinder bore guns will shoot from 6s up to buck better than chokes. SPORTSMAN.

COLUMBUS, Ga., March 22.

Editor Forest and Stream:

In reply to "Tinker's" inquiry in regard to sight on rear of three-barrel gun, I would advise him to get a Lyman sight fitted to it. It will have to be short on account of drop of stock. The shot barrels of my Baker gun put 90 per cent. actual count of No. 4 shot, chilled, in a 24-inch circle at 30 yards. Out of 164 shot in the load, 1⅛ ounces, it put in the circle 149, and besides this it put 30 of them through one inch of pitch pine lumber. It will average about 145 with coarse powder. This gun is 10, 30-inch, 9¼ pounds. If those tube shells will do 50 per cent. better work than common ones, as one of your correspondents says, why don't some one make them? I find by loading one-half coarse and one-half fine ducking powder I can get good pattern with increased penetration, putting the coarse powder in first. M.

HASTINGS, Ia., March 31.

Editor Forest and Stream:

Some time since an idea struck me that by a peculiar way of putting in the shot a strange result might be expected. I tried it and thereby succeeded in putting No. 6 through an inch pine board at forty yards. This was the *modus operandi:* I used the usual powder charge, then one pink-edged wad pressed down, then another pushed in the shell an eighth of an inch, then a single layer of shot, then a wad of thin blotting paper. Push shot down further and then place another layer of shot evenly distributed, then more blotting paper, until you have put in an ounce. Complete by pushing all down steadily. I fired two charges only, with the above result, and gave up, as the shot bunched. But perhaps some cute, persevering sportsman may work something tangible out of this idea and give us the benefit of it.

PICTON, Ont. R. P. J.

Editor Forest and Stream:

I use for a field gun a Remington double-barrel breech-loading shotgun, model of 1882, 12-bore, 30 inches, 8¾ pounds, full choke. Experience has taught me to load as follows: 3¼ drams Dupont's chokebore powder, one of Eley's thick felt wads, one ounce of shot, and one thin cardboard wad. This way of loading gives good satisfaction; still it is not perfection. J. C. Y.

WASHINGTON, Mich.

A MEMORY.

WITHIN my cosy room, nothing meets the eye but bright and cheerful things. Outside how different; the ground is covered with snow; the arctic wind howls dismally around the corners of the house, rattling the doors and windows in trying to gain admittance; and the rain is unceasing, freezing the moment it reaches the ground. The trees are encased in ice, presenting to an eye unaccustomed to the sight, beauties of strange and fantastic forms. It does not interest me. The moaning wind has carried my thoughts back to a most successful duck hunt which commenced Nov. 15, 1882, and ended the following evening. I will try to give the particulars.

Our party had been anxiously awaiting a flight of wild fowl. A few had taken possession of the bayous, lakes, sloughs and ponds, but not in sufficient numbers to warrant a good bag. Each day, however, added to their numbers; but it was not until we saw Gen. Hazen's "off-shore" signal hoisted, indicating a norther, that we commenced to arrange matters. Sure enough that night, Nov. 14, a norther came out, blowing with unusual severity, and lowering the temperature to near the freezing point.

Next evening found the norther considerably abated, game flying in abundance, and our party on the wharf eager to be off. Finally, everything being arranged we weighed anchor, and, under the influence of the still brisk wind, skipped merrily along toward Caronkaway, West Bay.

Caronkaway takes its name from an extinct tribe of Indians, who, in former days, made it their fishing headquarters. Nothing remains to indicate their camping grounds but immense piles of oyster shells, remnants of former feasts. Occasionally upon removing these, one comes upon a bone knife or arrow head.

We arrived at our destination just as the sun sank to rest behind a bank of purple clouds, lighting the sky most beautifully. We anchored in about four feet of water under the lee of the land. This protected us most effectually, and as the yacht swung to her moorings we found we were in most comfortable quarters. Arriving too late to take advantage of the magnificent evening shooting, we consoled ourselves by making the cabin as comfortable as possible, and, amid clouds of tobacco smoke, each related past experiences. In this way time flew by. About 10 o'clock the Captain remarked, "Time to turn in, boys," and we took the hint.

I was awakened the next morning by voices on deck and feeling the yacht pitching uneasily. Upon dressing and joining the others, I found, to my chagrin, that they had had coffee and were "fixing up." When I asked why they had permitted me to sleep, they replied, "Well, you see you looked so sweet, and your nasal organ was giving vent to such euphonious chords, we thought it a sin to disturb you."

As we "piled" into the tender, previous to pulling ashore, we were aware that daylight was fast approaching. Things could be seen but indistinctly.

We had accomplished about half the distance between the yacht and shore, when the Captain frantically grabbed his sides and exclaimed: "Oh! my ammunition!" He had left his belt in the cabin. Here was another delay, but it took the laugh off my shoulders, and I was glad it occurred.

We reached shore at last, and after making the tender fast each sought a stand. I took one I had occupied on a previous occasion and waited in silence. The faint reports borne across the bay from Galveston Island, seemed to warn me that I would soon have my hands full. A deafening report from behind attracted my attention, and almost before I had time to turn, a flock of swiftly moving objects were upon me. I fired, and had the satisfaction of bringing down three. I was eager to know what they were, but I had no time to bring them in, for a bunch of teal immediately claimed my attention. On they came, and just as they got to me I rose. Upon seeing me they bunched, which gave me an excellent opportunity of pouring in both barrels. I got eleven. Three consecutive shots at single sprigs were next missed in beautiful style. I began to think that if I wanted to equal my three friends, whose guns were popping incessantly, I'd better wait for flocks; in them I did more execution. After a while, however, I did better.

A lull in the flight gave me an opportunity to bring in my birds. The three killed by the first shot I fired were, much to my satisfaction, canvas-backs.

Suddenly the guns of my companions became active, and, although I could see flock after flock fly over the stands, not a feather came my way. I began to get discouraged, and had almost concluded to go to the yacht, when suddenly an immense flock of mallards flew directly over me from behind. To raise my gun and fire both barrels was but the work of a moment. I killed two, and, as in my estimation they are the most beautiful of all the duck family, I took great pleasure in handling them. I am speaking, of course, of the greenhead.

Finally, the ducks, as if tired of being made targets of, took to the bay; and I, feeling pretty hungry, followed them; first, however, counting up twenty-three birds. I thought my eleven teal would give me the advantage of my three companions in numbers, but I was mistaken. Together they had sixty-seven, added to my twenty-three, makes the total bag ninety. Not bad.

So ended the hunt. We pulled to the yacht, and, as we partook of a splendid breakfast, we discussed the incidents of the morning. NEMO (of Texas).

FRANKLIN, March 8, 1884.

MR. CONGER EXPLAINS.

YELLOWSTONE NATIONAL PARK.
Office of the Superintendent,
MAMMOTH HOT SPRINGS, Wy. T., March 23, 1884.

Editor Forest and Stream:

My attention has been called to an editorial in the FOREST AND STREAM of March 13, on the subject of the Yellowstone Park. My astonishment was great to find that so great and enterprising a journal as the FOREST AND STREAM, devoted exclusively to kindred subjects to the National Park, should have misconstrued the law on that subject. By consulting the law, you will discover that the superintendent is in no manner responsible for the appointment of his assistants. You will then read with a new meaning the extract which you were pleased to quote from one of my letters to the Secretary of the Interior, in regard to my assistants.

Secretary Teller does us but tardy justice when, in his letter transmitting my correspondence with the Department to the United States Senate, on the subject of the Park, he candidly admits that the superintendent and his assistants were powerless, under existing law, to enforce the orders and rules of the Department for the government of the Park.

I have tried for the past two years to impress upon the Department our helpless condition here, for the want of the necessary authority and power to enforce the law, and I have been answered only by scolding letters, and secret spies and the universal howl of an ill-advised press throughout almost the entire country. Added to all of which has been the ceaseless and untiring hostility of this mis-named Park Improvement Company, chiefly by and through the company's superintendent and manager, C. T. Hobart, and why and for what reason, ask yourself the question, Mr. Editor, and I will not fear but you will arrive at a just conclusion.

As to Secretary Teller himself, it is but just for me to say, that I do not believe he has been personally aware, until very recently, of the condition of affairs here, as he has been obliged to leave these matters to the care of his assistant on account of the numerous and important duties pertaining to his high office elsewhere.

But, Mr. Editor, I think I see for the Park the dawn of a brighter day. Congress is better informed as to what is necessary to be done to render this marvelous park the pride of the American people, and a wonder to the whole world.

I am much pleased to find in your paper the letter of Mr. Arnold Hague, of the United States Geological Survey, upon the railroads in the Park. And I am more than delighted to find that I have in your paper and Mr. Hague such powerful allies in this great battle between the speculators and the people. I have opposed the scheme of allowing railroads to enter the Park from its inception. I have sent my protest to the Secretary; have written to members of Congress and to the editors of newspapers, calling upon them to sound the alarm and let the people know what designs the speculators have upon their heritage.

You very justly remark "that public opinion has not been altogether just to the superintendent of the Park," and I will add, neither has it been just to the assistant superintendents, for I feel bound to say that a majority of them are excellent and efficient men, and have accomplished all that any like number of men could have accomplished, situated as they have been.

In conclusion I desire to say that I neither ask nor expect any mercy from the public, should examination prove that I have been in fault. I ask then only simple and impartial justice.

P. H. CONGER, Supt. Yellowstone National Park.

[Mr. Conger is in the right, and we regret that we should have done him injustice in this matter. The appointment of the assistant superintendents rests with the Secretary and not with the superintendent. We wrote of the law as it should be, not as it is.]

NOTES FROM IOWA.

THE ducks are in, and I can hear the guns from early morning until far into the dusk of evening. More geese went over us, going north, this spring than I ever saw before, but none were killed in this neighborhood, that I know of.

There is a splendid lot of prairie chickens here now, and we do hope that they will stay with us, and that the weather will be favorable to their propagation this spring.

Quail are fairly plenty. I know of enough to stock this place, if they are only permitted to hatch and the clutch is not drowned.

We have given up going on our semi-annual hunt this spring, and I am just shooting in the evening. I get from one to three ducks each time I go out, and I am satisfied. Day before yesterday, the 26th, I heard the first jack snipe. If the weather stays as it is, jack snipe will be in thick in a few days, and the ducks—well we hope to see them in the fall.

I was in our county seat (Weppello) the other day, on business, and found that they have a rifle club organized there, and have a regular day for practice each week. Mr. Cole is their coach, and if they all could shoot as good as he can, their scores would run high. He is manufacturing a gun patented by himself, and thinks, like all the rest of gun makers, that his gun is the simplest and best. One thing is sure, he knows how to handle his own gun, as his score will

show. I am no rifle shot but I do enjoy talking to the man who is a good shot, and can pile up the fives—75 out of a possible 75, at 800 yards.

Now that the snow is gone, my pistol is laid away, and when I take it up again there will be some practice before I take it into the field. I wish you could see my old wood house in Ohio. Many a time I have stood and used up a box of cartridges shooting at some particular spot in the wall, and I expect that some day some boy will burn it just to get the lead. MARK.

MORNING SUN, Iowa, March 28.

10, 12 OR 16.

IT is surprising how many sportsmen carry the first-named bore (10) weighing from 7½ to 10 pounds. Such a weight of iron is, I think, useless in the field, and is fatiguing to carry. I am writing now of field work over a dog. Of course in duck hunting a heavy gun is a necessity, although I have killed ducks with a 16-bore, and that at quite a long distance.

The 12-bore is, to the majority of sportsmen, the gun, good for anything, ducks included; as a 7½ or 8-pound gun will burn 4 drams of powder nicely, and kill almost as far as a 10-bore with less weight to carry.

A 16-bore is, in my estimation, the field gun *par excellence*, and to cut down quail and partridges with this handy gun is truly a pleasure to the sportsman who aims it. The 16-bore is just heavy enough (6 to 6½ pounds), and 2¾ to 3 drams of powder is sufficient for a load for this handy little gun, instead of throwing a heavy load of shot with from 3 to 4 drams of powder after a bird, and about the same bulk of shot.

I am very glad the smaller bore guns are coming into use, much more than formerly, and it is truly more artistic to kill quail, partridge or woodcock with this little gun. Of course some few carry a 20-bore, but not one man in four hundred carries such a tool. I am told the 20-bores kill at a surprisingly long distance, but never having used one I of course can't say much about them. Let us carry a small gun in the field, and not lug a cannon of 10 pounds weight, for such is not pleasure but toil. 16-BORE.

MADISON, N. J.

ST. LAWRENCE GAME CLUB.

AT the third annual meeting of the St. Lawrence Game Club, held recently at the office of Mr. L. D. Hoard, at Ogdensburg, N. Y., the President's address showed that more than twenty indictments have been found against individuals for hunting deer out of season, and a large number of suits have been brought to a successful issue for minor offenses. Mr. Hoard says:

"From a memorandum of the assistant district attorney, Mr. L. P. Hale, of Canton, and on file with the secretary, it appears that since the last annual meeting twenty-two indictments have been found by the grand jury, against thirty-six different individuals for unlawfully killing and dogging wild deer, and nine indictments against six different individuals for unlawful fishing. That convictions and pleas of guilty have been obtained in seven cases and fines imposed to the amount of $195, and one case dismissed by the district attorney for want of evidence, leaving undisposed of one case pending on appeal and twenty-three cases in various stages of advancement. Mr. Hale accompanies his memorandum with the statement that 'of the earlier of the cases noted as pending, repeated attempts have in some cases been made to arrest defendants, thus far without success, but through no fault of the district attorney. Other cases have been discontinued either by the defendants or the people.' For further details of said memorandum, as to names of defendants, dates and character of the offenses described, I refer to the document itself. The above-mentioned results show an amount of labor on the part of our esteemed member and assistant district attorney, which entitles him to your favorable consideration and hearty thanks, at least, if not to some more substantial testimony of your approval.

"It would appear from the foregoing that the necessary machinery for the successful enforcement of the game laws in this protection district has been secured, and one of the leading objects of this society thereby satisfactorily accomplished. So far as the enforcement of the law is concerned, we have only to continue, as heretofore, our encouragement and support of the officers in the discharge of their duties, to render it certain that in the near future the punishment of the offenders against these laws will be as fully sustained by the force of public opinion as the bringing to justice of any other class of criminal offenders now is."

The president also alluded to the importance of stocking the St. Lawrence River, and the streams and ponds of St. Lawrence county, with food fish, and made valuable suggestions as to the best methods by which this could be done.

The treasurer's report shows the society to be be without debt and to have a balance in the treasury.

The following named gentlemen were elected trustees for the ensuing year: John Webb, Jr., Gouverneur; George P. Ormiston, Governeur; M. D. Packard, Canton; S. D. Kimball, Canton; J. H. Rushton, Canton; Jas. R. Smith, Russell; William Peters, Ogdensburg; J. H. Brownlow, Ogdensburg; Josiah L. Brown, Potsdam; Allen Olmstead, Potsdam; Wm. Stillwell, Ogdensburg; D. G. Wood, Gouverneur.

Mr. McNaughton addressed the association on the importance of having the State game protectors act together in all cases of violation of the law. Continuing, he alluded to the desirability of having fishways in all the dams in the county, and recommended that a law be drafted and presented to the Legislature. In order that this might be done, he moved that a committee of five be named by the chair to take steps to have such a law pass. The motion having been adopted, the president named as such committee Joseph McNaughton, Sidney Brown, William Peters, L. W. Russell and John Webb, Jr.

The following committee was appointed to go to Utica on the 11th inst. to attend the St. Lawrence Anglers' Association: J. McNaughton, Dr. Brownlow, Wm. Stillwell, L. D. Hoard.

The thanks of the club were unanimously voted to District Attorney Lang and his assistant, L. P. Hale, for their persistent efforts to punish transgressors of the State game law.

GAME IN MISSISSIPPI.—No game is left here now except bear. They are thicker than on Wall street. If you know of any one wanting a bear ranch I can furnish them, and will guarantee an income of fifty bears per annum.—TUCKAHOE (Belzoni, Miss., March 31).

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

I must request permission to correct an error in my letter published by you in your issue of February 21, where I quoted from Farrow's letter that the drop of the ball of the rifle was 3 inches at the 200-yard target when fired with the 100-yard sight. I received a letter from Mr. Farrow stating that this should be 13 inches instead of 3; the drop of the .45-75 being 2 feet 6 inches, and of the .45-60 2 feet 10 inches.

Heretofore the discussion on hunting rifles has all been in the direction of calibers and charges, and I now would like to ask of your numerous readers if something besides proper calibers and charges is not essential, if not vital, to the owners of a hunting gun; for may we not have a perfect barrel, with proper caliber and charge, and still have a gun that is only partially effective from the lack of some other essential to its proper aiming and firing?

In shotguns we have various "lengths" and "drops" to stocks, so that the intending purchaser can procure a gun that will "fit" him, and come up promptly and properly for rapid wing-shooting, but in rifles have we any such variation? Has not the making of rifles by machinery caused an invariable model to be adopted by each maker, so that one has to submit to an improper fit sometimes if one wishes to possess the gun of a particular maker, through the inability to procure other than the model adopted by that maker?

I have not the dimensions of the guns of various makers, so I am unable to give the length and drop of stock of each; but I am satisfied that an examination of the various guns possessed by your readers and correspondents, will show that there has been no standard adopted, and that a considerable variation will be found.

I will give data as far as I have it from measurement of guns in my possession, to show what I mean:

Ballard, .32-caliber target rifle	Length 13in.,	drop 3¾in.
Peabody, .45-caliber	Length 14in.,	drop 2½in.
Springfield, .45-caliber	Length 13¾in.,	drop 3½in.
Remington—Kun pattern	Length 13in.,	drop 2⅝in.
Baker, three-barrel	Length 14in.,	drop 3½in.
Marlin, .45-70	Length 13in.,	drop 3½in.

These measurements are from the trigger to the middle of buttplate for length, and from line of point-blank sights to toe of stock for drop.

One might say here was variety enough to choose from; but it will be observed that the variety is in different styles of guns, and so far as I know, there is no variety in the same style of gun, unless one pays heavily for the special stock.

In military rifles such variety is not to be expected, but in hunting rifles I see no reason why such variety, particularly in the length, should not be made. Variation in length would also vary the drop without any change in the angle made by the axis of the barrel and center line of the butt; but short and crooked stocks, as well as long and straight stocks, might be wanted also.

It is conceded that one can learn to shoot, and shoot well, with almost any form of stock; but could not the same man shoot better with a gun that fitted him naturally and easily, without constraint, than with a gun that did not fit him and which caused constraint? And would he not sooner acquire skill and expertness shooting such a gun than when he is forced to learn and every time take a constrained position?

Besides the length and drop of stock, does not the form of butt and butt plate have more to do with successful shooting than is ordinarily conceded? I think every one will admit that constancy of position in aiming is one of the necessities for fine shooting; butt high on the shoulder for one shot and low for the next will not make good shots, and the general form of buts has nothing with which to insure the proper position.

I don't know that I would advocate the butt with horns on heel and toe for this purpose, though nearly all the old muzzleloaders had some such form of butt plate; but cannot some better form of plate be adopted than those we have now, that will give more grasp to the shoulder and insure the same relative position of the gun every time it is brought to the shoulder?

In the days of the muzzleloader the stock had a "patch box" set in it, and now that the muzzleloader has passed out of date, this patch box has also vanished from the stock.

But are there not uses that this box could be put to, that would make it a valuable addition to the breechloader? Could it not be adapted to carry a screw driver and such extra parts as are most likely to be useful in the repair of a gun? True, one can carry them in the pockets, but when wanted, they are almost certain to "turn up missing," from having been left at home or lost from the pockets, while if in the gun stock a place is made for them, they would be more likely to be at hand when needed, as that would be their place, and no reason for their being missing.

I once had a gun restocked from a pattern made exactly to my "fit," with butt plate to fit the shoulder, and a box of this kind (taken from an old muzzleloader) in the stock, and I can therefore tell from experience not only how much better I could take quick shots with this gun that fitted me exactly, than I could before it was restocked, but also how "handy" this box was. In it I could carry a small folding screw driver and spare parts, with an oiled rag to wipe my gun when necessary to keep the outside from rusting in the rain, and I feel as though the box were indispensable.

With many of our breechloaders (in fact nearly all) no provision is made for a cleaning rod being carried in any way, and how many times has the want of such a rod been severely felt when in the field and away from possible rods in camp? The Winchester rifle, and the Government carbine have such rods placed in the stock, and so has the Fruend rifle, and many a time their usefulness has been proved, when some accident has disabled a gun temporarily from a shell not extracting. Accidents will happen, and when one goes on a hunt every precaution should be taken, not only to prevent such accidents, but also to have the means to overcome them should they happen. I would not recommend the use of this metal rod as a cleaning rod, nothing but a wooden rod should ever be used to clean a gun with, where a rod is used at all; but it is useful nevertheless, to drive out tight shells, should one stick, or to take out a headless shell, should the head of one blow or tear off; in the Springfield carbine a headless shell extractor is in the butt with the jointed ramrod, but a bullet shaved down and "upset" in the headless shell will generally answer to drive out the shell, provided one has the ramrod to do it with, and I cannot, therefore, too strongly recommend its adoption in the stocks of all guns—shotguns as well as rifles.

One can get pistol grip with checkered fore end and grip by paying extra for them, and some makers now place pistol grips on all their rifles, and this is certainly a move in the right direction. With some of the under lever gun this may not be necessary, as the shape of the lever takes the place of this pistol grip; but I would be glad to see the straight grip become a thing of the past on all (even our military) rifles. Better holding and more even shooting would result, in my opinion, especially when in cold weather one has to use gloves.

Do makers pay enough attention to the position of and shape of the trigger? We all know that the nearer one applies their power to the end of a leaver the less power it requires to do a certain work, and how many triggers are there that allow such application of the pull anywhere near the end? Besides this, should not the trigger be so placed and shaped that the pull comes naturally up and across the grip, so that a squeeze of the finger rather than a pull would be the proper application of power to release the scar? I have one gun with trigger like this, and although in one direction it will bear a pull of several pounds, when applied in the proper line of this squeeze a much less force will fire the piece.

I am speaking now of hard triggers. I have seen too many accidents ever to want to use or see used any more "hair" triggers, and I claim that better shooting can be made with a moderately hard trigger, that one can hold on to as the piece is pressed to the shoulder, provided it is made of the right shape and placed in the proper position.

Why should not triggers be roughened, the same as the head of the hammer is, so as to prevent slipping of the finger in pulling it? and why should some triggers be made of such narrow surface for the pressure of the finger? Would it not be more comfortable and better in every way to have a broad roughened surface for the finger to hook around, rather than the narrow smooth surface so often seen?

Speaking of hard triggers reminds me of why some are so hard and how easily it can be remedied. A great many are hard because the nose of the scar is a wedge-shaped surface instead of being the surface of a cylinder generated about an axis passing through the center of the screw which forms the pivot for the scar. The nose being a wedge and the notch in the tumbler being the reverse, the full strength of the main spring has to be overcome, as the tumbler has to be rotated slightly backward before the scar can be disengaged; whereas if this nose were the curved surface I speak of, and the notch a similar curved surface, these two smooth surfaces would glide smoothly over each other, and the scar would be easily disengaged, no matter how deep the notch might be. I prefer a "creep" to the trigger, so that I can feel it gradually press back, rather than a trigger that gives way all at once, like a bound door suddenly letting go.

All who have practiced rifle shooting will, I think, agree that pulling trigger is the hardest part to learn thoroughly, especially in off-hand work, and that, if a firm, positive and proper pull could be given, much improvement would result. It is no easy matter to hold a nine-pound rifle off-hand, keep it on the bullseye, and at the same time pull off with a "three-pound" trigger, without deranging the piece, and in my opinion there is much yet to be done in this direction to make the piece easier shooting, not in the way of making softer or hair triggers, but those that can be felt and pulled, but yet pulled gradually in the right direction, and that when they do "let go" will do so without imparting motion to the gun.

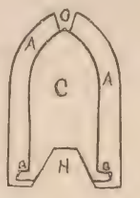
I would conclude by saying that I am well aware of the difficulty of introducing changes that will necessitate change in forms of the metal breech frames in breechloaders, and therefore change of tools and plant to make them, that would be necessary to have stocks of various drops—and such changes would only be made upon its being made apparent that they were desired by the majority—and for this reason I hope the views of your various readers and correspondents may be freely expressed, either for or against the proposed change.

It may be less trouble to change the forms of trigger, as probably less expense in change of tools and plant would be necessary to produce them, but on all these points I merely ask for opinions, having merely expressed my views, and the views of several with whom I have discussed these subjects, in calling attention to the matter.

FORT MCKINNEY, Wyo., March 7. C. D.

Editor Forest and Stream:

After giving the common express bullet much study, I am convinced that it is a failure, as it lacks penetration, but if it could be made to make two holes in the skin of a grizzly it would be the best bullet by all odds for large game. Now such a bullet should have all the qualities of a hollow-pointed bullet, and also, if perfection is wanted, those of a solid one. To meet these needs I have planned the following, express envelope bullet.



Parts—A A, expanding envelope. O, hollow at point. C, solid bullet. B B, flanges at base of solid bullet. H, conical cavity at rear.

A solid bullet with conical head, and smaller than the bore of the piece from which it is intended to be fired, is cast, and should be made of such a mixture of tin and lead that it would not weld with pure lead. This bullet then being placed in the mould, pure lead is poured in, forming an envelope around it, with a hollow point, as shown in the engraving, this envelope on striking would expand, making a large hole, while the core or solid projectile would give all the penetration that could be desired. The envelope might go on with the bullet proper, after expanding, which would increase its efficiency much. The flanges in the engraving at the base of the bullet are to prevent the envelope from separating before the moment of contact.

NORTH GRANVILLE, N. Y., March 28. HAWKEYE.

Editor Forest and Stream:

As a contribution to the very interesting discussion now going on in regard to the choice of hunting rifles, allow me to give briefly my ideas in regard to them, premising, that I speak only of large game, with which I have had considerable experience during the past eight years in the West.

For a gun for general use I very greatly prefer a double express rifle, .45 or .50-caliber, and have used them exclusively during the past three years. I have two, both .45-caliber; one, a very fine imported gun, takes the Eley 3¼-inch shell; the other, made to my order, takes a Sharps 2⅞-inch shell. I always load my own shells, casting express bullets of four different weights and shapes, besides occasionally using a solid bullet and also round balls, two or three in each shell, which I find very convenient for running shots at coyotes, wildcats, etc. I attach the greatest importance to heavy charges of powder and, for most purposes, a light bullet of 250 to 325 grains, regulating the effect of the bullet by the size and shape of the hole in front, and by the proportion of tin used to harden it.

Another important point that seems to be not generally known, and which is not found in the one or two makers of so-called express rifles advertised by American makers, is to have a very slow twist to the rifling, one turn in four feet being quite enough.

Such a double rifle, with slow twist, and shells properly loaded to get the full effect of the express principles, weighing not over 9 or 9½ pounds, and with 26 or 28-inch barrels, is, in my opinion, by far the most effective and convenient hunting rifle made, and with them I have more than once got out of a "tight place" with a charging grizzly, the only really dangerous animal in this country.

Personally I dislike repeating rifles, as I have too often seen them disabled, usually by the jamming of a cartridge, to have confidence in them; and rapid firing is by no means synonymous with effective firing, in fact, it is very seldom effective.

Of single-barreled rifles I like the Springfield, or "needle gun" as it is often called, and the Sharps, and this preference is shared by the great majority of frontiersmen whom I have met. The actions are strong and simple, and will stand very hard usage without getting out of order. Forty-five is the smallest caliber I would use; 50 is far preferable to .40, except for those persons (who seem to be more common in the East than I have found them to be on the Western hunting grounds) who invariably put their bullets precisely where they wish to; for these a .32 or .38-caliber is all that is needed, but I cannot recommend anything smaller than .45-caliber for ordinary mortals.

If bear shooting at short range is expected, a more deadly arm than a short and heavy 12-gauge cylinder shotgun cannot be found; the wound and shock is terrible; the gun is easily and quickly handled, and it is besides often very useful for shooting ducks, grouse, etc., when large game is scarce.

Few persons know what a deadly weapon this is when loaded with ball, and after a little practice with balls of the right size, it may be used with considerable accuracy at 75 yards.

For one who has used a good double express rifle on large game it is easy to see that a large proportion of those who write on this subject have had no practical and but little theoretical experience with these guns. Many are persons who seem to consider that "pumping lead" (a disgusting expression that deserves a place in your *index expurgatorius*) at game as long as it may be in sight is the height of sport, and who care nothing for wounding a dozen animals, who escape to finally die of their wounds after hours and days of suffering, if only they occasionally happen to hit one in a vital spot. Such persons are beyond the reach of argument, either as to guns or their own selfish and brutal ideas of sport; but for those who like to kill and find the great majority of game they hit within fifty yards of where it stood when fired at, I can confidently recommend a trial of the express rifle.

I cannot agree with your statement in your issue of Feb. 28 that "rifles require greater strength at the breech than could be secured by shotgun breech mechanism," for hundreds of such rifles are in use, and so far as I am aware all double express rifles are loaded just as a shotgun of the same maker would be. One of my rifles is underlever action without extension rib. It has done good and hard service for its two owners for at least seven years with shells holding about 130 grains of the strongest powder, and is now as tight and closely fitting at the breech as the day it was finished. The other is a snap action with extension rib, and although it has not had as long or hard service as the other, I think it will wear as well. These are both light and easily handled guns, and the recoil (which some writers imagine must be excessive on account of the amount of powder used) when a light bullet is used is really less than in most common rifles that use a heavy bullet with a much smaller amount of powder, and once used I do not think any one would again hunt with the absurdly heavy single-barreled rifle as usually made, even without reference to the far more satisfactory results of a good double express using a suitable bullet. AREBARDEA.

Editor Forest and Stream:

I am more interested in a squirrel gun, and my ideal would be a .38-caliber, made as light as it could be to retain a good shape and balance, and be strong enough to be safe and durable. It should be chambered for the extra long cartridge, and be large enough so the shell could be made for a swaged bullet of full size all the way back, so as to insure a steady flight.

The different kinds of ammunition should be put up in the long shells, and the space between the powder and lid filled with wads. In that way the lead could always be seated in the rifling and no chance of upsetting or starting crooked. I would prefer a singleloader, because the arm would be lighter and the action less complicated, and if it is well made, so that the shells will not stick, there need be very few good shots missed. I would say further that the ammunition should be made so as to be reliable up to 75 yards, and by making slight calculations this would be effective up to 100 yards. The proportion of powder should not be less than one to four for good shooting at 50 to 75 yards, and I would be satisfied with a .22-caliber, provided the changes would be made so as to insure a reliable gun at 75 yards. N. J. S.

BROOKVILLE, Pa., March 31.

GAME IN TEXAS.

I CAME down here last fall, and was agreeably surprised to find myself in a region where game was abundant. The sportsmen of the town and neighborhood were then killing deer in abundance. I had no opportunity to participate in the sport, but as soon as the quail (partridge they call them) were fit to kill I took a hand in, going out at least once a week.

Previous to my leaving the North my shooting had been principally done in New Jersey, where one would consider himself amply rewarded by a find of four or five bevies and a bag of a dozen birds, after a long day's tramp. No wonder then that I was astounded when the first day I went out Waxy McCoy brought me to a field, not a mile and a half from the business portion of the town, in which we found six bevies of from twenty to forty birds each. They gave us enough hunting the whole afternoon, never leaving the one field. Of course the birds and ourselves had ample room to move about in it, consisting as it did of about five hundred acres. Bags of from forty to fifty birds are frequently made in an afternoon by two guns over a pair of good dogs, and that is saying a great deal for the number of birds, when it is considered that the shooters here never follow them into the brush, hunting up a fresh "gang" when the bevy seeks the kindly shelter afforded by the pines and undergrowth.

The English snipe seem to remain with us all winter. I have shot a few each month from September to the present time, killing sixteen one afternoon two weeks ago, the best bag of them I heard of being twenty-six to two guns for one afternoon's shoot. Many of the native sportsmen do not consider them game, and will not shoot them, but believe me, your humble servant and other hunters in town who have been raised in the North, know how to appreciate them for the sport they afford and for their table qualifications.

As you predict in your last issue, the little beauties must be on their way north, as the other day I shot but four on ground which was literally alive with them a short time previously.

Woodcock must be a rarity here, as I have seen only two; one was brought to town by a countryman, who had shot it, and wanted to know if it were "good to eat." Think of it! The other I flushed while shooting quail one day, and was so surprised at its appearance that I missed him clean.

A friend brought me the other day three birds which he had killed with one shot, within the precincts of the town, and asked me what they were, as he had never seen any like them before. They were large yellow-leg snipe. Is is not rare to find them so far inland? As I looked at them, visions of old times on Barnegat Bay arose before me. Many of them had I shot between Bill Chadwick's and Uncle Jake Herbert's, when there was not a sign of a human habitation between those two places, and the railroad brought you only as far as Squan.

Wild turkeys are plentiful here, and can be found almost anywhere within a radius of five miles of town. I heard of a fine gobbler being shot day before yesterday. The prairie chicken is about the only southern game bird which is not found in this immediate section, as we are surrounded by dense pine forests, but they are found in large numbers a short distance further west. The cottontail rabbit is very plentiful too, you kick them out of bushes every few steps when quail shooting, and the tall pines are alive with squirrels. ALIQUIS.

JEFFERSON, Texas, March 29.

WOLVES IN MAINE.

THE Maine wolf cry is being narrowed down to pretty close quarters, and when the FOREST AND STREAM stated some weeks ago that there were practically no wolves in that State, its assertion was as near the truth as can ever be approached concerning such subjects. All the prominence the subject has been given by the discussion drawn out has failed to bring to light any but a couple of dead wolves, one killed several years ago and the other last December—provided it was a wolf.

A Portland correspondent writes:

PORTLAND, Me., March 29, 1884.

Editor Forest and Stream:

In answer to your inquiry about a wolf being at Fryeburg, in this State, will say that John Heath caught what was called a Canada gray wolf Dec. 22, about a mile from Fryeburg Village. His trap was set for fox. The wolf was a large one, measuring 5 feet 8 inches from tip to tip, and stood 2½ feet high. He dragged the trap, heavily clogged, more than a mile. He was very savage when found, making a vigorous attack on Mr. Heath, who dispatched him with a shotgun. A few days before he was caught he attacked a young man while cutting wood, and tore his clothing, scratching him considerably before being frightened away. F.

This is a good wolf story, but as Fryeburg is about fifty miles to the northwest of Portland, the account must have grown in traveling there. The FOREST AND STREAM has carried its investigations of the wolf subject still further. The selectmen of Fryeburg have been written to, since they would be called upon to pay the bounty, and would be very likely to know the truth of the matter. One of the board writes:

FRYEBURG, Me., ——— —, 1884.

Editor Forest and Stream:

Yours, making inquiries about a wolf killed here last winter, is at hand. I would say there was one killed here and the bounty paid. The animal was captured in a common trap; was undoubtedly a traveler, as they are not common in this part of Maine. They are very seldom seen or heard. This wolf was of the Canada gray species, and is supposed to have strayed from the forests of that province. His size was medium. Will give you other information with pleasure, if desired. ——— ———, Selectman of Fryeburg, Me.

This letter gives no account of an attack by the wolf or wild animal upon a young man or anybody else. A letter from another correspondent in the same county says:

Editor Forest and Stream:

No wolf has been killed in this section for a great many years. I hear that one was killed in New Hampshire recently.

Still another correspondent, from a town adjoining Fryeburg, writes:

Editor Forest and Stream:

Yours is received. I have heard that a wolf or wild animal was killed in Fryeburg or Lowell.

It seems that there is some doubt about the animal being a wolf at all, while others claim that the creature was killed in New Hampshire, which is not difficult to understand when it is taken into consideration that the town of Fryeburg borders upon that State. But in order to investigate the wolf story still further the Maine Fish and Game Commissioners, who offered the special wolf bounty in that State, have been applied to. One of them writes:

"We have not as yet been called upon to pay a wolf bounty, neither do I much expect we shall be. There is always a stray panther or wolf reported in the forests of Maine, and probably with some degree of correctness. The time is past when either of these creatures can exist in any numbers in our forests, whatever may be the plentifulness of deer and other game, so great is the enterprise and competition among our fur hunters."

All of which goes to show that our position was not far out of the way.

Since the above was in type, and at the moment of going to press, we have received information from a gentleman well acquainted in Oxford county, Me., and perfectly reliable, that a wolf escaped from the collection of curiosities of a traveling showman a year ago last fall. The showman is an eccentric character, a resident of Oxford county. He had for several years a collection consisting of a black bear, a couple of Canada gray wolves, etc., which he was accustomed to exhibit at a side show at county fairs, and Fourth of July celebrations. When not on the road he kept his animals in a pen in his barn, and from this pen one of the wolves escaped. The exhibitor kept the matter still for a long time, fearing trouble, if the story of a live wolf astray should get out, but finally the truth became known some months after. It is pretty generally believed that the wolf killed in Fryeburg is none other than the tame one which had escaped.

FROM SHAWNEETOWN, ILL.—The winter was an exceedingly severe one, the thermometer going as low as 23° below zero, and fears were entertained that all small game would be frozen out. With some degree of interest, I have noticed the quail since the advent of spring and find them much more plentiful than could have been hoped earlier in the season. By inquiry among farmers and others I am informed that very few frozen birds were found after the hard weather of the earlier part of January. Squirrels are very plenty in the woods. On Saturday, while out ducking in the Wabash bottom, I noticed quite a number in the woods, although the ground was covered with from five to ten feet of water. During the exceeding high water in February the turkeys were all driven to the hills and, I am sorry to say, quite a number were slaughtered. Water fowl have been plentiful for a month past, but at present are fast wending their way northward. Mallards are pairing and will soon leave us. Saturday, March 22, I took a trip into what we call Hampton bottoms, on the Wabash, and ducks and geese were found in immense numbers. To the true lover of nature, life has no greater pleasures than when in the solitude of the woods. The air is filled with the resonant honk of hundreds of geese and the incessant quack of the wild ducks. There is a charm that seems to haunt his memory and bind him closer to the sports of the chase. While silently gliding through the thick timber of the inundated bottom lands the very air seemed alive with the wild commotion of the frightened fowl, as, rising upon every hand, they sped away upon frightened wing. I am pleased to say, however, that they all did not get away, as I had all I could possibly carry. Jack snipe are just coming in, and No. 10 shot will soon be in demand. By the time they disappear the young squirrels will be ready for shooting, and then the dogwoods will be in blossom, when the gun can be laid aside and some of the finest black bass that ever gladdened the heart of the angler will be ready to bite. In fact, I am already getting rods and lines ready—reels are of no use in this section, as the fishing grounds are so difficult to approach that nothing but a rod can be used. Last season I tried trolling faithfully, but could not succeed in hooking anything. Think I'll not try it this year. I will say before closing this that your articles on the most desirable gun for sportsmen's use are read with interest and are of real benefit to amateur sportsmen like—X.

THE BLACK HILLS SPORTSMAN'S CLUB.—A brief history of the organization of a sportsman's club in Deadwood, Dak., will interest many of your readers. It is by the efforts of clubs such as this one that game on the frontier is to be saved from extinction. A meeting was called for the purpose of organizing a sportsman's club in Deadwood, D. T., for Jan. 8, 1883, and was attended by the following gentlemen: Seth Bullock, W. M. Brewer, E. Butterfield, Porter Warner, Jas. Lawler, L. F. Whitbeck and John C. Ickes. A committee was appointed to draft and submit a constitution and by-laws at a meeting called for Jan. 11, 1883, at which time the club was organized, to be known as the "Black Hills Sportsman's Club." The club is said to have been tireless in its efforts to prevent the wanton destruction of game, out of season, and has secured the passage of wholesome laws by the Legislature to that end. Steps have been taken by the club for the introduction of quail with whose progeny to stock the Hills and surrounding country. The officers elected on Jan. 1 were as follows: Dr. L. F. Babcock, President; John Stannus, Vice-President; John J. Ickes, Treasurer. Board of Managers—Seth Bullock, E. G. Phillips and E. Butterfield. At present the club is composed of twenty-one effective members and fifteen honorary members; one from each of the journals published in the counties of Lawrence, Pennington and Custer.—STAMPS.

SIZE OF MEASURES.—"Hammerless" says that there is a difference of ten pellets between the Bridgeport and Dixon measure. I have a measure that, when it is set at the ounce notch, holds about six pellets of No. 5 shot over 1¼ ounces. The maker neglected to put his name on the measure. Another one, stamped "Bridgeport G. I. Co., 23 C. R.," when set at the 1¼ notch (there is no 1-ounce notch on it) holds eleven pellets less than 1⅛ ounces. Another, without stamp, is about correct. The measures were filled level full and the shot weighed on a postal balance. I said that I did not consider the shell chamber in the gun any benefit. I presume some of your readers will differ from me in that, but I would like to see the 12-gauge gun that will shoot stronger than mine. Bitter Root Bill says that his gun is chambered for 3-inch shells, but that it shoots as well with 2⅝ shells. Now if it shoots as well with a shell ⅝ of an inch shorter than the chamber, would it not shoot as well (or better) without any chamber? It appears to me it would.—GREEN WING (Freestone, Cal., March 20).

A NEW GUN CLUB.—The Independent Rod and Gun Club, of Rochester, N. Y., was organized March 25, 1884. Its object is to protect fish and game and the promotion of legitimate sport with the rod and gun. Officers for the ensuing six months are: President, H. Ritter; Vice-President, J. G. Zimber; Secretary, T. J. Zimber; Treasurer, J. C. Enders; Executive Committee, C. L. Harris, J. Long, T. J. Zimber; Vigilance Committee, J. Nouch, W. G. Weston, J. G. Zimber.

SUMMER SHOOTING.—In your issue of March 20, "16-Bore," of Madison, N. J., under the head of "Summer Woodcock Shooting," makes some statements to which we take exceptions. It must be very tame sport, indeed, in New Jersey, if his views are correct. With ten years "constant in season" woodcock shooting in this vicinity we must say that our experience is decidedly different from "16-Bore's." The season here opens July 4, and if the Jerseyman will come and make us a visit about that time we think that we can demonstrate to him that it requires something more than a mere boy to "catch on" to even a bare majority of the birds flushed. In all of our experience we have never seen a single woodcock (after July 4) that could not get out of as small a hole, and do it as quickly as anything clothed in feathers. We have very fine partridge and quail shooting, but the woodcock is king of them all, and the hardest by far to bag. —PEDRO (Mehalson, Pa.).

SLAUGHTER.—Mr. Francis Burritt, of South Norwalk, has been going for the ducks in a remarkable manner this spring. His first shot resulted in bringing to bag twenty-eight broadbills; the second shot twenty-seven broadbills; and the third shot thirty-eight broadbills. These shots were made with a twelve-pound double eight-bore, with six drams of Hazard No. 5 duck, and 1¼ ounces No. 5 shot. The birds were plenty, and he sculled on to them, and fired both barrels with the above results. This only includes the birds that he picked up dead, of course, some cripples getting away. Last year he made another shot at old squaws, off Beaufort, Conn., killing fifty (50), having used a single four-bore at them sitting, and a double eight as they rose. He picked up fifty dead, and many wounded escaped. We do not think this shooting has been beaten recently.—FOUR-BORE.

BIRDS IN MARYLAND.—Snipe shooting has commenced in this section. As early as March 24, R. Cantler shot one snipe in Anne Arundel county, Md., and on March 30, he made a bag of six snipe in Baltimore county. Blackheads and sprigtail ducks have made their appearance on the Patapsco River. I saw several coveys of partridges close to the city the last few days, and if they are not disturbed by the market gunner, sportsmen may expect good shooting close to the city this fall. There have been woodcock shot this spring to supply the demand of the taxidermists, the killing of which is against the law. But as long as they can be sold for a good price, those shooting for gain will continue to violate the law and destroy the birds.—AMATEUR (Baltimore, Md., April 2).

BIRDS IN OHIO.—Quail wintered pretty well here, the pheasants a little better. I found a few dead birds in the field that had been frozen and starved to death. Ducks are abundant here, fishing is fine also. I am getting Hon. H. C. Greim, a representative, to try and help our game law through. That will protect the game when shooting seasons are over, it also forbids trapping birds and selling them. Let us hear from some other young sportsmen in the future.—YOUNG SPORTSMAN (Somerset, O., March 25).

NEW JERSEY NOTES.—Quail seems to be very scarce in this section of the State, notwithstanding the efforts of the game society we have here, who annually stock their leased ground. I was out with my dog last Sunday for a walk and put up two woodcock, but they were very wild. I also ran into a flock of upland plover. Robins are quite numerous. Mr. Willis, the champion quail raiser, has an addition to his feathered pets in the shape of two imported pheasants.—DASH (Westfield, N. J., March 27).

PENNSYLVANIA NOTES.—Game wintered well in this section, for although we had a great deal of snow, there was little drifting, and no sleet or freezing rains. I flushed seven English snipe the other morning near town and, on the 20th ult., saw the first woodcock of the season. Trouting season opened on Tuesday, 1st inst., with a general rush to the streams, and although it is cold and stormy, some pretty good catches have been made.—T. E. D. (Hollidaysburgh, April 3).

Camp Fire Flickerings.

"That reminds me."

108.

THE late Dr. John R. Curd was a native of Goochland county, Virginia, and possessed a talent for fiction which gave him a broad reputation.

At a dinner party he related the following incident in connection with his experience as a high private in the army of Northern Virginia.

"I was attached to a battery at the battle of Gettysburg, and in the fierce cannonade which preceded Pickett's charge, every man, except me, in my detachment, was killed. But although left alone, I did not desert my post; and long after the shattered remains of Pickett's division had returned to the Confederate lines, I continued to fire grape into the masses of the enemy on the opposite ridge. While I was ramming down the last charge, General Robert E. Lee galloped up and cried, 'Curd, cease firing; let there be an end to this bloodshed.' But I said to him, 'General, I have but one charge left; let me give them this.' Overwhelmed by his emotions the noble Lee sprang from his horse, seized my hand, and with tears in his eyes exclaimed, 'Dr. Curd, henceforth do not call me General, but call me Bob!'"

NORTHSIDE.

109.

In a recent visit to Adironda I had the pleasure of calling on your occasional contributor, Major Joseph Verity, U. S. H. M. I found the veteran hale and well and full of reminiscences of the past, which he freely discoursed of. Early in the conversation he spoke of his first and second wives and his children, but later on, when I spoke of something concerning domestic relations, I think it was of wives sometimes objecting to their husbands going fishing and shooting, he said that he "was not competent to give an opinion in such matters, having lived a bachelor all his days."

"Why, Major!" said I, in some astonishment, "if I understood you aright you were telling me not long ago of your wife and children." (I was afraid to venture on more than one wife).

"Was I?" said he, and then after a short pause he added, with great dignity of manner, "Well, sir, it cannot be expected of one of my years that he should remember every little thing that has happened to him in the course of a long and somewhat eventful life." AWAHSOOSE.

Sea and River Fishing.

ROD MAKING.

Editor Forest and Stream:

Several times I have noticed items in your paper, and one in last issue signed "W. K.," recommending swelled or over-capped ferrules which he says gets the full size of the wood. I would like to have some one tell me what advantage there is in using such ferrules; most of us rod makers of late years in making a light rod would not think of letting in the ferrules flush with the wood. We turn the ferrules at the end so as to make a nice finish, at the same time making it a little thinner and place a wrapping of silk next, which, when finished, makes the work complete. But it is claimed that it makes the rod stronger. Suppose we were going to use for a fly-rod No. 3 swelled or over-capped ferrules for first, and No. 0 for the last joint; it makes a rod which is really No. 4 and No. 1, which is just one size larger than No. 3 and No. 0 straight ferrules. Again suppose we take a swelled ferrule which is size of No. 3 at large end, and compare its size with No. 3 straight ferrule; we find it is just one size smaller where the male ferrule enters and the same size at the other ends. Now, where is there anything gained? The swelled ferrules cost more and it is more work to fit them on. I use them on some rods because they are ordered so, but consider them, like the dowels, of no use whatever.

When I make a rod and use swelled ferrules, I use just one size smaller ferrules than I would in using straight ferrules to get same sized rod.

The fact is we follow too faithfully in the old rut, and it is high time that such gentlemen as Mr. Wells should stir us fellows up, and we should help them to get the wool off our eyes and to benefit ourselves and customers. E. M. E.

Hancock, N. Y., March 28.

Editor Forest and Stream:

I have been much interested in the recent discussion in the columns of Forest and Stream concerning the use of dowel pins in fishing rods, and would like to add my mite for the benefit of my fellow anglers, although I fear the subject has been already so ably and thoroughly exhausted by Mr. Henry P. Wells that my remarks will prove superfluous.

Nearly thirteen years' experience as an amateur rod maker has satisfied me of the soundness of Mr. Wells's views in regard to dowel pins. During that period I have made about thirty rods of various descriptions for my friends, and since my first attempt I have abandoned the use of dowel pins, which, as Mr. Wells correctly states, not only serve to weaken a rod unnecessarily, but add to the angler's perplexities when so unfortunate as to break his only rod while on the stream where the fish are biting freely, and possibly not another rod is to be obtained within a distance of forty miles. An instance of this came under my observation while bass fishing last fall.

While engaged in the manufacture of my first fly-rod I was so fortunate as to make the acquaintance of the lamented "Uncle Thad" Norris; this resulted in a correspondence, which was only terminated by his death. To him I am indebted for many little kinks in rod making, for he had, as he expressed it, "an abiding sympathy for amateur rod makers," and was always ready to extend a helping hand to tyros like myself, and share with others the stores of knowledge acquired by him during an experience extending through the many years of his useful life. He early pointed out to me the abomination of the dowel pin; the weakening effect of the pins so generally employed to fasten on ferrules, also another fruitful source of broken rods, namely: making shoulders in the wood when fitting on ferrules—this latter method has to my mind even a far greater weakening effect than the dowel pin. In nearly every instance of a broken rod which has come under my observation, the fracture occurred just at the junction of the female ferrule with the wood.

I approach the subject of tapered ferrules with some trepidation, but agree in the main with Mr. Wells. Straight ferrules are undoubtedly the best if they cannot be had properly tapered. If properly made the female ferrule should taper very slightly from both ends to the center. This is accomplished by stretching the end into which the male ferrule fits over a tapered mandrel; the male ferrule will then fit snugly the whole length of its insertion, and as the metal becomes worn, enters deeper and deeper, thus taking up all wear. Norris thus made his ferrules, and since commencing this article, I have examined my old fly-rod made by him, and used by me for nearly nine seasons, and cannot detect the least looseness or shakiness in the ferrules, which fit as tightly as when first made. During nearly thirteen years experience in fly-fishing, both for trout and bass, I have seldom had my rods throw apart, and am convinced that on every occasion where such mishap occurred, the fault was due mainly to my own carelessness in not properly jointing the rod. Unless unnecessary force is employed in casting the fly, I don't see how a reasonably well jointed rod can be thrown apart.

By the way, will some of your readers furnish me a recipe for making a good stick cement for fastening ferrules, or inform me where it can be bought. Norris used to supply me, but since his death I have made numberless experiments trying to make something like his, but the results have been unsatisfactory. Latterly I have been using a mixture of liquid shellac and powdered quartz, yet while this preparation appears to hold well, it would be rather inconvenient to take along on a fishing trip. G. A. Brandt.

Washington, D. C., April 1, 1884.

Editor Forest and Stream:

If Mr. Brandt will make his ferrules fit the joint reasonably well, and then proceed as follows, it is confidently believed the result will be satisfactory:

Warm the end of the joint and cover it evenly with gutta-percha gum, distributing it as it melts with a stick for this purpose; warm the ferrule, place a small piece of the gum inside, and move it about in like manner until the inside is coated. Then warm both joint and ferrule, and push into place with a twisting motion. This gum will be found to melt at a low temperature, to be extremely adhesive, and it is believed is sufficiently elastic to defy time or any other contingency, except heat, to loosen its hold.

For twelve years or more, off and on, I have experimented with ferrule cements, and though several were found which answered well, all left something to be desired. Some experiments in another direction required the use of gutta-percha gum, and while manipulating it I was at once struck with its unequalled adaptability to the purpose under discussion.

The theoretically perfect ferrule cement resembles the theoretically perfect knot, in that while it should hold forever if desired, it still may be loosened at any time with the utmost ease.

This discovery, if discovery it is, is too recent to have as yet undergone the crucial test of protracted use and abuse. But as far as a limited lapse of time, and considerable experience in the behavior of other cements, will warrant the formation of an opinion, it is confidently believed that this is the ferrule cement of the future, and that it fully meets and equals every requirement of the theory.

In all that I have written on the subject of fly-fishing appliances, and in all that I may hereafter write, but one end and object has been and will be in view—the improvement of the art. I hope to see the day when the dowel will at least be the exception rather than the rule; when a detached handle will be of almost universal use; when the fastening-pin and cements which necessitate that a broken end shall be burned out of the ferrule, will all be things of the past.

Every September for years past I have had to keep a Maine camp full of anglers in repair. This is a labor of love, of course, as it is to every true angler to aid another. I mention this, that your readers may see that sufficient experience has been had of the various accidents to which anglers are liable, to justify an expression of opinion. And no opinion that I have so formed rests, I believe, on so solid a foundation of fact as the objections and recommendation of the preceding paragraph.

Gutta-percha gum may easily be had of any dentist in sufficient quantity to fasten a set of ferrules, but if Mr. Brandt will send me his address, I will gladly mail him some.

Or some of that cement may be procured at any shoemaker's, which they use to paste waterproof patches on shoes. This generally, if not invariably, consists of this gum dissolved in carbon bi-sulphide. It is a thick brownish liquid. But of all the vile smelling compounds that the ingenuity of man has yet been able to devise, this solvent caps the climax. Therefore, unless prepared to defy an attack from a mob, it is not wise to use it in the near neighborhood of others.

Not only is it believed that this gum will fill every requirement as a ferrule cement, but an equal degree of confidence (based, however, less on experience than on theory) is felt that it will prove invaluable in emergent repairs, as a means of coating and uniting such splices as are employed to mend broken joints. Its extreme adhesiveness, its utter indifference to moisture, and its ready fusibility, seem to render it peculiarly suited to this purpose—far more so than the shoemaker's wax usually employed for the purpose.

To such as may desire to thus fasten their ferrules, the following procedure is recommended. Mark the distance to which the joint is to enter the ferrule. There wrap on tightly a strip of writing paper about three-quarters of an inch wide, and secure the outer end with mucilage or flour paste, that it may not unwind. Set the ferrule as before directed. Some of the gum will be crowded before it, which may be removed with a knife, wetted to prevent sticking, and set aside for future use. Then heat till the residue is fluid, and wipe off clean with a rag. Finally remove the paper, and the job is complete.

Mr. Brandt's remarks in reference to the hour-glass conformation of the bore of a female ferrule merit and receive my thanks, for they call to my attention an oversight in my comments on the dowel pin, of no little importance. In his skilled hands doubtless this may work well; but it is a principle of construction which must be handled with singular discretion.

Let us analyze this for a moment. The hour-glass conformation we understand to be that, in which the inner diameter of the female ferrule diminishes from both ends toward the middle. Of course, the male ferrule is tapered to conform. Now here we have a portion of a cone entering a conical hole. It is obvious that this cone may enter some distance before it is at all in contact with the sides of its socket; or in other words, before there is any fit at all. It is also plain that when contact does occur, very slight additional advance of the cone wedges it fast, and it can enter no further. Therefore, the limits within which the fit lies are very narrow. On one side and almost in contact lies the "jam," where further inward motion is brought to a stand; on the other side, and in almost equally close juxtaposition, is a point where the contact and consequent friction (or, in other words, the cohesion of the surfaces) is very slight. Now it is this frictional cohesion alone which prevents the rod from throwing apart.

Have any of your readers ever endeavored to loosen a stubborn glass stopper from a bottle? Here we have the conditions exactly reproduced—a cone fitting within a tapered bore. Holding the bottle in the left hand and constantly turning it, each side of the glass stopper is tapped in alternation with any light metal body, and in a moment an adhesion which defied all the torsional strain you could apply, is broken, and the stopper may easily be removed with the thumb and finger.

And just here, and in ignorance or neglect of these simple and elementary principles, lies the foundation of the constantly recurring charge that the dowelless ferrule will throw apart. Give to such a ferrule, if constructed on the hour-glass plan, any sudden shock or jar, start it ever so little, and the cohesion of the surfaces is so impaired that, if the next cast does not overcome this altogether, it at all events loosens it still more, until the joint throws apart, and the angler lifts up his voice in such remarks as he deems appropriate to the occasion.

Now let us contrast the action of a true cylinder. Enter one-eighth of an inch and it fits—enter it another eighth; it still fits, and the cohesion of the second is added to first—a third, and with like result, and so on, till it has entered to its limit, still fitting at each fraction of advance, and still constantly adding a due proportion of cohesion to that already obtained. Start this ferrule intentionally a quarter of an inch—yes, even half an inch, and still, if the fit is tolerably good, you have cohesion more than sufficient to meet and overcome the tendency of the joint to throw apart, and thus, as has been demonstrated by years of use by my friends and self, as well as it would appear from your columns by many another angler, this most aggravating mishap may be altogether prevented.

Therefore it would seem that by no means should that end of the female ferrule which is to receive its mate be enlarged upon a tapered mandrel, but on the contrary, the bore of that part should be as true a cylinder as possible. If doubt of the fit is still felt, the following course is recommended: Stretch the male ferrule on a cylindrical mandrel, if it be too small; then cement it and its mate each on a stick to serve as a handle, and grind them together with flour, emery and oil. In doing this be not content with simply twisting them around, the male within the female ferrule, but try to combine to some extent the reciprocating motion of the piston of a steam engine, and this not only to insure a more even distribution of the emery, but that the grinding may be uniform and not in rings. To trained mechanics other abrading powders preferable to emery will suggest themselves. But it is to be remembered that the ferrules of a fly-rod bear little analogy to the bearings of a running machine, since the sum of all the motion communicated to the ferrules by jointing and unjointing the rod in many years would fall far short of that made by such a machine in a very few minutes. Flour emery is everywhere to be had, and is, therefore, all things considered, the most available for our purpose.

With the aid of a lathe this fitting becomes a matter of very trifling difficulty. Provided with a round stick armed with No. 0 emery cloth, glued upon it, and of a size just to enter the female ferrule, the latter is chucked in the lathe. While revolving at a rate of speed as high as the lathe will give, the stick is introduced well oiled, and while the ferrule revolves, the stick is moved constantly inward and outward. A very few minutes suffices. Then the male ferrule can be readily fitted, while itself revolving in the lathe, with a "dead smooth" file, supplemented by emery cloth and oil.

Since the grinding-stick is thus constantly reciprocated during this process, it is clear that while at the mouth of the ferrule the abrasion is continuous, it is intermittent within; and that this necessarily enlarges the mouth more than inner portions of the bore. But the difference is almost infinitesimal, and that it should be confined to the least possible quantity, the grinding should be continued for but two or three minutes at most.

Thus from the tubing described in your issue of March 27, I can make and fit the ferrules for a rod, including a handle-ferrule, one butt, two middle joints, and two tips, in not to exceed three-quarters of an hour. I have tested them with severity for years, and I know they will work in every particular to leave nothing to be desired. Henry P. Wells.

VIOLATIONS OF THE FISH LAWS.

THE Buffalo *Courier* says, in speaking of the work of Game Protector Stephen A. Roberts, of that city:

"The first official act of Mr. Roberts was the taking and destroying of eight large nets found set in American waters of Niagara River early last fall. The owners of the nets watched the proceeding from hiding places along the river banks, but made no open opposition to the sacrifice of their property by the game protector and his allies. Loss of their nets is deemed infinitely more disastrous by the piscatorial law-breakers than the being detected and indicted. The former punishment means the loss of valuable nets, besides the possible punitive penalty imposed by the court for the offense in case the name of the owner of the nets is learned by the public prosecutor or game protector. It may be news to many of our citizens to learn that all fishing with nets, except for minnows, is positively prohibited in the American waters of Niagara River at all seasons, and that it is an offense under the same statute to have in possession either black or striped bass weighing less than one-half pound at any time. Snaring with pound nets in Lake Erie and Ontario is forbidden at all seasons. Mr. Roberts said to a *Courier* reporter: 'The opposition to my authority is very strong, especially about Buffalo. The men who subsist here from the fisheries are mostly idle fellows, too lazy to work, and just sufficiently adventurous to love violations of the law for the very sake of the excitement. Several of them are desperate fellows who have served terms in the penetentiary and who literally poach for a living. When I first entered upon my duties these men committed open violation, claiming that the fish they seared were of Canadian parentage, but they found out their mistake. Last fall I used to go out at night in boats and make a regular patrol of likely spots for nets. A policeman from the nearest station-house would usually accompany me, and we often found what we sought and without opposition could destroy the nets. During the winter I have been in the habit of visiting the river banks to watch operations. Now, however, I shall begin my water patrol systematically, and enforce the law strictly. I intend to exercise my authority to the fullest, although I am almost alone in my attempts. Citizens are not disposed to help me and even put obstacles in the way of my success. Even the sporting clubs of this city extend no helping hand to me in my effort to punish violations of the game laws. One might naturally suppose that these organizations would be disposed to come forward and aid me, even to the extent of offering rewards for the detection of offenders, but they show no disposition to second my efforts in any direction. Already this season the poachers are thoroughly organized. They go off in boats and have sentries posted along the shore to warn them. When they have set their nets they go ashore and leave them over night or until early morning, setting a watch on shore to keep guard over their nets. If they see me coming in my boat, they shoot out from cover in a light skiff, cut the lines, and so I lose the chance of getting both net and culprits. There is no man in the State fonder of hunting and fishing than I am, and for that very reason, if for no other, I am determined to press poachers. Only I want the co-operation of the officers of the law and of the people generally. What good is it to have a man indicted if he can pay a trivial fine and repeat his offense under my very nose, defiantly? None at all. My duties are hard enough, but I mean to discharge them to the very best of my ability, and earn my money while I hold my place. There are things about the game laws I should like, as a sportsman, to see changed. The present open season is from May 20 to Jan. 1, and this is wrong, because, you see, these fish do not begin to spawn here until between the 12th and 15th of June, when they seek the shallow waters of the river sides and can be readily snared. If the season was not declared open until July 1 the spawning would be over and the fish swimming in mid-stream, safe from all but anglers. I have conferred with Mr. Sherman of the board, who has promised to have the matter brought up before the game committee in the Legislature. I hope some action will result from it. I am devoting my whole time to my keepership, and shall devote my days with equal impartiality to the poachers who shoot and the poachers who fish and snare. I shall have my hands full, at any rate. In August, when the woodcock season sets in, the destruction of hen partridge and their young will also be inaugurated, and I shall bring sportsmen of all shades of culture to the undiscriminating bar of, it is hoped, even-handed justice. Didn't know it was loaded"

won't do if I hear of a young and uprotected partridge being knocked out by a guileless sportsman. Well, good day, I have a trio of names of offenders before the grand jury and I must go over to the hall. You might say, if you will, that all complaints directed to me at 56 Cottage street will receive prompt attention. Good day;' and the keeper of his excellency's preserves and preserver of the game and dignity of the commonwealth turned away, and the stone figure of justice on the city hall tower seemed to smile on him as he bent his steps toward the building."

At Swanton, Vt., there has been a fight with the poachers on Missisquoi Bay. Our correspondent, "Snip Snap," sends us a clipping from the Burlington *Free Press*, and says that it is the intention to enforce the laws although it is difficult to get a conviction in Vermont. The article details a fight with clubs, axes and pistols, and concludes by saying:

"The prisoners secured were two brothers named Nat and Joseph Sheets and Joseph Couture. The officers looked around and discovered three or four barrels of fish of excellent quality, caught that morning, which the fishers were prepared to ship to New York. The prisoners and the two large nets which were taken were loaded into the wagon and the officers started out on their return trip. As there was room in the wagon for only a part of their number, Sheriffs Barton and Atherton and Officer Dumas walked to Swanton, a distance of seven miles. The prisoners were taken to St. Albans where a complaint was entered against them for resisting the officers of the law, and in default of bail in the sum of $250 each, they were committed to jail in that place. The State attorney at St. Albans has taken the case in hand and the offenders will undoubtedly receive a lesson that they and their partners in guilt will long remember."

Editor Forest and Stream:

I am very glad to see that there is some one who will say a word against the slaughter of the fish in the western part of Vermont. It seems too bad that there should be so much illegal fishing of our lakes, and even in the small streams, where a few trout can be taken in the proper season. As it is now, there are a certain few who go fishing, and what fish they cannot catch with hook and line, they will take by nets and make a clean scoop as far as they go. In some of the trout brooks instances have been known of lime being thrown into the streams, which destroyed all of the fish that came in contact with it. No notice is taken of any of these acts, although there is a so-called fish protective society in the place. The same thing happens also in our beautiful Lake Bomoseen, where there are both large and small mouthed bass, pickerel, perch, sunfish, bullheads, suckers, and a small fish called the whitefish. The illegal fishing is carried on during the whole season. As soon as the ice is out of the above mentioned lake, spearing is commenced, and on any night during the spring that is suitable for spearing, can be seen from three or four up to a dozen boats. The writer has seen as many as thirteen jacks out at one time in one evening, and from then until the lake is frozen over netting is carried on. The nets used are mostly gill nets. It is a common occurrence in a certain locality to see the nets spread out on the grass or around the porches, drying. It is plain to be seen that such work is spoiling all hook and line fishing. Now it is hardly possible for a person to catch with a hook and line a decent mess of fish, where a few years ago it could be readily done. It seems too bad, that as long as we have a very stringent law against all such illegal fishing, there cannot be found some one who has the pluck to put a stop to such work.

The aforementioned fish protective society appointed certain men to prosecute all such offenders; but there has not been one single instance of any of the offenders being brought to justice. As this lake has become quite a prominent place for summer visitors, it seems to me this illegal fishing ought to be stopped. Such is the wish of one of the citizens of the place. Snap Shot 6.

Castleton, Vt., March 31.

LENGTH AND WEIGHT OF FLY-RODS.

Editor Forest and Stream:

The importance of selecting and using the right kind of a fly-rod is so great that I wish to indorse the article written by "Onondaga II.," in your issue of March 27. I do not know the writer, but he must be a master workman at the gentle art to handle the subject so well.

Twenty years' experience at fly-fishing has convinced me that a good split bamboo from eleven to eleven and one-half feet long, from nine to ten ounces in weight, and properly balanced, which means much, is the safest rod that can be used, except for brook-fishing or very small trout. The advantages of such a rod over a light and short one are: It will stand harder usage, is quicker killing, will make longer casts, and at the same time possess all the virtues that are claimed for a light, short rod.

On my second trip to the Rangeley Lakes I was taught a lesson never to be forgotten. I had whipped the water from twenty to forty feet below me with a light rod and three flies attached to a short leader for half an hour, and walked away in disgust, when a stranger to me quickly stepped on to the rock I had just left. He was armed with a ten-ounce split bamboo of the latest pattern. A short movement of the forearm, a gentle turn of the wrist, and the two flies went bounding outward and upward and at last dropping on the water like thistle down. Only a few casts, and they landed sixty feet away, and as they touched the water so deftly, a mighty swirl, a splash, and a five-pound trout that I had driven down the river was hooked and scientifically killed. I stood and watched him handle that rod until three trout, weighing nearly twelve pounds, were taken in that one place. I lost my trout, but the lesson learned was the best one and the only one I ever needed.

Since that time I have done the same kind of work for some hurrying, over-anxious nimrod who was apparently driving oxen instead of fly-fishing.

The point that "Onondaga II." makes is a good one where he says: "Such a rod will carry the flies to the full limit of its strength, and at the end of a taut line, accurately and softly."

One thing to be observed in selecting a rod is to not get a too slim or limber one. I have two objects in writing these few lines. The first is to show "Onondaga II." that there are some of the Forest and Stream's readers who appreciate his article, and the other reason is to benefit some one of less experience in the craft in selecting and using a fly-rod. E. T. W

Putnam, Conn., March 31.

FISHES AND FISHERMEN.

SOME are born to greatness, some are born to wealth. Others come into the world and must needs work their way to fame and fortune. Whether a fisherman is born to always have good luck, I doubt, but I do not doubt the truism, that all lucky fishermen had it bred and born in their bones, as sure as the son of a king is natural heir to a throne.

I was born on Friday, therefore must expect some bad luck in my time, as in the past it has come to me, one way and another. I was brought to first see the light of my existence in Bradford county, Pa., near the mouth of the Wyalusing Creek, and spent my boyhood, or halcyon days, by the side of a rippling brook that ran through my father's farm upon the banks of the beautiful Susquehanna River, whose silent waters flowed past our very door. The lofty mountain that lifted its giant head on the opposite shore, cast its shadow every morning at our feet, and has a charm for me that no other spot on earth has. The old crooked river is mapped in my memory, though for thirty years I have become acquainted with new faces and strange waters. Now for our vacation of 1883.

At the time of my first bout at sailing, I was a resident of the thriving inland city of Syracuse. Whether it was for the purpose of getting a huge joke on me, or for the purpose of allowing me to spend some jolly days with a few jolly Elmira boys, I will leave the reader to judge when my tale has been told.

Two years ago this coming summer, in July, I found my friends awaiting me at the depot in Elmira. All preparations had been made and a large flat boat was anchored in the Chemung below the road bridge. It had been well built by my brothers, Dr. C. W. Brown and T. F. Brown, residents of Church street and College avenue. It was 20 feet in length and some 10 feet wide, with 12-inch sides, braced on the bottom with 2x4 scantling; a staunch craft, with a large cabin, with upper and lower berths. Our stock of provisions, fire-works, guns and ammunition were in great abundance. The fire-works consisted of rockets, Roman candles, wheels and crackers, all the gift of our genial companion, Attorney-at-law Swartz. He had a fine voice, and could enchant any crowd with his melodious strains.

Our company was made up of two Browns beside myself; Legal Swartz, captain or conductor of pyrotechnics; Dr. C. W. Brown, captainisimo and general superintendent of motion; Rev. Manly S. Hard, chaplain and professor of good order; W. H. Willson, of Ithaca, N. Y., a contributor to Forest and Stream and the possessor of the largest shoes of any man in the party; Mr. Copeland, champion bass eater; one of the editors of the Elmira *Daily Advertiser*, the taker of notes, etc. Several other gentlemen went on board with us, who acted as sailors. The writer was dubbed the cornetist, he unfortunately having taken his horn along, the echoes of which may still be reverberating, for all I know, from rock to rock up and down the ravines of Sheshequin or Sugar Run.

It was Sabbath night, and we all trying to be patient for the dawn of the morning. Our craft had been loaded, and everything was ready to lift anchor when the midnight hour should have past. The hours dragged slowly on, our sleep having been dreamy and fitful enough to produce hysteria in a woman and hypochondriasis in any man but a born fisherman.

The night was pitch dark when we left the dock and pulled out with a stiff wind blowing great guns.

The river was low, and we were obliged to use an ash breeze to get on at all. It was broad daylight, and the sky overcast with clouds, before we had proceeded down the Chemung three miles. At this slow rate we could not expect to reach Athens, Pa., before midnight. At about 12 M. we landed on an island, where we found a large encampment of Elmirians—ladies and children principally—the happiest lot we ever met. Their camp was called Wyckoff, and a neater place one must go to the tropics to find. Grand old elms and beautiful buttonwoods cast their shadows over camp and field.

The chirping of birds and the merry laugh of the children, combined with the musical voices of Rev. Hard and Attorney Swartz as they chatted with the ladies, completed the charming scene. We remained but a short half hour to rest from our pull against the wind, and to allow our captain, Dr. C. W. B., to get more breath, to enable him to call lustily to the oarsmen for more motion during the rest of the day before us.

From Camp Wyckoff we sailed for Chemung. Before reaching this hamlet, nestled at the foot of a mountain,, we must needs pass "Johnny Cake Dam." This spot in the Chemung none of us will will ever forget. We called it the worst dam that ever dammed a stream. The sequel will show why. My brother and the writer had a skiff and went ahead of the large boat to prospect. We heard the roar of the water ahead of us, and felt the current sucking our boat fairly from under our feet. We were standing up looking at the torrent of rushing water as it sped through the old timbers and piles of the ragged remains of the defunct dam. Nearer and nearer our trembling skiff approached the terrible place, in spite of our efforts to pull into safe quarters. We now gave up all effort to save our going over into the whirlpool, and prepared ourselves as best we could to meet the shock. As serious as was our situation, Swartz and Rev. Hard laughed to see our frantic efforts to use our oars to conduct the boat into a space that might possibly allow our little craft a clear passage between some of the numerous piles, sticking their ugly heads above the water.

At this moment we struck. I went through the air like a rocket, some twenty feet, fish-rod in hand, and landed upon the seething waves, and went under of course. Fortunately, the place I struck was a shallow one, and my feet touched bottom. I braced and struggled against the awful current, but could only hold my own. I felt something entangling my legs; I felt for it, and grasped one of our trolling lines. I pulled upon it, and found it was fast to the boat, which had gone down between the piles. I was thus enabled to pull myself to the skiff in the space of a few minutes. The eddy formed by the lodging of our craft made it possible for me to stand neck deep in the stream.

My brother was fastened by one leg between the boat and a log. I felt great alarm for him, but was soon relieved by his good fortune to disengage himself by an herculean effort. There we were, out in a cauldron (as it were), being furiously washed and swayed by the crushing, foaming water, not knowing how soon we might lose our footing and be swept down to death.

The situation was becoming extremely alarming. Our friends saw the plight we were in, and jumped from their big boat and ran down the beach to try and save us. My brother put his hand to his pocket and found his money just about to pass out into the current. I also looked after my wealth, and was just in time to save it also. We were but about twenty feet from a little island, and on this we threw our cash and it was secured by our friends.

Our oarsmen—two as brave men as I ever met—took a rope and cast it to us, which we caught and fastened to a pile, and the shore end was manned by five of the crew, and thus we were saved from a watery and untimely grave.

I was now reminded of a lost creel and fish, a lost coat, fish-rods broken and useless, a lost fly-book worth $20, the rod worth $25 with line and broken reel, all my trolling lines and spoons lost, tangled or broken, and our hides wet as a washerwoman's dress. In trying to get our boat loose, we broke it to pieces, and thus lost $25 more. Rather an expensive trip for the first day of our journey. In the "wee sma'" hours of the night we anchored under the great iron railroad bridge of the Lehigh Valley, at Athens. We took a midnight supper at mine host Rice's hotel, and went to bed with our boots on, and slept well, after one of the most eventful and hard day's work of a lifetime.

I neglected to mention that we were some three hours or more getting our large craft over a sluiceway to the east of the dam, and on our way toward Athens we found my creel on a shoal, more than two miles from where we had our great struggle in that dam site.

When we left Athens, at 8 o'clock A. M., the wind was still blowing, and the skies betokened showers. We now entered the broad and tortuous Susquehanna and put out our fishing lines, with bait and spoons, which we had replenished at Athens. We took fifteen wall-eyed pike and a goodly number of black bass before we reached Towanda, some twenty miles from the place of starting at the railroad bridge.

At Milan we stopped for dinner, and such a dinner hungry and wet fishermen seldom sit down to.

Oh, how it did pour when we landed and while our dinner was being prepared. It seemed as if the heavens were let loose, and to add to our distress, we saw the river, so beautifully clear in the morning, now beginning to darken with mud. Like true braves and jolly tars, however, we sat down to fried pike and sweet and Irish patatoes, black raspberries, fresh picked, fricasseed chickens, lovely white bread and the sweetest of butter, coffee and tea of the best flavor, also such milk as only can be had at a country hotel. Talk about eating and clearing a table; talk of a flock of wolves in a sheep fold; expatiate on a hawk swooping down upon a brood of chickens, and then consider the wreck made of that dinner, and you will have reached the climax of destruction of viands. Not a cake, a pie, a chicken, or fish was left outside of us. After the rain ceased to pour we all went to dig fish worms, which seemed to be the best bait for pike and bass that day. We had small, strong spoons, with red and white feathers covering the hooks, whirlers; three hooks which we loaded with worms, a wad of the squirmers, most tempting in lakes or rivers for wall-eyed or glass-eyed pike. No angler should go after these fish without the worms and the spoons I have described. They are the boss for summer fishing.

The best pike fishing I ever had in any river is the Susquehanna at Milan, and at the mouth of Towenda Creek, and at Wyalusing. The best lake for fishes is Onida; though they abound in great numbers in Onondaga Lake, where they are often taken with a fly.

When we reached the long streak of still water above Towanda, we took several of the largest pike of the day. Here friend Swartz sent up a few rockets, and we fired several rounds of cartridges from our fowling-pieces to let the citizens of the town know of the approach of the jolly pirates. It still rained, and we all housed as soon as we could in the Ward House, kept by Col. Jordan. In the evening we had a host of friends and some curiosity seekers call upon us. Rev. Mr. Hard and Swartz gave a display of fireworks that elicited great applause from the company, and especially from the crowd that congregated on the streets. The evening passed too quickly, for it was one of the pleasantest often enjoyed. The following morning we found the river swollen and quite roily. We had poor luck fishing, but made a quicker passage to Wyalusing on account of the high water.

After coming to anchor at Well's Ferry, Capt. Brown arrayed the company in military order, the guns and fish-rods to shoulder, and with martial music we marched two by two to the Wyalusing House, kept by J. M. Brown, where we rendezvouzed for a week, and enjoyed ourselves as only such a wide awake party can. Day after day we picnicked our sweethearts and better halves, having met us there by rail. We fished and banqueted by day and by night, and every hour was full of pleasure.

One day while fishing in Bennett's Eddy, I had a bite that raised me off my feet. Our boat was anchored, and I had out about fifty feet of line, baited with a young bullhead as long as one's index finger. The fish was a monster, and after I struck him, he took a bee line for the west shore. I could not check him in the least; on he went so rapidly, now heading up stream that all my line had run out, and I, bracing with both feet, this towing the stern of the boat against the current. What to do in this emergency I did not then know, I was so much excited. I soon found that one thing was sure, my line must part if I could not turn him. My eight-ounce fly-rod, split bamboo, was bent in a semi-circle and still on he went, never once slacking pace. Snap went my leader, and down I went in the bottom of the boat, the heaviest fish I ever had hold of was gone, and so was my strength and patience. Have you ever been in such a plight? If so, you know how to pity a brother angler.

The Susquehanna River is the most natural water for fish in the State. One shore is made of a mass of shelving rocks, the other is shallow, and gravel bottom, covered with a rank growth of eel grass. Here the young fish can live and thrive unmolested, while near them the male fish stand guard by night and by day till the gamy little fellows are large enough to shift for themselves. A resident of Wyalusing told me that he had seen two rods wide of the shoal water, along Bennett's Eddy, so alive with young black bass, that the water was kept constantly roily by their motion in it during spawning or hatching time.

There are millions of bass hatched out in this one long stretch of still water. This is only twenty-five minutes' ride from the hotel at Wyalusing and only ten minutes' walk from a lovely private boarding house at Browntown, kept by Theodore Brown, where the best of board and the neatest of sleeping rooms can be had for a dollar per day. Philadelphia people put up there and at Wyalusing every summer, and the fun they have would make a dyspeptic envious.

I have taken four-pound small-mouthed black bass right in front of Mr. Brown's boarding house, to which water one can go in three minutes. Boys and girls ten years old catch

twenty to thirty bass at this point in half a day. A lady caught one there while out with a party from Wilkesbarre and Harrisburg that weighed over four pounds. Dr. Scoville, of Wyalusing, caught large numbers last season that weighed four and five pounds each.

Every man who reads this article and wishes a good time let him go to Wyalusing or Brownton next summer. It will be well to engage rooms now for the month of July, as there may be such a rush as to make it an impossibility if put off too late.

We went home with renewed strength and bronzed faces and hands. We shall be there next season if we live.

M. M. Brown, M.D.

Ithaca, N. Y.

OPENING THE SEASON IN NEW HAMPSHIRE.

I HAD often read and pondered over the sketches of the opening day on trout fishing, but being fully aware of the uncertainty of the results on so bleak and generally stormy date as April 1, I had never ventured out. But this year I determined that if railroads were not blockaded by snowstorms I would go and have an opportunity to realize all there might be of sport or discomfort.

I went; and mark the favorable conditions: no black flies, no mosquitoes, no midges, and no ice needed to keep my fish. I had a good little catch, no such score of weights as given by the members of Long Island clubs, taken from their waters, but thirty good fish with a big one that weighed a pound, and all bright, beautiful and wild. Fifteen of these I brought home alive, and in my aquarium they attract the admiration of the multitude, and awaken the dormant love of the sport in the heart of the old timer as he gazes long and lovingly on them.

Listen: "Ah! Brook trout! beauties—wonder where they were caught? I thought I wouldn't do any fishing this year; but I guess I must take a week or so."

No. 2—"Hello, Jim; come over here. See that? Boss fish! I broke one of my best rods last year on a big one. I must be looking over my tackle; I haven't been feeling well all winter, and must get away early this season and have a long trip."

These expressions, together with the usual "Where did you catch them?" and "How many did you get?" "I wish I had been with you," etc., show how deep and universal is the love for the brook trout.

I have also to-day added to my family seven live trout from the famous Monadnock Lake, Dublin, N.H., the classification of which has again become an open question this winter. I have a fine opportunity to compare the two varieties (?) as to outward markings, but as specimens have recently been forwarded to Prof. Baird for a decision, I will for the present call them the "no name" trout. The people of that vicinity are justly proud of their beautiful lake and its fish, and as jealous of non-residents as they are proud; but before they again order off a fishing party I would suggest that at least one of the three wardens may be made aware of the change of close time from May 1 to April 1; for that old law of the date of 1879, which they carry about in their pockets and read over the heads of "the boys," won't count, and may get themselves into trouble. M.

Bromfield House, Boston.

Protection in New Jersey.—A meeting was held last evening in the law office of Senator Griggs for the purpose of forming an association which will look after the enforcement of the fish and game laws in this county. It is a well-known fact that fish have been illegally caught in the Passaic River and in the up-county lakes for some time, and that the laws governing the killing of game have also been violated in a most outrageous manner. The meeting last night was a very successful one, although a number of the prominent sportsmen of this city could not attend for private reasons. These will, however, join the movement at the next meeting. County Clerk William M. Smith was elected president, Charles A. Shriner secretary, and Henry Keenan warden. Posters were ordered printed and distributed, warning all violators of the law to cease their illegal practices. Another meeting for the purpose of forming a permanent organization will be held on Thursday of next week in Mr. Griggs's office. The work of the Association was mapped out last night. Individual members of the Association or persons not belonging to the Association, but interested in the protection of game and fish and the enforcement of the laws, will report to the secretary all violations of the law which come under their notice. An investigation will follow, and as soon as the necessary evidence has been collected the warden will make a complaint before some justice of the peace. Senator Griggs has offered his services in the prosecution of all cases, an offer which was gladly accepted by the Association. The Senator is one of the most enthusiastic sportsmen in the State, and by the prosecution of the violators of the law he will make a warm friend of every lover of the rod or gun in New Jersey. The Association proposes to prosecute vigorously every offender, and by so doing it is hoped to put a stop to all illegal methods of capturing game and fish.—*Paterson Press, March* 29.

Trouting on Long Island.—South Oyster Bay, April 2.—The trout season opened quite favorably here. Lakes and streams are numerous, and they all contain more or less trout. Mr. Stanley caught seven very nice trout, weighing 5½ pounds; Mr. Clinton only caught four, one of them weighing two pounds, and the others one pound each. Some of the other sportsmen did quite well also, but the rain to-day interfered with the fishing. The trout I speak of were caught in public streams and not in a preserve; taking that into consideration it is not so bad. There were as usual some big fish lost, but that don't count. We generally do better on the first day, but the weather has been too cold lately to expect good sport.—Geo. Kilian.

Trouting in Western New York.—Onondaga County, April 4.—Trout fishing opened on the 1st with a record of a few good strings. The veteran trout fisher, Charles Bebee, caught thirty-three on the 1st, whose aggregate weight was three and one-quarter pounds. He also took two California mountain trout of three and four ounces each. Some persons from Syracuse brought in between forty and fifty fair trout. On the 2d, a friend and myself fished two brooks and took twenty trout of quite good size. The two largest weighed one and a half pounds. I also took a mountain trout of about two ounces in weight.—Geo. A. Knapp.

The attention of salmon fishers is called to the Boston advertisement for three or four rods. It is from a gentleman whom we know.

Trout and Electricity.—In one of the tanks belonging to Mr. Blackford in Fulton Market, is a collection of live trout from James Annin, Jr., of Caledonia, N. Y., one of which is a lake trout of four pounds weight. The tank is one of those that have an electric light suspended in the water, and is made of slate with glass on the front and back. An iron pipe enters a hole near the top of one end for the supply of water, and another pipe connects at the bottom of the other end. There is a board cover which keeps the fish from jumping out. One morning since the trout show the fish in this particular tank were noticed to be in a state of excitement, which was so violent that the passers-by stopped to see what was the matter. They rushed about, and tried to jump out for about two minutes, and then turned on their backs. One of the attendants jumped to take out the fish, and on putting his hands in the water received a shock which nearly floored him. Recognizing the cause of the trouble he took out the wire, which had become detached somehow, and he left the fish in the tank to see if they would revive. In twenty minutes they recovered and were swimming about as if nothing had happened. No doubt a few minutes more in the electric current would have killed them.

Michigan Fish Laws.—Detroit, April 5.—*Editor Forest and Stream:* Your correspondent, "S. E. B.," calls upon me to state why the Fish Commissioners allow the slaughter of fish to go on in violation of the law. In the first place, the Commissioners have no more to do with the enforcement of the law than any one else has. If "S. E. B." will read the law he will see whose duty it is. To ask the Commissioners to attend to the enforcement of law, and pay their own expenses for the benefit of men too cowardly to act themselves, is absurd. We give our time to the work of the Commission without charge now, and it takes a great deal of labor and time to carry on our work. Will "S. E. B." please tell me where he finds the law he quotes and the authority for saying the Commission will prosecute, etc. I do not know of any such law nor of any act on the part of the Commission that could even give color to such a report. When the law is passed making it the duty of the Commission, and they to be paid for their time and expenses, they will see that the law is respected. We hope to be able to have a law passed creating game and fish wardens, etc.—A. J. Kellogg, Fish Commissioner.

Salmon in Scotland.—*Editor Forest and Stream:* A letter just received by me from Henry Wright, Esq., secretary to the Duke of Sutherland, states that the salmon fishing in Sutherlandshire, Scotland, this season is exceptionally good. He writes: "One of my friends was there for seventeen days, fished fifteen and caught seventy-eight, weighing 790 pounds. A party of six fishing one river showed over fifty salmon, on their return to the hotel, in one day, and on the other rivers it has been proportionately good. I told one man at Brora (near Dunrobin Castle), who fishes with nets for the market, that he might go to Loch Brora and have a haul. He did and got 398 fish, weighing 3,960 pounds. I don't mean in one haul, but one day's hauling, say eight or ten hauls. The country is beginning to look lovely, the fruit trees just coming into full bloom, and the grass green."—Geo. Shepard Page.

A Fly Preventer.—A common prescription to keep off flies and mosquitoes is a solution made by soaking or boiling quassia chips in water. Although highly recommended by some of those who have tried it, it nevertheless often proves ineffective. Something like the quassia remedy in its character is the following, taken from the Sydney (Australia) *Tribune:* "A reader, Namoi River, states that he has found that by washing his hands and face in a weak solution of bitter aloes, he has escaped annoyance from the attacks of mosquitoes, even in localities where they are most troublesome. He has also found that his horses benefited in a like manner by giving them a wash down with the same liquid." We print it for the purpose of asking our readers if any of them have ever tried it, and if so, with what result. To many people the ordinary smear of tar and oil is only less disagreeable than the insects themselves.

A Handsome Trout.—On Monday we received a box containing one two and three-quarter pounds trout, sent with the compliments of Mr. A. Weeks. The fish was taken near Locust Valley, on the north shore of Long Island, where they have access to salt water. It was as shapely a fish as one ever sees, and its light silvery sides shaded off to a delicate pink underneath. It was a fish that should have been immortalized on canvas. If, as is claimed, the trout of Long Island are the handsomest in the country, this was one of the most beautiful of Long Island trout.

Fishculture.

AN ENGLISH FISHCULTURAL FARM.

LAST week we noticed the arrival of 10,000 eggs of the English trout at the Cold Spring Harbor station of the New York Fish Commission. The following is an account of the place from which they came, written by Mr. R. B. Marston, of the London *Fishing Gazette:*

The other day, in response to a long-standing invitation, I paid a visit to Mr. T. Andrews, the pisciculturist, of Westgate House, Guildford, in order to see his place generally, and to arrange about a shipment of 10,000 English trout eggs, which are to be sent as a present from the *Fishing Gazette* to the American Fishculture Association.

I found Mr. Andrews in his hatching house busy looking over his magnificent stock of ova and fry. Fish-breeding seems to agree with Mr. A., for he looks the picture of a man who takes things easily, and always seems jolly and contented. One would hardly suppose that he had the care of the finest fish farm and breeding-place in England, and a large business besides. He commenced fish-breeding as an amusement many years ago, and soon found such a demand for his eggs and fry that he had to go in for it thoroughly, and it now pays him splendidly. In addition to his large hatchery at his house, he has, a few miles off, a system of no less than forty ponds fed by springs, and ranging in size from two acres down to a few square yards. In these ponds he keeps his yearling trout and his parent fish, and some idea of the magnitude of his fish farm may be got from the fact that at the present moment he has about 40,000 trout in these ponds. Not having seen them, I must reserve a description of the ponds for another visit; suffice it to say they are all admirably arranged, are staked to prevent poaching, and the water can all be drawn off by means of iron sluice valves, and they are, besides, so efficiently watched that poachers have no chance.

In the hatchery, Mr. Andrews has facilities for hatching over two millions of eggs during the season, and his annual "output"—if I may use this expression—often exceeds that number. Last year Mr. A. sold half a million trout fry and yearlings, and about a million eggs, and his prices for eggs range from 20s. to 40s. per 1,000, for fry from 30s. to 60s. per 1,000, and for yearling fish (5 to 8 inches in length), from £30 to £45 per 1,000.

He has at present about nine hundred thousand splendid trout eggs of various kinds in his troughs and trays. It was to me extremely interesting to witness this wealth of embryo trout life. Six hundred English trout eggs stocked the streams of Tasmania and New Zealand; here around me were sufficient to stock a universe. The ova was of different sizes and color, from a pale yellow to a deep orange. The largest eggs were a lot of hybrids, produced by crossing *S. ferox* and *S. salvelinus* (char). Then came a fine lot of great lake trout, which Mr. Andrews had obtained from Dr. Zenk. Some of these had already hatched out in a most promising manner. A cubic inch of ordinary (medium size) trout eggs number about 125—*i. e.*, five rows deep of twenty-five eggs. A gallon measure holds about 40,000 "fine" eggs. Mr. Andrews finds that equally good results are obtained by using "trays" instead of the old-fashioned "troughs." He can rely, as a rule, on an average of over ninety per cent. of fry from every hundred eggs. As an instance of the advantage of the trays over the troughs, I may mention that while a trough 3 feet by 7 inches will only hold successfully about 7,000 eggs, trays 1 foot by 3 inches will contain 125,000. In addition to this, the trays are infinitely cleaner and more easy to manipulate. The trays are made of finely-perforated zinc, coated with ordinary tar varnish. Five of these trays fit into a wooden box, which contains the water, and are made with a flange turned outward; this is important, as the flange then supports the box when it is let into its place, and there is no difficulty in pouring out eggs or fry, as would be the case if the flange turned inwards. A tray 12 inches long, 6 wide and 3 deep will hold 30,000 eggs, and the water comes to within half an inch of the top, and the eggs lie 15 deep.

The following, respecting the cost of a box with five trays, will be useful:

	s. d.
Wooden box, 3 ft. by 5 in. deep	7 0
Five trays, at 2s. 6d. each	12 6
Lead piping, etc.	7 0
Total	£1 6 6

Mr. Andrews is fortunate in having a supply of excellent water, which is made to pass through three large cisterns, and thus settles down before it reaches the trays. He informs me—and it is a hint worth remembering—that water from a high pressure is too highly aerated, is unfit for respiration, and kills the fish. The following information is also most valuable: For twenty-four hours after being stripped from the fish, eggs can be washed and manipulated almost with impunity; then for three or four weeks and until "eyed" they are extremely delicate, and should be disturbed as little as possible. When fairly "eyed," they will stand an almost incredible amount of judicious manipulation; indeed, Mr. A. once upset a box of 25,000 eggs on to the floor and then swept them up without appreciably injuring them. In the garden are several large tanks for holding yearlings and other trout. Mr. Andrews netted out some of these to show me, including some very fine *fontinalis*. It would be impossible to imagine finer or more healthy-looking fish—not a trace of the imperfect gill covers, showing the red gills, as is so often seen in artificially-reared trout which have not been properly treated. I asked him what his opinion was of *fontinalis*, and he replied that they were splendid fish for ponds or any water where they can be prevented from escaping, but that they certainly do not answer in English rivers. This fully conforms what I have repeatedly stated in this paper.

Mr. A. related to me a most encouraging instance of how a river may be re-stocked. Some years ago he set his heart on a stream which he knew was capable of feeding trout to any extent. There were none in it then, as they had all been killed by the chemical refuse from a mill. The mill did not pay, and had been converted into a harmless factory of some kind, and the river had gradually regained its aquatic vegetation, and with it insect life. Without saying anything to any one, he placed about 20,000 fry into this stream, and in three years' time the river was so well stocked that a gentleman wrote to the *Field* to point out the wonderful manner in which a stream, if left to itself, will reproduce trout when the injurious refuse has been done away with.

Mr. A. quietly stepped in and explained the wonder in a very much more rational manner. He still continues, every year, to put a few hundred yearlings into it, and it is now probably, for its size, the best bit of trout water in the county of Surrey—the fish running very large.

In another case, he turned about twenty-five brace of trout (averaging two pounds each) into a tributary of the Wey, and now fish of four, five, and even eight pounds, are not uncommon.

It is pleasant to know that one who has unostentatiously done so much to increase that splendid fish, the trout, is himself an ardent and skillful fly-fisher. I spent a long time looking over his rods and flies, of which he has enough to stock a tackle shop. He showed me a capital fly-rod, made to his order by Mr. Bowness. It had duplicates of second, third, and top joints; these are carried by placing them so that the ends rest in a corner of a big "Freake" bag, the tops rest over the left shoulder, and Mr. A. is thus prepared for any accidents, and he gives his fish no more law than his tackle will permit. I confess, for my part, I should not like to be encumbered with any spare joints except a top in the landing net handle, as I do not remember having an accident with any other joint but once, and that was in dace-fishing at Teddington, when a heavy chub took the fly, and the quick strike required for dace smashed a bad bottom joint. But even Mr. Andrews' precaution would not have availed in this disaster, as he does not carry a duplicate butt.

THE GOLDEN IDE, OR ORFE.—Mr. Hugo Mulertt, of Cincinnati, in speaking of this fish, recently said: "This is a fish which is but little inferior to the trout in gameness as well as on the table; and then notice his brilliant colors. He is called the gold orfe, and is pre-eminently the aristocratic game fish of the world. He is to be found in the pond of every German nobleman, and, I must say, is worthy of every honor. These fish swim in schools near the top of the water, and in consequence are particularly fitted for fountains and ponds. They are perfectly hardy, may be left in the ponds all winter, and in a couple of years will sometimes reach the length of three feet." The recent flood in the Ohio River carried away a great stock of fancy fish from Mr. Mulertt's ponds, near Mill Creek. Among them were Japanese kingios, fringe-tails, telescope fish, golden orfe, and many other rare fishes. His loss is very great, and is to be regretted, as he is the only fishculturist in America who makes a specialty of ornamental fishes.

McDONALD FISHWAYS FOR SCOTLAND.—The Tay Fishery Board have decided to place a McDonald fishway on that river, and Col. McDonald will sail for Scotland in June to superintend its construction. This was suggested by a writer in the *Scotsman*, who said: "There are at least a dozen fishery districts in Scotland where impassable waterfalls shut out good spawning ground, and in the great majority of these districts there are district boards; and if the McDonald fishway be really as valuable a discovery as it is stated to be, why should not these boards arrange among themselves, and combine to bring the inventor over and let him try to open up the hitherto untouched spawning grounds on our upper waters? But it is not only to natural obstructions, in the shape of waterfalls, that the McDonald fishway would apply. It would also be invaluable, if its claims are well founded, in enabling salmon to ascend the numerous dams belonging to mills and manufactories which at present greatly retard, if they do not entirely prevent, their upward progress. The number of such dams is legion."

The Kennel.

FIXTURES.

BENCH SHOWS.

April 22.—The St. Louis Gun Club's Bench Show, St. Louis, Mo. Entries close April 14. J. M. Munson, Secretary.

May 6, 7, 8 and 9.—The Westminster Kennel Club's Eighth Annual Bench Show, Madison Square Garden. Entries close April 21. Chas. Lincoln, Superintendent. R. C. Cornell, Secretary, 54 William street, New York.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1115.** Volume I., bound in cloth, sent postpaid, $1.50.

THE CLEVELAND DOG SHOW.

THE second show of the Cleveland Bench Show Association was held at Cleveland, O., last week. Like all of the shows superintended by Mr. Lincoln, it was well managed, and we are pleased to add, pecuniarily successful. The number and quality of the dogs was not quite up to that of the show held two years ago. There was a notable falling off in the English setter classes, while the pointer classes showed an improvement. The Irish setters were well represented, many of the best in the country being present. The black and tan setters were a mixed lot, with only two or three moderately good ones. The spaniels were fairly well represented, as were the beagles and fox-terriers. The collies were very good, both in numbers and quality. There was a meagre showing of large dogs, nearly all of the classes having but one or two representatives. The ladies' pets were out in force, and proved to be one of the most attractive features of the show.

A large number of the stalls were tastefully decorated, many of them displaying handsome boquets and wreaths of choice flowers. The building is rather small, and at times was uncomfortably crowded.

The judging was done upon a raised platform in the center of the building, affording the spectators a good view of the proceedings, which were watched with great interest, which often manifested itself in applause, as some favorite was given the blue. Major Taylor and Mr. Mortimer handled their dogs very nicely, and not much fault can be found with their awards. Mr. Munson was not quite so happy with the pointers, and some of his decisions were decidedly wrong. Major J. M. Taylor passed upon the merits of the setters, and Mr. J. M. Munson upon the pointers. Mr. J. F. Kirk was expected to judge the remaining classes, but business engagements prevented his presence, and Mr. James Mortimer very acceptably filled his place. In commenting upon the dogs, we deem it unnecessary to repeat our description of those that are well known. Many of the animals in a large number of the classes were sadly out of condition, both in flesh and coat, and quite a number were afflicted with mange and should not have been shown. The special prizes, which were very valuable, as well as handsome, were open to all, unless otherwise specified, and in most cases followed the awards in the regular classes. The performance of the trick dog was very good and afforded much amusement to the spectators. The Association will not hold a show next year, having an understanding with Pittsburg to alternate with them. It having been fully demonstrated that both Cleveland and Pittsburg can hold successful shows, it would be much better for each to hold them annually, as we are sure that both larger and better entries would follow.

SETTERS.

The English setters were not so well represented as they were two years ago. Major Taylor's Lit was on exhibition. She is not a bench show winner, but the fame of her victory last winter over the celebrated Grouse Dale secured for her quite an ovation. Royal Ranger had a walk over in the champion dog class. He has settled together and improved in form since we last saw him, although he was shown in very bad condition, which was in part due to his having been hunted until recently. He was also suffering from mange. Dick Laverack, the only other entry, was absent, as were all of Mr. Davey's entries. In the bitch class, Nellie May, who was in capital condition, won over Lady May, who was not at her best. Nellie May is a sweet little bitch, with no very weak points. She lacks a little in bone. Lady May is also a capital bitch, rather above the medium size, of good form, with plenty of bone. We thought her deserving of the ribbon, notwithstanding her feet were not so good as Nellie's. In the open dog class, first went to Count Gladsome, a very nice upstanding dog of much quality. He was not in good condition. Laverack Chief, who won second, is also quite a good dog. He was in even worse condition than Count. Don, who was placed third, has not the quality of the others, although he is a well put together useful-looking dog. Chief Justice, hc., is a big workmanlike-looking animal, with plenty of bone. He was shown too thin and soft. Napoleon, c., we liked for the three letters. He is well built, with a fair head, and has capital legs and feet. He looks all over a workman. We also liked Brandon, unnoticed. He has not a first-class head, but has a good chest, back, loin, legs and feet; he was not in good condition. None of the others were worthy special mention. In the bitch class, first and second went to Mr. Hartley's Queen Alice and Daisy Queen. Both deserved their honors, although they were all out of condition. Daisy, who won third, was the only one left worthy of notice. She is quite a fair animal. Dan Voorhees, in the dog puppy class, was an easy winner. He is a very promising youngster, with a nice head, and will probably be heard from again. Don, who won second, is a fair animal, but a bit big and inclined to be coarse. There was but one entry in the bitch class, Countess Floy. She is very pretty, and well deserved her ribbon.

The Irish setters, although only about about half as numerous as the English, were far ahead of them in quality. Glencho, who won in the champion class over Chief and Norwood, was looking better than we have ever seen him. He has filled out and overcome much of his leggy appearance, he has also improved in stifles, as we predicted, and we doubt if a better representative of the breed can be found. Chief was very well shown. He is also a hard dog to beat. Norwood we liked very much. He is a capital dog, but was not in so good condition as the others. Biz was absent. In the bitch class, Trix furnished quite a surprise party to the friends of Lady Clare. When both are at their best, there is not much to choose between them; but both were out of condition, owing to the cares of maternity, and Lady Clare had a little the worst of it. In the open dog class Snap, who was second at New York last year, was placed first. He has improved and was very well shown, as were all of Mr. Pierce's dogs. Mickey C., who won second, is also a very nice animal, with good head, chest, legs and feet, and a good flat coat. McCullough, vhc., is of good type, but was sadly out of condition. Chief II., c., is also well shaped. He was also in bad condition, and carried his tail too high. Conn, unnoticed, has a good head, and is well formed. Had it not been for his wavy coat he would probably have been noticed. In the bitch class, Reeta, the winner, had it all her own way. She was in good condition. The three others were litter sisters. All of them are very fair animals, of good form, but a little under size. We thought them well placed. Glenmar had an easy win in the puppy class. He is wonderfully developed for a six-months puppy, and is as hard as an old dog. If he goes all right he will be good enough for almost any company. Book, who was given second, is big and coarse, and should not have been noticed. Elcho IV., the only other entry, is not entitled to his name. He is a cross-bred and solid liver in color.

The black and tan setters, with the exception of three or four, were a poor lot. Rupert II. had a walk over in the champion class. He was not in very good condition. He has a good head and chest, with very rich tan markings; he might be better in stifles. There were no entries in the bitch class. Dark, who won first in the open dog class, is quite a fair animal. There was not much to choose between him and Mr. Brown, who won second. Jet, who won first in the bitch class, is also a fairly good animal. Nell, the only other entry, was very badly out at elbow, and the second prize was properly withheld. First was withheld in the puppy class, and second might have been also and no injustice done, as the winner was rather weedy and decidedly curly in coat.

POINTERS.

The entries in the pointer classes were just the same in numbers as two years ago, while the average quality of the animals was an improvement. In the champion large dog class Faust was given the pride of place. He was looking very well, considering his age, and is still a grand dog, although he has grown throaty and shows his years. Brownie also shows age, and was not well shown. Knickerbocker was looking better than when we saw him last. Vandevort's Don, the only other entry, was absent. Marguerite II. was alone in the bitch class. She is quite a good bitch, and deserved her honors. She has a good body with a straight back, a nice tail, with good legs and feet. Her head is quite plain, and she might be better in stifle, and greatly improved in condition. In the champion small dog class Jet had a walk over. He is too long coupled and light in bone to win in good company. There were no entries in the bitch class. In the open large dog class there were three moderate specimens, with not much to choose between them. Joe, who won first, has a fair head, good chest and shoulders, and good forelegs and feet. He is a bit leggy and lathy, and weak in stifles. Jacob, who won second, should have been content with third place. He has a fair head, but is coarse and has no quality: he is also leggy and lathy, and has a coarse tail. Ruff, c., we liked as well as either of the others. He has as good a head as either, and is much better formed; he has a good chest, body, loin, legs and feet; he is a bit wide in chest and of as ugly color as we ever saw. In the bitch class Countess Vesta, who was given first, is far from being a good specimen. She has a fairish head with a good loin and quarters; her ears are set on too high and her shoulders are bad; she is out at elbow and her fore feet are close together, giving her a very awkward appearance in front; she is also swaybacked and has a coarse, badly carried tail. Belona, who was second, should have been first; she clearly outclassed the others; she has a good head, body, legs and feet and tail; she is a little too wide in chest, and was not in good condition, having just weaned her litter. Fan II., vhc., we liked for second place; she is a fair specimen, with no glaring faults. Musette, hc., received all that she deserved; her head and eyes are bad.

In the open small dog class King, who won first, is a very good specimen of the old style pointer. He has a fairly good head, except that the occipital bone is not well developed. His neck is elegant and well set on. He has a good loin and quarters, fair legs and good feet. He is too wide and round in chest, and is a trifle too closely coupled; he is also let down just a bit behind the shoulders. He was in beautiful condition. Bang Bang, who won second, was clearly entitled to first, notwithstanding the bad condition in which he was shown. In no point except in condition was King his superior, while in most points that enlightened breeders deem of vital importance, Bang Bang was far ahead of him. Mr. Munson claims that Metcor is very near perfection. Now we venture to say that there is not a prominent pointer in the country who approaches Meteor in type so nearly as Bang Bang. Donald II., vhc., is a fine big dog and shows considerable quality. He is a trifle lathy and a little too straight behind. The others that were noticed were perhaps as well placed as was possible, except that Match, unnoticed, should, if the judge was right, have had at least vhc. He resembles the winner in form more than any in the class, and well deserved a place. In the bitch class there was not much to choose between first and second, both are quite good. Lady Croxteth had a little the best of it in head, but in other respects they are nearly equal. Rose II., vhc., is fairly well formed, but she has a bad head, and is too wide in front. Dora, hc., is quite a nice bitch, and gives promise when matured, of turning out a good one. Dora, unnoticed, is also quite good, and deserved the three letters, although she has just weaned her litter, and was not in good condition. The dog puppy class brought out two good ones. Both are well formed and promise well. They were very well shown. The bitch class was not quite so good. We thought them properly placed.

SPANIELS.

The Irish water spaniels were particularly good. Barney was alone in the champion class. He has been at work and was not in his usual good condition. In the open class, first went to Ponto, a very nice specimen of excellent type, but rather small. Patsy O'Connor, who won second, is also a capital dog, with a very good coat. He carries his tail badly. Aleck, vhc., has a good coat and plenty of bone. He is well formed, but is too square on muzzle, and a little off color.

Benedict, the only entry in the champion field spaniel class, was absent. In the champion cocker class, Bene beat the only other entry, Hornell Dinah. Bene is a very nice little bitch, with plenty of bone and a capital coat. She might be better in head. Her ears are also a trifle short. In the open class for field spaniels, Hornell Maggie won first. She is a very good bitch, but was not in first-class condition. Burdette Bob, who won second, we did not like so well. He is too high on his legs and has not a good coat, and, judging from the many scars he carries, his disposition is not of the best.

Cocker spaniels, other than black, was a poor class. Nellie, a black, was ruled out on account of her color, and Hornell Rattler, the only one left worthy of notice, was given first. He has a good head and good length of body, with plenty of bone. His ears are rather small, and set on too high. Macduff and Queen Ann are both toyish in appearance and curly in coat, and not deserving the hc. they received. In black cockers, first went to Hornell Silk, a capital little dog, with a good coat and body and plenty of bone. He is just a bit high on his legs. Rosa, who won second, has a good body and a fair amount of bone. She is weak in head, and her coat is slightly curled. Hornell 101 is good in body and bone, but has not a good head. In the puppy class, Ross, who was first, is a nice black, with good body and bone, but a bad coat, which may improve with age. The second prize was withheld. Nellie, who was hc., got all that she deserved. She is well made, but is too small.

FOXHOUNDS.

Ringwood was the only entry in the champion foxhound class. He was looking well, and deserved his medal. In the open class Ringwood II. won first. He has a good head and shoulders and plenty of bone. He is just a trifle slack in loin and might have better feet. Gabriel, who won second, has a good head and ear and lots of bone, and a capital set of legs and feet. He is a trifle throaty, and is not good in back and loin. Sport, vhc., is a good stamp of dog, but is too straight in shoulder and moves badly. Leader, hc., has plenty of bone, but has a poor head and ears, and lacks quality.

BEAGLES.

Rattler, who won in the champion class, was not looking his best. Lill, the only other entry, is a good bitch. She is a bit short in ears and begins to show age. The open dog class was very good, King Pat, who was placed first, is a very nice little dog with a good head and ear, deep chest and good feet. He seems a bit weak at knee joints. Boxer III., who was second, has good bone legs and feet. He is only fair in head and body and carries his ears a trifle high. Dell, vhc., has a good head with lots of bone. He is out at elbows, and has too fine a coat. Minstrel, c., we liked for a better place. He is a grand little dog with first-class body, legs and feet. His head is a bit heavy, and we do not quite like the hang of his ears. He was suffering from mange, which undoubtedly set him back. There were three very good ones in the bitch class. Mischief, who won first, has a beautiful head, good ears, which are nicely carried, good bone, legs and feet; she is a trifle weak in loin. Bonnie, who was second, is a very sweet little bitch of much quality; she is rather light in build. Lill II., vhc., is very well made, but is a bit too high in her legs, were it not for this fault she would have been a good second. There was only one entry in the puppy class, quite a promising youngster.

DACHSHUNDE.

There were only three in this class. Prince, the winner, is a very good specimen. He has a good head, with good length of body, plenty of bone and crook. Brunhilde, who won second, is not quite so good as the winner in length of body or crook. Waldman K., vhc., we liked better for second place, although he was not in good condition.

FOX-TERRIERS.

Fennel had it all his own way in the champion dog class, out-classing Dick, his only competitor, at every point. In the bitch class, Thistle was also an easy winner, beating Ruby in bone and coat. Lyra was absent. In the open dog class, Vakeel, who won first, is a very taking dog, full of character. He has a good head, with nice, well-carried ears, a good neck well set on to good shoulders, and a dense coat. He is slightly out at elbow, and might have better feet. Belvoir Jim, who won second, is also quite good. He has good shoulders, legs and feet, and looks like a workman. He is a bit thick in skull, and stands a trifle too high on his legs. Greek, vhc., is a nice little dog all through, but rather too small. Grip, hc., received more than he was worth. He lacks character, has large ears and open feet. Pouf, c., should also have been unnoticed. He is large and coarse, with a poor head and is short of coat. Village Belle, who won first in the bitch class, is all over a terrier, and the only one in the class that the judge noticed, a decision with which we agree. First was withheld in the puppy class; second was given to Vixen, a very moderate specimen.

GREYHOUNDS.

Spring Custer was the only greyhound present. He shows age, but deserved his ribbon for his good back, loin and quarters.

DEERHOUNDS.

There was but one entry in this class, Garfield, who was given first. He is a magnificent dog in front, and not at all bad at any point, except that he has a bad tail which he carries much too high.

MASTIFFS.

Lion, the winner in the champion mastiff class, is a well-made dog with a good skull and legs; he moves very well. He falls away below the eyes and is off color, and has too much white on chest and feet. Tiny, the only other entry, we consider a much better specimen, but he was in wretched condition, and should not have been shown. Agrippa, the only entry in the open dog class, well deserved his prize. He has a good head, and is well formed, with lots of character. He is undersize, which is his most serious fault. There were but two in the bitch class. Cleopatra, who won first, has developed into a grand animal. She is well formed, with a good head and muzzle, and is full of quality. Duchess, who won second, is also very good, but does not show quite the quality of the winner.

ST. BERNARDS.

Otho, the only entry in the champion rough-coated dog class, is of immense size and bone. He has a massive head and stands 33 inches at shoulder. He was very low in flesh, which gives him a leggy, gaunt appearance. Lady Abbess, by mistake, was entered in the champion class, but was transferred to the open class. In the open dog class, Hermit was alone. He well deserved his first. He has a massive typical head and plenty of bone. He is rather light in body, and was out of coat. Lady Abbess, who won first in the bitch class, was in much better condition than when we saw her at Loudon last fall. She has a good body, bone, coat and color, and is nicely marked. She might be more massive in head. Santa, who was second, is of good size and bone, but has a very poor head and a badly carried tail. There were no entries in the smooth-coated champion dog class. In the bitch class Daphne was alone. She has a good body with immense bone and a very good coat, she might be better in head and tail. In the open dog class Bishop, quite a nice orange and white dog, easily won over his kennel companion, Bonhomme, who is disfigured by having a pig jaw. Chartreuse, the only entry in the bitch class, was given first. She has a nice head and good body but is a little short of bone.

NEWFOUNDLANDS.

The Newfoundlands were a poor lot. Watch, the winner, is fairly good, with a good body and coat. He is deficient in head and lacks bone. Mackaboy, who won second, has a good coat, legs and feet, but has a poor head and is slack in loin. York, vhc., is an immense dog, and except that he has a retriever coat he was the best in the class. The others were unworthy mention.

COLLIES.

Rex and Lorne were the only competitors in the champion dog class, Rex winning the medal. Except that Rex is just a trifle better in head and ear, we thought Lorne the best. He is fully as well formed, and has a better coat. He did not carry himself so well as his stylish rival, which we presume lost him the race. Lassie had a walk over in the bitch class. She was heavy in whelp, and did not show to advantage. The open dog class was very good indeed, with not a bad one in it. Yarrow, the winner, does great credit to his sire, Rex. He is a very handsome, stylish dog, with a beautiful head and ears, good legs and feet, and lots of bone and a very graceful mover. He was trifle short of undercoat. Hiram, who won second, has not improved in condition, being as usual much too fat. There was not much to choose between the others, all of them were good with no glaring faults. The bitches were also a good lot and deserved their awards. Fairy, who was first, was in excellent coat. Flyaway, second, has greatly improved and, but for her light coat, would have made it very warm for the winner. The dog puppies were a promising lot, with not much between the three that were placed. We fancy that Roy, who was placed behind the others, will show them the way next year. Nannie O. had no trouble in winning over Olive, her only competitor in the bitch class. Olive, however, is very promising, and may do better when mature.

BULLDOGS.

Boz, the only entry in the champion class, was not at his best. In the open dog class, Brimstone, placed first, has a good skull, but is rather plain in face and has a terrier body and tail. The second prize was properly withheld, as were all prizes in the bitch class.

BULL-TERRIERS.

In the large class the first prize was withheld, and no great injustice would have been done had the same been done with the others. There was but one entry in the small class, Little Maggie, quite a nice little bitch of correct type.

WIRE-HAIRED OR SCOTCH TERRIERS.

In this class Heather, a very good bitch, with a capital terrier head, beat Tam Glen, who is a very typical dog, but not quite up to the winner in head. The others were all good and

not very much behind the winners. We liked Nibs the Tramp full as well as any except the first two. He is a varmint-looking customer, and if the class were turned loose among rats we will warrant that he would not be the first to quit.

BLACK AND TAN TERRIERS.

This was also a good class, in which Vortigern, although defeated for both first and second place, was not disgraced, as both of the winners were sired by him. They are both of good form and well marked. Spring, hc., is well made, but is off in color and markings. Nell, c., deserved more than she got as she is a very nice little bitch, although rather too small.

DANDIE DINMONTS

were both absent.

IRISH TERRIERS.

We could not quite agree with the judge in placing Erin over Norah. Erin has a good coat and color, but he is not first-class in head and lacks bone, while Norah has a good head with plenty of bone and a fair coat.

SKYE TERRIERS.

There were no entries of Skyes except in the prick-eared class which brought out three good ones in our old favorite Judge and two of his get; we thought them properly placed.

PUGS.

Joe was alone in his glory in the champion class. He was not in his usual blooming condition. In the open dog class first went to Treasure. He is a well made dog with good skull, mask and wrinkle. He is a bit coarse in coat, but will probably improve as he grows older. Punch, who won second, is good in head and body but is deficient in mask, and has white toe nails. Pete, vhc., is a very nice specimen, much better than Punch, except that he is blind in one eye. The others we thought well placed. The bitches were fairly good, the winner is very nice with correct markings. She carries her ears badly, which is her most serious fault. The remainder of the class as well as the only puppy call for no especial comment.

YORKSHIRE TERRIERS.

Hero, the only entry in the champion class, deserved his medal. He was in good coat, although it was a trifle faded. In the open class, over 5lbs., first went to Tiney, a nicely-colored dog, a trifle short in coat. The others, as well as those in the small class that received notice, were all fair specimens that call for no special comments.

TOY TERRIERS

were all quite good. Dot, the winner, was a nice little black and tan, with correct markings.

KING CHARLES OR BLENHEIM SPANIELS.

Rosie, quite a nice little black and tan King Charles, was the only one shown. She was a little short of coat and feather.

ITALIAN GREYHOUNDS.

The only entry was absent.

POODLES.

Bennie, a good coated corded gray, was awarded first; second went to a well shaped white and black, who was hardly close enough in curl.

MISCELLANEOUS.

This class was quite good, Sir Garnet, who won first, is quite a good Airedale terrier. Foreigner, who won second, is a four months old bloodhound, who promises to turn out a good one. He is good in skull, eye and ear, and has good length of body with immense bone. He is short of flew and wrinkle, but may improve with age. The others call for no special mention except Fritz, vhc., who is an exceedingly clever trick dog. Following is a full list of the

AWARDS.

Class 1. Champion English Setters, Dogs,—1st, Howard Hartley's Royal Ranger, lemon belton, 3yrs., Royal IV.—Shorthose Novel.

Class 2. Champion English Setters, Bitches.—1st, D. O'Shea's Nellie May, blue belton, Blue Dash—Jolly May.

Class 3. English Setters, Dogs.—1st, John Overman's Count Gladsome, white, black and tan, 2½yrs., Champion Gladstone—Lelia; 2d, A. C. Waddell's Laverack Chief, black, white and tan, 3½yrs., Pontiac—Fairy II.; 3d, L. G. Hanna's Don, black, white and tan, 2½yrs. High com., R. B. Carothers's Chief Justice, black, white and tan, 2yrs., Byron—Reign. Com., B. F. Wilson's Napoleon, black and white, 28mos., Royal Blue—Lady Vin; Charles Willard's Jake, white and black, 3yrs., Penn—Nettie; S. A. Kaye's Brackett, orange and white, 4yrs., Gladstone—Clip.

Class 4. English Setter Puppies, Bitches.—1st, Howard Hartley's Queen Alice, black, white and tan, 4yrs., Druid—Cubas; 2d, Howard Hartley's Daisy Queen, black, white and tan, 3yrs., Rock—Meg; 3d, Jacob King's Daisy, blue belton, 2yrs., Felton—Jessie Turner. Very high com., B. F. Wilson's Dashing Romp, 4yrs. 7mos., Dash II.—Norna. High com., Roe Reisinger's Annie Boleyn, black and white ticked, 12mos., Dash III.—Isabella. Com., A. C. Waddell's Queen Alice II., black, white and tan, 18mos., Laverack Chief—Queen Alice; S. A. Kaye's Druid's Maid, lemon and white, 3yrs., Druid—Lady-of-the-Lake; S. A. Kaye's Nannie, black, white and tan, 5yrs., Blue Dash—Sport.

Class 5. English Setter Puppies, Dogs, under 12mos.—1st, P. B. Spence's Dan Voorhees, black, white and tan, 10mos., Chief Justice—Nancy Lee; 2d, G. Tilke's Don, lemon and white, 11½mos., Duke—Peg.

Class 6. English Setter Puppies, Bitches.—1st, J. H. Dalliba's Countess Floy, black, white and tan, 9mos., Count Noble—Floy.

Class 7. Champion Irish Setters, Dogs.—1st, W. H. Pierce's Glexcho, dark red, 2yrs. 10mos., champion Elcho—champion Noreen.

Class 8. Champion Irish Setters, Bitches.—1st, William Kemble Lente's Trix, dark red, champion Elcho—champion Fire Fly.

Class 9. Irish Settters, Dogs.—1st, W. H. Pierce's Snap, red, 2yrs. 9mos., champion Chief—Tilley; 2d, H. E. Chubb's Mickey C., red, 2yrs., Karl—Irish Countess. Very high com., Charles A. Willard's McCullough, red, 20mos., Duncan—Maud. Com., H. P. Goetschius's Chief II., red, 3yrs., Chief—Doe.

Class 10. Irish Setters, Bitches.—1st, Jas. T. Walker's Reeta, red, 3yrs. 11mos., Elcho—Fire Fly; 2d, Frank Billings's Nora II., red, 2½yrs., champion Biz—Nora. Very high com., H. E. Hill's Maggie H., red, 2½yrs., champion Biz—Nora. High com., George Randerson's Red Daisy, red, 2½yrs., champion Biz—Nora.

Class 11. Irish Setters, Puppies.—1st, W. H. Pierce's Glenmar, red, 6mos., champion Glencho—Mavourneen; 2d, George W. Short's Book, red, 10mos., champion Glencho—Mollie.

Class 12. Champion Black and Tan Setters, Dogs.—1st, Franklin Kennel's Rupert II., black and tan, 4½yrs., Rupert—Queen.

Class 13. Champion Black and Tan Setters, Bitches.—No entries.

Class 14. Black and Tan Setters, Dogs.—1st, E. Nutting's Dash, black and tan, 5yrs., Jan—Diana; 2d, Miss L. Walton's Mr. Brown, black and tan, 4yrs., champion Grouse—Topsey. Com., E. B. Seidel's Bob, black and tan, 5yrs., pedigree not given.

Class 15. 1st, H. R. Parker's Gip, black and tan, 2yrs. 3mos; 2d, withheld.

Class 16. Black and Tan Setters, Puppies.—1st, withheld; 2d, Geo. P. Covert's Lilly, black and tan, 7mos.

Class 17. Champion Pointers, Dogs, over 55lbs.—1st, S. A. Kaye's Faust, liver, white and ticked, 8yrs., Sefton's Sam—Pilkington's Nell.

Class 18. Champion Pointers, Bitches, over 50lbs.—1st, H. W. Fawcett's Marguerite, liver and white, 4½yrs., champion Faust—Devonshire Lass.

Class 19. Champion Pointers, Dogs, under 55lbs.—1st, W. R. Huntington's Jet, black, 3½yrs., Frank—Lady.

Class 20. Champion Pointers, Bitches, under 50lbs.—No entries.

Class 21. Pointer Dogs, 55lbs. and over.—1st, T. H. Dalliba's Joe, liver and white, 29mos., pedigree not given; 2d, J. H. Kirkwood's Jacob, liver and white, 4yrs., pedigree not given. Com., Theo. F. Spencer and George R. Butler's Ruff, lemon and white, 3yrs., Dilley's Ranger—Dilely's Fleet.

Class 22. Pointer Bitches, 50lbs. and over.—1st, S. A. Kaye's Countess Vesta, liver, white and ticked, 4yrs., imported Donald—imported Bell II.; 2d, Westminster Kennel Club's Belona, lemon and white and ticked, 5yrs., champion Bow—Beulah. Very high com., A. C. Waddell's Fan II., liver, 2½yrs., Bow—champion Fan. High com., S. A. Kaye's Mussette, liver and white, 4yrs., Bow—Queen.

Class 23. Pointer Dogs, 55lbs. or under.—1st, A. C. Waddell's King, liver and white, 2yrs., Clipper—Dove; 2d, Westminster Kennel Club's Bang-Bang, orange and white, 3yrs., champion Bang—Princess Kate. Very high com., C. M. Munhall's Donald II., liver and white ticked, 19mos., champion Donald—Devonshire Lass. High com., John R. Daniels's Snap Shot, orange and white, 14mos., Bob III.—Fan; B. F. Seitner's Riot, liver and white, 18mos., Lort—Lass. Com., Adam Baker's Don, liver and white and ticked, 18mos., Rush—Nelly; J. W. Shannon's Dash, liver and white, 4yrs., pedigree not given; Tuscarawas Kennel Club's King Bow, Jr., liver, white and ticked, 23mos., King Bow—Chess.

Class 24. Pointer Bitches, 50lbs. or under.—1st, B. F. Seitner's Lady Croxteth, liver and white, 2yrs., Croxteth—Lass; 2d, B. F. Seitner's Lass, lemon and white, 4yrs., Sleaford—Dawn. Very high com., S. A. Kaye's Rose II., lemon and white, 4yrs., Sensation—Rose. High com., J. H. Dalliba's Dora, liver and white, 12mos., champion Sensation—Devonshire Lass. Com., Joseph Lewis's Lilly, lemon and white, 3yrs., Fawcett's Duke—Owner's Spell.

Class 25. Pointer Dog Puppies.—1st, B. F. Seitner's Rapp, liver and white, 11½mos., Croxteth—Lass; 2d, B. F. Seitner's Doncaster, liver and white, 11½mos., Croxteth—Lass.

Class 26. Pointer Bitch Puppies.—1st, G. W. Baker's Ray, brown and white, 10mos., Brownie; 2d, Fred W. Stocky's Brownie, liver and white, 7mos., Brownie—Unknown.

Class 27. Champion Irish Water Spaniels.—1st, John D. Olcott's champion Barney, liver, 7yrs., Shamrock—Shannon.

Class 28. Irish Water Spaniels, Dogs or Bitches.—1st, Cleveland Irish Water Spaniel Kennel's Ponto, liver, 2yrs., champion Barney—Nora; 2d, C. W. Baire's Patsy O'Connor, dark liver, 2yrs, imported Dan O'Connor—Traller. Very high com., G. W. Baker's Aleck, liver, 5yrs.

Class 29. Champion Field Spaniels, any color, 28lbs or over.—Only entry absent.

Class 30. Champion Cocker Spaniels, any color, under 28lbs.—1st, Dr. J. T. Niven's Bene.

Class 31. Field Spaniels, any color, 28lbs. or over, Dogs or Bitches.—1st, Hornell Spaniel Club's Hornell Maggie, black, 3yrs., Bob III.—Fan; 2d, Hornell Spaniel Club's Burdette Bob, black, 3yrs., Leigh's Bob—Venus.

Class 32. Cocker Spaniels, other than black, under 28lbs., Dogs or Bitches.—1st, Hornell Spaniel Club's Hornell Rattler, 11½mos., chestnut and tan, champion Dandy—Dinah; 2d, withheld. High com., A. G. Dayken's Macduff, liver and white, 1½yrs., Brandy—Lady, and Queen Ann, liver and white, 2yrs., imported.

Class 33. Black Cocker Spaniels, under 28lbs., Dogs or Bitches.—1st, Hornell Spaniel Club's Hornell Silk, black, 18mos., champion Obo—Chloe II.; 2d, Dan O'Shea's Rosa, black, 16mos., Doctor—Dolly. Very high com., Hornell Spaniel Club's Hornell 101, black, 16mos., champion Benedict—Priu.

Class 34. Spaniel Puppies (any color)—1st, B. F. Lewis's Ross, black, 10mos., imported; 2d, withheld. High com., Thomas Neal's Nellie, liver and white, 5mos., Brandy—Fan.

Class 35. Champion Foxhounds, Dogs or Bitches.—1st, Dan O'Shea's Ringwood, black, white and tan, 3yrs., Forester—Lady.

Class 36. Foxhounds, Dogs or Bitches.—1st, Dan O'Shea's Ringwood II., black, white and tan, 18mos., Ringwood—Rocksy; 2d, John H. Sweet's Gabriel, black, white and tan, 19mos., Snifter—Jacobs. Very high com., Peter Knierin's Sport, black, white and tan, 5yrs. High com., H. F. Knowles's Leader, white and tan, 5yrs., Bouncer—Fido.

Class 37. Champion Beagles, Dogs or Bitches.—1st, Dan O'Shea's Rattler, black, white and tan, 2yrs., Rover—Music.

Class 38. Beagles, Dogs.—1st, C. E. White's King Pat, white, tan and black, 21mos., Searcher—May Belle; 2d, Fulton Kennel Club's Boxer III., white, black and tan, 15mos., Our Boxer II.—Lill. Very high com., R. & W. Livingston's Dell, A.K.R. 319. Com., W. H. Ashburner's Minstrel, black, white and tan, 2yrs., imported from England.

Class 39. Beagles, Bitches.—1st, Dan O'Shea's Mischief, black, white and tan, 2yrs., Rover—Music; 2d, Mrs. C. E. White's Bonnie, black, white, tan and ticked, 21mos., Searcher—May Belle. Very high com., Fulton Kennel Club's Lill II., white, black and tan, 15mos., Boxer II.—Lill. Com., C. Wm. Fromm's Stella, black, white and tan, 16mos., Spottie—Nina.

Class 40. Beagles, Puppies.—1st, Windsor T. White's Mac, white, black and tan, 10wks., Pilot—Minnie.

Class 41 Dachsunde, Dogs or Bitches.—1st, B. F. Seitner's Prince, fallow red, 14mos., Bergman—Gretchen; 2d, J. P. Shaefer's Brunhilde, fallow red, 14mos., Bergman—Gretchen. Very high com., Carl Klocke's Waldman K., black and tan., 4yrs., Waldman—imported Waldine.

Class 42. Champion Fox-Terriers, Dogs—1st, R. Gibson's Fennel, black, white and tan, full pedigree.

Class 43. Champion Fox-Terriers, Bitches.—1st, R. Gibson's Thistle, black, white and tan, full pedigree.

Class 44. Fox-Terriers, Dogs.—1st, John T. Cable's Vakeel, white, black and tan, 2½yrs., champion Volo—champion Spikepole; 2d, R. Gibson's Belvoir Jim, black, white and tan, full pedigree. Very high com., S. C. Graff's Greek, white with black and tan on head, 14mos., Fennel—Fay. High com., Frank T. Moorehead's Grip, black, white and tan, 15mos., Belgrave Joe—champion Nettle. Com., W. B. Sterling's Pouf, white, black and tan, imported.

Class 45. Fox-Terriers, Bitches.—1st, John T. Cable's Village Belle, white, black and tan, 2yrs. 9mos., champion Volo—Beauty; 2d, withheld.

Class 46. Fox-Terriers, Puppies.—1st, withheld; 2d, M. J. Kelly's Vixen, lemon and white, 6mos., pedigree unknown.

Class 47. Greyhounds.—1st, Dave Marshall's Spring Custer, fawn, 8yrs.; McGraw—Mirror.

Class 48. Deerhounds, Dogs or Bitches.—1st, Jacob Krieger's Garfield, fawn, 2½yrs., imported.

Class 49. Champion Mastiffs, Dogs.—1st, Jas. H. Lynch's Lion, fawn, 28mos., Salisbury—Tigress II.

Class 50. Champion Mastiffs, Bitches.—No entries.

Class 51. Mastiffs, Dogs.—1st, Shaw & Bates's Agrippa, A.K.R. 449.

Class 52. Mastiffs, Bitches.—1st, Dr. J. W. Alsop's Cleopatra, A.K.R. 258; 2d, Shaw & Bates's Duchess, A.K.R. 260.

Class 53. Mastiff Puppies, Dogs or Bitches.—No entries.

Class 54. Champion Rough-Coated St. Bernards, Dogs.—1st, Fred W. Rothera's Otho, A.K.R. 483.

Class 55. Champion Rough-Coated St. Bernards, Bitches.—No entries.

Class 56. Rough-Coated St. Bernards, Dogs.—1st, Chequasset Kennel's Hermit, A.K.R. 23.

Class 57. Rough-Coated St. Bernards, Bitches.—1st, Fred W. Rothera's Lady Abbess, A.K.R. 432; 2d, H. B. Sherman's Santa, orange, white and tawny, 15mos., Monk II.

Class 58. Champion Smooth-Coated St. Bernards, Dogs.—No entries.

Class 59. Champion Smooth-Coated St. Bernards, Bitches.—1st, Fred W. Rothera's Daphne, A.K.R. 488.

Class 60. Smooth-Coated St. Bernards, Dogs.—1st, H. B. Sherman's Bishop, white and orange, 2½yrs.; 2d, H. B. Sherman's Bonhomme, orange and white, 2yrs., Webb's Rex—Theon, A.K.R. 94.

Class 61. Smooth-Coated St. Bernards, Bitches.—1st, H. B. Sherman's Chartreuse, orange and white, nearly 2yrs., Rex—Brunhilde.

Class 62. Newfoundlands, Dogs or Bitches.—Wm. Sellers's Watch, black, 4yrs.; 2d, A. C. Johns's Mackaboy, jet black, 14mos. Very high com., James McKay's York, black, 6yrs. High com., Jacob Kreiger's Prince, black, 3yrs. Com., Chas. Eilert's Nero, black, white points, 3yrs.

Class 63. Champion Collies, Dogs.—1st, Jas. Lindsay's Rex, black, tan and white, 5yrs., Carlyle—Elcho.

Class 64. Champion Collies, Bitches.—1st, Fred. W. Rothera's Lassie, A.K.R. 445.

Class 65. Collies, Dogs.—1st, Charles A. Otis, Jr.'s Yarrow, black, white and tan, 18mos., champion Rex—Beauty; 2d, James Lindsay's Hiram, sable and white, 10mos., Rex—Kittie Mac. Very high com., Edith M. Fasig's Mac, black, white and tan, 11mos., imported Captain—imported Topsy. High com., Frank T. Moorehead's Scot, black and tan, 2yrs., Lord Rayton—Cloudy; G. W. Evans's Trump, black and tan, 2yrs., champion Rex—Belle. Com., Dr. W. C. Fair's Bobby Burns, black and tan, 2yrs., champion Rex—imported Lassie.

Class 66. Collies, Bitches.—1st, James Lindsay's Fairy, sable and white, 10mos., Rex—Kitty Mac; 2d, James Watson's Flyaway, sable and white, 3yrs. and 8mos., champion Rex—champion Flora. Very high com., G. W. Evans's Evans's Nell, sable and white, 6yrs., Pattison's Davey—Bell. High com., W. A. Jeffrey's Letta, black and fawn, 12mos., Gaffer—Josephine II.

Class 67. Collies, Puppies, Dogs.—1st, Edith M. Fasig's Mac, black, white and tan, 11mos., imported Captain—imported Topsy. Very high com., G. W. Evans's Sandy, sable and white, 6mos., Trump—Nellie. High com., W. A. Jeffrey's Roy, black and tan, 5mos., Bruce—Lukie.

Class 68. Collies, Puppies, Bitches.—1st, James Lindsay's Nannie O., black, white and tan, 10mos., Rex—Kittie Mac. Very high com., G. W. Evans's Olive, sable and white, 6mos., Trump—Evans's Nellie.

Class 69. Champion Bulldogs, Dogs or Bitches.—1st, R. & W. Livingston's Boz, brindle and white, 3yrs. in June, Gamester—Browse's Betsy.

Class 70. Bulldogs. Dogs.—1st, J. P. Barnard's Brimstone, white, yellow, ears, 2yrs., Bonny Boy—champion Judy; 2d, withheld.

Class. 71. Bulldogs, Bitches.—Prizes withheld.

Class 72. Champion Bull-Terriers, over 25lbs., Dogs or Bitches.—Absent.

Class 73. Bull-Terriers, over 25lbs., Dogs or Bitches.—1st, withheld; 2d, Wm. Veale's Countess, white, 2yrs., Spot—Nellie. High com., Wm. Veale's Ben, lemon and white, 2yrs., Spot—Belle.

Class 74. Champion Bull-Terriers, under 25lbs., Dogs or Bitches.—No entries.

Class 75. Bull-Terriers, under 25lbs., Dogs or Bitches.—R. & W. Livingston's Little Maggie, A.K.R. 525.

Class 76. Wire-Haired or Scotch Terriers, Dogs or Bitches.—1st, John H. Naylor's Heather brindle, 2yrs.; 2d, John H. Naylor's Tan Glen, dark gray, 19mos. Very high com., Dan O'Shea's Boxer, wheaten, 3yrs., Major—Lady; W. H. Little's Buster, Bedlington terrier, 12mos., Sting—Wasp. High com., Weddel House's Nibs, the Tramp, gray, 8yrs.

Class 77. Black and Tan Terriers, Dogs or Bitches, over 7lbs.—1st, Edward Lever's Lady, black and tan, 1½yrs., Vortigern—Lillie; 2d, John Whitaker's Brilliant, black and tan, 1½yrs., Vortigern—Lillie II. Very high com., Edward Lever's Vortigern, black and tan, 5yrs., champion Viper—Gipsy. High com., H. A. Kistemann's Spring, black and tan, 2yrs. Com., Charles Stalley's Nell, black and tan, 1yr.

Class 78. Dandie Dinmont Terriers, Dogs or Bitches.—Absent.

Class 79. Irish Terriers, Dogs or Bitches.—1st, Dan O'Shea's Erin, red, 2yrs., Tim—Nora; 2d, Dr. J. S. Niven's Norah, red, 4yrs., Spring—Nettie.

Class 80. Champion Skye Terriers, Drop-Eared, Dogs or Bitches. No entries.

Class 81. Champion Skye Terriers, Prick-Eared.—No entries.

Class 82. Skye Terriers, Drop-Eared, Dogs or Bitches.—No entries.

Class 83. Skye Terriers, Prick-Eared, Dogs or Bitches.—1st, L. G. Hanna's Judge; 2d, L. G. Hanna's Flora II. Very high com., L. G. Hanna's Bloss.

Class 84. Champion Pugs, Dogs.—1st, Mrs. George H. Hill's Joe, fawn, 4yrs., champion Comedy—Clytie.

Class 85. Champion Pugs, Bitches.—No entries.

Class 86. Pugs, Dogs.—1st, Chequasset Kennel's Treasure, pale fawn, black points, 11mos., imported Fritz (A.K.R. 569)—imported Banjo; 2d, H. A. Kistemann's Punch, 2yrs. Very high com., L. G. Hanna's Ponto, fawn, 3yrs.; Mrs. E. V. Jewell's Pete, fawn, 5yrs. High com., Thos. W. Cockerill's Butler, fawn, 26mos.

Class 87. Pugs, Bitches.—1st, T. S. Dumont's Gipsy, fawn, 18mos., imported; 2d, Mrs. H. L. Taylor's Taffey, buff, 20mos. Very high com., Mrs. E. E. Bieman's Jennie, fawn and black, 1½yrs., imported; Anton Petrey's Sallie, stone fawn, 3½yrs., Punch—Judy.

Class 88. Pugs, Puppies, Dogs or Bitches, under 12mos.—1st, Anton Petrey's Prince, stone fawn, 6mos., Peter—Sallie.

Class 89. Champion Yorkshire Terriers, Blue and Tan, Dogs or Bitches.—1st, H. A. Kistemann's Hero, champion of the world, blue and tan, 3yrs.

Class 90. Yorkshire Terriers, Blue and Tan, over 5lbs., Dogs or Bitches.—1st, Miss Jennie Axworthy's Tiney, blue and tan, 2yrs., imported; 2d, H. A. Kistemann's Prince, blue and tan, 1½yrs. Very high com., H. Schmidt's Dot, 2yrs. High com., Wm. Keegan's Tip, blue and tan, 9mos., Dandy—Nibs.

Class 91. Yorkshire Terriers, Blue and Tan, under 5lbs., Dogs or Bitches.—1st, H. A. Kistemann's Crickey, blue and tan, 2yrs.; 2d, H. A. Kistemann's Lillie, blue and tan, 1½yrs. Very high com., P. F. McGue's Nellie, blue and tan, 2yrs., imported. Com., Wm. Keegan's Belle, blue and tan, 2yrs., Billy—Beauty; Thos. Blake's Topsy, blue and tan, 12mos.

Class 92. Toy Terriers, other than Yorkshires, under 5lbs., Dogs or Bitches.—1st, F. J. Hovlechek's Dot, black and tan, 16mos., Tip—Pippy; 2d, H. A. Kistemann's Flora, tan, 2yrs. Very high com., S. H. Wilson's Tina, black and tan, 1yr.

Class 93. King Charles or Blenheim Spaniels, Dogs or Bitches.—1st, H. A. Kistemann's Rosie, black, white and tan, 1½yrs.

Class 94. Japanese Spaniels, Dogs or Bitches.—No entries.

Class 95. Italian Greyhounds, Dogs or Bitches.—Absent.

Class 96. Poodles.—1st, Jacob Zuellig's Bennie, gray, 3yrs.; 2d, Jacob Zuellig's Prince, white, black ears, 2yrs. Very high com., Miss S. M. Cohrs's Prince, white, 11yrs.

Class 97. Miscellaneous or Foreign Class.—1st, Ed. Leuer's Sir Garnet, blue and tan, 2yrs., Airedale terrier, champion Crack—Gypsy Queen; 2d, Dan O'Shea's Foreigner, bloodhound, black, white and tan, 4mos., Lassie—Slave Boy; equal 3d, H. L. Stanton's Moody, black and tan, 2yrs.; H. L. Stanton's Sankey, black and tan, 2yrs. Very high com., W. Fleming's Jep, flesh color, 2yrs., Mexican hairless dog; A. C. Cozad's Fritz, fawn and white, 21mos., Maltese terrier. Com., Chas. Hogg's Fanny, white with black spots, 8yrs., Dalmatian.

SPECIAL PRIZES.

A.—For the Irish setter bitch having won the greatest number of first and special prizes, Mr. Thos. Axworthy, gentleman's traveling valise, value $50; won by Lady Clare, J. S. McIntosh.

B.—For the best kennel of spaniels, not less than six, B. & S., brass jug, value $45; won by the Hornell Spaniel Club.

C.—For the best brace of cocker spaniels, B. & S., bronze plaque, value $25; won by Hornell Rattler and Hornell Silk, Hornell Spaniel Club.

D.—For the third best pug, S. H. Wilson, fishing rod and reel, value $12; won by Pete, Mrs. E. V. Jewell.

E.—For the best smooth-coated collie, Messrs. P. L. Miles & Co., silver medal, value $10; won by Lassie Regis, the Scottish Chief's Kennel.

F.—For the best rough-coated collie owned in Cuyahoga county, Mr. George Forbes, canary bird and cage, value $10; won by Mac. Edith M. Fasig.

G.—For the best Yorkshire terrier owned in Cleveland, Messrs. Edwards and Fasig, fancy inkstand and buckhorn penholder, value $15; won by Tiney, Miss Jennie Axworthy.

H.—For the best Irish water spaniel, Hon. John Farley, silver duckhead scarf pin, value $18; won by Barney, John D. Olcott.

I.—For the best pointer bitch under 50lbs., Mr. W. H. Corning, picture and easel, value $20; won by Lady Croxteth, B. F. Seitner.

J.—For the best bull-terrier, Mr. W. H. Corning, bronze dog, value $15; won by Little Maggie, R. & W. Livingston.

K.—For the best English setter dog puppy, Bank street Hackmen, bronze dog, value $15; won by Dan Voorhees, P. B. Spence.

L.—For the best bull, dog or bitch, Mr. Crittenden, painted antique pitcher, value $25; won by Boz, R. & W. Livingston.

M.—For the best pug bitch, Mr. Henry Beekman, silk umbrella, value $10; won by Gipsy, T. S. Dumont.

N.—For the best King Charles or Blenheim spaniel, Messrs. Benton, Meyers & Co., pair of vases, value $10; won by Rosie, H. A. Kistemann.

O.—For the best beagle dog, Messrs. S. Ranney & Son, pair hunting shoes, value $10; won by Rattler, Dan O'Shea.

P.—For the best black and tan terrier, over 7lbs.; won by Lady Edward Lever.

Q.—For the best toy terrier, under 5lbs.; won by Dot, F. J. Hovlechek.

R.—For the best Newfoundland; won by Watch, Wm. Sellers.

S.—For the best foxhound in open class, Mr. Wm. Rhode, lamp, value $7; won by Ringwood II., Dan O'Shea.

T.—For the kennelman showing the greatest number of animals of any class in the best bench show condition; won by B. F. Lewis.

U.—For the best English setter bitch puppy, Mr. J. F. Chadwick, picture, value $15; won by Countess Fly, J. H. Dalliba.

V.—For the best English setter dog in the best condition in the open class, owned in Cleveland, Mr. C. E. Gehring, picture, value $25; won by Don, L. G. Hanna.

W.—For the best brace of English setters, Messrs. Rice & Burnett, silver tea set, value $25; won by Brigand Chief and Queen Alice II., A. C. Waddell.

X.—For the best brace of Irish setters, Mr. J. F. Ryder, picture value $20; won by Glencho and Snap, Wm. H. Pierce.

Y.—For the best black and tan setter dog, Mr. C. A. Selzer, plaque, value $10; won by Dash, E. Nutting.

C.—For the best collection of sporting dogs entered from Canada, Mr. N. Wilson, stove, value $20; won by Dan O'Shea.

AA.—For the best pointer dog in the open classes, owned in Cleveland, Mr. Henry Chubb, pair game pieces, value $20; won by Joe, T. H. Dalliba.

BB.—For the best prick-eared skye terrier, Mr. J. Palmer O'Neil, fishing rod, value $15; won by Judge, L. G. Hanna.

CC.—For the best English setter bitch in the open class owned in Cleveland, Mr. Geo. Bashington, brass stand mirror, value $10; won by Daisy, Jacob King.

DD.—For the best English setter dog, Mr. Geo. W. Cady, antique brass plaque, value $10; won by Count Gladsome, John Overman.

EE.—For the best Irish setter puppy, Mr. W. C. Ball, silver flask, value $8; won by Glenmar, W. H. Pierce.

FF.—For the best Irish setter bitch in the open class, Reeta, James T. Walker.

GG.—For the best collie, Mr. J. B. Perkins, picture, value $20; won by Yarrow, Chas. A. Otis.

HH.—For the best spaniel puppy, Mr. M. Ryan, silver cup; won by Ross, B. F. Lewis.

II.—For the best mastiff, Mr. W. A. King, collar and whip, value $15; won by Cleopatra, J. W. Alsop.

JJ.—For the best wire-haired or Scotch terrier, Messrs. Sigler Bros., fruit dish, value $8; won by Heather, John H. Naylor.

KK.—For the best collie bitch puppy, Messrs. S. H. Foster & Co., box cigars; won by Nannie O., Jas. Lindsay.

LL.—For the best pointer dog, Mr. E. Beach, picture, value $15; won by Faust, S. A. Kaye.

MM.—For the best smooth-coated St. Bernard, Messrs. Short & Foreman, ivory paper cutter, with rest, value $20; won by Bishop, H. B. Sherman.

NN.—For the best rough-coated St. Bernard, Mr. David Johnson, bronze donkey, value $10; won by Hermit, Chequasset Kennel.

OO.—For the best pointer dog puppy, Mr. Fred Diebold, case of fruit knives, value $10; won by Rapp, B. F. Seitner.

PP.—For the third best poodle, Messrs. Arnold & Hurd, work basket; won by Prince, Miss S. M. Cohrs.

QQ.—For the fourth best dog or bitch in miscellaneous class, Mr. G. H. Mack, box of cigars; won by Sankey, H. L. Stanton.

RR.—For the best pug dog in open class; won by Treasure, Chequasset Kennel.

SS.—For the best black and tan setter bitch, Messrs. E. M. McGillen & Co., pair vases, value $15; won by Gip, H. R. Parker.

TT.—For the third best prick-eared Skye terrier; won by Bloss, L. G. Hanna.

UU.—For the best fox-terrier dog in the open class, Messrs. Colwell & Hubbard, silver fruit dish; won by Vakeel, John T. Cable.

VV.—For the best fox-terrier bitch in open class, Mr. W. Murray French vase, value $7; won by Village Belle, John T. Cable.

WW.—For the third best beagle dog in open class, Mr. A. T. Kinney, box cigars; won by Dell, R. & W. Livingston.

XX.—For the third best beagle bitch in open class, Mr. F. W. Slosson, box cigars; won by Lill II., Fulton Kennel Club.

YY.—For the third best dachshund; won by Waldman K., Carl Klocke.

ZZ.—For the best sporting dog owned by a lady, in Cleveland; won by Bonnie, Mrs. C. E. White.

AAA.—For the best setter or pointer shown in the best bench show condition, the Cleveland Clothing Company, hunting coat; won by Don, Adam Baker.

BBB.—For the best brace of pointers, the Excelsior Clothing Company, hunting coat and vest; won by Faust and Countess Vesta, S. A. Kaye.

CCC.—For the best collie in open class, the Cleveland Gun Store, revolver; won by Yarrow, Chas. A. Otis, Jr.

DDD.—For the best trick dog, Mr. J. Powers, revolver; won by Fritz, A. C. Cozad.

EEE.—For the best Yorkshire terrier over 5lbs; won by Hero, H. A. Kusenann.

FFF.—For the best Irish water spaniel in open class, Messrs. Likely, McDonald & Rockel, leather gun case; won by Ponto, Cleveland Irish Water Spaniel Kennel.

GGG.—For the best pointer bitch over 50lbs., Mr. C. A. Selzer, plaque; won by Marguerite II., H. W. Fawcett.

HHH.—For the best Irish setter owned in Cleveland, Messrs. McIntosh, Good & Huntington, carving set; won by Book, G. W. Short.

III.—For the best Italian greyhound, the Medford Fancy Goods Company, collar; not awarded.

JJJ.—For the best terrier owned in Cleveland, the Medford Fancy Goods Company, collar; won by Tiney, Miss Jennie Axworthy.

KKK.—For the best pug owned in Cleveland, the Medford Fancy Goods Company, harness; won by Pete, Mrs. E. V. Jewell.

LLL.—For the best pointer dog owned in Cleveland, the Medford Fancy Goods Company, collar; won by Joe, T. H. Dalliba.

MMM.—For the best pug, won by Joe, Mrs. G. H. Hill.

SPANIEL AND BEAGLE CLASSIFICATION.

Editor Forest and Stream:

During the past two or three years many of your prominent contributors have written you complaining of the lack of sufficient classes and a dearth of prizes, offered by the Westminster Kennel Club for spaniels and beagles, at their annual shows. As their suggestions and requests for a different classification have been fruitlessly made, I had intended renewing the same this year, not only as the opinions expressed were those held by most breeders, but more particularly as the number of entries in the past have warranted a more liberal classification.

But—too late—I find their premium list already issued, and therefore, after reviewing the classification for the above-mentioned breeds, I am induced to make a few miscellaneous comments regarding this classification, as it seems to me to be further from what it should be than previously, in that the classification remains as before, with the exception that liver-colored spaniels are included in the black classes. The objections to this I state below.

I had advocated, as had your many other contributors, that black or black and white, or if the white is allowed, more properly in my opinion black, white and tan, be separated from other than the above; that dogs be separately classed from bitches, as is done with all the above classes be made for those weighing over 28 pounds, *i. e.*, for field spaniels, as well as for those under 28 pounds, cockers. This year the W. K. C. make a new departure in separating the spaniel colors into two classes, namely, black and liver, and other than black and liver.

Not only have we no distinct strain of liver-colored spaniels, but I believe liver color has no legitimate connection with the black as a class, although now and then a solid liver-colored puppy will creep into a litter of the best black strains, just as it will at times in a litter of Gordon setter puppies.

In making separate classes for blacks, it has usually been customary to allow white (and a good lot of it, too,) on chest and feet, while tan points have been barred. At New York, in 1882, I remember a fine bitch, which I think was good for second, if not first prize, which was ruled out for showing tan markings. I would suggest that in the black classes, so called, either white or tan be allowed, or that the white as well as the tan be barred, making the class one for solid blacks only. The former combination of colors is a natural one, and one apt to appear in a litter, and on the score of beauty, I think almost any one will prefer the tan to the white. Perhaps at the rate the little cocker is increasing they will be of sufficient numbers to warrant the formation of the two classses in the future, "solid blacks," and "black, white and tans."

I believe the class heretofore most complained of (and justly so) has been the puppy class. Here but one class is made for all spaniel puppies, blacks, liver, and whites, dogs and bitches. The number of entries in the past certainly have warranted a more liberal classification, as well as better prizes.

Looking over the Westminster Kennel Club's catalogue of 1883, I find there were sixteen entries in the spaniel puppy class at $3 each, while the first prize given was only $5, and the second one a medal; the prizes, of course, were out of all proportion to the amount of entry fees received. I find further, that for pointer and setter puppies there were ten classes; in all but two of these classes the number of entries was much less than in the spaniel class, while in all of them the prizes were double.

No class of hunting dogs has increased in numbers as well as favor with us of late years as much as the cocker spaniel, and the increase has probably been greater during the past year than any year previously, and as a result, the number of entries received, and so the necessity of a more liberal classification will probably be proportionately greater than heretofore. From private sources I have been informed that more good and typical cockers have been imported during the past year than in any previous year. I would therefore suggest to the W. K. Club that they act upon the very sensible suggestion which the FOREST AND STREAM made to the New Haven Kennel Club, namely: "That if the number of entries received be sufficient to warrant the same, that a further subdivision be made at the opening of the show."

In the spaniel classes I would suggest as follows: Class 61 to be divided either into "black, white and tan," and "other than black, white and tan," or that dogs be separated from bitches. I suggest this, supposing that not sufficient entries will be received to warrant a more complete classification, namely: "Black, white and tan" and "other than black, white and tan," and dog and bitch classes for each. Also, that in open cocker spaniel classes, dogs be separately classed from bitches, and in the puppy class the number of entries will probably warrant the separation of "black, white and tans" from others, and dog and bitch classes for each of these, and certainly the past shows have demonstrated the need of one subdivision, at least, here.

Until we are overburdened with spaniels bearing the title of "champion," which, by the way, is altogether too cheaply acquired in all breeds with us, as definite a classification as the above is not necessary for champion classes. But where each one of our numerous shows with its recognized right to turn out champion candidates, is capable of turning out four spaniels annually, which are barred into a champion class, one such class is certainly not sufficient, either dogs and bitches should be separated or black, white and tan from others.

The entry fees for the show, I observe, remain the same as last year, when they were advanced 50 per cent. above all other, and its own previous shows, while the amount of prizes has not been increased at all, Judging from the objection made last year I supposed it would be reduced to the customary amount.

I know of one very prominent breeder and judge who has often turned up as a first prize winner, who last year purposely remained away from the New York show on principle.

In another way the entry fee of bitches is nearly trebled, thus, to a great extent, still retarding the only worthy object of bench shows—the advancement of our breeding dogs. I quote from Rule No. 19: "An entry fee of $3 will be charged *for each animal* entered. The entry fee for litters of puppies whelped in 1884 will be $5." (The italics are mine.) Whether this means the entry fee is $5 to enter a bitch with a litter of puppies, or $5 in addition to the entry fee of the bitch, I do not know; but, viewing it in the most favorable light, I can give a practical illustration of one great objection to it. I have a bitch, a previous show winner, which I had intended entering, which is due to whelp so that her pups will be nearly three weeks old at the time of the show. Even if I desired to enter the pups to sell them, this would be useless at that age, and as a result, of course, personally, I would prefer to leave the pups at home, if possible. Practically, therefore, the entry fee for all bitches which may have unweaned litters is $5 or $8, whichever it may be. The W. K. C. write me that the mortality among puppies being great, they do not desire to encourage the entries of the same; but, as the exhibitor is the only one running any risk of a loss, I should say he should be allowed to use his own judgment in the matter without any extra bar. Therefore, if a fair extra fee be demanded for salable puppies, well and good; but an exception should certainly be made for all bitches which necessarily must be accompanied by their unweaned puppies.

The object of bench shows, as I stated above, is for the purpose of advancing the breeding of dogs, to allow breeders and admirers to assemble and obtain points and knowledge on the subject of breeding, which cannot be obtained in a better way than by criticising and expressing their views on the various animals shown. The entry fees to shows, therefore, should be the minimum fee which will keep out all dogs unworthy to be shown, and consequently induce the greatest possible number of good dogs to be entered. Two dollars as an entry fee does not appear too low for the purpose.

Nothing will be more likely to induce the owners of the best dogs to enter them than the shortening the length of shows from four to three days. Many owners of the most valuable field dogs refuse to enter their animals in a four-day show, owing to the danger they incur of contracting distemper, or some other disease from the additional mental excitement undergone on a fourth day. Where a dog goes the rounds of the several shows, the additional mental strain undergone on a fourth day at each show, on the naturally very nervous system already wrought up perhaps almost to frenzy by the noise and excitement, is far greater than one can imagine, and out of humanity as well as for the sake of the dog's health, this fourth day should be abolished.

I should like to ask the opinions of show managers and breeders on an idea I have often thought of, namely: Would not the entries to shows be increased, and the shows be benefited, by annually arranging a "circuit," as it were, of the shows for the season, beginning, for instance, in the most Western city offering a show, and working Eastward; the following week showing in the next nearest place offering a show, and so on, or vice versa, East to West. As regards the extra expense breeders who desire to follow all the shows are put to in the way of railroad fares and express charges, to say nothing of the wear and tear on the dogs from the much greater length of time they must be crated up, no more forcible illustration can be given than the arrangement of the shows this year. Starting at Cincinnati, almost at the doors of Cleveland, Washington and New York are passed by to reach New Haven. Then to reach Washington this ground is again passed over. Toronto is then reached by again passing New York. Cleveland is then visited. In order to show at New York that city is visited for the fourth time, and if, as last year, Chicago concludes to hold a show later, it caps the climax by causing the useles 1,200 mile ride from Cleveland to New York and return.

And now I ask, would not many more exhibitors, breeders especially—and they are the largest exhibitors—show their stock, if a circuit had been arranged which would have done away with two-thirds at least of the present expense. For instance, had the shows been arranged to follow each other weekly, thus, Chicago, Cleveland, Cincinnati, Washington, New York, New Haven, and Toronto. Not only would better and fuller shows be given, but places on the route as, for instance, Pittsburg, Philadelphia, and Boston, which otherwise cannot draw sufficiently owing to the expense exhibitors incur in reaching them, would be able to give shows. All my above comments I think, will be pertinent to all shows and, I think indorsed by many of your readers.

As my communication has reached a much greater length than I intended, and though I am in the ranks with him in spirit, I shall leave the question of beagle classification to your genial correspondent "O. W. R.," who, last year, with several others, pleaded for his little musical pet. As yet the beagle has not increased in numbers and favor among us as his admirers would wish that he might, and as he should have done, simply because, as we have not been made sufficiently well acquainted with him, we have not been able to appreciate him. His musical tongue as he now strikes the trail of popular favor is just beginning to be heard, and he is just about two years behind the cocker spaniel. The American English Beagle Club, together with the encouragement given by the FOREST AND STREAM, will do for the beagle what the American Cocker Spaniel Club has done to bring the little cocker into notice, and, as a result, into favor.

SPORTSMAN.

A FOX HUNT.

THE first snowstorm awakened the "brush gatherers," a gleaner of wheat in a business letter added a feminine luxury a P. S., saying that the tarnal foxes had carried off some more chickens. Charlie, Captain and the writer secured a team and drove out to the scene of carnage. After interviewing the writer of the postscript, who said that 'ere pesky fox had carried off his favorite leghorn, and the critter had a nest about a mile from his house. After a survey of the country we drove over to the Hadley meadows. We were joined here by Henry and Mott with Boissy and Frank, the hounds. We always took Henry for his ability to see game; he will see more foxes in one day than ever stood in Hampshire county. Casting off the hounds at the edge of the pines, they did not go more than twenty rods before they gave tongue. Reynard made for the hills, and the hounds were doing their duty with legs and voices. The writer was given a station by a massive elm; Henry was to take the team and go over the hill. We took a long look at the team, which we never expected to see again. If Henry had seen any fox he would have left the team to the tender mercies of the Humane Society and tried to bag the fox, or at least did on one of our former hunts, and after walking home a good six mile walk. The conversation during that walk was not very lengthy but pointed. The fox, after making a trip for his health among the hills, evidently thought the fertile valley good enough for him. On reynard's return tour he had to come in the direction of the writer, who was endeavoring to keep warm, having that day put on a pair of boots which would have fitted better had his feet been smaller. Having heard from old settlers that by taking off your boots and rubbing snow on your feet they would be warm at once. The snow being applied, and circulation not increasing at the rate desired, the writer took a walk or rather a run. After getting away from the big elm, and hounds were making considerable noise, casting my optics in the direction of my assigned position the fox was passing between me and my gun. There seemed to be a "bluish" vapor in that section, after going back to my boots, which were shaked on so quick that the straps tore off. My heart was heavy, and I did not enjoy very good health, the symptoms had increased greatly within the past few moments. I went to the nearest farm house and happily there was a team going to town, and the same conveyed the writer. There were three brushes secured that day; two by Charlie and one by Henry, and his fox was frozen. Whether he shot the fox or got him out of a trap is a question. FLICK FLICK.

HARTFORD, Conn.

THE NEW YORK DOG SHOW.

THE special prizes offered for the Westminster Kennel Club's bench show, to be held next month at Madison Square Garden, are as follows:

The Eastern Field Trials Club offer a club medal, suitably engraved, for the best pointer dog, pointer bitch, English setter dog, English setter bitch, Irish setter dog, Irish setter bitch and black and tan setter that have been placed at any of the field trials that have been held in America.

The Westminster Kennel Club offer a club medal, suitably engraved, for the best kennels of large-sized pointers, small-sized pointers, English setters, Irish setters, black and tan setters and collies. Each kennel to consist of not less than five. Also to the best black English setter, best setter or pointer that retrieves in the most stylish and obedient manner, fastest greyhound, to be decided by heats, highest leaping greyhound and best trick dog. Best pug, dog or bitch, in the open classes, $25; best collection of five pugs owned by one exhibitor, $10.

Members of the club offer for the best pointer dog, the get of Sensation, $15; for the best bitch, $10.

The Medford Fancy Grods Company offers a suitable collar for the best pointer dog, pointer bitch, English setter, Irish setter, St. Bernard, mastiff, pug, bulldog, collie and greyhound.

WITHHOLDING PRIZES.

Editor Forest and Stream:

I returned a few days ago from a hurried trip to the Washington dog show, and was disappointed in not seeing as fine an exhibit as they had last winter. The pointers were good, decidedly the best in the show as a class. There were some good setters, notably Plantaganet, who was in splendid condition and carried off the champion prize. The mastiffs, St. Bernards and Newfoundlands were decidedly poor. Last year all these classes were very fine. I noticed that some prizes in several of the classes were withheld, I suppose for want of merit; in fact I have noticed it has been done at almost all the shows. This seems to me to be wrong. I understand that the dogs entered at bench shows are judged by a scale of points (Stonehenge's or some other). The prize list reads thus: "For the best English setter other than pure Laverack, $15; second, $5." Now, does not that mean that the dog entered that comes nearest to the scale of points by which the class is judged is entitled to the first prize, and so on?

I can't see how it can mean anything else, and I don't see how any judge of a show can throw out my dog, if he is the only one entered in his class, for want of merit. I have paid my entrance money and am entitled, according to the reading of the prize list, to first prize if he is a pure bred dog of that breed, no matter how poor a specimen he may be. The words "for the best" can't, it seems to me, mean anything else than "for the best one entered." Again, what is the scale of points by which dogs are judged? and how do you arrive at the merit of the dogs? He gets so much, as I understand it, for the measurement of his different parts, according to a certain standard. How can we arrive at this unless the measurement is actually made (that is, such parts as require measurement)? But no such measurement is made as far as I have ever seen.

There has never, as I have heard, been any number of points of merit adopted, to which a dog must attain in order to win first, and if this is not so, then the best one entered and shown in the classes, it seems to me is clearly entitled to win. I heard some complaints in Washington in regard to this custom, from owners of dogs which were there thrown out, and this has suggested the idea of writing this letter. I am not a disappointed exhibitor, and if I am wrong in the position I take, I would like to see the subject discussed and put right. I have acted as judge at a good many agricultural fairs and never yet saw any animal or fowl refused the premium offered for the best for want of merit. The judges of bench shows are not selected (or ought not to be) to say which dogs, or whether any, have merit enough to win a prize, but to say which in his judgment shall have it. The moment I pay my money into the treasury of the show, I am entitled to first prize if my dog is the best in his class, that faces the judge, whether he be a Plantagenet or not, or whether he will score one hundred or only ten points of merit, so he be the best dog shown.

If this were not so, I should never show a dog to be thrown out at the option of a judge who differed with me, when no other dog was shown against me. If this custom is right according to any rule of the shows, then the sooner it be abolished the better for the shows. No two men judge alike; one man will throw out a dog for want of merit that some other man would think entitled to first place. A dog may be shown at one time and place in the pink of condition and be placed, and when next shown be out of condition and be put at the foot of the list. Yet he is the same dog, as far as the scale of points is concerned. LEX.

[Before submitting his argument, "Lex" should have examined the *lex loci*, to be found in Rule 6, which says that "no prize will be awarded in any class where no dog possesses sufficient excellence to entitle it to the prize.]

EXPERIENCE WITH DOGS.

LEST "Flick Flick" shall think that I am a being without reason, and use the whip upon dumb creatures as a master upon the slave, I will, in a few lines, explain why a dog should be taught to retrieve under the whip. In most hunting dogs there is an inheritance which prompts them to pursue game, and so deeply rooted is this instinct, that to follow it is their greatest source of pleasure. Hence it is that a perfect bird dog can be made, by simply guiding this talent which is bred within him. We do not teach the dog to hunt, this he does naturally. We only teach him to hunt in the way our own experience has taught us is the most effective in bagging game. The dog supplies the motive power, we lay the rail which guides him to the destination we desire him to arrive at. Retrieving is to a certain extent an inheritance to which all dog flesh is heir; the mongrel will grab up an old shoe and race about with it in play, and almost anything with a bark can be taught to fetch on land or in the water, but the passion is not as strong as that which urges the pointer or setter, under a broiling sun, or through thorns and brambles to catch the delicious scent of the quail or grouse. Dogs tire of play, as do men. They think it sport to rush through water which is tempered by a summer's sun, but they shrink from an element which sends a shiver through every muscle of their body. I have never yet seen the dog trained as "Flick Flick" suggests, and but very few that would brave the cold water of spring or the late fall.

For instance, I once owned a pointer which I trained to retrieve in the manner suggested by "Flick Flick," and he worked elegantly. One day in my absence my room mate exhibited him to some friends, and kept him romping after a ball until he was very tired. He refused to fetch, was whipped for his impertinence, and forever afterward refused to retrieve. I had a spaniel that was forever on the watch for something to carry, but cold water, after one or two introductions, would curb his spirit to such an extent that no urging could force him on, and the sight of a whip would so completely quench him that he would be entirely useless for hours afterward. Now for the remedy for such perverseness

in our trusted friends. When I advise to train a dog to retrieve under the whip I do not mean that any cruelty should be practiced. The lesson to be taught the pupil is this: that when he is told to retrieve he must do it. If agreeable to him so much the better; if not, that he must do it just the same. This does not require any brutality. An even temper will enforce the lesson, and not a blow be struck which would call a whimper to the lips of a child.

I have a spaniel now, which, when I first adopted him, was a perfect fool. My sporting friends all laughed at me for allowing such a "kyudle" (?) to follow me about. He had been raised by a "cullud pusson," and was a type of all that is worthless. Raise your hand at him and he would fall on his back, feet in air, and tail close to his body, and there he would stay; endearments were wasted upon him and cuffs only constricted his tail. I handled him gently; first making him hold an object in his mouth. After a while I induced him to pick an object from the floor, and then my labor was practically over, the balance was simply extending the range of the instruction, the hardest step of which was to teach my pupil to pick an object from the floor at command. This dog was gun shy and water shy, and was eighteen months old before I ever spoke a word to him. Last fall he retrieved fairly for me in all kinds of weather, and before another year is passed, I venture to say that he will be as good a duck dog as any one would wish to own. This dog could never have been coaxed to retrieve. He did it because he had to at first.

A dog trained under the whip to retrieve will never fail you in hot weather or cold. If he is not so trained and if the whip is used to correct him at his first disobedience he will refuse to retrieve for the time, at least, perhaps for all time as did my pointer. HUNT.

ST. PAUL, Minn.

N. A. K. C. DERBY.

Editor Forest and Stream:

I inclose balance of entries for the fifth annual Derby of the National American Kennel Club. There are 88 in all, of which 74 are English setters, 5 Irish setters and 9 pointers. I think there will be the largest field of starters this year that we have ever had, as the entries did not close until after the distemper season was past, and the death rate will not be so great. There may be a few more entries by delayed and foreign mails. D. BRYSON, Sec.

MEMPHIS, Tenn.

ENGLISH SETTERS.

KENWOOD.—Montague Smith, Forest, Ont., blue belton dog, April 21 (Cambridge—Marchioness Peg).

GLADIATOR.—Samuel S. McCuen, New Orleans, La., lemon and white dog, Oct. 19 (Gladstone—Dido II.).

SPORTSMAN.—J. W. Murnan, Keeling, Tenn., black, white and tan dog, Aug. 21 (Gladstone—Sue).

FLOUNCE.—J. W. Murnan, Keeling, Tenn., lemon and white bitch, March 11 (Druid—Ruby).

MORSE.—Rogers & Dalton, N. Albany, Miss., black and white dog, Oct. 16 (Gladstone—Nellie).

BLUESTONE.—Rogers & Dalton, N. Albany, Miss., black, white and tan dog, Oct. 16 (Gladstone—Nellie).

MARSHALL NEY.—Rogers & Dalton, N. Albany, Miss., black and white dog, Oct. 16 (Gladstone—Nellie).

MISS CLIFTON.—E. S. Gay, Atlanta, Ga., white and lemon bitch, March 15 (Druid—Princess Draco).

CICILY B.—N. B. Nesbitt, Cedar Grove, Miss., black, white and tan bitch, Aug. 17 (Count Noble—Dashing Novice).

FIDGET.—N. B. Nesbitt, Cedar Grove, Miss., black, white and tan bitch, July 18 (Rake—Madam Llewellin).

PENDRAGON.—T. S. Dumont, New York, black, white and tan dog, June 11 (Count Noble—Floy).

LADY BLANCHE.—John S. Ormsby, Milwaukee, Wis., black, white and tan bitch, Aug. 28 (Count Noble—Rosalind).

PROSPECT.—L. J. Petit, Milwaukee, Wis., blue belton dog, Aug. 28 (Count Noble—Rosalind).

HARRY RYAN.—Capt. W. H. Key, Florence, Ala., blue belton dog, May 24 (Gladstone—Countess Key).

ANNE BOLEYN.—Rae Reising, Meadville, Pa., black and white bitch, March 23 (Dash III.—Isabelle).

PRAIRIE SCOUT.—R. B. Morgan, Akron, O., black and white dog, age not given (Count Blythe—Pearl).

PRAIRIE SUE.—R. B. Morgan, Akron, O., black and white bitch, age not given (Count Blythe—Pearl).

COUNT WESTLEY.—J. Palmer O'Neil, Pittsburgh, Pa., black, white and tan dog, Aug. 12 (Count Noble—Gertrude).

COUNT RICHARDS.—J. Palmer O'Neil, Pittsburgh, Pa., black, white and tan dog, Aug. 17 (Count Noble—Dashing Novice).

GLIDELIA.—Dr. C. Spahr, Bridgeville, Pa., black, white and tan bitch, Aug. 12 (Count Noble—Gertrude).

BLACKSTONE.—L. F. Paterson, Bainbridge, Ga., black, white and tan dog, June 3 (Roy—Gretchen).

ZOE.—B. M. Stephenson, La Grange, Tenn., black and white bitch, May 13 (Gladstone—Fawn).

RAPID ANN.—B. M. Stephenson, La Grange, Tenn., black, white and tan bitch, May 13 (Gladstone—Fawn).

INDEX.—J. M. Avent, Hickory Valley, Tenn., black, white and tan dog, July 10 (Gladstone—Countess Druid).

GLADSTONE'S IMAGE.—J. M. Avent, Hickory Valley, Tenn., black, white and tan dog, Oct. 5 (Gladstone—Bessie A.).

GLAD MOON.—J. M. Avent, Hickory Valley, Tenn., black, white and tan dog, Oct. 5 (Gladstone—Bessie A.).

JESSIE WINFIELD.—J. M. Avent, Hickory Valley, Tenn., black, white and tan bitch, Oct. 5 (Gladstone—Bessie A.).

ANNIE MORGAN.—J. M. Avent, Hickory Valley, Tenn., lemon and white bitch, Oct. 5 (Gladstone—Bessie A.).

LADY BESSIE.—J. M. Avent, Hickory Valley Tenn., lemon and white bitch, Oct. 5 (Gladstone—Bessie A.).

DASHING MONEY.—J. M. Avent, Hickory Valley, Tenn., lemon and white dog, May 18 (Dashing Monarch—Armida).

JACK W.—Col. A. G. Sloo, Vincennes, Ind., lemon and white dog, April 22 (Sergeant—Eva).

RICHMOND.—E. M. Usher, Vincennes, Ind., lemon and white dog, April 22 (Sergeant—Eva).

CLYDE T.—L. Shuster, Jr., Philadelphia, Pa., lemon and white dog, May 24 (Thunder—Cornelia).

ROD GLADSTONE.—D. C. Jones, Memphis, Tenn., black, white and tan dog, June 28 (Gladstone—Donna J.).

BLANCHE GLADSTONE.—Chas. Tucker, Stanton, Tenn., black, white and tan bitch, July 10 (Gladstone—Lavalette).

MISS DRUID.—Chas. Tucker, Stanton, Tenn., black, white and tan bitch, June 11 (Druid—May B.).

MAUD B.—Dr. Otto Moeber, Rowland, Ala., black, white and tan bitch, June 1 (Rollo—Morgo).

COUNT WIND'EM, JR.—J. R. Henricks, Pittsburgh, Pa., —— dog, age not given (Count Wind'em— ——).

BELTON'S BOY.—J. R. Henricks, Pittsburgh, Pa., black and white dog, Jan. 5, 1884 (Belton III.—Skip).

ROYCE.—W. B. Stafford, Trenton, Tenn., black, white and tan dog, May 26 (Rake—Phyllis).

COUNT.—W. B. Stafford, Trenton, Tenn., black, white and tan dog, Aug. 28 (Count Noble—Rosalind).

NOT NAMED.—Capt. Pat Henry, Clarksville, Tenn., black and white dog, Oct. — (Gladstone—Cammie).

NOT NAMED.—Capt. Pat Henry, Clarksville, Tenn., black and white bitch, Oct. — (Gladstone—Cammie).

FAUST.—A. W. Foster, Atlanta, Ga., black, white and tan dog, July (Prince—Anne Boleyn).

IRISH SETTERS.

LONELY DORA.—J. H. O'Reilly, Louisville, Ky., bitch, April 20 (Box—Rowena).

NOT NAMED.—W. E. Venable, Atlanta, Ga., dog, April 15; pedigree not given.

MINE.—W. A. McIntosh, Pittsburgh, Pa., bitch, Jan. 1 (Elcho—Flora).

SHAMROCK.—J. C. Vance, Chattanooga, Tenn., dog, Sept. 16 Captain—Gipsy Queen).

IRISH ROSE.—J. C. Vance, Chattanooga, Tenn., bitch, May 13 (Dan—Ruby).

POINTERS.

RICHMOND.—John E. Gill, Franklin, Pa., lemon and white dog, July 27 (Vandevort's Don—Beulah).

CYCLONE.—E. F. Stoddard, Dayton, O., liver and white dog, June 11 (Croxteth—Spinaway).

ROBERT LE DIABLE.—E. C. Sterling, St. Louis, Mo., liver and white dog, June 11 (Croxteth—Spinaway).

TOM COLLINS.—E. C. Sterling, St. Louis, Mo., liver and white dog, June 11 (Croxteth—Spinaway).

DUSK C.—B. F. Long, Pittsburgh, Pa., black and white dog, April 2 (Robert E. Lee—Darkness).

TWILIGHT.—B. F. Long, Pittsburgh, Pa., black and white dog, April 2 (Robert E. Lee—Darkness).

AMERICAN ENGLISH BEAGLE CLUB.

FOLLOWING is the report of the committee of the American English Beagle Club upon the standard to be adopted by the club:

Mr. President and Members of the American English Beagle Club:

GENTLEMEN—Your committee appointed to draft a standard for the beagle, very respectfully report that they have entered upon their duties with a full realization of the difficulties and importance of the subject before them.

The necessity for a descriptive scale of points for this breed is very apparent. Bench show judges having no authorized type on which to base their decisions, differ widely in their estimates as to the breed marks of the race. At one show, dogs of harrier size and style, win the highest recognition, at another, the smallest specimens are favored. Diminutive size being seemingly the only passport to preferment, quality being overlooked or ignored.

Thus opinions clash, and breeders and fanciers hesitate to submit their dogs for exhibitions in the present see-saw condition of affairs.

With an accepted standard the judge will have a guide to lead him through the difficulties of his position, and the breeder, if a novice, will be enabled with its assistance to discard those animals that are deficient in quality, and recognize merit where it exists, thus elevating the status of his kennel.

With this preface, your committee respectfully submit the accompanying standard for the English beagle, the result of a careful and painstaking analysis.

DR. L. H. TWADDELL,
GEN'L R. ROWETT,
N. ELMORE.

STANDARD AND SCALE OF POINTS FOR THE ENGLISH BEAGLE.

Head.—The skull should be moderately domed at the occiput, with the cranium broad and full. The ears set on low, long and fine in texture, the forward or front edge closely framing and inturned to the cheek, rather broad and rounded at the tips, with an almost entire absence of erectile power at their origin. The eyes full and prominent, rather wide apart, soft and lustrous, brown or hazel in color. The orvital processes well developed. The expression gentle, subdued and pleading. The muzzle of medium length, squarely cut, the stop well defined. The jaws should be level. Lips either free from or with moderate flews. Nostrils large, moist and open. DEFECTS—A flat skull narrow across the head, absence of dome, ears short, set on too high, or when the dog is excited rising above the line of the skull at their points of origin due to an excess of erectile power. Ears pointed at the tips, thick or boardy in substance or carried out from cheek showing a space between. Eyes of a light or yellow color. Muzzle long and snipey. Pig-jaws or the reverse known as under-shot. Lips showing deep pendulous flews. DISQUALIFICATIONS—Eyes close together, small, beady and terrier-like.

Neck and Throat.—Neck rising free and light from the shoulders, strong in substance, yet not loaded, of medium length. The throat clean and free from folds of skin, a slight wrinkle below the angle of the jaw, however, may be allowable. DEFECTS—A thick, short, cloddy neck, carried on a line with the top of the shoulder. Throat showing dewlap and folds of skin to a degree termed "throatiness."

Shoulders and Chest.—Shoulders somewhat declining, muscular, but not loaded, conveying the idea of freedom of action, with lightness, activity and strength. Chest moderately broad and full. DEFECTS—Upright shoulders and a disproportionally wide chest.

Back, Loin and Ribs.—Back short, muscular and strong. Loin broad and slightly arched, and the ribs well sprung, giving abundant lung room. DEFECTS—A long or swayed back, a flat narrow loin, or a flat constricted rib.

Forelegs and Feet.—Forelegs straight with plenty of bone. Feet close, firm, and either round or hairlike in form. DEFECTS—Out elbows. Knees knuckled over or forward, or bent backward. Feet open and spreading.

Hips, Thighs, Hindlegs and Feet.—Hips strongly muscled, giving abundant propelling power. Stifles strong and well let down. Hocks firm, symmetrically and moderately bent, Feet close and firm. DEFECTS—Cow hocks and open feet.

Tail.—The tail should be carried gaily, well up and with medium curve, rather short as compared with size of the dog, and clothed with a decided brush. DEFECTS—A long tail with a tea-pot curve. DISQUALIFICATIONS—A thinly haired rattish tail, with entire absence of brush.

Coat.—Moderately coarse in texture, and of good length. DISQUALIFICATIONS—A short, close, and nappy coat.

Height.—The meaning of the term "Beagle," a word of Celtic origin, and in old English *Begele*, is small, little. The dog was so named from his diminutive size. Your committee therefore, for the sake of consistency, and that the beagle shall be in fact what his name implies, strongly recommends that the height line be sharply drawn at fifteen inches, and that all dogs exceeding that height shall be disqualified as over-grown, and outside the pale of recognition.

Color.—All hound colors are admissible. Perhaps the most popular is black, white and tan. Next in order is the lemon and white, then blue and lemon mottles, then follow the solid colors, such as black and tan, tan, lemon, fawn, etc. This arrangement is of course arbitrary, the question being one governed entirely by fancy. The colors first named form the most lively contrast and blend better in the pack, the solid colors being sombre and monotonous to the eye. It is not intended to give a point value to color in the scale for judging, as before said all true hound colors being correct. The foregoing remarks on the subject are therefore simply suggestive.

General Appearance.—A miniature fox-hound, solid and big for his inches, with the wear and tear look of the dog that can last in the chase and follow his quarry to the death.

NOTE—Dogs possessing such serious faults as are enumerated under the head of "Disqualifications" are under the grave suspicion of being of impure blood. Under the heading of "Defects" objectionable features are indicated; such departures from the standard not, however, impugning the purity of the breeding.

SCALE OF POINTS.

Summary.	Value.		
Skull	5		
Ears	15		
Eyes	10		
Muzzle, Jaws and Lips	5	Value of head	35
Neck	5		
Shoulders and Chest	10		
Back and Loins	15		
Ribs	5	Value of body	35
Forelegs and Feet	10		
Hips, Thighs and Hind Legs	10	Value of running gear	20
Tail	5		
Coat	5	Value coat and stern	10
Total	100		100

MASTIFFS AT TORONTO.—Our correspondent desires us to correct an error which slipped into his report on the mastiffs at Toronto. Speaking of Lion he is made to say he is "a good little dog." This was not our correspondent's meaning, as Lion is of good size. "Well built dog," he thinks was the expression he made use of.

RECENT IMPORTATIONS.—Mr. John Gellatly, of New York, has received from England the Scotch deerhound bitch Lufra II. She is not quite a year old. She is well bred and gives promise of good form when mature. She will be exhibited at the New York show next month.

CORRECTION.—In our report of awards at Toronto show the dog Chief II., in Class 9, red Irish setters, is spoken of as Max Wenzel's. Mr. Wenzel bred Chief II. (A.K.R. 252) who is now owned by Mr. H. B. Goetschius, Hoboken, N. J.

PERSONAL.—Mr. James Watson has accepted a position on the editorial staff of the Philadelphia *Press*, and he requests us to find room for the information that his postal address is P. O. Box 770, Philadelphia, Pa.

CHICAGO DOG SHOW.—There will be a dog show at Chicago, Ill., the last of May or early in June. Mr. Chas. Lincoln will superintend.

THE POINTER BRAVO.—Mr. J. Norbury Appold, Baltimore, Md., requests us to say that the pointer Bravo, who won vhc. at New Haven, is not related to his champion Bravo.

MEN IN "SAFE EMPLOYMENTS" were paid a quarter of a million dollars last year by the Travelers, of Hartford, Conn., for accidental death and injuries.—*Adv.*

Rifle and Tray Shooting.

FIXTURES.

First International Clay-Pigeon Tournament, at Chicago, Ill., May 26 to 31. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

RANGE AND GALLERY.

BOSTON, April 3.—The Fast-day shoot at Walnut Hill was well attended notwithstanding the storm. The scores stood: Creedmoor Practice Match, 200yds., possible 50: A. Law 45, P. B. Smith 44 W. Fisher 44, C. B. Edwards 44, S. Morse 42, M. Williams 42, W. H. Norton 40, S. Edgar 40, G. L. Haynes 38, W. H. Oler 38, R. A. Lappen 38, H. A. Dennison 37, M. H. Crockett 37, A. J. Look 37, C. H. Best 36, A. Darling 36.

Creedmoor Prize Match, possible 50: J. B. Thomas 48, O. M Jewell 48, G. H. Wentworth 47, J. A. Frye 47, W. H. Oler 46, B. A. Lappen 46, W. Fisher 46, C. E. Berry 45, J. B. Fellows 45, J. P. Bates 43.

The names and records of the prize winners in the various matches which have been running since January are appended. "C." "D." and "R." at the head of the combination match signifies Creedmoor, decimal and rest:

Creedmoor Prize Match.

J B Thomas	48	48	48	47—191+ 8=199
C E Berry	48	47	47	46—187—12=199
G F Ellsworth	50	48	48	48—194— 0=194
G H Wentworth	47	47	47	46—187— 7=194
J A Frye	47	46	46	46—185— 8=193
A L Brackett	45	45	45	45—180—13=193
J P Bates	45	45	45	44—179—11=190
C M Jewell	48	48	47	46—189— 0=189
A Matthews	48	47	47	46—188— 1=189
W Fisher	46	46	45	44—181+ 8=189
E J Cram	48	47	46	46—187+ 1=188

Combination Match.

	C.	D.	R.	
W Charles	49	49	87	91 95+ 0=457
W Gardner	47	46	78	75 97 93+15=451
R Davis	46	46	67	80 94 82+12=437
A L Brackett	47	45	73	76 70 7 +33=436
J P Bates	45	45	64	61 85 61+38=389

April 5.—As is usual after a holiday the attendance at Walnut Hill to-day was quite slim, and the practice match was the only one shot in. The day was exceedingly bad for shooting, the wind blowing hard from 11 o'clock. J. A. Frye was able early in the day to make a fine 47, but this was the only one made. F. W. Perkins attempted military shooting with a Springfield rifle for the first time, and made a fine 42. Saturday next a match will be commenced which will be shot on every alternate Saturday and close each day. It will be on a Creedmoor target, three scores to win, re entry permitted, and the prizes will be 15, 12, 10, 8, 7, 5 and 3 per cent. of the total entries. Following are the best scores to-day. Creedmoor practice match: J. A. Frye 47, W. Charles 45, A. C Adams 45. B. A. Lappen 45, F. W. Perkins 42, J. Payson 41, F. W. Fowle 41, A. L. Brackett 40, W. H. Morton 39, W. H. Slocum 36, W. Meadows 36, L. E. Green 34.

THE ZETTLER DEFEAT.—The challenge of the Zettler Rifle Club, of New York, after their first defeat by the Frelinghuysen Rifle Association, of Newark, N. J., on March 17, was promptly accepted by the latter club with the proviso that they would not shoot for prizes already won, but that a new set of individual badges should be provided and paid for by the losers of the match. A disinterested referee, not a member of either club, to decide all doubtful shots. The match was shot on the Frelinghuysen range, No. 167 Market street, Newark, Wednesday evening, April 2, and resulted as follows, the men shooting alternately in the following order and with the appended scores:

Zettler—J. H. Brown 111, G. Joiner 113, D. Muller 106, C. Zettler 102, M. Engel 111, B. Zettler 105, P. Fenning 116, A. Lober 111, C. Judson 111, M. Dorrler 109. Total, 1,095.

Frelinghuysen—W. F. Lynn 113, J. H. Shackleford 110, G. D. Weigmann 111, George Zimmer 102, William Hayes 112, E. O. Chase 111, W. P. McLeod 113, J. L. Tobin 110, J. K. Walsh 114, A. C. Neumann 114. Total, 1,110.

It will be noticed that the Frelinghuysens have raised the score and record one point above that of the last match, defeating the Zettler team by 15 points and making the high average of 111 points per man throughout the team.

SARATOGA SPRINGS, N. Y., March 31.—Following are the best scores of members in attendance at the Glen Mitchell Range, of the Saratoga Rifle Club, during Wednesday and Saturday, March 26 and 29. On the first day very little shooting was done because of the fog prevailing, which at times was so dense that the target was invisible. The second day the light and wind was about as near perfection as we can get at this season of the year. Condition 200yds., off-hand, Massachusetts target:

I Davis	12	12	10	12	12	10	12	10	11	9—	110
F S Wheeler	10	12	10	12	10	9	10	10	12	11—	106
W H Gibbs	11	10	12	11	8	12	11	10	11	10—	106
H Wheeler	12	12	11	11	12	8	9	9	10	10—	105
Wm B. Gage	9	11	12	11	10	11	8	10	10	10—	102
A F Mitchell	9	9	11	11	10	10	10	9	10	12—	101
J Hays	12	10	10	9	11	11	10	9	10	9—	101
H Wellington	8	12	11	12	9	10	9	9	10	10—	100
F A White	11	7	11	11	9	10	8	11	11	11—	100
A C Rich	10	12	10	10	11	11	7	11	8	10—	99

A G HULL, Adjutant.

NEWARK, April 7.—The sixth and last tournament for the season of the Newark Rifle Association, was opened this evening on the Warren Range, when the Frelinghuysen team made the highest score yet shot in a match in this city. The scores as counted on the Creedmoor and ring target were as follows:

	Creedmoor.	Ring-target.
W F Lynn	49	117
J H Walsh	47	112
G D Weigmann	48	111
E O Chase	48	112
W P McLeod	48	113
J L Tobin	48	113
R Westermann	47	110
S H Shackleford	47	111
Wm Hayes	49	116
A C Neumann	49	115
	430	1,120

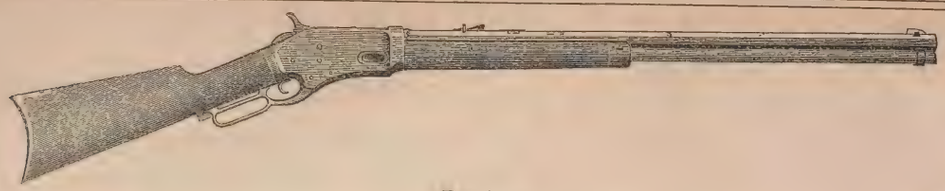


FIG. 1.

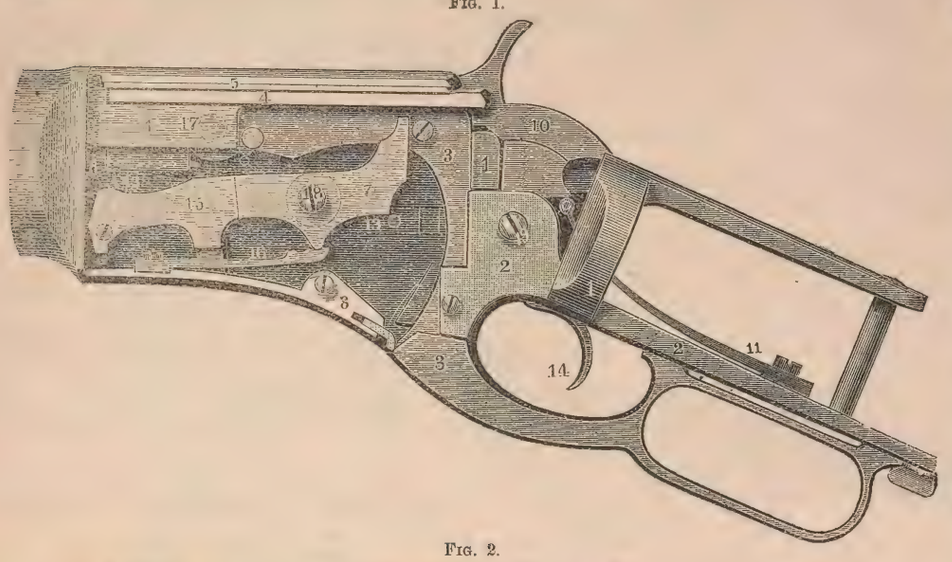


FIG. 2.

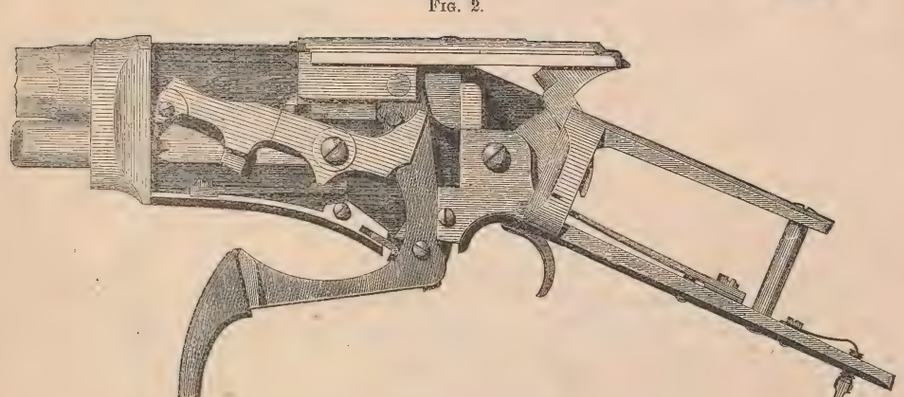


FIG. 3.

RIFLES OF TO-DAY.

THE KENNEDY REPEATING RIFLE.

THE Kennedy arm, or as the manufacturers now prefer to name it, the Whitney-Kennedy repeating rifle, belongs to that class of repeaters where the magazine is arranged in a tube below the barrel and the action is operated by a lever, the motion of which downward and forward performs all the work of cocking the hammer, opening the breech, throwing out the empty shell and bringing a new cartridge into the chamber of the arm ready for the next discharge. The rifle is manufactured by the Whitney Arms Company, of Whitneyville, near New Haven, Conn., U. S. A. Something was said of this company and its history in the notice of the Whitney single-loader last week. The Kennedy rifle dates back to 1872 and 1875, when it was invented by Andrew Burgess, that prolific concocter of small arms, who has had so much to do with bringing about the art of small-arm shooting as it is known to-day. His devices were taken up by the Whitney Arms Company in 1877, and further improvements were made in 1879 by S. V. Kennedy, superintendent of the works. Eli Whitney, Jr., during 1882, made other changes and improvements, and the arm grew gradually to bear some resemblance to its present form. Among the patents which cover the arm may be mentioned:

No. 134,589. Dated Jan. 7, 1883, A. Burgess.—This patent covers the shape of the lever and method of locking the breech-block.

No. 213,865 and No. 213,868. April 1, 1879, A. Burgess.—These patents cover minor points.

No. 215,227. May 13, 1879, S. V. Kennedy.—This patent is for the carrier block, including the clamp for holding the cartridge in place when the block is raised. The carrier is quite different from that used in any other repeater, and contributes as much as any other one part to the perfection of the same.

No. 218,426. Aug. 12, 1879, to F. W. Tiesing and S. V. Kennedy.—This patent is for the ejector, which throws the empty shell out of the way when the breech is opened after discharge.

After patenting his invention in 1873, and yet further in 1875, Mr. Andrew Burgess made a few rifles by hand and exhibited them at the Centennial Exhibition in 1876. It was not until 1879 that the tools were completed and the rifles placed on the market. At that time it was called the Burgess rifle, and the model first made was adapted to the government service cartridge, .45-70-405. The rifle as then made turned out to be a very unsatisfactory weapon, and it was evident that other changes were necessary to make the arm both safe and handy. This led to the Kennedy improvements, and the rechristening of the arm. At the same time the .45-70 government cartridge was discarded as being unsafe on account of its rounded bullet which, in a repeating rifle, where the magazine is in the form of a tube, renders an explosion possible by the bullet of one cartridge impinging forcibly upon the primer of another shell. Since 1880, when the Kennedy arm was put before the public, other improvements were made, the curved handle of the lever has been replaced by a loop, and in the large calibers, .45-60, .45-75 and .50-95 express, the carrier block has been so arranged that the cartridge does not jump its whole length from the magazine, but instead enters gradually as the breech block is moved back in opening the system.

The arm is now turned out in large numbers, and thousands have gone into use. During the year 1883 about twelve thousand were made to supply the retail demand. It has been adopted as a military arm, and several foreign governments have sent orders for supplies of this repeater. Upon its merits as a sporting arm for use against game, readers of the FOREST AND STREAM have been given the opinion of hunters from time to time. The communication of "S. E. B." in the issue of Jan. 17 last tells what the arm will do under hard usage, and the correspondent, "Big Injin," has also given the arm a very thorough comparative test. The manipulation of the Kennedy is very simple, and scores have been made where rapidity of fire was important without taking the rifle from the shoulder. The magazine is charged while the breech is open by pressing the cartridges, one at a time, through the spring cover, which is placed on the right hand side of the receiver. Accidents from premature discharge are rendered impossible, as far as may be, as the hammer cannot reach the firing-pin until the breech is fully closed and locked. The resistance to the discharge is in direct line with the bore of the barrel. Its present builders claim that the qualities essential to a first-class rifle of safety, accuracy, durability, strength, simplicity, rapidity and ease of manipulation are all united in the Whitney-Kennedy.

The tests applied at various times to the Kennedy action have been very severe.

It has been tested at the armory, by firing many hundreds of rounds successively, by excessive charges, by defective cartridges, etc., and has stood every test. The parts are of such size and form that they are not extra liable to break or get out of order. Only the best materials are used. The system is made of steel throughout. The construction is simple, and the parts are few as in any other magazine rifle operated by a lever. The mechanism can readily be understood by any person who is at all familiar with fire arms, and no difficulty should be experienced in taking apart and assembling the system if the directions given below are followed.

Ten shots have been fired from the Kennedy in two seconds, and it can be fired as a single-loader (the charged magazine being held in reserve) as rapidly as any gun in the market.

The rifle has a general record of some fine shooting by selected experts. Captain E. E. Stubbs thinks much of the arm, and at Gainesville, Ark., on Nov. 25 last, shooting at 1,000 glass balls thrown from screened Bogardus traps, at a distance of 15yds., broke 993, and during the feat made a run of 700 without a break. Speaking in September last, Captain Stubbs said: "I tried the Kennedy at Coney Island, 200yds. range, and made 47 consecutive bullseyes." Again, on Dec. 31, Captain Stubbs writes: "I subjected the Whitney-Kennedy rifles on Christmas Day, just past, to a wonderful test of endurance, making a total of 500 shots in a fraction less than five minutes. I used six guns, and all worked well."

Mr. C. Wilkins, at Franklin, Pa., on May 4, 1880, broke 479 out of 500 balls thrown from a trap. This feat was witnessed by the Franklin Sportsman's Club and many hundred visitors.

The directions for taking apart the weapon should be closely followed, and may then be employed without the necessity of a professional gunsmith.

To take apart, the breech being closed with the muzzle of the barrel to the front:

Take out the two side screws, on the left side of the receiver, that are nearest the barrel. In the 45-caliber rifle take out also the largest screw (carrier-block screw) on the right side of the receiver. Remove the bottom plate and carrier-block through the bottom of the receiver. Full cock the hammer and take out the extractor screw from the top cover, then depress the lever sufficiently to let the cover pass over it, pull back the hammer as far as possible and slide the cover out over it. Remove the breech-block and lever together through the top of the receiver. To disengage the lever from the breech-block: Take out first the firing pin screw; second, the firing pin; third, the ejector from the bottom of the breech-block; fourth, the large pin from either side.

To assemble: Put the parts together in the reverse order from which they were taken out.

If, from long use, the main spring should lose its force and the gun miss fire, it may be stiffened by turning up the set screw, placed under it in the bottom tang.

The accompanying cuts show the arm in its completed state, and by the cross section display the mechanism of the action with the breech closed and again when the breech is open. The parts in Fig. 2 correspond with the numbers as follows: 1, Receiver; 2, bottom tang; 3, lever; 4, breech-block; 5, top cover, 6, ejector; 7, carrier-block; 8, bottom plate; 10, hammer; 11, main spring; 13, sideloading spring cover as seen from back; 14, trigger; 15, carrier-block clamps 16, carrier-block spring; 17, breech-block pin; 18, carrier-block screw; 19, hammer screw; 20, extractor; 21, ejector catch; 22, bottom-plate snap; 23, long firing pin; 24, short firing pin; 25, carrier block clamp spring; 26, ejector spring; 27, bottom-plate snap spring; 28, long firing pin spring; 20, short firing pin spring.

There are now five different calibers or sizes made: .38-40, .44-40, .45-60, .45-75 and .50-95, while a rifle is now under preparation to take a .32-20 cartridge. The .38-40-160 arm, 24-inch octagon barrel, 13-shot magazine costs $27, while the same with a round barrel costs $25. The .44-40-200, 24-inch octagon barrel, 13-shot cartridge, also costs $27, with a round barrel at $25. The .45-60-300 rifle, 28-inch octagon barrel, 11 shots, weighing 9½lbs., costs $29, while the round barrel comes at $27. The .45-75-350, otherwise similar to the last named, comes at the same prices. The .50-95-300 express rifle has a 26-inch barrel, carries 10 shots and costs $38 in octagon barrel, while with round barrel the cost is $35. All of these prices are for sporting rifles, fitted with open buckhorn or clover-leaf sights.

SHORT-RANGE SHOOTING.—Ilion, N. Y., April 3.—*Editor Forest and Stream:* I take the liberty of forwarding you diagram and electros of targets made on our range. The weather conditions were light breeze, cold, cloudy and poor light.—A. ARMSTRONG, Sec. Ilion Rifle Club.

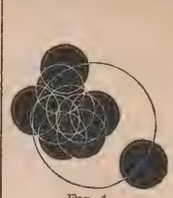


FIG. 1.



FIG. 2.

Fig. 1.—Ten consecutive shots, made from rest, by L. N. Walker, Ilion, N. Y., March 3, 1884; distance, 100yds.; Remington rifle, 32 caliber, 35 grains powder, 150 grains lead. The above diagram is actual size. Shot at lower right hand was the ninth fired.

Fig. 2.—Ten consecutive shots, made from rest; 100yds. distance; by L. N. Walker, Ilion, N. Y., March 20, 1884, with Remington special M. B. L., military sights; without cleaning; 80 grains powder, 550 grains bullet, Remington waterproof patch. Used Dolan's breathing tube. Diagram, actual size.

GARDNER, Mass., April 3.—To-day members of the Gardner Rifle Club kept open house at Hackmatack Range and entertained a few members of the Worcester Rifle Association, and a right good time was the result. The American decimal target was used, shooting off-hand at 200yds., with a possible score of 100. The best results were as follows, in the face of one of the severest snow-storms: G. F. Ellsworth 92, G. E. Fordyce 89, A. C. White 89, G. C. Goodale 88, I. N. Dodge 87, G. F. Emerson 87, Stedman Clark 82, A. Mathews 79, B. Williams 76, H. C. Knowlton 64, A. Williams 59, P. George 57, J. L. Thomas 57.

At the last regular meet of the Garden Rifle Club the following scores were made on the same target:

W C Loveland	9	10	10	6	9	8	10	9	9	9—89
A Mathews	10	9	9	9	9	10	9	9	10	8—87
L W Clark	8	10	8	10	6	9	10	9	6	10—86
M Atherton	9	6	9	7	8	10	9	8	10	9—84
G F Ellsworth	8	8	9	6	8	9	8	8	10	9—83
G C Goodale	5	10	9	9	9	6	10	9	6	9—82
S Hildreth	8	9	9	9	9	5	9	4	9	7—80
B Williams	7	6	8	9	6	6	7	10	10	9—78
J W Dickinson	4	10	7	7	6	7	6	8	9	9—73

At the annual meeting, held this week, the club elected officers as follows: President, I. N. Dodge; Vice-President, H. C. Kowlton; Secretary and Treasurer, G. C. Goodale; Executive Committee—F. E. Nichols and W. C. Loveland.

NEW YORK.—Regular weekly shooting of the Bulls head Rifle Club Thursday, March 27, 12-ring target, possible 120: M. Dorrier 118, A. Lober 118, E. Holzman 117, C. Rein 115, V. Steinbach 114, H. Gunther 113, J. F. Schrorder 109, A. Stolzenberger 109, J. Schneider 110, H. A. Wasmuth 108, G. Wendelken 106, D. Holland 101, J. F. Campbell 93, S. F. C. Weber 94, H. Zubiller 95, D. Louitzki 86.

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

BOSTON GUN CLUB TOURNAMENT.—A dull, wintry day at Wellington opened, and greeted a large number of shooters at the above tournament on the 2d inst., nearly all of the surrounding clubs being represented; later on the snow seemed likely to interfere with the day's sport. In spite of all such difficulties, however, the comfortable quarters enabled the shooters to stand to their guns and exterminate some 2,000 birds, with the results tabulated below. Leading scores were as follows:

First sweep, 5 birds, 18yds. rise:

J Williams	01111—4	C F M Stark	11111—5
J S Hart	10111—4		

Second sweep, 5 single birds, 18yds. rise, 5 traps:

Sampson	10111—4	Eager	11111—5
Jenkins	11111—5		

Third sweep, 2 pair double birds, from 5 traps, 16yds. rise:

Perry	11 11—4	Hart	11 11—4
Jenkins	10 11—3	Stark	11 10—3
Evans	11 01—3	Cooper	10 11—3

Fourth match, 7 single birds, 18yds. rise:

Williams	1011111—6	Jenkins	1110011—5
Eager	1111101—6	Hart	1111111—7
Cooper	1111111—7	Sampson	1011111—6
Perry	1111111—6	Johnson	1111101—6
Gerrish	0111101—5	Sawyer	0110111—5

Fifth sweep, 5 single birds, 18yds. rise:

Sawyer	01111—4	Cooper	11111—5
Law	11110—4	Gerrish	01111—4
Jenkins	11111—5	Johnson	11011—4

Sixth sweep, 5 pair double birds, 16yds. rise:

Jenkins	11 11 01—5	Eager	11 10 10—4
Hart	11 11 00—4	Perry	11 10 11—5
Law	11 10 10—4	Gerrish	11 10 10—4
Sawyer	00 11 11—4	Johnson	01 10 11—4
Braley	11 11 11—6		

Seventh sweep, 7 single birds, 18yds. rise:

Field	1111111—7	Sawyer	1011011—5
Stark	1011111—6	Gerrish	0111111—6
Williams	0111111—6	Cooper	1111111—7
Johnson	0111111—6	Perry	1111111—7
Kirkwood	1111101—6	Eager	1111110—6
Law	1100111—5	Jenkins	1111001—5
Gilman	1011111—6		

Eighth sweep, 7 single, 18yds. rise:

De Rochmont	1111010—5	Field	0101111—5
Perry	0111110—5	Eager	1111110—6
Stark	0111011—5	Kirkwood	0011111—5

Ninth sweep, 7 single birds, 18yds.:

Sawyer	1111111—7	Nichols	0111110—5
Jenkins	1011111—6	Field	1100111—5
Sampson	1101101—5	Williams	1011111—6
Law	1110101—5	Johnson	0111101—5
Eager	1101111—6	Gerrish	1011101—5
Cooper	1111011—6	Parker	1111011—6

Tenth sweep, 7 single birds, 18yds. rise, 5 traps:

Jenkins	1011110—5	Parker	1011011—5
Cooper	1101011—5	Stark	1001111—5
Perry	1101101—5	Kirkwood	1111101—6
Johnson	0111011—5		

Eleventh sweep, 3 pair doubles:

Perry	10 11 11—5	Houghton	10 10 11—4
Law	11 11 01—5	Parker	10 01 11—4
Sampson	10 11 11—5	Kirkwood	10 10 11—4
Cooper	10 10 11—4		

Twelfth sweep, 7 single birds:

Jenkins	1011111—6	Gerrish	1111111—7
Eager	1111001—5	Sawyer	1111100—5
Cooper	1101110—5	Field	1111011—6
Sampson	1111100—5	Williams	1111010—5
Perry	1111011—6		

Thirteenth sweep, 5 single birds:

Eager	11111—5	Kirkwood	11110—4
De Rochmont	01111—4	Gerrish	11111—5
Sampson	10111—4	Field	01111—4
Perry	01111—4		

Fourteenth sweep, 5 single birds:

Perry	11101—4	Law	11111—5
Johnson	01111—4	De Rochmont	01111—4
Stark	11110—4		

THE LIGOWSKY SHOOT—Cincinnati, April 3.—The following additional clubs have remitted $1 initial entrance fee, championship match, first international clay-pigeon tournament, May 26, 1884. The numbers indicate the respective order of choice as to time in being called to the score:

14. Feb. 23—Knoxville Gun Club, Knoxville, Tenn.
15. March 6—Kirtland Gun Club, Cleveland, Ohio.
16. March 6—Evanston Gun Club, Evanston, Ill.
17. March 10—Algona Sportsmen's Association, Algona, Iowa.
18. March 14—Chippewa Falls Gun Club, Chippewa Falls, Wis.
19. March 16—Farmington Sporting Club, Farmington, Ill.
20. March 19—Bradford Sporting Club, Bradford, Pa.
21. March 20—Boston Gun Club, Boston, Mass.
22. March 21—Franklin Gun Club, Benton, Ill.

LIGOWSKY CLAY-PIGEON CO.

IOWA SHOOT.—The first annual tournament of the Winnesheik Gun Club will be held at Decorah, Ia., on May 13, 14 and 15. Glass balls, clay and live pigeon matches are provided in abundance.

GENEVA, N. Y., April 2.—The second annual shoot of the Lake side Gun Club took place this afternoon. It being a stormy day, the attendance was not large. The following is the score:

Contest No. 1, 10 glass balls, Card trap:			
Stapleton	8	Crawford	8
Fish	9	Dey	8
Stacey	7	Stacey, Jr.	6
Geo Hutchinson	5	Shot	8
Grant Hutchinson	4	Maunder	5
Contest No. 2, 10 glass balls, Card trap:			
Grant Hutchinson	3	Fish	7
Shot	8	Stacey	7
Stapleton	9	Geo Hutchinson	7
Dey	7	Stacey, Jr.	7
Crawford	4	Maunder	3
Contest No. 3, 10 glass balls, Card trap:			
Grant Hutchinson	8	Fish	7
Dey	9	Geo. Hutchinson	6
Stapleton	9	Crawford (21yds.)	8
Stacey, Jr.	6	Stacey (21yds.)	8
Maunder	7		

The club held its annual meeting in the evening. The treasurer's report showed the club in a flourishing condition financially, and the following officers were elected for the ensuing year: President, S. Coursey; Vice-President, J. S. Crawford; Secretary and Treasurer, J. Geo. Stacey.

TORONTO, April 1.—The pigeon match between A. Humphrey, of Toronto, and J. Bell, of Limaroux, for $100 a side, came off at John Oulcott's shooting grounds, Eglinton, to-day. The weather was rather cold for this time of year, still it did not mar the gathering of sportsmen, who were numerous. The wind was favorable to the birds. Betting on the start was 2 to 1 on Bell. Bell won by 6 birds, as follows: Match at 40 birds each, $100 a side, 21yds. rise; Dominion rules:

J Bell	1101110111111101111111111000001101—26
Humphrey	1101101010001100110111101110111101000—20

Mr. J. Wilson acted as referee and Mr. Oulcott trapped.

MUNCY, Pa., April 5.—Our new club, the Keystone, of Muncy, had its first shoot to-day; out of thirteen members seven shot, and below is the score. Weather awful.

C Guyer	20	S D Renn	18
B McMichael	19	H Corson	17
J P Guyer	19	Levi Hill	16
W Crawford	19		

Yachting.

FIXTURES.

May 18.—Eclipse Y. C., Opening Cruise.
May 24.—Oswego Y. C., Opening Cruise.
May 24.—Boston Y. C., Opening Cruise.
May 30.—Knickerbocker Y. C., Spring Matches.
May 30.—Atlantic Y. C., Opening Cruise.
May 30.—Newark Y. C., Spring Match.
May 30.—South Boston Y. C., Spring Match.
May 30.—City Point Mosquito Fleet, 13 and 15ft. boats.
May 31.—Boston Y.C., First Match, Connor and Commodore's cups.
June 9.—Portland Y. C., Challenge Cup.
June 10.—Atlantic Y. C., Annual Match.
June 11.—Hudson River Y. C., Annual Match.
June 12.—New York Y. C., Annual Matches.
June 14.—Hull Y. C., Club Meet.
June 14.—Seawanhaka Corinthian Y. C., Annual Matches.
June 16.—East River Y. C., Annual Matches.
June 16.—Newark Y. C., Open Match.
June 19.—New Jersey Y. C., Annual Match.
June 23.—Newark Y. C., Open Matches.
June 28.—Boston Y. C., Ladies' Day.
June 30.—Manhattan Y. C., Annual Cruise.
June 30.—Eclipse Y. C., Spring Match.
July 4.—Larchmont Y. C., Annual Open Matches.
July 9.—Beverly Y. C., Marblehead, First Championship.
July 12.—Hull Y. C., Club Meet.
July 12.—Boston Y. C., Second Club Match.
July 26.—Beverly Y. C., Nahaut, Second Championship.
Aug. 9.—Hull Y. C., Club Meet.
Aug. 9.—Boston Y. C., Open Matches, all clubs.
Aug. 16.—Beverly Y. C., Swampscott, Third Championship.
Aug. 23.—Beverly Y. C., Marblehead, Open Matches.
Aug. 23.—Boston Y. C., Third Club Match.
Sept. 6.—Beverly Y. C., Marblehead, Special Matches.
Sept. 13.—Hull Y. C., Club Meet.
Sept. 13.—Boston Y. C., Second Ladies' Day.

THE LAKE Y. R. A. AND MEASUREMENT.

A FULL report of the proceedings at the recent meeting at Toronto is printed in this issue. It will be seen that the lake clubs, both Canadian and American, have, after investigation, decided upon a length and sail area rule. This conclusion is in harmony with the general feeling prevailing in yachting circles on both sides of the Atlantic. The fallacy of measuring by simple length, and the evil tendencies of that rule, are fast becoming appreciated. The sail area rule is making rapid strides, for the good reason that under it various types can be raced with some approach to equity. But the chief recommendation of the rule lies in the fact that small, economical boats, reasonably sparred and of convenient draft, will not be driven to the wall as under the comparison by simple length. The modern Boston keel sloops and Itchen cutters, which are the direct outcome of the latter custom, are the largest and most expensive boats to build and sail, and draw more water than others of less extravagant size on the length. Witness, for example, the keel sloop Cricket, of Boston, which, on a loadline of 32ft., draws no less than 7½ft., or as much as the cutter Muriel on 40ft.; 2½ft. more than the cutter Merlin on 25ft., 2ft. more than the cutter Yolande on 26½ft., as much as the cutter Madge on 33½ft., and within 6in. as much as the cutter Maggie on 45ft.

A rule which forces the construction of an unhandy and expensive type cannot long survive, and as fast as yachtsmen appreciate the tendency to great expense and oversparring with no commensurate returns for the outlay, there can be little doubt that simple length rules will gradually give way to more intelligent modifications which will allow all to build as they please, from the widest to the narrowest, the shoalest to the deepest, and so through competition promote the survival of the fittest. Already, with one exception, the principal clubs in New York have given in adhesion to the sail area rule. In the East the recently formed Y. R. A. have not as yet arrived at any conclusion, and it is possible they will decree the same method. Should this not be done, experience to come will show up the false and pernicious workings of simple length, that at future convocations of the powers the desired perfection will be brought about through the force of public opinion. In England the sail area rule will be tried this year by several prominent clubs, and it has already supplemented length in Itchen classes and Southampton waters generally.

There is a firm conviction abroad that the time has come for abolishing the old and prejudicial beam and length rule all around the British coast and the substitution of the new system. As fast as "vested interests" can be set aside, the sail area rule is being accepted, and we think that in another season or two it will become universal throughout the yachting world as the best and most practicable substitute by which the difficulties in the way of obtaining the actual bulk of vessels will be overcome.

The Lake clubs are to be congratulated for being in on the new tide. The Toronto and Kingston clubs had already given the Seawanhaka rule a season's trial with great satisfaction, and at the recent meeting the whole matter was thoroughly canvassed and examined through application to actual boats whose relative performance is known. Hence future prosperity under the sail area rule can be considered assured. The Chicago Y. C. is also debating in an informal manner a similar measure, and we learn that Colin Archer is working among Swedish organizations to the same purpose. So the coast seems clear at last to a universal rule in which all interest s will acquiesce. Nearer home, old prejudices still have some influence and strength, but that the errors of length measurement are fully understood by intelligent observers elsewhere appears from the following, taken from *Le Yacht*, of Paris:

"To sum up: The English Y. R. A. has decreed three classes of boats, of certain defined lengths, and applies to these classes time allowance based upon sail area and length. * * * It appears, then, that the division of boats in classes by length maintains the principles of measurement by length, but at the bottom the allowance upon sail area and length has, as a direct consequence, the abandonment of measurement by length. * * * Experience has demonstrated the fallacy of simple length; for among boats of same length it gives the advantage to the largest and most powerful, and as between boats of different type it hinders all fair comparison. The introduction of sail area offers more equitable conditions for comparison, because the beam and depth [Here appears the intuitive desire to measure actual bulks for fair comparison.—EDITOR FOREST AND STREAM] are the sources of sail carrying, and the new rule takes them into account. This must give results in racing at least fairer, if not perfectly fair, because of the accounting for the bulk on the length. * * * This rule, practically put to test in America under various forms, will be from the present, through the Y. R. A., or perhaps in spite of it, engrafted upon English rules for the racing of yachts and for small boats."

Twaddle about "patriotism" and the slushy scribbling of "penny-a-liners" with no higher aim than pocketing their pay for the filling of a certain amount of space, may find it easier to get along without any exertion of their brain, but wherever critics of experience venture an expression, it is in strong condemnation of simple length. It remains to be seen whether the New England Y. R. A. will have the insight to deal courageously with this question or whether it proposes to shirk by shouldering the vices of a bad rule which chokes off all further experiment and progress in its crass prejudice for the largest displacement and greatest expense in yacht building to the exclusion of all fresh ideas and the rapid development of the sport. A rule which forbids anything but the largest on the length cannot be fair, and that is not the worst of it. The expense of large boats frightens the public from building. The New England Y. R. A. must not look to the past only, but to the future. What may have been good enough in the old days, when all yachts were shoal draft traps, is not necessarily good enough for an enlightened policy applicable to the future, which should give all a fair show and favor none in particular. We are aware of the powerful prestige of old customs, and that the snares of "simplicity" are bound to exert great influence upon the coming deliberations. But we believe the New England Y. R. A. may be trusted to commit no hasty blunder, and that it will face the music without regard to vested interests, and permit no narrow local issues or provincial prejudice to sheer it off the path of duty. That duty demands a rule free from favor to any type, in the light of experience abroad and at home, where there has been sufficient opportunity to observe the workings of rules adhered to for a long time.

The two leading clubs in the country, the N. Y. Y. C. and Seawanhaka Corinthian Y. C., in view of the constantly widening divergence in the type of the vessels composing their fleet, have, after deliberate consideration, resisted the pleadings of vested interests, and to their credit, refused to formulate a ukase against those whose experience or choice leads to deviation from the ancient typical trap. The sail area rule as a correction to the notorious unfairness of measuring by simple length has been introduced with good effect and satisfaction in New York, whatever this or that growler with an oversparred trap may have to the contrary. It is received with increasing favor abroad and indeed is destined to take precedence of all other methods. The Y. R. A. council of Great Britain has positively declared length an inequitable gauge. The Lake Y. R. A., in full possession of all that has been said and reported upon the subject, has seen fit to reject simple length. Those journals making a specialty of yachting from a technical standpoint, are unanimous in the condemnation of simple length. It is not our purpose to further or force any selected rule. But we wish the issue to be put before the New England Y. R. A. in its true light. Are we to have in the East the liberty to build and rig as we like, or is the future to be rammed into a straight-jacket at the outset, only to have all hands wake up again some day and find our cousins abroad have stolen another long march on our practices and experiences? Will the New England Y. R. A. bear in mind that the evils of length measurement were only just beginning to show themselves, because builders are slow to recognize the loophole in the rule? That, if a sloop on 29ft. draws 7½ft. and has 30ft. hoist to-day, the future, forced by the artificial stimulant of prejudicial measurement, will develop vessels drawing 10ft. on the length with 35ft. hoist, displacement and cost corresponding?

Can the association overlook the boat with 5ft. draft and 22ft. hoist, supplied at half the cost and equally as well fitted to the general objects of yachting? Is reason to be dumped overboard and riot in size the consummation to be sought? Are we to see all the troubles and tribulations of racing abroad transplanted to our own shores, only augmented in their interference with sport and the erection of false standards?

This is the sequence length measurement is bound to bring about should the New England Y. R. A. perpetuate its follies and emphasize them by official indorsement. The largest and most expensive and most undesirable type will raise its head and tower above others, a fright to the pockets of all but a small number of rich people, and of a draft and general unwieldiness wholly unsuited to the promotion of yachting interests. We will see on this side of the Atlantic the same harrassing and regretable split between racers and cruisers, and years will not efface the evil wrought. The past is not a sufficient criterion, as the sport was in a general state of chaos. Now that piling up records is becoming the fashion, measurement rules will be swindled to the most possible.

Already the influence of length can be detected in the huge Eastern sloops as the first step in the direction we fear. Let every one desiring a boat ask himself whether he cares for 8ft. draft, 10 tons weight on the keel and 32ft. hoist for general yachting purposes on 30ft. loadline? Yet precisely such a boat was planned three years ago and made her appearance in last year's matches about Boston. She is the product of length measurement, and not a boat representing the most advantageous or economical disposition of size. But for the fact that length refuses to consider size and permits it to race untaxed, such monsters would never enter any one's head. The length rule quashes the delicate play of reason and sets up as a fetish the brute force of bigness. Cruisers will refuse to bow to such a false idol, and as fast as they discover it a losing game to pit small boats on a length against large ones they will retire from the line and relapse in public estimate to the lower order composed "only of cruisers." The most excellent and talented designs will be spoken of slightingly as "cruisers," and that only because a false standard has warped just comparison.

The danger lies herein. If the New England Y. R. A. seeks its guide by the past, it will fail to receive the true course for the future, because the past has scarcely afforded a chance for the poison to appear on the surface. Wise counsel peers ahead and a warning against official indorsement looking to the perpetuation of a proscriptive rule, simply because its vices have lain dormant in the past, cannot go unheeded, unless at serious sacrifices in the future and the complete miscarriage of the chief purpose for which yachting associations are instituted. Once vested interests are permitted to grow strong under a malacious rule, then neither reason nor example may be able to put affairs round again on the other tack.

LOG OF THE WATERSNAKE.

[*From "Cruises in Small Yachts," by H. Fiennes Speed.*]

NOW for the little ship which was to be our home for three months on salt water and fresh, and which usually lay either at anchor or at her moorings a little below Erith Pier, in what is very commonly called the "London River." She was a small cutter of about seven tons, built at Portsmouth in 1873, but redecked, sparred, canvassed and thoroughly overhauled and refitted by McWhirter at Erith in 1878, of pretty smart appearance and not overdone with sail. Dimensions as follows: Length over all 34ft. 6 in., beam 8ft., draft of water 5ft. She had iron ballast inside and a small lead keel of half a ton. Of course carvel built and with considerable rise of floor. Sternpost not much raked, and clew of mainsail plumb with taffrail. Main cabin 10ft. 3in. long, a good forecastle with room in it for a bed bunk, with which, however, it never was fitted. Her fittings below were mostly of teak and maple French polished, which looked very well. The little after cabin was entered by a ladder through the cabin top on starboard side, and had a washstand on starboard side and a 6ft. berth on port side, which was carried along under the deck and passed along one side of the steering well. The latter was 3ft. 7in. long, and completely shut off from the main cabin by a bulkhead which had fitted on it a small shelf to take the binnacle in a handy position. In most small yachts one enters the cabin through foldings or sliding doors, and the question is usually, Where on earth is the binnacle to go?

The whole crew of the Watersnake numbered three. We were therefore an amateur crew. No hand, no boy, no dog, not even a cat to curl up in front of the forecastle stove and make things look homelike when the kettle was on the boil and sang merrily over the red hot coke.

Provisioning for three months required some consideration, but of course we were to get fresh things when and where we could. But that pile, a second great pyramid of tins from Hugh Wood & Co., heaped up on the cabin carpet. How are we going to stow all that lot in the lockers.

Before we warp off, a word about one's toggery on board a small craft. What is best to wear? Now, we all had pilot cloth, and blue jerseys, and flannel shirts, and fine worsted caps, and India rubber soled shoes. All of which sounds professional, of course, but still there are drawbacks even to professional costume, *e. g.*, a thick pilot cloth pair of trousers are not nice to go aloft in to cast off the topsail lacing in a hurry, and get the fid out of the topmast, till they grow pliant with sheer old age. They are too stiff and thick. Whereas flannels are charming and allow perfect freedom of action; but these again are not warm enough on many a summer night, and get to look dreadful after a little brasswork cleaning has been got through, and they have a plentiful modicum of brickdust and oil daubed upon their soft surface. In one short week their pristine beauty is gone forever, and we all know the washerwoman's hands don't improve them.

The question lies between pilot cloth, white flannel and blue serge no doubt. The first is heavy and stiff, and when wet won't dry. The second in easily wet through, but dries easily and is supple, but spoils in appearance with the least thing. The third is a kind of go between and perhaps is best of all, as it dries soon, and allows one to bend one's knees, and yet is fairly warm. It should be of good substauce, otherwise it soon perishes.

But now we warp off at last and drop down to moorings below the pier to wait for next day and get things squared below, wash the decks down and feel we have done with Erith Hard for a time. That night, having done a fair day's work on board, we sat up late and made merry; but I made my crew clearly understand that it was only for a treat, and that the Watersnake always kept good hours as a general rule. My brother slept in the forecastle, I had the after cabin to myself, where I could pop up and down the ladder at pleasure and at a moment's notice while at anchor, and not interfere with anybody; though my apartment was, I must confess, somewhat limited in area. Pen slept in the berth on port side of main cabin and F. in the starboard.

Next day, August 10, there was a nice breeze from S. W. (the usual quarter). Slipped moorings about mid-day and reaching down a little beyond Herne Bay, brought up somewhere in the neighborhood of the Pudding Pan. We had a good sail, but nothing of much interest happened.

August 11.—During the night the wind freshened a good deal on the flood tide, and the old Snake rolled dreadfully, rolled in fact so much that each rail dipped, first on side then the other, and it takes a very heavy roll indeed to effect this, in fact, I never have had it happen in any craft. Breakfast while at anchor was impossible. Only two of us were left sound, and a hard job it was for us to get the anchor, as the motion was so extremely violent with the fresh W. wind. When we had succeeded, and it was only a question of time and patience, and steering and holding on, and when the foresail was run up she was quieter, and we ran comfortably under a reefed mainsail past the Pan Sand Red Buoy and Tougne Light, taking this channel instead of the favorite old Gore channel by way of a change. After a bit it was "Gybe O!" for the North Foreland, and with a good breeze we ran into Ramsgate Outer Harbor till 10 P. M.; then warped into dock and slept peacefully.

THE GLEAM'S RECORD.

THE amount of ballast at present carried by this sloop amounts to 6,200lbs., something over 1,700lbs. of which has recently been put on the keel. Considering the boat is only 23ft. loadline, these figures patently illustrate the tendency toward an expensive and unwieldy type which length measurement fosters. What has been done in the Gleam on a small scale is only the forerunner to what we may expect in large vessels as soon as the weak side of that rule is taken advantage of. Indeed, the new compromise, Thetis, building in Boston, gives a gauge of the tendencies of the times toward the enormous. The record of the Gleam for last year, put in tabular form, is as follows:

June 9—Larchmont Y. C. First Pennant Match, sloops. third class. 2 starters, Gleam	1
June 19—Atlantic Y. C. Regatta, sloops, Class G, 3 starters, Gleam	1
June 23—Seawanhaka Y. C. Corinthian Matches, fourth class, 5 starters, Gleam	1
July 4—Larchmont Y. C. Regatta, third class, 3 starters, Amazon	1
July 14—Larchmont Y. C. Pennant Race, third class, 2 starters, Gleam	1

From the list of races in our issue of Nov. 22, 1883, it appears that for the past season the Gleam's record of four firsts is the best among the sloops, which started five times, with the exception of Dr. Bryant's Shadow.

Editor Forest and Stream:

I notice an error in to-day's paper in your account of the performance of the Gleam last season. In the A. Y. C. race, Gleam won very handily, with several minutes to spare, from the Lois, and Amazon was third that day. While I am at it, it is as well to say, that Amazon carried away the throat halliard block hook within two minutes after crossing the line, and although damages were repaired quickly, yet Amazon could not in the light and baffling wind regain the distance lost. I pride myself upon never carrying away anything on my boat; but this accident was caused by bad ironwork well hidden by the galvanizing, something no one can guard against.

In the Seawanhaka Corinthian race I tried an experiment on the silly rule of measurement now in vogue, viz.: sailed without a topmast, and thus gained about six minutes in time. Of course, I had to take my chances on the weather, and this time got left. I had the satisfaction of beating the whole class down to the S.W. Spit buoy, but there the wind died out entirely.

I also had the satisfaction of showing there was a hole in that system of measurement, and the result is, I understand, that yachts will hereafter be measured for topmasts about the length of the gaff, whether they carry them or not.

At Larchmont we had the only racing day of the season; a good topsail breeze, true and steady as a clock. Gleam and Amazon crossed the line side by side, Amazon beat Gleam, in round numbers, fourteen minutes, or nine minutes with her time deducted.

Amazon is 2ft. 4in. longer on the water line than Gleam.

Regarding the Lois, she is one of Mr. Ellsworth's boats, formerly the Kangaroo. Although she is not now in racing hands, and is under-rigged, so as to be a comfortable boat in which a gentleman can and does safely take his wife and family with him, yet if there is any cutter or any sloop, carrying fixed weight, of her length, that thinks Lois can't go, I will try to convince them of the error for a $100 cup, A. Y. C. course and rules. FRANKLIN BEAMES.

[We gladly make the correction mentioned in the record of Gleam published last week, and regret that a misprint in the times of finish on our page 433 of Volume XX., should have led to the error. In reference to the Lois, we confounded that boat with another of the same name. The Lois, ex-Kangaroo, is no doubt a fast boat on length measurement in light weather with enough rig, but like all of her kind, not to be depended upon in rough water.]

CRUISING IN A SLOOP.

Editor Forest and Stream:

I do not know if I am at all singular in my experiences on the water, but I do know I have had some nasty ones. The scene of the following was the harbor of Halifax, N. S., some fifteen years ago. I had just returned there from Lake Ainslie, Cape Breton, where I had been sent on business, expecting to find certain letters, one of which I thought sure would direct me back again to Lake Ainslie for a six month's visit. In order to prepare for such a mandate when it came, I looked up certain yachtsmen and fishermen to find a staunch, fairly fast, seagoing, 25 or 30ft. keel boat to take with me. Among many I saw was one in particular that took my fancy. Her size, build and price just suited me. She had no nice fixings below, so that I could fit her out to my fancy and pocket. The bargain I made was, that I should pay a forfeit in two weeks of a stipulated sum, in case I did not want to purchase. After closing the agreement it did not take me long to throw aboard some bread and cheese, and prepare for a short cruise into the Atlantic. A fine breeze and tide tempted my haste, and soon I had mainsail on her, with the only jib she carried. I made my dingey fast to the anchor buoy, and slipped my moorings. Off we bounded, my heart and joy keeping pace with the occasion. About one-half of the mainsheet was aboard, and the jibsheet was belayed in my hand. I handled and felt her as I would a colt just out of the stable, and soon gained great confidence in her abilities and qualities. This did not last long. I found I had been greatly mistaken in the wind, and that it was merely luck that had attended me thus far, as squalls of great fierceness became the order of the day. My yacht suddenly righted, her mainboom came aboard just as if I were passing under the lee of some great elevator, then down came the wind again with awful force and so quickly that my determination to reef had no time to be put into effect. I tried to bring her to, but another burst of aerial passion so buried her that I had to bring her helm up again and await a more peaceful moment. All this time the city was fast being shut out and the Atlantic opening. The quiet moments I waited did not come. Aeolus, on the contrary, appeared determined to make the most of his opportunity and hurled his imprecations at my audacity in attempting alone to gain the mastery over one element in spite of the other. I forget just now who wrote "*Tempora mutantur, et nos mutamur in illis*," but I do not forget how forcibly those words came to me. The time was changed and I must change with it. So here goes. Down with the helm in spite of everything. I did some lively handling of that mainsheet, and if the jib whips into ribbons I cannot help it. It was an awful moment. My sloop of that date was a very different article to the cutter of to-day. There was no grip to her, she sat on the water like John Gilpin in the saddle. When a puff came she went, when a sea rolled under her she rolled off, and here she was on her beam ends. A regular Minnie-ha-ha in the cockpit, having it all its own way. We carried no boarding nettings, and thus the briny enemy found no difficulty in coming aboard. I thought nothing could save me. The strong tide and wind prevented our coming up any more, and although the time seemed very long to me it could only have been a few seconds. I took my bearings for a swim, I might just as well have done so for a fly, or a walk, when crash went something. It was the jaw of the boom giving way with the weight of the water and wind. Then some of the masthoop seizing parted, and the yacht actually lifted her lee rail out of the water. Doubtless a lull helped her. Now was my chance. I manned the downhaul and stowed the jib. Then for the main halliards. But oh! no, not yet. I must first fight and conquer that wild maniac of a boom or be struck down with it. Pat never wielded his shillalah more

dexterously, nor the Roman legionary its battering ram more fiercely than the God of the misty element hurled that boom about. I knew the spar could not long stand it, so I must be quick. I seized a line, and making two canal hitch loops I went for that boom. I waited, I dodged, I jumped, I lassoed it, and sprang round the mast, hauled in, taking a turn or two round something, and then let go the halliards. The gaskets soon had that sail in their embrace, and I breathed once again.

I was as strong as a lion up to this, now I was weak as a cat. I trembled now when I was comparatively safe, whereas before I did not even tear anything. Then I could think quite readily, now not at all. I was imbecile or next thing to it. I carried no colors to telegraph a word of distress. I did not think any one saw me, therefore I must act for myself.

The tide was by this time nearly neap; the wind as fresh, but steadier. A gale was commencing. It had hauled a point or so, and more off shore. All this encouraged me, for I should have smoother water. I began operations by pumping, but had not done much when something told me that my mainsail was split into ribbons and useless. I trembled like a leaf, and cold sweat bedewed my whole system while I examined and found it just so, and yet this fact so showed me my position that I found my nerves and mind strengthening every minute. My determination was to sail back under jib in a head wind. Could it be done? I had done so before in another yacht by trimming stup. I will try this one. I slashed the mainsail free and stowed it away right in the eyes. I then found a bar of pig iron that had not gone out with the rest, and placed that there too. The water then put her down by the head, even though I went aft to the helm. She sailed well, but not fast. I had at times to give her a weather helm, when the wind freshed more than usual. The tide, of course, after it commenced to flow, helped me along. The great drawback now was my inability to find either bread or cheese or pipe. A boat's crew from H. M. S. Royal Alfred had put off to assist me, but seeing me fast picking up my anchorage, they returned. As I neared the wharves I saw a dark line, which turned out to be nautical Halifax, *en masse*, who cheered and cheered again as I luffed up, seized my anchor-buoy, and made fast. VERAX.

[A yawl or cutter rig would have prevented the discomfiture described, and a deeper boat would have made better weather.]

THE LAKE YACHT RACING ASSOCIATION.

[*From the Toronto Mail.*]

AT the annual general meeting of the Toronto Y. C. held on Saturday, Jan. 5, the feasibility of forming a yacht racing association was discussed, and a committee consisting of Messrs. G. H. Duggan, W. H. Parsons, Wm. Dickson and George E. Evans were appointed, with instructions to put themselves in communication with the other yacht clubs around the lakes with a view to the formation of such an association. After considerable correspondence on the part of the secretary of the T. Y. C. with other yacht clubs on the lakes, it was found that they were all very much in favor of having such an association formed. A circular was then sent to each of the clubs calling on them to appoint three delegates; these delegates to form a committee and draw up a constitution and rules to govern such an association.

The outcome of this preliminary skirmishing resulted in a meeting of the delegates so appointed at the Queen's Hotel on Saturday afternoon. The Royal Canadian Y. C. sent Col. Grasett and Messrs. John Leys and Robert Cochrane, and the Oswego Y. C., Messrs. Mott, Chelps, and McMurrich. The Bay of Quinte Y. C. was unfortunately unable to send delegates, but authorized the secretary of the Toronto Y. C. to vote on the vital points which came up for discussion. Mr. Leys took the chair, and the delegates immediately proceeded to tackle the most important subject which came up for their discussion, viz., the measurement rule, for it was believed that if unanimity could be secured on this subject, other less important details could easily be settled, and the Association might be considered as formed.

Mr. Evans read a long and exhaustive letter upon the subject addressed to him by Mr. Kuhhardt, of FOREST AND STREAM, which entered with great exactness into the principle underlying the different rules for measurement of the Seawanhaka, New York, Yacht Club and English Yacht Racing Association, and after the matter had been fully discussed, and its effect upon typical yachts round the State examined, it was decided to adopt the Seawanhaka rule as a happy mean between the two others. The Toronto Y. C. have already adopted this rule, and sailed their last regatta under it. The Oswego delegates came armed with full authority to bind their club and also declared in its favor. The Bay of Quinte Y. C., in their letter to the secretary of the Toronto Y. C., gave him full power to cast their vote in its favor, and the Royal Canadian delegates decided to recommend its adoption at a special general meeting of their club, which will shortly be held.

Kingston, although unfortunately unable to send delegates, had written to the secretary of the Toronto Y. C. stating that they had already adopted the Seawanhaka rule, so that the co-operation of their club may be looked upon as assured.

A constitution was forthwith drafted by the meeting, which is appended, by which it will be seen that any of the yacht clubs round the lake of good standing may become a member of the association by adopting the constitution and by-laws.

The officers for the ensuing year were next appointed, as follows:

President, Mr. John Leys, R. C. Y. C.
Vice-President, Mr. John T. Mott, Oswego Y. C.
Second Vice President, Mr. Hugh C. Dennis, Toronto Y. C.
Secretary and Treasurer, Mr. George E. Evans, Toronto Y. C.

After the labors of the meeting the delegates adjourned to dinner, which was served in the Queen's best style, the Mayor presiding, with Mr. Leys in the vice-chair. After the dinner cigars were in order, and the delegates spent a very pleasant evening over the subject nearest to their hearts, and separated with great regret, but feeling satisfied that they had accomplished, or almost accomplished, a good work. Appended is the constitution. A copy of it and the sailing rules will be sent to each club upon the lakes, and upon their signifying their acceptance of them they may become members of the Association.

LAKE YACHT RACING ASSOCIATION.

CONSTITUTION.

Article I.—Name.—The Association shall be known as the "Lake Yacht Racing Association."

Article II.—Objects.—The objects of the Association shall be to encourage yacht building and yacht racing and to establish and enforce uniform rules for the government of all races in which the yachts of two or more clubs compete.

Article III.—Officers.—The officers of the Association shall be president, vice-president, second vice-president, secretary (who shall also be treasurer), and an executive committee, consisting of eleven members, of which the officers shall be members *ex officiis*. The officers and members of the executive committee to be called the council. The officers shall be elected at each annual meeting, and shall hold office for one year, or until their successors have been duly elected. Vacancies may be filled at any regular or special meeting, of which the secretary shall give at least ten days' notice in writing to each member of the council, and no member of the council shall vote upon any question in which he is personally interested. A majority of the votes of the members of the council present shall be necessary to pass any rule or regulation. Voting shall be by ballot. One member of the council from each club belonging to the Association or his proxy shall be necessary to form a quorum.

Article IV.—Duties of Officers.—President.—The President shall preside at all meetings and enforce all regulations of the Association.

Vice-President—The vice-president shall assist the president in the discharge of his duties and in his absence officiate in his stead.

Second Vice-President—The second vice-president shall assist the vice-president in the discharge of his duties and in his absence officiate in his stead.

Secretary—The secretary shall keep a true record of the proceedings of all the meetings of the Association in a book provided for that purpose; shall keep a correct roll of all the clubs and delegates; shall notify each club of its election to membership, and shall notify each delegate of every meeting and of the purpose for which it is called.

Treasurer—The treasurer shall collect all money due the Association and pay all bills contracted by it, keeping a correct account of the same in a book provided for that purpose. He shall make a report at each annual meeting of all receipts and expenditures, and of the amount of money remaining in his hands.

Executive Committee—The executive committee shall act as a membership committee, shall establish and enforce penalties for the infringement of the racing rules of the Association, and shall settle any dispute arising out of the construction of racing rules which shall be referred to the Association.

Article V.—Membership.—The following yacht clubs may become members of the Association by accepting the by-laws: Bay of Quinte, Kingston, Royal Canadian and Toronto. Any other yacht club on the lakes in good standing having fifty members and five yachts of 16ft. loadline or upward, shall be eligible for membership. Application for membership must be made in writing to the secretary of the Association, must be signed by the commodore or secretary of the club applying for membership, and must contain a correct list of the members and yachts of the club so applying. The executive committee shall act upon said application, and shall admit all clubs eligible under this article; their decision shall be final.

Article VI.—Representation.—Any club becoming a member of the Association under Article V., shall be entitled to an equal numerical representation in the council with the other clubs belonging to the Association.

Article VII.—Meetings.—There shall be an annual meeting on the second Saturday in May of each year, at which the reports of the secretary and treasurer shall be read, and officers for the ensuing year elected. The first annual meeting, as aforesaid, to be held in Toronto, in the year 1885, at which meeting it shall be settled where the next meeting shall be held, and so on; the place where each subsequent meeting is to be held to be settled at the preceding one. Special Meetings.—Any club belonging to the Association shall be at liberty to call a special meeting by giving one month's notice in writing, stating the object for which such meeting is called, and signed by the commodore or vice-commodore of the club, giving such notice to the secretary of the Association, who shall thereupon notify the members of the council of such special meeting and its date, giving them at least fourteen days' notice.

Article VIII.—Assessments.—Funds for defraying the current expenses of the Association shall be raised by an annual assessment on each club of ten dollars, which shall be due and payable in advance, and the financial year shall begin at the date of the annual meeting, and an additional assessment to cover the expenses of publishing a book containing the constitution, rules and regulations, code of signals, etc., of the Association to be borne by the clubs proportionally to the number of their members. No other assessment shall be levied except by a two-thirds vote of all the members of the council present at a meeting called for that purpose.

Article IX.—Resignations and Expulsions.—The membership of any club in the Association shall be forfeited by voluntary withdrawal, by disbandment, or by a unanimous vote of all the clubs of the Association at a meeting specially called, at which said club shall have an opportunity of being heard in its own defence.

Article X.—That each club shall be furnished with a copy of the constitution and by-laws and be bound thereby, and that in case of infringement of such laws by any club, such club shall be liable to expulsion from the Association in the manner provided in Article IX.

Article XI.—Delegates to the annual general meeting to have power to appoint proxies to vote in their stead.

Article XII.—Amendments.—These by-laws may be amended by a two-thirds vote at any meeting of the Association, provided, however, that the notice of such meeting shall have contained the proposed amendment in full.

PETREL.—From a letter in last week's paper it might be inferred that the sloop Vivien had been shown a match for the Petrel. We have overhauled the records and find as follows: In 1880, second day of cruise, when Vivien was said to have beaten Petrel into New London, the day was too fluky for any real test, and Vivien's gain was owing altogether to leaving the channel and cutting off inside the Bartlett's lightship, Petrel passing to southward thereof. Leaving New London, Petrel was bound direct for New Bedford by prearranged plan, and gave the Vivien a thought one way or the other. Vivien was then a light, open boat, and generally considered reasonably smart and quite up to the average. Both yachts met again during the cruise of 1882. First day's run from Larchmont to Morris Cove, good leading wind, 44 miles in 7 hours, Vivien with spinaker and Petrel with jibtopsail, latter beat Vivien 16 minutes. Same cruise, Morris Cove to Greenport, light wind aft, spinakers carried to Plum Gut. Then beat up Gardner's Bay to anchorage in strong westerly wind, Petrel beat Vivien 29 minutes, 28 of which was made in the turn to windward of twelve miles.

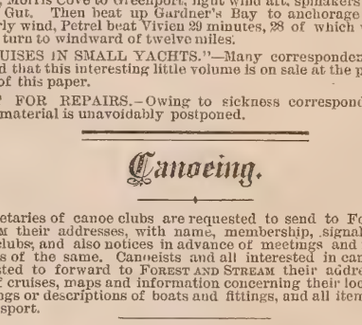
"CRUISES IN SMALL YACHTS."—Many correspondents are informed that this interesting little volume is on sale at the publication office of this paper.

OUT FOR REPAIRS.—Owing to sickness correspondence and other material is unavoidably postponed.

Canoeing.

Secretaries of canoe clubs are requested to send to FOREST AND STREAM their addresses, with name, membership, signals, etc., of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to FOREST AND STREAM their addresses, with logs of cruises, maps and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.

ALLEGHENY C. C.



ALLEGHENY C. C., Pittsburgh, Pa. Commodore, Chas. A. Robb; Vice-Commodore, P. W. Shepherd; Secretary and Treasurer, Walter H. Maple. Burgee, 14x21in., white field, blue border, letters n blue.

CANOE VS. SNEAKBOX.

Editor Forest and Stream:

The question at issue is not as regards speed, but simply stability under press of wind and weather, and ability to go where you want to in open water. As regards the first point I can corroborate the statement of your correspondent from Tom's River. I 1880 I made a trip to Barnegat. On leaving the cars at the village I was met by the boatman, whom I had engaged to take me over to the beach. He said that there had been a storm, and that all the boats at the landing were beached, but that he guessed he could take me over in the morning. The following day I went down to the landing, and found my boatman, who refused to cross the bay. There were a dozen or more others there with boats from twenty to thirty feet in length, but none of them were willing to beat across. After a time a boat was seen approaching from the beach. She came free with four reefs. The skipper of this boat, though offered extra pay, declined to recross the bay. Just then a small boy, thirteen or fourteen years old, came down to the landing, jumped into a sneakbox, and started out. On inquiry I was told that he was the mail-carrier, and went over to the lighthouse every day. On expressing surprise that he should venture out in such a cockle-shell, was told that "them things will go anywhere, even when we dassent take out our yachts." (The boatmen down there all call their catboats yachts.) This it seems to me should settle the question of the stability of sneakboxes. Perhaps canoes are superior in this respect, but I doubt it. I have never known a sneakbox refuse to go where her head was pointed; but cannot say as much for canoes. A few years ago the Puck, Rosalie and Psyche attempted to go down the Hudson from Spuyten Duyvil, but could not do it under either sail or paddle. We then crossed the river, hoping for better luck on the other side. On arriving at the west shore found that we were no better off, and that there was nothing left for us to do but to run back to Spuyten Duyvil under sail, and return to the city from there by rail. The present correspondent answers also the name of "Snark," and will only say that the little 12½ft. box is no longer in his possession. The Bojum passed one summer on the South Bay in company with the canoe Queen Mab, and found no reason to be ashamed of the former's performances.

If Commodore Whitlock is anxious for a trial of canoe vs. sneakbox, I make him the following offer: To sail in July or August next, from Rocky Point, Greenwich, around the west end of Captain's Island, thence around the island to starting point. The match to be sailed in a southwest reefing breeze, with an ebb tide. This, I think, will give a better open-water test than can be had in the Hudson, near Newburgh. If speed is to be taken into account, will give or take allowance under measurement rules of any yacht club the Commodore may select. Otherwise the race to be "go as you please." If If Mr. Whitlock finds it inconvenient to accept, this offer is open to any other single or double canoe. For the sneakbox I claim the following points of superiority, as compared with the canoe: It will sail closer to the wind; it will live longer in a blow; it is altogether a more comfortable boat in open water or for an all-day cruise. BOJUM.

[No doubt Mr. Whitlock will be ready to race, but it is asking a good deal of the canoe to go from Staten Island to Greenwich, and wait there for a strong southwest breeze and an ebb tide. It would be fairer to name a fixed date for the race, as the canoe has to go so far. The question of time allowance is also a difficult one, as the boats, while of about the same length and depth, differ by 100 per cent, in beam.]

Editor Forest and Stream:

I have read with much interest the letters in FOREST AND STREAM concerning the sneakbox and canoe, and as I favor the sneakbox I think that I must put in my oar.

Three years ago I was stopping with a friend at Barnegat, and as the weakfish were running well, we made arrangements with a bayman to go out on the bay and try them in his box. I think the length of the box was about 16 or 17ft. Anyway, when we three were on board there was not much room to spare. I and my friend weighed about 125 pounds apiece, and the skipper was a short, thick-set man of twenty-eight years. We started down Forked River seven o'clock next morning, and after a run of a few minutes found ourselves on the bay, and half an hour later on the grounds.

After the skipper satisfied himself that he had the right ranges, he hove over the grapnel and made everything snug, as the wind was beginning to blow pretty fresh from the "eastard." Anybody knows that has been to Barnegat, that a stiff breeze will kick up a pretty lively sea there, and so it was that day. There were five boats within a half mile of us, and they were jumping around lively. Two miles "to windard" of us there was a forty-foot fishing smack, and she was pitching considerably. By this time we had eighty-four weakfish in the boat, averaging three-quarters of a pound, while the other boats had all left excepting the smack. It began to get so rough that we thought we would leave too, so we tripped anchor and got under way, but had not gone more than a mile when the step gave way.

The sticks were cleared off the deck and the skipper was on his knees heading the box before old Boreas. He hailed the smack which was near by, and when she overtook us and we threw our painter we had not shipped over a pail of water. One of the young fellows on board the smack was seasick.

If anybody thinks that a canoe can do any better than that let him write, I am ready to hear. SEAGULL.

Editor Forest and Stream:

In reply to the Commodore's challenge to sail his canoe against my heavy sneakbox, built expressly for ducking, I must say I cannot accept. Should I race with a canoe I should get Rushton to build me a sneak of the most approved pattern and rigged to compete with a canoe. GEO. H. WILD.

A FEW HINTS ON CAMPING.

A FUNGUS SMUDGE.

Editor Forest and Stream:

In your canoe columns of Feb. 28, I noticed an article by "Sis," entitled, "Smoke 'em Out." As a further suggestion for the accomplishment of so desirable an end, and for the benefit of my fellow-sportsmen who lie away to the woods and trout streams, I will give you the substance used here as a "smudge" to repel the attacks of gnats and mosquitoes.

It is the fungus growth frequently seen on the trunks of dead trees in the forest, old fallen timber, etc., and commonly goes by the name of "gnatwood" by many, also called "toad stools." I have frequently seen them as large in circumference as an ordinary half bushel measure. They grow pretty much all shapes and sizes, however. When old and dry, if cut into, they present a sort of spongy texture, both color and texture somewhat resembling cork.

This substance burns quite slowly, will not go out when once lit, and emits a light wreath of smoke of a pungency and odor quite peculiar to itself, possessing a repulsive power against a swarm of gnats that can scarcely be obtained in any other way, and particularly efficacious in driving off those infinitesimally small pests by some called "can't see 'em's."

I have frequently carried a piece of one suspended by a string around my neck, watch-guard fashion, and so secured in front as to keep the fire end outward while fishing on the head streams of Cheat. It burns invariably from the end ignited until entirely consumed. Placed in a position where it will do the most good, it keeps the "enemy" at a respectable distance.

I have also known it used by our 'coon and 'possum hunters as a ready means of conveying fire along with the hunt; in the absence of matches or other means for the purpose, a chunk the size of a quart cup being sufficient to hold fire during eight or ten hours, so slowly does it smoulder away.

In fishing from a canoe or boat, sharpen a stick and thrust into one end, it can then be secured in any suitable position, and the fire kept from danger of contact with either the boat or contents.

When freshly procured, it frequently happens they are so saturated with moisture as not to ignite readily; expose them in a hot place before your camp-fire and roast until the superabundant moisture is driven off; then proceed and you will find it works satisfactorily. If not required for immediate use it can be laid up in some dry nook of the camp or house and a few days will suffice to dry it out, cutting or breaking into the inner part facilitating the drying process.

To those who object to smearing themselves with any of the various compounds of tar and the essential oils, the above suggestion will prove beneficial. Converting oneself into a huge smelling bottle, with your skin exhibiting sensations as of a patent plaster or sheet of flypaper, is certainly not one of the pleasures of camping out.

BEVERLY, W. Va. BACKWOODS.

AIR-TIGHT COMPARTMENTS.

Editor Forest and Stream:

I write once more to your valuable paper to be enlightened as to the proper size of air-tight compartments for a canoe 16ft. long (tandem). I propose having metallic ones, or can you suggest anything that is better? Is there not a rule by which I can ascertain the number of pounds a cubic foot of air will keep afloat? R. P.

[A cubic foot of air will support 62½lbs. in fresh water and 65lbs. in salt. A metal box, 1ft. in each dimension, will float a weight of 62½ or 65lbs., less the weight of the box, the weight being *out of water*; and a proportionately greater weight, according to the density of the material, *when the weight is immersed.*]

THE LOG BOOK.

VI.—AMONG THE THOUSAND ISLANDS.

APROPOS of the meeting of the A. C. A. at the Thousand Islands next summer I send you the log of the Sadie N., on one of the short cruises made during a fortnight's sojourn in that charming region last August.

Our headquarters were established on a beautifully wooded island known as Tidd's, directly opposite to the town of Gananoque, and from this point we sallied forth from day to day as our fancy led us.

My fellow canoeist, the "Doctor," having only a few days at his disposal, was anxious to make the most of the time, and readily accepted my proposal to make a tour of the islands. He is a worthy representative of the single-blade, and had with him a beautiful little Rice Laker of Herald's build.

The morning of our start was unusually warm, with not a breath of wind, and our tiny craft floated so quietly that, though the current was in our favor, our motion was scarcely perceptible. However, with an occasional dip of the paddle we slipped along at the rate of a mile or two an hour, which was quite fast enough amid such picturesque surroundings; we were not tourists.

Our course lay at first over a considerable stretch of open water, passing the Gananoque lighthouse in mid-stream with its *vis-a-vis*, the beacon, known as Jack Straw. Thence through Halstead's Bay, when, no outlet being visible, a pocket map was consulted, which revealed a narrow channel to the right, and presently we were threading our way through a cluster of small islands which, notwithstanding our pocket-map, compass, dead reckoning, etc., quite perplexed us as to our exact bearings. Emerging from this maze, another vista of a mile or two opened directly ahead. Well's Island was now on our right, and the Canadian mainland on our left, with islands dotting the river here and there, though less thickly.

Passing another lighthouse we entered a narrow gap between Ash and Wallace islands, and the canoes began to glide along at a lively pace with the quickening current. An important question with the Doctor at this juncture was, where are we to have dinner, and catching sight of the little cottage of the light keeper on the bank to our right, he suggested that we halt for lunch.

With a cooling draught of milk from the kindly keeper's dairy and a sandwich from our lunch basket, we were soon afloat again "like giants refreshed." A glance at the map showed that we were now approaching the notable Fiddler's Elbow and Lost Channel; but we were placed in the embarrassing position of having two or three channels presented to us, and, as the rushing current hurried us along, a momentary doubt was felt as to whether the canoeists might not find themselves in the same predicament as the channel aforesaid. But like the historical Indian who vainly sought his wigwam, we did not allow the misgiving to be more than momentary, and full confidence as to our *locus in quo* was immediately restored.

On reaching the open river again a large camp was seen on La Rue Island, over our starboard bow, and getting within hailing distance we saluted the party, but as the afternoon was waning we denied

ourselves the pleasure of stopping to fraternize. The Canadian shore was again to be seen on our left, rising abruptly from the water, and at this point quite a remarkable echo may be produced, as was demonstrated by the stentorian hallooing of the Doctor.

Our course was now to the right, between La Rue and Club islands; thence by way of a small canal cut through the lower extremity of Wells Island, and we soon found ourselves in the vicinity of Alexandria Bay, the fashionable headquarters of summer life among the islands.

The large hotels at the Bay and the splendid villas dotting the surrounding islands give the place quite a civilized appearance, in striking contrast with the romantic wildness of the scenery of the Canadian channel through which we had just been passing, where nature has as yet been little disturbed.

As it was now time for supper, a point with a commanding view was selected and our little pyramid tent pitched in short order. Supper over, the demoralizing effect produced upon the provision basket profoundly impressed us. Fortunately, the village at the Bay was only a short paddle from camp, and we concluded to go in quest of fresh supplies at once. In our camp toggery, though, we felt we were hardly presentable in that quarter, so clean boiled shirts were donned, toilettes hastily adjusted and we were off. As we passed the hotels the Doctor's eyes glanced wistfully in the direction of the fair promenaders on the piazzas. We strolled through the main street, replenished our larder and were ready to return, when, chancing to meet with an acquaintance, the way opened for an introduction to some of those fair ones just mentioned. As we stepped up to the Thousand Island House the sound of music from the parlors announced that the nightly hop was in progress, and presently, when the whirling couples again took the floor our medical friend might have been seen with countenance serenely happy and—a charming young lady upon his arm.

When we got back to camp no lullaby was needed to bring sleep to our pillow after the long day of sunshine and fresh air and activity.

I must not omit to mention here the very pretty effect produced at night by the festoons of colored lights displayed about the hotels. Viewed from the river, with the shimmering reflections in its smooth surface, the effect is quite imposing.

Next morning we started on the return to Tidds, by way of the American Channel. A gentle east wind was ruffling the placid waters of the river as we got under way, and hoisting all sail fair headway was made against the current by "hugging" the shore and taking advantage of the eddies. The Doctor's craft having a smaller area of canvas than the Sadie N., it afforded him the diversion of "doubling up" to the front with the paddle semi-occasionally, as he was left in the lurch.

When passing a point bearing the high-sounding title of Central Park, about three miles up from the Bay, the well-known "toot" of a fish horn from the hotel verandah greeted our ears. Presuming the salute was from a knight of the paddle, we put in to the dock, and had the pleasure of shaking hands with the genial secretary of the N.Y.C.C., who was staying here with his family. As the wind was falling light we took our leave, after a very enjoyable half-hour's chat. The next three miles were covered at a snail's pace, but even that was preferable to paddling under a hot sun. By the time the Thousand Island Park was reached the wind had deserted us entirely, and there was nothing for it but to paddle the remainder of the distance to camp.

For a short cut we went through what is known as the "Gut," between Hemlock and Wells islands, and entered Eel Bay, an expanse of water some two miles in diameter, with only a few low islands within its area; then steered a pretty straight course for Gananoque, skirting the northerly point of Grindstone Island, on whose gentle slope the white tents of the A. C. A. are to be planted next August. This is one of the largest of the Thousand Islands, being about five miles long, by two miles wide, and is in every respect a most desirable location for the meet of 1884. Eel Bay, at its foot, which is almost inclosed by the islands, will also be a capital place for the regatta.

When within a mile or two of camp a squall struck us and a lively race ensued as we went scudding before it. It was "neck and neck" for some time, when the Doctor, gradually increasing sail, shot ahead; the Sadie N. followed suit by shaking out reefs, but too late, and my friend had the satisfaction of leading the way to our moorings amid the plaudits of our party, a satisfaction I did not begrudge him after his long stern chase.

The pocket map referred to will prove useful to the members of the A. C. A. who intend cruising among the islands next summer. It is published by George Rockwell, Fulton, Oswego county, N. Y.

SADIE N.

THE GALLEY FIRE.

SIMPLE DISHES.

OATMEAL is a staple and should always be carried by the cruising canoeist. The best oatmeal is the "A B C brand of steam-cooked cereals," to be obtained at any grocery store; price twenty cents. This oatmeal is simply cooked by boiling in a pot or can for twenty minutes, or until it becomes as thick as the canoeist likes it, some men preferring it thick, others thin. The more water used, the longer it takes to cook. It should be boiled at least twenty minutes. Salt to be added when first put on the fire. Eat it with milk and sugar, sugar and butter, or butter and syrup, or any of the foregoing alone. Now if you happen to cook two or three times as much as you want for one meal, don't throw what is left away; keep it, cut it up in slices, and fry it; eat it with butter and sugar. N. B.—When boiling oatmeal be careful to stir at short intervals to prevent from sticking to the bottom of the pot and burning.

Breakfast bacon is good for a change. Cut up in thin slices, place in a frying pan (without any butter, lard, salt, etc.) and let it fry until brown, or, if you like it well done, dark brown.

One way to fry potatoes is to peel them, slice them into thin, flat pieces, wash in cold water, have the grease in the frying-pan deep enough to cover the slices and boiling, then take the slices directly from the cold water, drop them into the boiling grease and salt them. They won't require much turning over if submerged when dropped into the grease. Eat while hot.

To boil potatoes: Wash them clean or peel them, put into water with a little salt, and boil until soft. Test their softness with a fork or pointed piece of wood.

An excellent way to cook eggs is to break two or three on a plate. Heat some butter until it turns black, pour the melted butter over the eggs, add a little salt, and if you like your eggs very well done, place the plate near the fire for a few moments.

To boil eggs soft, place them in boiling water for three minutes; hard, not less than six minutes.

A quick way of cooking eggs is to heat a frying-pan hot, take it off the fire, break half a dozen eggs in it, add a little salt, place the frying-pan on the fire again, prevent the eggs from sticking to the bottom of the pan by the continued use of a knife.

Never fry a beefsteak; broil it. When broiling a beefsteak never cut it to see if it is done. A piece of onion on each side of a steak when broiling gives it a pleasant odor.

A word of advice. My friend, don't attempt to go on a real canoe cruise unless you are in company with a man who can cook, or have had a little practice in the culinary art. A small fire to cook by is better than a large one.

FRIDAY.

THE WINTER CAMP-FIRE.

THE last of this series of meetings was held on April 2, at the Kit Kat Club room on Fourteenth street. The subject for the evening's discussion was "Tents." We omit a report here as the subject will appear shortly in the papers on "Canoe Building" in our columns. Mr. Norton described a new camp stove, made of four pieces of sheet iron, each about 10x18in., joined along the longer sides by hinge joints, so that it will fold flat, or may be opened to form a box, 18in. long, 10in. square, and open at top and bottom. About three inches from the lower end a piece of each side is turned in, forming a lug on which a small grate is supported, while a cover, also of sheet iron, fits on top. The entire arrangement fits into a package 18x10x1½in., and is carried in a canvas bag. These meetings have been a help to canoeing in keeping alive an interest in the sport during the six months when it is usually neglected, and the example of New York canoeists has encouraged similar meetings elsewhere, and they will in the future become an established feature with all canoe clubs.

CLUB NOTES.

A. C. A.—Dr. Neidé has forwarded the draft of the association book to Commodore Nickerson for his approval, and it will be published shortly.

NEWBURG.—Messrs. Oliver, of the Mohican C. C., and Stephens, of the N. Y. C. C., will visit Newburg on April 10 to select a site for the local meet on Decoration Day.

BIRCH BARK CANOES.—A meeting will be held in Boston on April 16 to organize a club of birch bark canoes. About fifteen gentlemen are interested in its formation, seven of them being canoe owners.

PERSONAL.—Mr. W. H. Bishop, of the Lake George C. C., was in New York last week and paid us a visit. Mr. Bishop has been spending some time among the sneakboxes on the Jersey coast, and speaks very highly of them.

SPRING CRUISE.—A number of Lowell canoeists think of shipping canoes to Franklin, N. H., at the source of the Merrimac proper, and making a two days' run home (distance, about 75 miles) on the high water in the early spring. The ice has just gone out of the river and the water is now extremely high. Fast Day will open the canoeing season.

TOLEDO C. C.—The canoe club organized on March 27 with thirteen members. Officers were elected as follows: Commodore, Joseph Hepburn; Vice-Commodore, Chas. Phelps; Secretary and Treasurer, Gus. G. Kelp. Messrs. Webb and Lynn were elected members of the executive committee. There are now eight canoes in the fleet, but this number will be increased.

AMSTERDAM C. C.—A meeting of the Amsterdam C. C. was held on the evening of March 20, at which the following officers were elected: C. H. Warring (canoe La Polka), Commodore; Dr. D. McMartin (Canoe Gypsie), Purser. Four new members were admitted, who will have canoes in commission before the 1st of May, and more are looked for early in the season. The club expects to send a delegation to the Newburg meet, and hopes to be at the Thousand Islands *en masse*.—CHARLES E. BELL, Secretary *pro tem.*

ROYAL C. C.—At the spring meeting, held last month, the following programme of races was drawn up and decided upon: Saturday, May 3, four paddling races at Kingston; Saturday, May 10, sailing race at Hendon: Saturday, May 17, sailing race at Hendon; Saturday, May 24, sailing race at Hendon; Saturday, May 31, sailing race at Hendon for challenge cup; Saturday, June 7, long paddling race, Teddington to Putney; Saturday, June 14, sailing race at Teddington; Saturday, June 21, paddling and sailing race at Teddington; Saturday, June 28, annual regatta at Teddington. A resolution "That in future all life subscription be invested, instead of being treated as revenue," was brought forward by E. B. Tredwen and E. A. Leach, and carried unanimously. A discussion was carried on for some time as to the best means of bringing country members into communication with one another, with a view to arranging cruises under the club flag, and it was suggested that a fortnight's cruise in August next on the rivers and broads of Norfolk would meet with such support. No more delightful spot for canoeing purposes could be found, and members who want companionship in their autumn holiday should make a note of this. It is proposed, if sufficient numbers attend, to fit up one of the Norfolk wherries to act as tender to the fleet, with sleeping accommodations for those who have not the necessary appliances fitted to their canoes. H. Evans and the secretary have volunteered to make the necessary arrangements, and canoeists from other clubs who would like to join the cruise are invited to write for further particulars to the Secretary R.C.C., 11 Buckingham street, Strand, W. C.

Answers to Correspondents.

J. D., Hoboken, N. J.—Yes, a partridge is a game bird.

C. H. C., Glencoe, Fla.—Mr. Hallock is now in Minnesota we believe.

A. C., Moira, N. Y.—Grounds of the Carteret Club, Bergen Point, N. J.

G. B. H.—It is to be a straight shell, we believe, but is not yet on the market.

J. B. H.—We shall publish drawings of canvas canoe and sneakbox in "Canoe Building."

O. T., Lennox, Mass.—It will not hurt shooting to have rifle rechambered to shoot 2½ inch shell.

A. H., St. Cloud, Minn.—We know of no way to trap crows, except by netting them as with wild pigeons.

W. H. D., Dubuque, Iowa.—See our advertising columns for best boat and canoe builders. Most of them show lines. Write for catalogues.

W. M., New York.—1. Do you think I could get any snipe on four or five acres of salt meadows a few miles below Nyack, on the Hudson? 2. Do you think it would be worth trying? Ans. No. to both.

F. P., Port Washington.—Would you please inform me when the Game Laws of 1884 of the United States, by Suydam, is published. Also where I could get them? Ans. They have not yet been issued, we believe.

W. T. D., Norwich, Conn.—1. What months do black bass rise to the fly? 2. Will dace rise to a fly, and if so, in what months? Ans. 1. June and July are the best months, later they do not rise as well. 2. We have had rises from dace all through the trout season, but most numerous in June.

W. H. B., Michigan.—Is there a law prohibiting the spearing of Mackinaw trout in Lakes Huron, Michigan, or Superior, or at the Straits of Mackinaw in the months of February and March? Ans. None that we know of.

P. P., Shickshinny, Pa.—Can you give me directions how to polish a gunstock (walnut)? Had a gunsmith undertake to do it, but he only varnished it, and that will come off in blotches and make it look worse than before. Ans. Use oil and furniture polish.

M. M. M., Girard Manor, Pa.—1. We are unable to give you any information on the wood powder. You must use it at your own risk. 2. Plug should fill brass shell pretty comfortably. 3. Yes, cheaper grades are practically as good as the more expensive.

J. R. S., Dewitt, Arkansas.—The feathers which you send belong to the cedar bird (*Ampelis cedrorum*). This is a common bird of Eastern North America, often wintering in New England. Its nearest relatives among North American birds are the swallows on the one hand and the vireos on the other.

E. L. R., Smithville Flats, N. Y.—1. Where can I obtain an ordinary sized aquarium, say 18x30 inches base and 18 inches high? 2. Where can I obtain materials for making an aquarium myself? Ans. 1. Write Hugo Mulertt, Cincinnati, O. 2. We know of no one who deals in the materials. You can make patterns and have them cast if you have time and inclination, but can buy cheaper than you can make one. Wooden ones are not satisfactory.

F. H. D., Somerville, Mass.—What size of buckshot should I use for deer shooting in a single barrel chokebore gun, and would it be perfectly safe to use it? What size shot should I use for duck shooting? What kind of a gun would you advise me to get, anywhere between $50 and $100? Ans. Use a size which will chamber in the smallest diameter of the barrel, then you can do it safely. 2. Any size from eights for teal to threes for coots. 3. Impossible to advise you. There are plenty of good guns to be had between the prices you name. Consult an honest gun dealer.

PIN HOOK, Elyria, O.—1. What kind of fish would be best to restock a public lake 1½ miles long by ½ mile wide, gravel bottom, moss and grass in places, neither inlet nor outlet, water clear and of moderate temperature. There are now in the lake black bass, pike, perch, dogfish (Indiana name), bullheads, and several varieties of sunfish. 2. Would the whitefish thrive there? 3. Can they be taken with hook and line? 4. Where can black bass be obtained? Ans. 1. We cannot suggest any other fish. The black bass now there should increase and take care of the sunfish. 2. If the lake is deep with cold springs the whitefish might thrive. 3. No. 4. No one appears to have them for sale. Apply to your Fish Commission.

A. C. S.—The colored drawings sent are easily recognizable. The fish is the "cowfish" *Ostracium quadricorne*, Linn. Its range is St. Helena, Guinea, Cape of Good Hope and Charleston, S. C. It is plentiful in Bermuda. It is encased in an inflexible triangular shell forming a ridge on the back and a flat surface underneath. The common name comes from its cow-like horns. The dorsal vertebræ are not movable and are only flexible in the caudal peduncle. The fins are inserted through holes in the armor much as the heads and legs of toy animals are. Your drawings show plates on the caudal peduncle, but these are only occasionally present, and may relate to sex. Some specimens have them and others are without these plates. The drawings are at your service.

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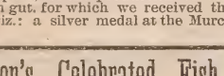
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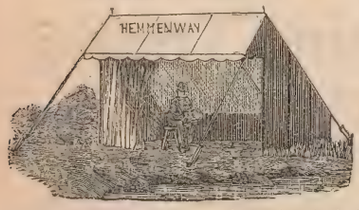
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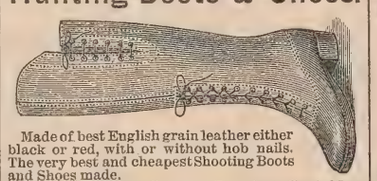
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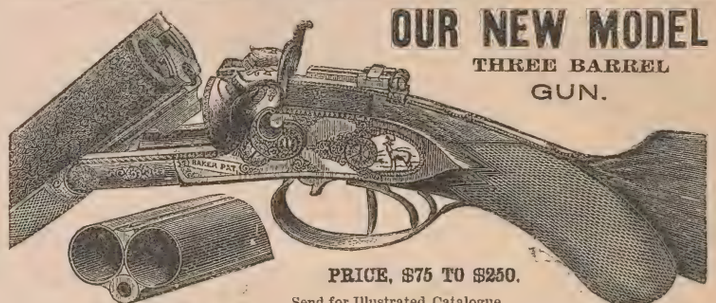
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With its compact type and in its permanently enlarged form of twenty-eight pages this journal furnishes each week a larger amount of first-class matter relating to angling, shooting, the kennel, and kindred subjects, than is contained in all other American publications put together.

HOW THE WATER GOES.

THE lessened water supply of many of our streams and their periodical floods are occupying the public attention more and more.

Last week there was a large and enthusiastic public meeting in New York, attended by our best citizens, at which both subjects were discussed, and resolutions calling for legislation to preserve the Adirondack forests were adopted. In the speeches, made by the Mayor and other citizens, the old story of the diminished water supply was told again. It is familiar enough to almost every one, and whoever spends a little time in the woods each year has seen the work going on under his own eyes.

The trout fisherman, who in spring follows down his favorite brook from its source among the hills, through the woods and out into the grass lots and cultivated fields, notices each year that more and more of the alders that once fringed the stream are cut away, and that the waters, that were formerly almost everywhere shaded, are now exposed to the glare of the sun's rays. Each year the woodcock shooter finds favorite bits of cover, spots where in former days he was always sure to start a bird or two, cut off, so that nothing but a *chevaux de frise* of stubs remains; so it is everywhere. The swamps to which the quail, when started, once fled for refuge, the hard wood forests in which the partridges used to wander, the very hedge rows along the old fences and stone walls, are being cut away. All this is, in one sense, an improvement; it gives to the farmer land once useless, and enables him to cultivate the whole of his tract. But the improvement is one which will carry with it its own punishment. A land without woods is no country for the farmer. At once it lacks water, for this runs off as soon as it falls. It will soon lack soil, for the spring torrents carry this away and deposit it in the rivers, where it still further blocks up the ever shoaling channels.

Within the past two or three years we have been amazed and alarmed at the rapidity with which forest destruction is being carried on in New England. There is a place to which we go for a day or two every autumn for a little ruffed grouse shooting. Three years ago the rough and sterile hills were most of them well wooded with oak, hickory, chestnut and beech, and it was as good a locality for ruffed grouse as could be found in the State. The farmers and land owners seemed to cut only such wood as they needed for fuel or for fence rails. Since that time, some one has brought into this town two or three portable sawmills. The result is that all the timber has been cut off. Heaps of sawdust and great piles of tough, dry boughs and twigs cumber, but do not protect, the earth. Brooks that were once full and flowing, in which one could see the trout dart, and along whose borders the woodcock fed, and the grouse stalked with deliberate tread, have disappeared. Their former channels are now dry gullies, which may serve to carry off the superfluous waters of the spring time, but have no permanent supply.

The shooting and the fishing have gone with the brooks, but that is not all. The manufacturers, whose mills are on streams which these former brooks fed, complain bitterly that they no longer have water enough for their purposes, and say that during certain months of the year they will have to shut down unless some measures are taken to increase the supply. In fact, a very large proportion of the mills in many of the most thriving manufacturing towns of New York State have already put in steam power, finding that water power was no longer to be relied on. This is the case near Watertown, near Stuyvesant, near Claverack, near Chatham, and near half a hundred other towns that we could mention. There is need of speedy action if anything is to be done toward preserving the Adirondacks. It is said that the lumbermen, alarmed at the general interest manifested in the subject, are cutting timber there right and left. They merely fell it, not trimming at all, their object being to get as much on the ground as possible before any law interfering with them shall be passed.

The whole story of our wasted water supply has an application broad enough to cover our whole country. Local legislation is necessary, it is true, but some general and wise measures must be taken by the Federal Government.

We cannot think that the time will be long before some steps are taken in the right direction. The matter is one which touches, or soon will touch, the pockets of merchants, manufacturers, ship owners and farmers, and the pocket, among the well-to-do, is a very sensitive organ.

THE ICHTHYOPHAGOUS CLUB.

THE time approaches for the annual dinner of the fish eaters with the sesquipedalian name. We have not heard from them this spring, and do not know how they have hibernated, but as the "peepers" are out on the marshes, and one turtle has been seen to emerge from the New Jersey mud, we presume that the Ichthyophagoi are thinking of taking a slight "feed" in order to get their stomachs in shape for the summer campaign. The organization of this club is incomplete. There are not officers enough. At present there is only a president, treasurer, surgeon, head taster, naturalist and poet, and the last three positions are held by one individual. This came about because it was deemed desirable to kill the poet, and he was appointed head taster in the vain hope that some of the dishes suggested for him to experiment on might "lay him out." This has not happened, and the club is in yearly danger of having some new verses inflicted upon it, which may cause death to some of the members who have withstood the assaults of hell-benders, water snakes, and other *outré* viands on their digestions.

As the poet declines to die by natural means, we suggest that the club kill and eat him. We shall not carry the suggestion so far as to counsel them to imitate the Ancient Mariner, who survived the protracted cannibalism of his castaway comrades until he sang:

> "O, I am the cook and the captain bold,
> And the mate of the Nancy brig;
> The bo'sen tight and the midship mite,
> And the crew of the captain's gig."

Still, the obnoxious officer should be disposed of, as he shows no intention of resigning; and there should be appointed a corps of nurses, an undertaker, two grave diggers, and a sexton. It is certain that this indigestion-breeding and dyspepsia-encouraging club cannot go on forever eating horrible marine monsters without coming to grief some time, and the officers which we have recommended to be appointed should not be allowed to eat with the club, but may safely be permitted to drink with them, in order that they may live to attend to their duties. It makes no difference whether the surgeon eats or not, he can be spared with the poet; but the undertaker and his assistants should not be subjected to risks.

Instead of drawing their nets in distant waters for rare and curious forms of aquatic animals, which are abhorrent even to those who are familiar with them, we suggest that they tempt fate by eating the products of the waters near the city. Among these we would name: Oysters and shad from Newark Bay with their flavor of petroleum, crabs from Staten Island with sludge acid sauce, eels from Newtown Creek served in Standard oil, and flounders from the Swash Channel garnished with city refuse. Such a menu, with other additions, which will readily occur to their caterer, will put to the test the reputed bravery of this club, which has based its reputation for courage upon eating perfectly wholesome articles which happen to be refused by popular prejudice. The members who might die from the effects of this dinner would depart in the proud consciousness of having done good by calling attention to the pollution of our waters, as would certainly be done by the daily press, and on their tombstones might be written: "Died that our waters might be purified."

COMPULSORY PILOTAGE.

THE bill before Congress relating to compulsory pilotage makes no especial exception of steam yachts. Of course this is only due to an oversight, as no reasonable person the least acquainted with the state of affairs will attempt to push through a measure which would be an odious and uncalled for hardship to owners of steam yachts; which would, in fact, kill the sport at one stroke. We believe it only necessary that the committees recently appointed by the N. Y. Y. C. and A. Y. C. should call the attention of those having the pilotage bill in charge to the absurdity of the proposed infliction in order to bring about the required modifying clause exempting steam yachts. Such vessels are nearly all small, drawing but few feet, can disregard channels, and have superior intelligence on board at all times capable of conducting with safety in and out of port. Moreover, being private property only, carrying neither passengers nor freight, steam yachts manifestly ought not to be dealt with in the summary manner the public safety may demand in the case of vessels plying for profit. It is too clearly to the interest of owners of steam yachts to navigate with due care to require the meddlesome interference of red tape. Besides, in the event of casualty, the loss would be upon a private owner and the responsibility upon persons who voluntarily take the risks in accompanying him in his vessel. Steam yachting, and especially steam launching, is already overburdened with wanton legislative complications. What is needed for the prosperity of the sport is a relief from official fuss and humbug and not a further dose like the pilotage bill. There ought to be no hesitation in granting the request of the delegation of yachtsmen charged with seeking exemption from the proposed compulsory pilotage bill. To refuse assent to immunity would be to return to barbarous limitations about a sport which should receive the most liberal encouragement from legislation in behalf of the interests of the country at large. Yachting, as a school of the sea, deserves not only leniency but direct promotion at the hands of national, State and municipal administrations.

A TENNESSEE ASSOCIATION is to be organized at a convention of sportsmen in Knoxville, May 20. The call is issued by the Knoxville Gun Club, and all individuals who are desirous of uniting for game protection in that State are invited to be present. Tennessee is greatly in need of such an association, and it is to be hoped that the Knoxville convention may be well attended. Nashville should send a large delegation, and if Chattanooga and Memphis are at all adequately represented, this initial meeting will have enough influence to arouse public opinion on the subject.

MARYLAND DUCKING LAW.—We have been told recently of attempts made to enforce the Maryland law, that boxes shall not be put on the ducking flats before daylight. The Chesapeake gunners are going to work the right way to utterly ruin what was once the finest ground for fowl on this continent.

OUR READERS *will confer a favor by sending us the names of such of their friends as are not now among the subscribers of the* FOREST AND STREAM, *but who would presumably be interested in the paper.*

FISHING FOR BASS.

A BRIEF DISCOURSE, BY MICROPTERUS SALMOIDES.

SCENE—A clear stream overhung by water maples and willows. M. S., a veteran of not less than five pounds weight by scale, of two pounds more by the better method of guessing, is surrounded by a school of his younger fellows, too big to be swallowed, but not too big to be taught by him.

MY young friends, the pleasure of fishing is not for men alone, nor yet for them and fish-hawks and kingfishers, otters and mink only. There is sport in it for fish, and do not understand me as meaning now in the taking of fish by fish, which is the greatest sport that a great fish can enjoy or a little one minister to (and if one of you were of a size to fit my throat and maw, I would be most happy to show you how to do it artistically); but I mean the sport of being fished for. Not by fish-hawks and otters, which are to be dreaded and avoided by us, nor by kingfishers and minks, which are too insignificant to be our foes after we have got beyond childhood, but by men. And not by men when they use their various deadly and insidious traps for our capture, nor try to impale us with mangling spears, sharper and crueler than the heron's, but only when they endeavor to take us with a show of fair play, by means of a lure, concealing or attached to a sharp-pointed bent and baited bit of steel, fastened to a long, slender thread. The lure is sometimes an earth worm, such as we occasionally vary our fare with; sometimes one of those small minnows which were wisely created for our sport and food; sometimes the delicate frog, or the ugly, but appetizing helgramite, the cricket, the grasshopper, and any of the winged and creeping things which we feed upon. Our ingenious enemy contrives cunning imitations of most of these, many of them so perfect that they would deceive the oldest and wisest Bass that ever swam until he had closely examined them, or tested them by touch or taste. Besides these he offers us wonderful combinations of feathers and gaudy colored silk, probably expecting us to use them as playthings, for they look like no living insect that ever flitted over the water, or else to lead us to destruction by exciting our curiosity concerning such strange objects.

Now, my young friends, attend to this rule, and hold always to it. Never attempt to lay hold of worm, minnow, insect, or any other article of food, or anything of unusual appearance which you may see in or upon the water, until you have examined it closely, and then if you discover that it is attached to a thread, no matter of what color, or though it appears to be only the slender stem of a water plant, be assured that it is one of the mischievous devices of man, and let your actions be governed accordingly. If you see nothing of this nature in conjunction with such an object, you need not hesitate to take it, and if you find it to your taste, to swallow it. Having satisfied yourself that a minnow fastened to one of these threads is a real and living one—if a sham never attempt to meddle with it, for the barbed steel will be in the tail, which you would first seize—you have presented to you an opportunity for sport. Cast your eyes upward and you will be likely to see the man, plainly distinguishable, though perhaps somewhat distorted by the ripple and swirl of the water, standing upon the bank or in a boat, or wading in the stream, and if the water is clear enough you will observe that he holds in his long pectoral fins a slim wand of wood, to the end of which is attached the thread or cord that tethers the minnow. Now, approach cautiously, and taking hold of the tip of the minnow's tail, give it a slight pull. Then after a few twitches, you may alter your hold to one a little above the tail, and begin to swim slowly away, when you will find the minnow given you for a little without resistance. But presently it will be jerked so smartly that it will be taken from you if the grip of your jaws is not firm. Hold fast and, swim which way you will, there will be a steady strain kept on the minnow by the man, but not yet will he attempt to draw you to him if he is skillful, but will let you rush whither you will, so it be not to weeds, roots or driftwood, while his wand bends as you have seen a bullrush with a marsh wren on its top. If the minnow is tough and hangs well to the bent steel, and you have been careful not to bite it in two, you may now add to your sport by making an impetuous rush and at the end of it leaping your whole length above the surface, when you may get a good look at the man, and be greatly amused to see the mingled exultation and anxiety displayed in his visage. The first expression will grow more intense if you keep your hold upon the minnow after the leap is made, which he thinks a desperate endeavor to free yourself, and having failed in it, he feels almost sure of your speedy capture. You may repeat this maneuver several times, being careful to put less force into each leap than in the one before it for the sake of keeping the minnow whole and to increase the confidence of your adversary, whom you will see grinning with delight, and hear him addressing you when your ears are above water, something in this wise: "Ah hah! My fine fellow! You are a brave fighter, but you'll have to give in! It's dangerous fooling with my minnows! Don't you wish you hadn't?" When he says: "Ah! you jolly old six-pounder!" you may think he is not talking to you, but he is, and is not flattering you, but himself. When you have had enough of this fun, you may pretend to be exhausted and ready to give up, and allow the enemy to draw you toward him while you lie upon your side and gently fan the water with your fins. When he has got you near to him, if you see him poking slyly toward and under you a web of threads stretched upon a hoop at the end of a stick, at once tear the minnow off the hooked steel as most likely you can easily do now. If you cannot do this, bite off your mouthful without delay and get to a safe distance with it. If the man does not use this instrument, but attempts to seize you with his five-rayed long pectoral fin, you may flirt his face full of water with your tail, take the whole or part of the minnow as you can, and be off with it. In either case, if you will just afterward put your ear to the air, you may hear a storm of words that need not frighten you, and if it does not shock you, will make you grin to your gills.

Very likely he will continue to offer you minnows as long as his stock holds out, and you may have sport till you tire of it, and your belly filled till it aches, and the same when he uses little frogs or helgramites to bait you. But if he offers you worms, crickets and the like you will be obliged to exercise more caution and will have but little pleasure of it, for you must bite gingerly, and only at legs, wings and fag ends, which have but little strength to endure his and your pulling.

As for the shams with which men seek to allure you, you would best shun all such as resemble minnows, frogs and helgramites, for in them is more danger than sport or profit for you. Those which have something of the appearance of flies and other insects, you are by no means to touch with your mouth, but may rush at them with a great show of eagerness and then strike with your tail, whereupon you shall see your angler in a fine state of excitement, and he will continue to toss and skitter and drag about his feathers and silk till you and he are both tired of it.

There be wretches so murderously inclined that they hesitate not to take our wives during the interesting and trying period of spawning, which they do by dropping upon the bed one of their steel instruments, sheathed in a worm. When such an object is seen intruding thereon, let it lie till the monster, grown tired of waiting for his intended victim to remove it, does it himself and departs. Men cannot live longer in the water than can we in the air; if we had but the power to draw such wretches as these and the netters into our element and then hold them till the miserable life had departed out of them, how worthy and glorious an act it would be, and one for which it would seem the better men must rise up and call us blessed.

If by any mischance you should get in your jaws this barbed instrument of which I have so often spoken, you must rid yourself of it at any cost of pain, and strength, and trouble, or else part with your life. Try your utmost pulling on the line, running up on it, rubbing out the steel on the bottom, getting the line wound about a root, sunken limb or log, when you may exert all your strength on the line, the hook and your own flesh, without the everlasting giving and bending of the pliant wand to thwart you. Spring from the water and shake the deadly torment loose at the instant the strain is slackened. If the man is in a boat, run under it. Get into the weeds if any are at hand. If all these fail, resort to feigning yourself fagged out and beaten before you are really so, and then when your would-be captor thinks he has you safe, and is off his guard, strike with all the strength of every fin for liberty and life.

I will not detain you longer to-day. When next you come to listen to my words of advice and instruction, bring with you two or three of your younger brothers, say of four inches length, and I will show you how to catch a Bass.

The Sportsman Tourist.

DOWN THE MADAWASCA.

"DID you take your usual trip to the Rangeley Lakes this season?" inquired a friend of me last fall, knowing that my habitat in late August and early September had been for several years in that region. "No," I answered, "I took a canoe trip down the Madawasca." "Down the what?" "Down the Madawasca," I repeated; and upon his professing in words what he had acknowledged in manner, viz., that he was entirely ignorant of the *locus* of the aforesaid river, I gave him information something like the following, which (presuming that some even of the readers of the FOREST AND STREAM may be equally uninformed) I insert here as briefly as I can.

The Madawasca is situated in the province of Canada and flows into the river St. John at Edmundston, the northern terminus of the New Brunswick Railway. It has this somewhat remarkable peculiarity: About twenty miles from Edmundston is its source in Mud Lake, and, passing through several lakes and receiving several tributaries, it takes a circuitous course of over one hundred miles, and finally empties into the St. John, having in one place, about fifteen miles above Edmundston (at Griffin's), run within four miles of its starting point.

To swing around this circle of piscatorial pleasures and primeval forests and pass over the waters, some of them exceedingly rapid, of this lovely stream, requires for easy work and no hurry in order to enjoy the ever changing scenery, about two weeks at the least, though some parties will make it hurriedly in a much shorter time. It is down stream all the way, of course, and there is no danger of getting lost, which is one consolation. One needs, however, the best of guides when on the river; *i. e.*, a good strong person with the canoe pole in the rapids, such as the Toledi Falls (pronounced "Toolady"), and the twelve-mile rapids in the river between Squattuck Lakes, Nos. 3 and 2. There are seven or eight beautiful lakes on this trip, where some paddling has to be done. The lakes vary from one to ten miles in length. The last lake, the Tamisconata (variously spelled) is about twenty-two miles long, but we enter it at the middle, nearly, on the left hand shore, and are thus saved from paddling its entire length. Guides are paid $1.50 and $2.00 per day. We had a good one, Peter Theriault, of Caribou, Maine, the most skillful man in the rapids I ever saw, and it was entirely owing to his skill that we were saved from being submerged in the swollen rapids and from having our craft dashed to pieces on the projecting rocks.

Now as to the fishing qualities of this stream. From the moment you strike the outlet of Mud Lake, the fishing begins. Trout by the hundred may be caught going the twelve-mile outlet of the first lake. This is called Beardsley (or Bazley) brook. These fish are not large, however, but as you pass down near to the next lake, Squattuck Lake No. 3, the trout become larger, and rise to the fly in a way to suit the most ardent fisherman. Frequently did I catch two at a cast, having only two flies. The color most attractive was red, or reddish; brown hackle with red body, Sloan fly, and dark winged Montreal never failed to do excellently. Throughout our whole trip the trout rose most readily. At the foot of Squattuck Lake No. 3, a rod or two from shore, I found my beau ideal of trout fishing. When the ripple came just right, trout of one, two and even three pounds could be hooked in rapid succession. In fact this place is enough to spoil almost any fisherman for ordinary fishing. It is a grand place for camping out, and but for its difficulty of access would be camped to death. We were the first party that went through last year, and because of this had to cut away seven jams of logs. Dr. Griggs, of Brooklyn, was my companion. Dugouts are generally used. We went with one guide, and all our baggage in a cedar boat hired from Mr. T. S. Richards, of Edmundston. Indians can be got for guides at Tobique. Mr. H. C. Collins, of Fort Fairfield, Me., did us much service. Mr. Richards was also of great assistance. He keeps store at Edmundston, and will fit one out almost completely. Black flies and mosquitoes were quite troublesome, and one must take along plenty of antidotes. We had a small tent, grocery box, etc., etc., and got along splendidly; our whole load weighed about 1,000 pounds. The nights were generally very cool, even in August.

Take it altogether, it was one of the finest trips I ever had; full of excitement and variety all the way, with fishing to satisfy, and even satiate, the fondest lover of angling. As for expenses, you can go from Boston to Edmundston for $20, the rest of the trip will cost one from $50 to $100, according to tastes and economy used therein. It is on one of these trips that one is near to Nature's heart, and from communion with her amid her grandest shrines one gains strength to go forth and labor more heartily in the sphere to which he may be called.

C. JACOBUS.

MATAWAN, N. J.

DOWN THE YUKON ON A RAFT.

BY LIEUT. FRED'K SCHWATKA, U. S. ARMY.

Ninth Paper.

AFTER redecking the raft, which was completed one afternoon, I thought I would take a stroll far into the backwoods, for it had been reported that a number of fresh moose tracks had been seen the night before near a fresh lake where an over-zealous nimrod of the party, having no apparent fear of the many mosquitoes, had tramped around trying to get a shot at a band of mallards. My trip was a complete failure, owing to the mosquitoes, that were so thick that had any game been seen I doubt very much if a person could have gotten a fair clear sight through the dense cloud that continually hovered in front of the face, let alone the other reasons which made it impossible owing to their presence.

Early on the morning of the 5th of July we again got under way, our hearts much lighter for the fact that we believed, according to our Indians with us, that the worst of all the rapids and all other obstructions on the river were behind us, and nothing ahead but "plain sailing" (and only one lake of that some thirty or forty miles long) and plain floating, subject to the annoyances that I have already depicted. For the first few miles, after leaving the cascades, the waters of the river are still very swift in a number of places, probably six or seven miles an hour, and occasionally where huge boulders in the river bed protruded could still be called rapids.

The Tahk-hcen-a was flowing very muddy water, and this in a way confirmed the Indian reports that there were no lakes along its course, for it had been noticed that however muddy the inflowing stream of the head of the lake might be, its emerging or draining river was always clear, and remained so until it received the muddy waters of some stream sufficiently large to tinge it, which was flowing directly from the mountains, where the glaciers seemed to be the great originators of this murkiness. Thus the lakes were the great receptacles of this transported material, and of course it was a mere matter of time, in a geological sense, when they would be filled up by it, and become mere "bottom lands," covered with willow, birch, poplar and other riparian trees; and this very filling up in fact seemed to have been done in several places where ancient lakes, I believe, could be traced. From the White River (the Sand River of the Chilkats), a large tributary of the Yukon ninety miles below the site of Selkirk, no lake interposes its current-less waters to allow the sediment to be deposited, and as this swift stream literally flows liquid mud, the Yukon from its mouth to the sea is "muddy," very muddy. As we had expected, this muddy water from the Tahk River spoiled our splendid grayling fishing that we had other reasons to suppose—as gravelly bottoms and swift current—would continue for some time, and although they did not wholly desert us until White River was reached, we never again saw them in that abundance that made a couple of rods sure of a good meal of fish for the whole party after camping. Pretty well along in the afternoon we saw the widening valley of the last lake on the river open out before us.

That evening, flock after flock of the large black ducks with red heads, known in Puget Sound as "whistlers," went scudding overhead, most of them flying southward. Not far from our camp at the head of the new lake was a totem pole that was visited and found to be of the very roughest construction, not comparing in carving with those of the Indians of the tide-water strip of Alaska. No house was anywhere near, and it seemed to be cut from a tall stump of a tree directly on the spot. The lake on which we found ourselves was called by my Chilkat Indians Kluk-tas'-si, and although they said that this was the local Indian name, I could not help having my doubt, knowing full well the tribal tendency of this great family to consider their own names as conclusive against every other tribe, even that of the country in which they are traveling, a mild sort of egotism that I have often come in conflict with personally, and

could fill a Webster's dictionary-sized book with in enumerating the mistakes of travelers founded on it. The shores of Lake Kluk-tas'-si are of the same general nature as those of Lake Marsh, in being nearly filled to the water's level with mud. Looking at a map (to which I have already referred) the first lake above old Fort Selkirk, a Hudson Bay trading post, burnt by the Chilkats in 1851, has been named Labarge, and I should have been inclined to retain it instead of Kluk-tas'-si, had not so many other gross errors of geography made it untenable, and really impossible to identify it beyond the one fact mentioned. Along the whole length of Kluk-tas'-si not a single Tahk-heesh Indian was to be seen. When we had started it was with a good spanking breeze that, coupled with the current (which was quite evident in certain localities during "dead calms" on the water), sent us along quite merrily, considering our rough craft, and we were induced to put out a trolling spoon, but caught nothing. Trolling on a raft under sail would make a fine picture for the professional anglers at home we all thought, but it must also be remembered that we were not altogether free from "pot-hunting" proclivities to vary our stale fare of Government field rations.

The right bank of Lake Kluk-tas'-si is overtopped by high rolling hills of gray limestone, the gullies between being picturesquely wooded with dark green conifers that formed a singularly pretty network and bright contrast to the hills themselves as viewed from the lake. The hills I called the Hancock Hills, after General Hancock of the army. They sloped back from the lake at an angle of about 45°, although in some places much steeper in escarpement, and were from 2,000 to 2,500 feet high. On the western bank the hills were not so high, but the banks were more abrupt and broken, and often of a conspicuous red color, until about fifteen miles from its head this formation culminates in a very picturesque pile of red rocks that looked to us from the lake as if they were on an island, but our Indians swore by every log in the raft that it was a part of the mainland, and that a considerable sized river came in just beyond which we were unable to make out from any position we viewed it, but no doubt it exists, as our inspection could not be critical. My Indians also said that the whole length of this river in the same pretty effects of broken red rock were to be seen, in fact, the Indian name of this stream was the Red River, from the abundance of this red rock. Not desiring to add another Red River to the geography of the world, and not having seen any river at all, I simply named the rocks, which I considered of sufficient prominence, certainly so if this route should ever be traveled, after an eminent German geographer, Von Richthofen. When we went into camp the evening of the 17th, there was not a breath of wind blowing, and the lake looked like a mirror cutting two perfectly symmetrical and picturesque landscapes into twain at the water line. The clouds hung lazily in the air, not a sign of aquatic life was on the lake or in the air, and one might have thought himself in the lonely land of the dead if it had not been for the busy hum of the omnipresent mosquito. Trout lines were gotten out and one good-sized fellow was hauled in in time for supper, and another one weighing over eight pounds, the limit of the Doctor's fish scales, was had for breakfast. Many fish were noticed feeding and jumping in the lake near by camp, but beyond the salmon trout mentioned as caught on the trout lines, nothing was captured, although the most tempting flies and baits were offered.

Not a breath of wind blowing in the morning, we were delayed until past noon, and made the time useful in determining the place astronomically. Thousands of small graylings about an inch long were seen in the clear, shallow water on the beaches of fine gravel, in schools of fifty to a hundred each, and, using a mosquito bar as a net, we captured enough to use as bait for our salmon fishing, with increasing prospects of success. At 1:30 P. M. a favorable breeze sprang up, and by 2 was raging as a gale, blowing over the tent, filling the coffee and eatables with flying gravel and sand—for it caught us at our midday meal—and we rapidly packed up. But while we were getting away the wind died down to an almost dead calm. After vainly waiting for a renewal of its vigorous midday energy, we went into camp at the base of the Hancock Hills, at a place so steep and rocky that a tent could not be pitched, and, of course, during the night it had to rain just hard enough to scare every one half out of their wits for fear it would rain harder. This constant drizzling through the night, with one's face exposed, does less harm in the way of wetting than it does in the loss of sleep.

The next morning we got a very early start, for in bivouac as soon as the rain ceased the mosquitoes made sleep more than impossible, and between the two on one side of the scale and a good fresh wind on the other, we turned out quite early. We were so near the end of the lake, about thirty-five or forty miles long, that the fates seemed to give it up, and the wind, instead of dying out, as usual, surprised us by steadily freshening until we entered the river at 10:30 A. M., and I think as the old tent went down forever from its clumsy mast, no besiegers ever saw the flag of a fortress go down with such heartfelt thanks. We had seen enough of rafting on a river to know that, as far as physical work was concerned, it was much harder than on the lakes; but the uncertainty of navigation at all on the latter, and constant worry and anxiety as we went crawling along even under favorable winds, when before us stretched some 2,000 miles that must be made by early fall or a lonesome wintering in this dreary country was the alternative, makes me safe in stating that my happiest day on the trip was the 9th of July, when we left behind us nearly one hundred and fifty miles of lake water never to be repeated in whole or in part. Our trip ahead might be hard work, but it was assured at the least. There was still one rapid to be met in three or four days, so our Indians said, but as it was in no wise to be compared with those of Miles's Cañon, we feared it very little. A raft in a rapid was an explorer's delight compared with one on a lake, the very maximum of helplessness. The old tent was carefully rolled up, and we worked with more relish at the pries when the bulky thing ground on the gravel bars.

The high clay banks that had extended along the river from Lake Marsh, and especially conspicuous below Miles's Cañon, and had terminated with its junction with the Tahk River, again commenced after we left Kluk-tas'-si, and were higher and more conspicuous than ever. Far back on the hills the forest fires had made great winrows through the timber and as this had fallen and decayed, a peculiar plant of the country had sprung up in these burnt and open districts, which, from its denseness and cappings of red flowers, gave a reddish tinge to the whole area, even though many miles distant. For a number of days we thought it to be due to a distinct color of the soil, but at last a nearer inspection revealed its true character. One butte, in fact, was so conspicuous in its red covering that I named it Red Butte. All through these burnt districts could be seen stumps and fallen timber in all grades of dissolution, from the recently burnt trunk "as black as the ace of spades" to the almost whitened ones bleached by the beating rains of many years. Dull brown ones falling in great piles of rotten punk were freely distributed everywhere, and had there been a black or brown bear in these "burns" all he would have had to do to save his carcass was to keep quiet and the keenest eyes would never have detected him. About half past five on the afternoon of the 9th, while drifting down through one of these burnt districts, the resemblance of one of these brown rotten stumps to a grizzly bear was remarked by one of the party, referring to an object on the crest of a series of clay bluffs, and his opinion was readily assented to by the others who took enough interest to notice it. As the raft floated down about 500 to 600 yards of the object, it came waddling down the crest of the bluff directly toward us, and we all scrambled around after our rifles in a way more amusing than effective. I do not know why it is that if a man puts his trust in fate for a quiet time, and his rifle in its case for preservation from the wet, all the grizzlies and shootable game in the country pick that time for putting in an appearance; but so it really seems, and the present was, in a brilliant manner, no exception to the rule. Mr. Grizzly stood so "end on" that he was hardly a fair shot at such a distance, and just as the rifles were out he caught one good sight of the raft, and quicker than one could think that a thousand pounds of bear meat could do so, he whirled around and tumbled into the wooded ravine between two clay bluffs, and then scampered off faster than it takes to chronicle it, only one more flashing sight being caught of his grizzly sides as he took up a gait that had a good deal of the appearance of a week's hard run in it. We sadly rolled up our gun cases and put them away, leaving our rifles so convenient that we could massacre a whole herd of grizzlies in a few seconds; and all wondered why we hadn't fired at the beast anyway, but no one told the story of the man that invested a portion of his wealth in a padlock after the departure of a favorite charger. The well-known bad quality and even offensive nature of the meat of the grizzly and the perfect worthlessness of their robes, and the general "cussedness" of the creature in general as a topic of conversation, helped us to bring our feelings down to that point that when we pried the raft off of the next bar it washed them away almost entirely.

About 6 in the evening, having been on the raft over twelve hours, and feeling satisfied with the day's work, I determined on going into camp at the first favorable spot, and we commenced surveying the shores with that idea in view, but so uniformly wide was the swift river, with no eddy to deaden our headway or spot clear from willows, that it was not until after 8 that we found a place where we managed to get ashore, and then it was not very prepossessing. What was our great surprise, shortly after camping, to see three of the most forlorn human beings on the face of the earth put in an appearance. They were miners and belonged to an equal party still beyond, and these three were returning with barely enough "grub" to pack them back to Chilkat in order to leave the remainder enough provisions to continue prospecting throughout the country. They had expected to find an abundance of game in their prospecting tour for gold, and had they done so their "grub" would have been sufficient to have lasted them all for the summer, but the mosquitoes had driven the game from the creek and river bottoms, where their labors were confined, according to their stories, and their return was the result. They had found plenty of tracks everywhere, and as this was the only part of the animal that could hold its own with the mosquitoes, however innutritious, they had to content themselves with it. They had been living on nothing but flour for some time, with such meat and fish as they could procure from the country, and of course were about half starved. I stuffed them full of the bulky bean of Boston and the crisp corn beef of Chicago, until they must have been grateful beyond measure, for when I returned to civilization I found they had made quite a hero of me by proclaiming that I alone had shot all the rapids on the raft, and even my Indian allies had walked around. Had I filled them with ice cream and mince pie I suppose they would have found me sleeping under a robe of Indian scalps that I had personally collected, while for another plug of tobacco I could have slain a grizzly with a bowie knife—in the newspapers.

MR. O'BRIEN PROTESTS.

To the Foresht and Strayme:

MISTHER EDDYTOR—*Sorr:* Me attintion has bin called to a late noomber of your payriodical, in which that omadhoun of a "H. P. U." has preshoomed to relate, for the divartisement of your rayders, a certain nocthurnal adventure which occurred to mesilf.

In that article, sorr, he has endivored to hould up to ridicule, an Oirish gintleman, who boasts his proud descint from Brian Boru, and I can lick any bloody Sassenach that dares to thread on the tail av me coat.

Ye have lassyrated me faylings, sorr, and have violated the sacred confidince which shood subsist betune man and man. That the corcumstanshiality av the incidince are correct, sorr, I do not deny, but no rifrince is had to the motives which impilled me upon that occaysion. Are ye not aware, sorr, that me burro, Mickey, reposhed in me that confidince and thrust which wan gintilman fayls in another, and that me proud boast is, that that confidince was nivir abused, and that thrust nivir bethrayed. Consequintly, av he desired to deludher me by playin' bear, was it for me to lassyrate his tinder faylins by descinding from me three, and thereby litting him know that I saw through his disguisement? That dilicacy of sintiment, which is the pervaylin charactheristic of an Oirish gintilman, wad not allow me, sorr, to revayle to him the fact that I had penethrated his incognitow. The chakes av me wad have burnt wid shame for the rest av me life, had I committed the ongintayle procedin' av saying to um, "Shure, 'tis not a bear ye are, at all, at all, but only a burro, Mickey alanna!" Such, sorr, were me motives, and be thim shood me procaydins be joodged.

But, sorr, I have another and a shtronger rayson for conshiderin my faylins hurted, and mesilf insoolted be that same artickle. I could forgive the mishconsthruing av me motives, but the houlding av me up to ridicule as a man possessed av no eddication, and puttin' such worruds into me mouth as there is in that same pace av nonsense—'tis that, sorr, that touches me sinsibilities most dapely. Av I cudn't talk nor shpell betther nor that, sorr, I would look upon mesilf wid the most abject scorn, sorr. I will lave it to yourself, sorr, as an honest man, and a gintleman, if this letther, which I am writin' to ye wid me own hand (barrin' that it's Misther Howard that's thrimmin up the ideays, and Tim Dooley is writin' um down) isn't after proovin that me ideays are as illigant, me sintiments as choice, me language as illigant, and me shpellin as correct as "H.P.U.'s," or any other divil's buckie that makes foon av a dacint man. Av you would do me the kindness to print the same, verbattim et littyrattim, as the poet says, your rayders will see the imposhibility av me usin' that onraysonable kind av talk which he puts into me mouth.

And foinally, an in conclusion, sorr, I wud say—av I have, in anny way, hurt your faylins, or those of "H. P. U.," be anny thing I may have said, onbeknownst to mesilf, or av the warrumth av an Oirish heart has timptid me into anny extravagance of expreshion, or anny sintimint onbecoming a gintilmin, then, sorr, in that case I freely forgive you both, and have the honor to be, sorr,

Wid sintiminta av the highist regayrd, and faylins av the most dishtinguished conshideration,

Your most obayjient
An respictful
Well wisher,
PATRICK O'BRIEN.

DIVIL'S FLAT, Collyraddo, March the 6th, 1884.

[It affords us much pleasure to give place to Mr. O'Brien's explanations of the occurrences recounted in "H. P. U.'s" account of his adventure with the bear. We cannot, however, believe that the narrator of the chronicle understood the circumstances as we do now, for had he realized the motives which actuated the owner of Mickey, we feel confident that he would have set the matter forth in its true light. We need scarcely say that we reciprocate in the heartiest manner the kindly expressions of our Colorado friend, and should we ever be obliged to pass a night among the rough, cold mountains of the San Juan, we hope that it may be our good fortune to stumble on his camp.]

Natural History.

STEARNS'S NATURAL HISTORY OF LABRADOR.

Editor Forest and Stream:

In your last issue, April 3, I notice with pleasure a somewhat lengthy criticism of my Lists of Natural History of Labrador, as contained in the Proceedings of the U. S. National Museum, soon to appear. I notice it, I say, with pleasure, as I believe that there is no true naturalist or author but who, while deploring his own errors, will not only invite criticism, but will thank his critic.

Mr. Merriam has often visited the north shores of the St. Lawrence, and his name was quite familiar with Mr. Napoleon Comeau, of Godbout River; Mr. Scott, of the Hudson's Bay Company's post at Mingan, and also Mr. Cante, of Whale Head. Let me ask Mr. Merriam, however, did he follow down the shores of the river and gulf and extend his researches in Labrador, since all this region west of Blanc Sablon belongs to the Province of Quebec? I doubt if he has. Let me say, therefore, that I defy him, or any other person, to collect of the flora of Labrador, eighty species of plants, including every specimen of both phenerogams and ferns that he can procure, in three weeks' time anywhere on the coast of Labrador proper, which is bleak and barren land compared to the vicinity of Mingan and its surrounding Province of Quebec.

My lists are intended as aid to future investigation, and are presumably imperfect to start with. That they contain errors is apparent to anybody. I am glad that Mr. Merriam points out some of them. It is well to say, however, that I visited the region both times more for my health than otherwise, and gave more attention to the sports of fishing and shooting (and their accompanying pleasures of feasting) than to collecting. My last voyage was given to collecting invertebrates, and its results sent to Profs. Verrill and Baird. These results appear in the same volume.

Further. I do not wish to hold anybody responsible for my errors but myself, yet the lists Mr. Merriam criticises so sharply were all prepared under Mr. Robert Ridgway's personal supervision, who had authority to change any names that he wished or suppress any information contained therein at his own option.

Be facts and errors what they may, I consider that an inaccuracy in transcribing the title and place of any scientific paper is greater than all the errors of the paper combined, and when Mr. Merriam starts his article by saying that the before mentioned lists are contained in the fifth volume of the Proc. U. S. Nat. Mus., I feel bound to say, for the benefit of any who may desire to refer to them, that it is the sixth volume of said Proceedings, and that they have not yet appeared in book form, but that a few can be supplied to those desiring them as extras without charge.

Now for the errors in question. The estimate of young seals or "whitecoats" should read, and was so intended by the author, as the catch of Labrador vessels, and as such I believe the statement is correct.

The silver and black fox are "accorded [a] varietal distinction," I believe justly. Of the ringed seal I have two specimens at Bonne Esperance "salted down" with others, and when these are secured, as I expect they will be this summer, both Mr. Allen and Mr. Merriam shall have the pleasure of examining them. I now believe that they will be found eventually more common than is generally believed upon the coast.

I still doubt the *Halichœrus grypus* is found, rarely at any rate, on the coast of Labrador proper. My remarks upon the elk and moose, given provisionally, are true as far as the statement goes. While there, specimens of deer were brought in fresh killed from large herds, which differed so much in size, color and shape, that one would easily believe them distinct species without the statement of the natives that their habits "were not the same." The white whale doubtless occurs as Mr. Merriam states. As to the gray squirrel, I saw two skins, said to be taken on the coast, but I suppressed further mention of them for want of more positive evidence. The brown bat is still somewhere in my collections and shall be "hunted up" at once.

With the birds, the records of wood thrush was a mistake, the bird being, doubtless, as Mr. Ridgway remarks, *H. aliciæ*. The record of king eider breeding off Mingan was doubtless misleading. It should have read, "The first record south of Hudson's Straits." None of Mr. Merriam's other remarks need commenting upon, as they amount to little more than a review of the author's own words by quoting the same without any material remarks. The "glaring inconsistency," if such it in reality be, is contained in the "extraordinary announcement" respecting *Somateria v-nigra*.

Of that a few words, and I submit lists, errors and reply to the public. The author confesses that, to use a slang phrase, he may be "way off" in this announcement; he still believes that he can sustain his position. Too much credit must not be given to the "natives" in cases of scientific accuracy, yet everywhere in spring the "natives" recognize three kinds of "passing ducks." One kind stay and breed—the eider proper. Two kinds, they say, remain each only a few weeks and then disappear. Of these, if there be two, one is the king eider, *S. spectabilis*. I have shot these by the dozen from flocks of as many thousands, while the native gunners kept saying, "Wait, and you'll get the other kind;" and then again, "There's another kind yet that you haven't got." One day, while shooting, several of the gunners pounced upon a duck I had just shot and exclaimed, "There's the other kind." I hastily examined the bird, but could find little or no difference between it and the king eider, a pile of which latter birds lay near us on the rocks. Now, one thing I know, in one of the so-called "kinds" the black mark of the chin was rounded at its apex; in the other it was as clean cut a V-point as it was possible to make it. I laid the bird aside to stuff, and the not too scrupulous cook consigned it to the oven in my absence as the fattest one in the mess. I heard occasionally from other parties along the coast who had "shot the other kind of passing ducks," but did not secure a specimen. I still believe I can procure suitable specimens of *S. v-nigra* from Labrador. Of this kind, if it so be, the gunners say, "It only stays here a week or ten days," and is not found like "the other passing duck," all the spring. W. A. STEARNS.

AMHERST, April 4.

SOUTHERN LIMIT OF QUAIL AND GROUSE.

HAS the extreme southern limit of the Bob White and the ruffed grouse ever been definitely ascertained? Several years ago I crossed on horse back, or rather on mule back, from the Pacific to the Atlantic, through the Republic of Costa Rica, C. A. For forty or forty-five miles after leaving the west coast the road constantly ascended until we reached an altitude of 7,000 or 8,000 feet, from which point we looked down upon the beautiful Catargo Valley, where lie the coffee plantations and the towns of San Jose, Catargo Alajuela, etc. On the coast grew the banana, plantain, cocoa palm, and many other species of purely tropical vegetation, but as we reached the higher altitudes this gradually changed until near the summit we found the range covered with deciduous trees and a general landscape that strongly reminded me of New England. Here we found several flocks of ruffed grouse which were feeding and dusting themselves at the side of the road; they were comparatively tame and gave us ample opportunity to observe them, the cocks strutting about with expanding tails in the manner so familiar to every one who has ever had the pleasure of hunting this splendid bird, while over their heads high in the air flew the great, gorgeous scarlet macaws, screaming like calliopes.

A few miles west of the summit was the little village of San Mateo, situated at too great an altitude for the banana and plantain, but not too high for the orange, and on the stone walls that surrounded the small fields in the suburbs of the town sat our old friend Bob White, whistling as loud and clear as we ever heard him in an old whortleberry pasture. We saw neither quail nor grouse after entering the valley, nor did we see or hear either in the hundred miles of tropical forest that closed in upon both sides of the narrow trail leading from Catargo to the Atlantic. But there is no mistake about their being there, and I am a little curious to know where the southern limit of their range is found.

SAN FRANCISCO, March 24. FORKED DEER.

A ZOOGENIC PARADOX.

THERE is nothing which so perplexes one in charge of zoological collections, as the peculiar habits and actions of animals in confinement. He is so constantly brought face to face with occurrences which completely upset all preconceived ideas of animal economy, that he finally becomes so case-hardened as to cease to look for what are supposed to be natural actions from any of his charges. The following recent occurrence will serve to show the last stumbling block in my perplexing calling.

On the 31st of last December the female axis deer (*Cervus axis*) in the Society's collection gave birth to a fully developed male fawn, which has grown apace and promises to become a fine specimen. On the 5th inst., a few days over three months after the first birth, she bore a fully developed female fawn, which in less than an hour after birth, was strong enough to frisk around its mother. Immediately after birth the mother was found to be seriously sick, and in less than twenty-four hours died. Very naturally, on dissection, the generative organs were first examined, and were found in a healthy condition, Mr. Dury, the Society's prosector, remarking to me: "If you had not have told me of her having recently given birth to a fawn, it would have been almost impossible for me to have detected the fact from the state of the organs." Further examination proved that the prime cause of death was fatty degeneration of the heart, hastened by acute inflammation of the left lung. At present writing, April 8, the young one is being nursed by bottle, appearing perfectly hearty and healthy, and giving every indication of being successfully reared. Now here is an instance of an animal giving birth to two fully developed young ones within less than one hundred days of each other, whose period of gestation is well known to be eight months, and as customary with the family, only produces once a year. Is it possible that she could have been impregnated at two periods, with the above intervening space of time? If so, those who have made the zoogeny of the deer a special study, will have to write a new chapter on the subject. FRANK J. THOMPSON.

ZOOLOGICAL GARDEN, Cincinnati.

BIRD NOTE.—I inclose report of my observations of the arrival of birds during March: P. R.—March 6, crow (*Corvus americanus*), common. W. V.—March 7, Acadian owl (*Nyctale acadia*), rare; 18th, great northern shrike (*Lanius borealis*). S. R.—March 5, Phœbe (*Contopus fuscus*), common; horned lark (*Eremophila alpestris*); 6th, robins (*Turdus migratorius*), males only; 21st, bluebirds (*Sialia sialis*), males only; song sparrows (*Melospiza melodia*), common; redwinged blackbird (*Agelæus phœniceus*), common; 24th, purple grackle (*Quiscalus purpureus*), common; 28th, robins, (*Turdus migratorius*), females; 31st, bluebirds (*Sialia sialis*), females; cedar waxwings (*Ampelis cedrorum*), common.—J. L. D. (Lockport, N. Y., April 5).

Game Bag and Gun.

KEEPING QUAIL IN CONFINEMENT.

Editor Forest and Stream:

As the secretary of the New Jersey Game and Fish Protective Society, it fell to my lot to be designated as one member of the society to care for the large number of live quail procured in December last, to be kept through the winter months for stocking purposes in the spring. The first installment of birds came about the middle of last December, from Tennessee. They were at once turned loose into an inclosure previously constructed on the floor of a large room in the third story of my office. The size of the coop or inclosure was as follows: 16 feet long, 8 feet wide and 2 feet 9 inches in height. The top was covered with muslin, stretched tight. The front of the coop was constructed of open lath work. The back and sides were the brick walls of the building. Two windows over the inclosure allowed streams of sunlight to enter, and gave ventilation by lowering the top. As fast as other installments of birds were received they were turned loose among those already received until there were some 250 in the coop. Another lot of 100 birds being procured from North Carolina, another smaller coop was constructed along the west wall of the building, 12 feet long, 3 feet wide and 2 feet high, covered with muslin. The front of both coops were covered over with burlap, shutting out all sight excepting the door where food and water was furnished them. The bottom of each coop was covered with sand and small gravel, wood ashes, and the screenings from hay mows, which formed a covering to the depth of several inches, in which the birds scratched and wallowed.

At the suggestion of Mr. John J. Willis, of Westfield, N. J., who has had considerable experience in keeping game in confinement and breeding them, each corner of the inclosure was provided with small limbs or boughs of cedar trees. These were covered over with straw and in one corner with corn stalks. Under these the birds made their roosting places. In two corners were also placed the crates the birds came in, turned upside down, with a small aperture left so they could enter it. These they did not take to much. For food I gave them alternately every two days cracked corn, wheat, and screenings from the grist mill, with pounded oyster shells, and occasionally a little buckwheat. Twice a week cabbages, celery tops, water cresses, or some other greens were given them. Self-feeding drinking cans, such as are used in chicken hatcheries, furnished them water, which was changed every day, and cans were occasionally scalded out. The birds ravenously ate the greens provided for them. And now for the mortality. The birds had been cooped up several days in the crates and were in an exhausted condition upon their arrival.

In the first week I lost six of the Tennessee birds and two of the North Carolinas. None of them died until Feb. 3, when two more died. Then followed three on the 5th, one on the 6th, nine on the 9th, two on the 11th, twelve on the 12th, and then one and two birds on the 13th, 17th, 18th, 23d and 26th. When the increased mortality occurred on the 9th and 12th, at the suggestion of Mr. Willis, who examined them and pronounced the trouble distemper from indigestion, I put a small quantity of sulphur and a number of old nails in the water. After that they began to improve. During March I did not lose a bird, and only two or three up to the time they were liberated from the 1st to 10th of April. About 300 were thus kept in good condition, plump, with beautiful plumage and strong of flight when let loose. The greatest mortality occurred among the Tennessee birds. The North Carolinas seemed stronger and larger birds, and were much wilder. Those in the larger inclosure became quite tame, and did not attempt to fly against the brick sides but against the muslin top when disturbed, which prevented them injuring themselves. When it became necessary to catch them, I would crawl into the coop and the birds would seek cover under the cornstalks and straw, where they were easily captured. A large number were also caught under the before mentioned boxes by closing up the entrance to the inside of it, and turning it over after they had entered it. If this statement is of any benefit to others who have had experience in endeavors to keep over quail for breeding purposes, they are welcome to it. W. L. F.

PLAINFIELD, N. J., April 11, 1884.

ETHICS OF FOX HUNTING.

THAT was rather an unhappy remark of mine on the subject of fox shooting, for I see that "Awahsoose" takes my hyperbole in sober sadness, while on the other hand my fox hunting friends are reproaching me for treating a serious subject with unbecoming levity.

From which I infer that methods of sport are indeed matters of faith, and, of course, when the emotions are chief interpreters, irony becomes perilous unless properly qualified by an explanatory foot note. I will be more careful in future, and to avoid all possibility of misconstruction, will follow the illustrious mother of the modern Gracchi and put "all the indignation in capitals and all the sarcasm in italics."

However, I have no idea of taking up the cudgels for my fox hunting friends. In the first place they would not let me, for I have laughed too often at the extravagant terms in which they denounce the shotgun exterminators.

And yet they have a case; a pretty strong case. For of all creatures which exist, the fox, and the fox alone, meets, and exactly meets, the full requirements of the chase. The hare, the deer, the boar, the bear, the 'coon, the badger, all these are hunted by dogs, and are either shot from runways, brought to bay and dispatched, or worried in their dens. But the chase of the fox is altogether different. Different not merely in degree but in kind. It is a mixed game of well balanced strength and skill, mind and muscle, nerve, finesse and fortitude, unfolding constant scope for new resources, and dashed with just enough of the element of chance to make results forever uncertain. The fox understands his opponents, knows their powers and methods and often their individual characteristics. He is sophisticated. He has passed his life behind the curtains and is familiar with every rope and pulley. His profession is to hunt the hare—single, double, "ride and tie." To him the mystery of scent is an open book. He knows the value of each artifice, makes his road-runs with cool astuteness, notes the result of his doubles, and holds muscle in reserve for needed exigencies.

Of course, he may be hunted differently. You may head him off, cut his doubles and throw the dogs on him whenever he shows up, as in average hare hunting; but that is not the method practiced by those who censure fox shooting. Their idea is to play what they consider a fair and equal game, and it is but simple justice to state that I have never known a hunter of this class to sound a view-halloo. On quest or trail they will aid the dogs with every resource of woodcraft and cheer the chase with all the stimulus of voice and horn, but they would no more think of calling from trail to a sight race than "Awahsoose" would think of taking a pot shot at a huddle of quail, and I cannot put the case stronger than that, for I recognize in his letters (fox shooting apart) the unmistakable tone of a true sportsman.

It is by this scrupulous observance of laws, based on fundamental qualities of hound and fox, that the issue of the chase is held in nicety of balance, and therein, I take it, lies the fascination of all sport. For in its last analysis sport is conflict, and without approximate equality conflict is impossible.

If quail were as slow on wing as sora, who would care to hunt quail? Why do we prefer ruffed grouse to prairie chicken? or woodcock to turkey? The rejected birds are larger than the chosen ones and certainly as toothsome.

Glance for a moment at the history of field sports and observe how this principle has been illustrated by the sweeping changes which have followed each improvement in the fowling piece. With the introduction of the matchlock falconry decayed, and the beagle and harrier began to extend their domain. These, in turn, received a relative check from the flintlock, which widened the sphere of the shotgun and extended its scope to slow-flying birds. With the invention of the percussion cap came still greater changes. It gave us modern wing-shooting and all that modern wing-shooting implies—pointers, setters, breechloaders and all the paraphernalia of the field. It enthroned the neglected quail as prince of game birds and debased ground game into vermin. It gave us a literature of sport which reacted upon and exalted every form of outdoor amusement and made possible the existence of such a journal as our splendid and beloved FOREST AND STREAM.

But amid all these changes, these constant efforts toward a maintenance of equilibrium in presence of the ever disturbing factor of mechanical improvement, the old sport of fox hunting remains what it was of yore.

> "Age cannot wither it, nor custom stale
> Its infinite"—stability.

Horse and rider, hound and fox, are to-day substantially what they were in the centuries gone by, and the devotees of the chase simply ask that an extraneous agency shall not be employed to compass the destruction of their chosen sport.

Of "the Newport style of hunting" I know nothing. The anise-seed bag I suppose is pretty much a counterpart of the glass ball, and need scarcely excite one's indignation. Dandies, it is said, make excellent soldiers, and for aught we know, fops may develop into acceptable sportsmen. In any case, let us give these gentlemen a fair chance, for surely the dude affords as noble a spectacle when chasing a burnt bone over the open fields, as when carrying a cane on the pavement. In short, it is a move in the right direction, and for my part I sincerely hope that he will not "break his neck in his servile imitation of British sport." For a fellow who takes those chances has good stuff in him, and the fact that he was not cradled in the saddle adds immensely to his merit. The new theory that "it is unsportsmanlike to shoot foxes because it is un-English," sounds somewhat peculiar to us, inasmuch as our fox hunting usages go back to an earlier time than the landing of the Pilgrims, or the first settlement of New York.

To throw the matter into a sentence: There are deadlier ways of taking all kinds of fish and game than those practiced by sportsmen, and if sportsmen themselves willfully ignore each others' methods, how can they expect the general public to give even a patient hearing to their claims?

GLEN ALLEN, Va., April 6, 1884. WAUZEE.

THE FIRST GEESE OF THE SEASON.

GAME here this winter has not been so plentiful as some seasons before, on account of scarcity of rain, and so ducks and geese could find very little food; and many an eager look has been directed toward the southern horizon during the last few months in search of rain clouds. When, therefore, our ears were greeted by the "gentle patter of the rain upon the roof," one night last January, you can imagine how delighted we were. We were glad, too, to have it continue for three or four days; and many were the boasts made by this one and that one as to who should first get to the "honkers." Many an eager look was directed toward every farmer who chanced to come into town after the rain, and "Any geese out your way?" was often repeated, only to be replied to by a solemn shake of the head and a corresponding droop on the part of the questioner.

At last, however, I was delighted to hear that an immense band of "honkers" had located some twelve miles out, and immediately hunting up young Morgan, we engaged a team and driver and arranged to start the ensuing Tuesday.

Tuesday morning came—cold and rainy, but we got away about 7 o'clock, a late start, and in due time reached the place near where I was informed the geese were, but after taking observations all over the surrounding country in every direction we came to the conclusion that we were "badly left," for not a goose or track could we see. We were on the mesa or high plain overlooking the ocean up the coast about fifteen miles, and distant from La Jolla, a favorite seaside resort, twelve miles; from town, about three miles.

There being a large cañon coming down to the ocean, between us and La Jolla, and as it was next to impossible to get on to the beach from the mesa, we should have to make a return drive of about six miles to get to La Jolla, and by the aid of a glass we could see, or thought we could, something foreign on the sidehills at La Jolla. We decided to attempt to get there by going on the beach, as we were after geese, and Morgan and I were both pretty certain we saw a band of them light on the mesa opposite La Jolla. So down we went. There had never been a wagon down there before, so far as we had heard, and it was an open question for a time whether we would get down right or wrong side up. We were decided at length by seeing an almost obliterated wagon track ahead of us, and continued on down despite the remonstrance of our driver.

By taking the horses off once and drawing our wagon by hand over a cut or two, we arrived safely at the beach, and we were delighted to find easy traveling the remainder of the way. On arriving to within a short distance of the hills on which we supposed the geese were feeding, we left the

driver and reconnoitered, and were rewarded by sighting about eighty-five fat "honkers," quietly feeding near the bluffs that fringe the beach, and distant about 500 yards from us. It was not clear how we were, to get on to the beach from where we were unseen, and then along the beach and up the bluffs so as to get at the geese, but after deliberating a while we decided to leave Morgan, Sr., in a blind where we were, while Walt and I should take the beach and attempt to get our work in by crawling until we got to the beach, and then chance the tide and bluffs. If we could only get to the top of that bluff, we would be within about fifty yards of as fine a lot of geese as ever gladdened the eye of a hunter. After an almost incredible amount of crawling we got to the beach and ran down the bluffs, and were delighted to find the tide out enough so that we could climb around all the points on the beach between us and the coveted place. After getting almost blown by hard climbing, we arrived at the desired spot half way up the bluffs, and directly opposite where we supposed our victims were.

Morgan, after taking a hurried peep, whispered, "We have passed them," and down we climbed, and back about a hundred yards we retraced our way, and at last "Now," says Walt, and we sat down plumb blown and quivering all over with exertion, and the perspiration actually dropping off our bodies.

After resting, catching our wind, and seeing that our guns and shells were all right, we slowly crawled to the top, and cautiously peeping through the thin grass, we saw the beauties, totally unconscious of anything in the shape of a man within a thousand miles, quietly grazing about fifty yards off.

Cocking our guns, Walt whispered, "For God's sake don't cross fire—now!"—and bang-et-bang-bang-bang! went the guns. The geese were demoralized, and the hunters frantic. You ought to have seen us. We had three dead and four wounded, and two of them were just everlastingly getting up and getting out of that. We each took a goose, and breaking our guns in two as we ran, and putting in fresh cartridges, each succeeded in bringing his bird back to *terra firma*. Walt made an exceedingly long shot at his, the goose being all of sixty yards off, and correspondingly high.

After retrieving our geese we went back to the scene of our glory, to find that the two remaining winged geese had succeeded in reaching the beach and getting into the surf and we had the pleasure of watching them swimming off about eighty yards away in the ocean and totally out of reach. However, we had five, and I never saw larger or fatter geese. We laid down and took a good long rest, with the sea breeze fanning us, dirty, muddy, and our shoes a wreck, but oh, so happy.

At length we shouldered our game and rejoined Morgan, the elder, who had witnessed our victory from the blind, and who was delighted at our success. The old man had held his end up to, for part of the band had come within seventy-five yards. And with one barrel he had crippled one so bad that he fell about a hundred yards off, and into the surf, but the old man said that it was a wonder he got any at all, from where he was to where the geese passed it was a remarkable shot to cripple a goose with No. 1 shot.

We rejoined our team, tired out, but happy as kings, at the prospect of electrifying our rivals that evening, on arriving in town with five fine fat geese on as short a hunt as we had, for hunters generally go to El Cajon, or Santa Margarita, distant forty miles, for geese.

A little before dark we got home, and carefully arranging our trophies on the wagon sides, where they would show off to the best advantage and do the most good, we proceeded down Fifth street. In a few minutes our wagon was surrounded by an eager crowd, and numerous were the queries, "Where'd you get 'em?" "How many have you got?" and "Tell us where to find them, boys," etc. Of course we told them, each and every one, exactly where we found them, as we had had such an easy time to find them ourselves; and, judging from the different parties who left town the next morning, and the different directions they went, a stranger would have thought that San Diego was a town of hunters. Such a gathering together of hunting paraphernalia and whistling up and chaining up of dogs ready for the morning I have never seen before.

We seemed to have thoroughly scared the geese out, for not a man has seen a goose since within twenty miles of town, and we are yet the victors of the season. We enjoyed roast goose the next day, and had the pleasure of recounting to a few friends who helped us demolish the geese the *modus operandi* of our hunt.

I believe the more difficult game is to obtain, the better dish it makes served up, for I never enjoyed a dish as I did that of the first geese of the season. NOS-RA-EP.

SAN DIEGO, Cal.

LONG ISLAND DUCK NETTERS.

Editor Forest and Stream:

In pursuance of the subject agitated by W. N. Lane and some others interested in protecting game on Long Island, allow me to quote from Sec. 4, Laws of 1883, Chap. 317: "The Commissioners of Fisheries shall report to the Governor all cases of dereliction or neglect of duty of any protector which shall come to their knowledge, together with such evidence as they may have touching the case, and the Governor shall have authority to remove from office any protector so reported to be delinquent, after giving him an opportunity to be heard in his defense."

And allow me to call attention to the fact that each district protector is allowed $250 in each year for traveling expenses, independent of $500 salary.

The game laws also provide for the arrest of violators on a warrant, which any constable can execute. The section providing for penalties, judgments, etc., of the laws of 1879 includes the following: "One-half of the penalty recovered shall belong to the persons giving information on which the action is brought, and the other half shall be paid to the treasurer of the county in which the action is brought."

It will be seen, therefore, that instead of relying upon a man whose duty it may be to arrest or find out about violators, the course is open for the prosecution of parties by private enterprise, with the reward as an incentive for obtaining information.

A great deal might be said on this subject, but I will not ask you to give any more space to my crude ideas, I only wish to point out the channel leading to a settlement of the question. On the other hand, the game protectors may ask if they are obliged to lie in wait for violators, etc. My answer to that is, follow the example of District Protector Dodge, of Prospect. He can show you a wrinkle or two. His energy took him into the heart of the Adirondacks wilderness, and the course pursued resulted in the lives of a great many deer being saved. And the sermons he preached converted many old hunters and guides, so that his missionary labors were easier afterward. The good done in freeing the lakes of Central New York of nets was done with energy, and doubtless one-quarter the interest, honesty and persistence exercised on Long Island would preserve our game birds ten times better than they now are. WALLOT.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

Concerning chambers for shells in shotguns, it strikes me that some one might strike a valuable lead in experimenting with barrels having no chambers. If shells were all of same thickness and length, then chambers might be well enough. The thickness of paper shells generally is about equal to the shoulder of chamber, but with brass there is considerable difference, so that shot must strike this shoulder more or less, resulting in resistance and deflection sufficient to impair accuracy and force. The same result, to an extent, obtains with paper shells. At least this appears so to me. I may be in error. Would it not be a good idea for some manufacturer to test this thoroughly?

"W. J." asks for opinions from some old hunter on loading with buckshot for deer. I am not an "old" hunter, but I have shot numbers of deer with rifle and shotgun, and have experimented considerably with buckshot, and that latter, it seems to me, is what is necessary for "W. J." No two guns are alike. Each gun has its own individuality in shooting. The load which proves most effective in one gun may not in another. I have tried Ely's wire cartridges, thread-wound cartridges, flannel cartridges, cartridges made of a section of paper shell slit longitudinally, and other kinds of arrangements for increasing effectiveness of buckshot, but none of these added to the effectiveness of my gun, which was a Parker .12-32-8½, medium choke, the best gun I ever shot for all sizes of shot. Either barrel would put eight out of twelve No. 1 buckshot into a two-foot square space at fifty yards every time, actual target. The first deer I ever shot with it got eight shot through heart and lungs at over fifty yards, and this at night, fire-hunting.

I experimented with this gun with all sizes of loads at different distances with different kinds of powder, with different wads, until I knew just what it would do. If it didn't do what I wished there was only one conclusion—the man at the end of the gun was "off." The load I always used was three drams Orange ducking No. 4 or Dupont's No. 1, once ounce, full, shot, two pink-edged wads on powder, same size of shell (paper) one on shot. If I shot brass, which I always did at deer, I used No. 10 wads, one each on powder and shot. "W. J." should be very careful to do what has been directed in these columns hundreds of times—chamber buckshot at muzzle of gun if a chokebore, and to choose that size shot that most nearly chambers, whether three or four, without crowding. I never crimped shells. Just that force employed in opening that crimp is wasted. Infinitesimal it may be, nevertheless it is just so much power lost.

Some one has said that we want a $75 hammerless. Just that we want. If the number of pieces in a gunlock can be reduced to five or six, it ought to reduce price of guns. But we will yet be able to own a reliable and fine shooting hammerless at $75. Then with the aid of electricity we shall be able to shock the game to bag with reasonable certainty and satisfaction.

On reading "W. J.'s" article again, I should say that if his gun will do as he says, he don't want to improve on it much. S.

Editor Forest and Stream:

The first gun I ever owned was given me by my grandfather, and had a grand record for shooting, being a muzzle-loader, 16-gauge, 34-inch barrels, and would pattern about 130 at an actual test, as I afterward found; but it was old and dangerously thin, and I laid it aside and bought me a W. & C. Scott & Son gun, muzzleloader, 14-gauge, 30-inch. About this time I commenced a series of tests with guns that resulted finally in the following conditions: I found by actual tests that my gun would target about 135 or 140 No. 8 shot, 30-inch circle, 40 yards, and as I make that my standard I shall mean that in all cases hereafter. About this time the chokebore craze began, and I caught it in its most violent form and talked chokebore all the time. I sent a gun belonging to a friend, with whom I had had many days' sport, and also my own, to H. C. Squires, with the request to choke them to their fullest capacity. Mr. Squires kindly sent word back that for upland shooting he should prefer a pattern of 135 or 140; but if I insisted upon it he would choke it. I replied, "Choke 'em," and he did. My friend's gun was a 14-gauge, 30-inch, and it would pattern all the way from 180 to 472, and upon my reporting the latter performance to a FOREST AND STREAM official, he said he never heard of such a thing for a 14-gauge. I have seen a woodcock's bill and head cut off close to the eyes and not another shot in it anywhere. Have seen numerous quail and woodcock split open, and utterly destroyed by this same gun, and my gun would average, right 240, left 330, when loaded properly, of which I shall speak hereafter.

My next gun was a Remington breechloader, and I took it home and targeted, and lost all faith in breechloaders. Its best pattern was about 130, and its average 100, and yet this same gun was as good a field gun as I ever want. I kept that a year or so, and bought me a Parker 12-28, which had no tag on when I bought it, and on taking it home found it would average right 240, left 300, and after using it one fall, I sent it back to the factory and had it bored for a cylinder. The gun came back with a tag bearing the No. 120, No. 8 shot, 24-inch circle, 45 yards, Parker's test; equal to about 145 or 150 on a 30-inch circle, 40 yards. I have never targeted it since it came back, I would rather remain in a state of "glorious uncertainty." It is enough for me to know that it works well in the field. So much for patterns.

Next comes loading, and here let me ask you to reprint "Charge for Shotguns," by Major H. W. Merrill, published in ROD AND GUN AND AMERICAN SPORTSMAN of April 7, 1877. I think at this time they would be very acceptable, and as I have always made them my standard for all cases, I find them very accurate; and by varying the conditions, suitable for all shooting. My experience in shooting is to find the load best adapted to your gun and then stick to it, and you will always know what is coming, and not expect one load to knock your shoulder off, and the next one to have to open your gun to see if it went off. My experience in regard to two wads on the powder, leads me to believe that it makes at least one-third difference in a muzzleloader, and a large increase also in a breechloader of both pattern and penetration.

I consider a cylinder superior in regard to penetration to a choke, all things being equal. I can give a positive test case that will show how it is in some instances. I don't say it is so in all cases, only my own can I prove. A friend of mine came up to my house and brought a single breechloader, cylinder or nearly so, and was going to beat me on pattern. We tested, and the result was that I beat him on pattern and he beat me on penetration. He secretly sent his gun to the city and had it choked, to use his own words, "all she'd bear," and then challenged me to another test at both pattern and penetration. He now beat me at pattern and I beat him at penetration in the proportion of 65 to 43, and all things in regard to loading were the same as before. After I had my gun choked, I found it lost fifteen per cent. of its former penetration. From the above experience I have deduced the following rule: A gun for upland shooting that will target 140 to 150, and shoot strong and even, is the gun for me, others may suit themselves. "You pays your money, you takes your choice." JIM CROW.

MR. GREENER CRITICIZED.

I HAVE recently read with some care the book entitled "The Gun and Its Development," by W. W. Greener, and derived no little information upon many points by its perusal. The work was written, I take it, from the intense evidence which it affords, as an advertising medium for the guns which the author is engaged in manufacturing, and this fact detracts in no small degree from the merits of the performance. But with this fault even, it is an interesting and instructive work.

That Mr. Greener makes an excellent gun no man can doubt who has seen specimens of his handicraft. But there are others who are fully his equals in this respect, and I think sell on more reasonable terms. With all due deference, I am not able to see how it is possible to put work on a gun which will make it worth over $150. Fancy work and elaborate engraving add nothing to its real value, and I am credibly informed that the best of English gun barrels can be had for $75, which is one-half of the cost of a gun. All charges beyond that sum I regard as mere payments for a maker's name.

But I did not commence this letter with the view of making any such criticisms. My object was to express my decided dissent from his ideas in regard to the aim of the sportsman at flying game. On page 486 *et seq.* Mr. Greener advises that in cross shots, no matter how fast the bird is flying, the gun should be held "on" the object. Now I do not hesitate to say that any man who follows this advice may shoot twenty times when the bird is in full flight and thirty yards off, and he will find that his bag is empty. Even in deer shooting—and I have killed quite as many as Mr. Greener has—it is necessary to hold the gun about the neck or well ahead, if it is expected to inflict a wound so deadly as to stop the flight soon after the gun is discharged. As to the distance ahead in wing-shooting, which is requisite to success, I am unable to say with proper accuracy, but I think when a bird is moving very rapidly at right angles with the shooter, and is distant from thirty to thirty-five yards, three feet ahead is not too much allowance to make. Mr. Greener cannot kill birds in such cases if he does what he suggests to others. When it comes to duck shooting, he who expects to get any game at all must hold his gun well ahead. If he holds "on" the bird he will surely miss.

Mr. Greener intimates that they who believe in the "hold ahead" plan only think they do so. With great deference, I beg to suggest that they who are the advocates of the "hold on" theory, only think they hold on the object, while, in fact, the gun is far enough ahead to allow for the "crawl," or advancing movement. If the "hold on" shooters kill anything in cross shots, I feel sure they aim better than they suppose they do.

But one of the most wonderful statements which Mr. Greener makes is, that "some quick shots pull the trigger while raising the gun to the shoulder." *Mirabile dictu!* He must be a quick shot, who can do that. I have never seen such; and I must be pardoned for saying that if any one should tell me he was so electric in his movements as to do that, I should begin to question his veracity. Hunters' tales often call for the exercise of human charity, and I have heard and read some which made a heavy draw on that quality of my nature. But this trigger-pulling story stands "in the solitude of its own originality." It is true he tells us that in such cases "the gun must be within an ace of the proper position." I should think so!

Mr. Greener's idea that the left hand should grasp the gun about the end of the forestock, is a good one. Besides being safer in case of an accident, the gun is more readily under the control of the shooter, and will be more securely held to its place. Whether sportsmen usually grasp where he says they do, I cannot say. Very few of those whom I have observed do so.

I confess that I am pleased with his views regarding the weight of a sporting gun. Of course I allude to a gun which the sportsman must occasionally carry a whole day in his hands, with the additional load of shells, game and provisions. For Bob White, which we usually call partridge—and that name is far more appropriate than quail—a 12, 14 or 16-bore cylinder gun, weighing from 6¾ to 7¼ pounds, will answer all the purposes required. There is no need of any choke about it. If there is any, it should be confined to one barrel, to be used as a second one, or when the range is long. The only objection to this is, that it results in shooting the cylinder barrel much more than the other. But Mr. Greener tells us that an expert gunner ought to use a choke always. I cannot admit that; and venture to assert that, with equal skill, the man who uses a cylinder gun will generally get more game than one who shoots a choke. In the open field, or in marshes, or prairies, the choke would have the advantage; but Bob White prefers to take refuge in the brush or brier patches, and in such places the choke is not the weapon.

I have used 12-bores, 14s and 16s; but the best shooting I have ever done was with a 16. It may be because it was made to order and fits me exactly.

I like his views in regard to machine-made guns. To my mind it is clear that, though they may shoot quite as well, they are incapable of standing the same amount of use that a carefully-made hand gun will bear. Americans are very expert mechanics, and perhaps, after a while, when the law shall require all gun barrels to be "proved" before they are put on the market, they may equal the skill of the English and Belgians. At present, however, their work is comparatively inferior, even when they import nearly all the first-class barrels which they use and then call their products

American manufactures. There is too much of the "cheap John" in our goods of all kinds.

But I will stop at this point, because I am getting on the "ragged edge" of a dangerous subject, upon which my opinions would not be agreeable to the supposed interests—not convictions—of quite a number of my countrymen.

WELLS.

ROCKINGHAM, N. C., March 21.

SUMMER SHOOTING.

IN this week's issue of FOREST AND STREAM (April 3) I notice a correspondent from Long Island, "G. W. R.," who does not agree with me in regard to the killing of woodcock in July. "G. W. R." thinks he would not have any woodcock shooting at all were summer shooting abolished; but I think he is greatly mistaken, for summer shooting is the very thing to make fall shooting poor. Surely, to kill the parent bird while trying to raise her young, is just killing the whole brood; whereas, if summer shooting was prohibited, no such thing would occur.

What pleasure is there in hunting while the thermometer ranges from 90° to 100° in the shade? Certainly none.

It is almost impossible to hunt woodcock in summer with any pleasure after sunrise, and then very often your birds spoil before night in your pockets. I, for one, would like to see a law passed prohibiting summer shooting, just to see what difference it really would make, and I am sure we would have two woodcock in fall for every one shot now in summer. Last fall I was out fifty times or more and I did not flush twenty birds. Last fall's shooting was very poor, and each fall will continue to be poorer until a stop is put to this infernal summer shooting.

On Long Island, where "G. W. R." resides, there cannot be many pot-hunters, since he says there are no partridges shot in summer, but that they are snared. Snaring is a curse, sure enough; but to kill a bird only half fledged is worse still, when such an act is against the law. Snaring is not carried on to any great extent in my neighborhood, for the simple reason, I suppose, that the partridges are much more easily killed in summer than snared in the fall, being then only half grown.

Black ducks have been very scarce with us this spring, unusually so. Sprigtails are quite plentiful on the Passaic River, two miles from here, but very few are killed.

English snipe were plentiful last week. This week snipe shooting will be much improved, as the water is much lower on the meadows, making better feeding grounds.

16-BORE.

MADISON, N. J.

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

When everything has been said concerning the choice of hunting rifles, the problem of making a judicious selection will still remain practically unsolved, at least for many persons. The development of new ideas and inventions, and the march of improvement in the construction of rifles follow, one after the other, in such rapid succession as to bewilder and puzzle the chooser and tend to restrain many persons and keep them in doubt as to the wisdom of making a choice now. At the same time the discussion of the subject which has been going on in the many interesting articles kindly published in the FOREST AND STREAM from time to time lately, will result in much good, provided some of the gun makers read these articles carefully enough to catch the drift of them and get the ideas of the majority of the writers of them into practical shape, and will then proceed without delay to construct a hunting rifle which will be in harmony with the majority's views, and will meet their requirements. In the meantime, the careful, cool-headed practical hunter, who has some knowledge of the habits of the game he seeks, and who is a good shot, will continue to succeed in killing it in reasonable plenty, no matter what kind of a rifle he has. Such a hunter, were he armed with an obsolete flintlock muzzleloader, would probably get, in a given time, more meat with it than could a tyro, or a careless hunter, or one who was an indifferent shot, armed with a modern breechloader.

In fancy I think I now see "Deerslayer" and Daniel Boone, restored to life in the prime of their best manhood, arrayed in the conventional backwoods dress of the hunters of their day, armed with their long-barreled, fine-sighted, flintlock, muzzleloading rifles, about to enter into a competitive hunt of ten days, against two of the most successful hunters of the present day, armed with the best modern breechloading rifles; and I am led to marvel as their sinewy forms seem to materialize before me in this dream of fancy, but I quickly get back to the practical in trying to guess which party, which side, will get most meat in this competitive hunt.

Without asserting which rifle is the best, I will say the Peabody Martini, .45-caliber, is my choice for such game as elk, deer and antelope. This gun is very reliable from one hundred to three hundred yards; it is handy, strong, durable, and will stand any amount of rough knocking about and hard usage. With 80 grains of powder, and 500-grain bullet, sharp-pointed and hardened with about one-tenth part of tin, it is an exceedingly effective and very deadly rifle. I am speaking of the military model, having used one of them more than three years. The sights on it are correctly placed, and have not been changed in any way. It is the same kind of a gun that was used by the Turks with such deadly effect on the Russians, in their late war. For five shots, or forty shots fired in rapid succession without cleaning, it is the most accurate shooting breechloading rifle I have ever used. It will, at any distance named, group the shots closer together, and put them nearer to the center of the spot aimed at than any other breechloading rifle within my knowledge.

The sliding leaf of the rear sight is straight across its top edge, except the cut out V-shaped notch for aiming; this can be seen the minute the gun comes to the firing position. The butt-plate is checked and made rough on its outer surface to prevent it from slipping on the clothing. The low price of this gun—less than twenty dollars—places it within easy reach. Using 70 grains of powder, it has the following drift, penetration in white pine, initial velocity, etc.

DRIFT.

405-grain bullet.	500-grain bullet.
At 100 yards it is ½ inch.	1⅛ inches.
At 200 yards it is 1½ inches.	3 inches.
At 300 yards it is 4 inches.	5 inches.
At 400 yards it is 8 inches.	8 inches.

PENETRATION.

10 yards.	100 yards.	200 yards.	300 yards.
20.8 inches.	17.2 inches.	12.4 inches.	10.2 inches.

Initial velocity, 1350 feet; the bullet is then revolving around its long axis at the rate of about 850 times in a second. Using the same kind of ammunition, its penetration is about the same as the Springfield rifle.

I have a 500-grain bullet in my possession, which was fired with 70 grains of powder from a Springfield rifle, squarely at an old grizzly bear's head, at the distance of about six yards; it flattened out there and failed to penetrate the bear's skull. It cracked the skull bone, however, and lodged under the skin from whence it was taken out when the bear was being dressed. This happened last October, near Laramie Peak, about one hundred miles northwest of here. The fact that this bullet did not go through the bear's skull bone is a matter of some astonishment, since it is known that it had a power of penetration equal to twenty inches in pine wood. But to come back to drift, etc., the writer contends that the drift of the bullet will be lessened when we have a cartridge which, in loading, will seat the bearing surface of the bullet well into the bore of the rifle, so that the bullet will start with the spiral motion produced by the grooves. The bullet of the cartridges now universally used is not, in loading the piece, seated in the bore, and consequently it must jump straight some distance before it reaches the bore and comes in contact with the grooves, and when it strikes the shoulder which joins the chamber to the bore, it is then moving with such fearful velocity that the vibrations the shock produced by one of the components of the resistance of the sides of the grooves, namely, that which gives to the bullet a rotary motion around its long axis, tends to derange the muzzle of the piece to the right. Moreover, the element of accuracy, which is undeniably one of the most important in rifle firing, is sacrificed to some extent when the bullet is seated away from the grooves and is already in rapid motion when it reaches there.

I had designed to drop a few words about the different forces which act on a bullet fired from a rifle; the combined action of these forces, and some of the causes which tend to vary them, but this letter is now longer than was intended.

ANDY PAINTER.

Editor Forest and Stream:

In your issue of April 3, "Penobscot" says his rifle also blew unburned powder out on the snow. May I ask him if this is strictly so, or did it only look so? Has he ever collected this unburned powder, again placed the same in his gun or rifle, and with what result? Should he take the trouble to do so—from his present standpoint—I think he will be astonished.

As regards his ideal repeating rifle, he has my idea precisely as to proportion of powder and lead, only I carry the same to the shotgun also. That is, by weight, three times as much projectile as powder, or as he sensibly puts it, 80 grains powder, 240 grains lead. The above proportion of powder to projectile, whether ball or shot, is close to the maximum shooting qualities of the piece, whatever it may be.

M. U. SKRAT.

BALTIMORE, Md.

Editor Forest and Stream:

When the first call was sounded in your columns for a new repeating rifle, I was strongly tempted to express my opinion about arms of this type. I thought it better, however, to wait a little and hear what others might have to say on the subject, and I am glad that I have done so. Among the many very interesting and remarkable points brought out by this discussion, the most remarkable, to my mind, is the apparent general popularity of the repeater. Of all the letters about rifles that have appeared in your columns, I can at this moment recall but two, in which the defects of the magazine rifle have been alluded to. One of these was from a gentleman, "W. N. B.," whose experience, extending over more than thirty years, entitles his opinion to great weight. My own use of the rifle in hunting large game extends over only about half that time, but I give it for what it is worth.

Before stating any facts, however, I should perhaps say that I have never habitually used a magazine rifle, and am therefore unaware of all their faults, their failures to act, and their weak points. On the other hand, having always used the singleloader, I am probably prejudiced in favor of that type of arm. Still, I have hunted so much and have been so anxious always to obtain the best gun that was procurable, that, had the repeater presented to my mind any advantages over the singleloader which outweighed its disadvantages, I should have been very likely to use it. My hunting has always been done in the West, and so far as I can recollect, I have never, within the United States borders, killed a single head of large game east of the Mississippi River. In the Western country I have killed all descriptions of large game there found except the moose, the white goat and the grizzly bear; no one of which I have ever seen alive within rifle range. So much of personal explanation seems necessary in order to show that the opinions which I may advance are not ill-considered, hastily formed, or those of a tyro.

During the fifteen years which I have devoted to hunting on the plains and among the mountains, it happened that for eight or nine I was obliged to journey through a country where hostile Indians were very troublesome, and where it might often occur that a man's life would depend on his gun. Simplicity and certainty of action were thus of the first importance in the choice of an arm, and I learned very early that the magazine guns of the present type could not be depended upon in this respect.

Repeating rifles with the magazine beneath the barrel, or in the stock, I believe to be unsafe, as I know they are unreliable.

1. Repeating rifles are unreliable. My first experience with arms of this type was many years ago when I traveled for four or five months with a party of young men, seven or eight of whom were armed with Winchester carbines of the then latest model. During all that time there was not, I believe, any single day when all of these weapons were in working order. The common fault was that a little dirt or a grain of sand would get in beside the carrier block, and so long as it was there, the lever was immovably fixed, and the gun could only be put in order by taking it to pieces, cleaning and oiling it. I happened to occupy the same tent with a young man who had a taste for machinery, and used to enjoy taking guns to pieces, and every night before going to bed his blankets would be covered with the parts of the guns he was putting to rights. If a gun was dropped in the sand, or a horse ran near one lying on the ground and scattered a little dirt over it, or it was not taken to pieces and wiped for a week or two, the arm was useless. And in traveling in the West such things as these constantly happen, and must be expected to happen. It is no answer to such objections to a gun to say that a man should keep his gun clean, and that then it will work well. Suppose he does not keep his gun clean, and that he is jumped by Indians or charged by a bad-tempered grizzly, is he to lose his life because he does not devote every evening in camp to polishing up his weapon? I have heard marksmen complain that at Creedmoor in past seasons, when shooting at the "running deer" with the Winchester, it has been a common thing to have the cartridges stick in the gun and the lever fail to work. Usually this is caused by a bit of dirt acting on the carrier block, and no matter how the open breech is protected, this is something that is always likely to occur.

In the summer of 1877 I hunted with two men in a country where game was very abundant. One of my companions was very anxious to kill a bear. He carried a Winchester of the model of 1876, the magazine of which holds, if I recollect aright, eleven cartridges. We had one day killed some elk, and seen a great lot of fresh bear signs, which so inflamed the imagination of this man that the next morning he started out alone, with the avowed determination of shooting at nothing less than a bear. When he came in at night he told the following story: He had hunted till about 3 P. M. without seeing anything but elk, and at these he had not shot. Just as he was about to return to the camp, and while he was resting on the edge of a little mountain park, three bears, two cubs and an old she grizzly, made their appearance, one after another, in the little park, and traversed it, passing within about seventy-five yards of where he sat. He said that he had intended to shoot at the first of the bears, and that he had not doubted his ability to kill both the small ones, but that, when the third and big one came on the scene, his interest in bear hunting ceased. We laughed at him, of course, while he was telling the story, and when it was ended he tried to take out of his gun the cartridge which was in the barrel, and found that he could not do so. It was at length picked out, and the gun being taken to pieces, this was found to be the state of things: He had filled the magazine full, jamming in all the cartridges it would contain. The spring in the magazine had thus been greatly compressed, and the result had been that the lubricant in the cartridges had been squeezed into a very small compass and the balls pushed into the shell much further than in a fresh cartridge. Each cartridge was therefore somewhat shorter than it should have been. Now suppose we call the cartridge in the barrel No. 1, the one beneath it No. 2, and the one in front of two, No. 3. No. 1 could, of course, be fired, but the base of the shell of No. 3 encroaching upon the space which should have been filled by No. 2, interfered with the breech mechanism and prevented it from working. Each of the eleven cartridges taken from the magazine was from one-eighth to one-quarter of an inch shorter than a fresh cartridge taken from the box. Now it is very well to say that the man was a fool to put so many cartridges into his magazine, but suppose he had fired and killed a cub with his one usable cartridge, and afterward had been torn to pieces by the old bear, would the fact that he had been a fool have been any special consolation to his widow, or to us who would have been obliged to pack him back to the railroad?

I could give other instances where these arms have proven entirely unreliable, but the one cited above, and the letter from "W. N. B." some weeks since, should be enough, I think, to show that sometimes they do not work. And a gun that sometimes fails will never do for me to use. If it is for hunting in the East, or in a country where nothing more dangerous than a deer or an antelope is to be met with, the getting out of order of your gun is a small matter. To lose your shot, or even to go hungry to bed, is annoying, but no great hardship, but where a gun's failure to work may cost a man his life, the question becomes a more serious one. If one is going to use his rifle merely to pop away at a deer as long as it is in sight, let him use a repeater, if he thinks best, but if he expects to rely on it as a weapon of defense, he had better choose an arm on which he can place more dependence.

2. Repeaters are unsafe, as I believe. They are unsafe because, with the tube magazine under the barrel, or with the magazine in the stock, there is always liability to a discharge of the cartridges in the magazine. This, it is true, may be avoided, provided the primers are very deeply seated, so as to be flush with or below the level of the base of the shell, and the ball of the next cartridge be flat on the end, but a man who hunts much will use a great many cartridges in a season, and who shall say that every one of these cartridges will be perfect in these respects? It is scarcely to be expected that a man should examine each cartridge, and test it before putting it in the magazine.

In the hands of a friend of mine, the magazine of a Winchester rifle exploded on the discharge of the cartridge in the rifle. He was shooting from above, at a band of mountain sheep. He heard the sound of the intended shot, followed at once by the cartridges in the magazine, and involuntarily tossed the gun over the cliff after the running sheep. He then wiped the blood from his face and went back to camp. Fortunately he had but one slight cut on the side of the head from a piece of flying metal.

In the hands of another friend, a Hotchkiss gun went to pieces. He was prospecting, and was driving a lazy jack, which was packed with his outfit. In trying to hurry the jack he punched it with the gun, which he held by the muzzle. The magazine exploded, and—well, the jack hurried that time, and the gun flew down the mountain side, as far as a good stout arm could throw it. Those who are in love with the repeater will probably say that a gun should not be used to prod lazy animals. Very true, but I presume that every man who has ever traveled with a pack train, has made use of his rifle for just that purpose. These are my two objections to magazine guns as they are now made, and I believe that they apply to all those constructed as I have stated. The Lee guns are not open to the same objections, but they will probably never come into favor as a hunting arm, the clumsy side bar being enough to condemn them utterly for that purpose.

It would not be difficult to show that for other reasons the magazine gun is very faulty as a hunting arm. Its balance is constantly changing, a very grave fault indeed. It conduces to poor shooting, for a man does not use the same care in aiming that he does with a singleloader, feeling sure that he can get in three or four more shots before the animal gets far, and being willing to take his chances of killing on some one of these. From this fact, too, it is a cruel weapon. The shooter keeps on firing away at the herd of animals, shooting at the "bunch" as long as they are within sight, and at the end of the "engagement" he may find one or two dead, but he is quite certain that half a dozen have gone off with broken legs or balls through the paunch, and that for days they will linger with festering wounds in which the blow-flies have deposited their eggs, suffering we know not what agonies.

With the singleloader, this is not so likely to occur. A man

hunts more carefully, works harder to approach his game, plants his ball with more precision, and in my opinion, is more likely to get his game. To my mind, nothing is more unsportsmanlike than to keep on shooting, shooting, shooting, after the game is beyond all reasonable distance. You know that if you hit it, it is merely a lucky scratch, and not good shooting on your part, and by the continued noise and racket you frighten all the game within hearing, and that, to leeward, is a long way. A single shot is not very alarming to game at some distance, many shots in succession are terrifying. Let a man, who is a real hunter, get up as close to his game as possible; if it is not within 200 yards, let him wait for it to come to him, or to get behind some cover so that he can creep up to it, and then let him shoot so carefully that one ball will do the work. This will give him some satisfaction.

I do not profess to be a good shot; I rarely shoot at an animal over 200 yards distant, and yet I find that with a little patience I can almost always get up within my own distance of game. A year ago last fall, in a month's hunting, I killed with a single ball every head of game shot at inside of 150 yards. There were not very many of them, to be sure, perhaps a dozen antelope, four or five deer, and as many elk, but they were enough. I was not skin hunting or butchering; I only kept the camp in meat.

Since writing the foregoing lines I have received from a friend in the West a letter touching on this subject, which is so interesting and suggestive that I need not apologize for quoting from it very freely. It is in reply to some remarks of mine on repeaters and their disadvantages. After giving the origin of the Winchester as the Volcanic pistol, he says:

Not very long after they became common in this region, "Old Jim Baker," a famous mountaineer, while shooting at a target with others near this city, suffered an accident, supposed at the time to be fatal. I was not present, but as I now remember it was occasioned by the explosion of a cartridge in the carrier, or by the blowing backward of the plunger. The whole side of his face from the corner of his mouth to his ear was torn off, and although he recovered it left him terribly disfigured.

In my observation I have noticed the repeaters often failing, either in the process of loading or in the fouling of a cartridge. I am not certain that I ever witnessed a really serious accident. The failure in loading is easily to be accounted for, I think. To work properly the cartridge must be mathematically exact as to length. If a shade too long the carrier will not bring it up to the breech of the gun because it cannot pass. If a shade too short, then the butt of the next cartridge follows it down past the end of the carrier, and prevents the latter from coming up. Jolting of cartridges, by carrying a magazine full on horseback for instance, may cause this latter result. (Are not Winchester cartridges, after manufacture, put through a sizing machine, which cuts them to a certain length? And is not this the cause of so many of their balls being cut off at the point as though with a knife or shears, thereby presenting a bad front for true flight?)

When about places where hunters congregate, it is very common to hear them say "I would have got a splendid elk to-day, but my gun wouldn't work," or "I got left on a deer by getting a cartridge fast," or many other similar remarks, as every one who has been among hunters will readily recall. Such failures are, I think, charged to repeating rifles four times out of five in ratio to their use. I know that their common reputation in communities largely made up of hunters is that they are far more liable to disappoint the bearer than are other guns.

If you can find some officer who was in the army of the Shenandoah (valley of Virginia) about 1863, I think you can get some points respecting the absolute danger of magazine rifles when placed in the hands of bodies of men. My recollection is that a regiment or brigade of volunteers were armed with them, and that so many casualties followed from accidental discharges, etc., that the guns had to be taken away from the men. This arming was in response to the importunities of the manufacturers, who claimed that the efficiency of troops would be greatly increased by giving them repeaters. (Has there ever been a regular military force armed with magazine guns? Or have their manufacturers ever tried to introduce them in actual war except upon this one occasion?)

After all, what is the use of a magazine when any expert can recharge a breechloader as rapidly as there is any possible use to fire—faster than he can see and realize the effect of his last shot, and faster than the smoke will allow him to see where to put the next one? In fact, our arms are all too good, too fast, too fatal. There will soon be little use for any for sporting purposes.

This is about the way we older men look at it. "Nessmuk" threatens to go back to the old flintlock muzzleloader, and I think that there are many who feel as if something like this must be done, if the slaughter is ever to cease. Of course it is now practically too late to save the game, and the effort at present is to see who shall kill the most in the shortest time.

I have purposely refrained from expressing my preference for any type of singleloader, as I desire merely to present evidence against the repeater. G.

NEW HAMPSHIRE LEAGUE.

THE eleventh annual meeting of the New Hampshire Game and Fish League was called to order shortly after 11 o'clock in Mirror Hall, Manchester, April 1, 1884, the president, John B. Clarke, in the chair. The president read letters of regret from John Fottler, Jr., president of the Fish and Game Protective Association of Massachusetts, who was prevented from an attendance upon the meeting by reason of his presence being necessitated in Boston to look after the interests of the bill before the Massachusetts Legislature for the better protection of fish and game in that State. The secretary read an interesting paper entitled "Notes on the New England Salmon and Trout," the author being Mr. S. Garman, of Cambridge, Mass.

President—John B. Clarke, Manchester.
Secretary—Charles L. Richardson, Manchester.
Treasurer—Frederick Smyth, Manchester.
Vice-Presidents—C. W. Pickering, Portsmouth; Luther Hayes, Milton; E. B. Hodge, Plymouth; Fred Gould, Concord; Edward Spalding, Nashua; W. H. Shurtleff, Colebrook; Horatio Colony, Keene; Arthur L. Meserve, Bartlett; G. P. Whitman, Manchester; Herbert F. Norris, Manchester; Charles F. Stone, Laconia.

Hon. Charles F. Stone delivered the annual address; and Fish Commissioner Hodges spoke of the work done by his department; an abstract of his remarks will be found in another column.

A committee consisting of Hon. Herbert F. Norris, of Manchester, Hon. V. C. Gilmore of Nashua, and Hon. John M. Hill of Concord, were appointed to inspect the fishways of the Merrimack River.

Dr. Edward Spalding of Nashua, Luther Hayes, Esq., of Milton, and E. B. Hodge, Esq., of Plymouth, made interesting remarks on pertinent topics. The latter stated that during the months of December, January, February and March over 200 deer, one moose, and one caribou had been killed. A large number of deer are killed in the lumbering camps. Dr. William Jarvis read a paper on "The Woodcock," and Mr. John Foster of Manchester, discoursed of "Coons and Coon Hunting" in a style that delighted the veterans present. His paper will be given in full in our Kennel columns. An essay on "Guns and their Attachments," written by Mr. Chas. M. Stark, of Dunbarton, contained many practical hints on this topic. The members of the League were instructed on "Camping Out" by Mr. Herbert F. Norris, who said:

"The well-worn saying, 'He is a good fellow, but he can't keep a hotel,' may well be applied to many a lover of sport who has had no experience in camp life and knows nothing of the joys or discomforts of life in the woods. Recollecting well my first night's experience, when after a tramp of ten miles I slept, or rather tried to sleep, beneath a shelving rock on the mountain side, while the hooting owl and barking fox aided the drumming partridge in a grand evening concert, I can well believe that knowing how to camp out is as necessary to the pleasure of a week in God's first temples as is the knowledge of hotel keeping to the comforts of the guests.

"I will suppose for the purposes of this talk that you desire to go camping, but before making preparations for your excursion you should always settle three questions. First, the time you can spend in camp; second, the game or fish you seek; third, the place or locality you desire to make the base of operations. I have named these questions in the order I deem them important. Many an otherwise delightful week has been thrown away by attempting to crowd into it a trip that should have taken twice as long, and the boys returning say, 'Yes, we had a good time, but had hardly got there when we had to come back.' I believe it to be a good rule that no place is available for a week's camping that cannot easily be reached in one day. Having settled the question of time, the kind of sport, whether with rod or gun or both, can easily be disposed of, and, having always in mind the available spots the time at your command will allow you to visit, you can soon decide where you will go.

"Then select one of your number to act as steward, who, with a carefully prepared list of what you will need, will procure and have securely packed every thing except blankets and wearing apparel you think necessary for your comfort. In this way you avoid the trouble of carrying larger quantities of stores than are needed, and the vexation of finding yourselves in camp miles from home without some things that are absolutely indispensable to the pleasure of your stay. To attempt to enumerate the many things that are taken into camp by those who go out into the woods would occupy the attention of the League during the remainder of its session, but there are some things that are so essential that you will pardon me if I suggest them.

"No camp is complete without conveniences for cooking such fish or game as you take; but few desirable camping grounds are to be found where a heavy cooking stove and furniture can form a part of your equipage. It follows, then, that in this particular, as in every other, that the lightest, most convenient and easiest transported substitute for a stove is the best for your purpose. Let me suggest one that I have found, all things considered, unexcelled. Any sheet-iron worker can make it for you in an hour, and you will have a camp stove that will last a lifetime. Take a piece of sheet iron and form of it a cylinder twenty inches long and about fifteen inches in diameter; put on one end a bottom, first taking out of one side at the same end a piece three inches long and an inch wide. Then for a top either a coarse wire netting or make a double cross of some strips of sheet iron with the ends bent so as to clasp over the sides, and your stove is complete. It is light, needs no funnel, can be set up in a moment, and heats quickly. The bottom prevents the fire from reaching the ground, the hole in the side gives excellent draft, and the cross or screen sufficient support for the spider or kettle. Some one will say that a stove of that shape takes up too much room in packing. Let me explain its advantages in that respect. Your stove is simply a large sheet iron pail. Why not use it as such? Within it you can place your camp kettle, tin plates, dippers and dishes, knives, forks, spoons and lanterns, in fact, all of your cooking and dining equipage, and know that it is securely packed. If you wish baked fish and game, brown bread and beans, don't try to cook them in this stove, but dig in the ground a hole fifteen or twenty inches deep, stoning up the sides like a well, if you desire, and you have a splendid oven. To heat it, build in it and over it a rousing fire, and when the wood has burned to coals clear out the oven, leaving some hot ashes and coals on the bottom. For beans your oven may be heated at night. Place the pot in the oven, push back the coals and ashes around it and over it, and, adding fresh fuel, you may enjoy your evening campfire, knowing that in the morning you can take from beneath its ashes a superbly cooked breakfast.

"To cook fish: Having placed some grass on the ashes at the bottom of the oven, to prevent the fish being scorched, lay them on the side, and putting over them some more grass, fill up the oven as before. In three or four hours you will have a baked fish, with all its flavor and juice retained, better cooked than in the best range in the land.

"For bread a covered dish can be used; while game may be treated in many ways.

"What luxuries you take into camp your own tastes will govern, but you should never forget the following reliable and substantial things: Plenty of salt pork, pilot bread or hard tack, coffee, Indian meal, salt and pepper; and if your camp is easy of access, potatoes, beans, onions, canned meats and flour should be added.

"Your camp or tent should be on a dry, level spot as near as practical to a good spring or cold running water. You will need good water for cooking and toilet purposes, and it is sometimes the case that some members of the party will drink it.

"Having your tent in position, if possible facing the southeast, carefully dig around it a good ditch. This will save you a repetition of my experience at one time, when I awoke in the midst of a heavy shower to find a fine stream of water running beneath the boughs that formed my bed, but not far enough beneath to prevent my getting uncomfortably wet. Throw the tent wide open as soon as the sun is well up in the morning, hanging out the blankets in the wind and shaking up the boughs that form your bed. I speak of your bed as one of boughs, because I believe, that while other things can sometimes be secured to give a softer couch, nothing is always at your command that will serve you as well. Again, the object of your visit is to obtain health and strength as well as sport, and there is about a bed of boughs, rich in its flavor of the hemlock or spruce, together with the properties of the earth, strong medicinal qualities that I believe to be highly beneficial to those who for the remainder of the year are confined within doors in offices, stores or manufacturing establishments.

"Being well settled in camp, don't try to hunt or fish all the surrounding country the first day. Such a course will only serve to unfit you for the enjoyment of the remainder of your stay. It is a changed condition of things for you, and you can easily misjudge your strength, and the second day find yourself lame and sore and unable to join in the sport at all. Take things easy the first day or so, and then you will be more than repaid for the loss of the few hours at the first.

"Some people seem to fancy that all that is necessary in the way of clothing in camp is a fancy yachting shirt, with its broad, loose collar and flowing sleeves, and the attendant pair of hip pants, but you should not fall into that error. I can think of nothing more poorly suited to your purpose. Your shirts should be made of the best flannel, with a narrow collar and button close around the neck, with a close-fitting sleeve buttoning as tight as comfortable with three or four buttons at the wrist. You will then save the annoyance of catching your sleeve upon every twig and bush, or of losing a fine fish by the reel catching in the needless cloth that hangs about your wrist, while that greater trouble than all, the mosquito and black fly, will be unable to select your neck and arms to feast upon. For the remainder of your clothing, any strong, well-made clothes will answer, being careful to select warm woolen under flannels and stockings. While the shirt I have suggested will protect you partially from the mosquito and fly, your face and hands will still be exposed, and will need guarding; for this purpose get at some druggist's a small vial of a mixture of oil of pennyroyal and sweet oil of the proportion of two parts of sweet oil to one of pennyroyal, and when troubled by the insects apply it to the exposed parts. The singing and humming may still remain near, but the mosquito and fly will not harm you while the oil remains upon your hands and face."

MASSACHUSETTS GAME PROSPECTS.

WE had a heavy snow storm here Wednesday night. It fell about fourteen inches on the level, followed next day by heavy wind and rain. On going out to-day to see how the birds stood it, I was surprised to flush in about three hours eight woodcock and a nice bevy of quail, twelve in number. If we have a good dry summer, we will have good sport next September. Little yellow birds and fox sparrows, golden-wing woodpeckers and crow blackbirds are here. J. F. D.

DANVERS, MASS., April 5.

The winter and spring thus far has not been so severe as usual to game. A good reliable farmer told me that a few days since he saw eighteen partridges budding his apple trees at one time, visible from his front door, and that they have badly damaged them. Rabbits are on the gain in numbers hereabouts, and but for box trapping the gain would be much greater.

At time of writing the ground is white with snow about twelve to fifteen inches deep, and sparrows, bluebirds and robins have starved to death in great numbers. E. S. K.

WESTMINSTER, MASS., April 7.

TENNESSEE CONVENTION.

Editor Forest and Stream:

It must be apparent to all those who have investigated the subject, that the great destruction of game throughout the State, by netting, trapping and killing out of season, as well as the wanton and exterminating method of killing fish by the use of dynamite powder, will soon deplete our fields and streams.

The only legitimate method to prevent the wholesale destruction of all kinds of game must be by stringent legislation, and to this end the sportsmen of East Tennessee deem it expedient to call a meeting of all the lovers of sport throughout the State, on Tuesday, May 20, 1884, in the city of Knoxville, to form a sportsmen's association of the State for the purpose of memorializing our State Legislature and securing the passage of such laws as will save from entire destruction our fish and game birds.

The E. T., V. & G. R. R. will give excursion rates over their several roads. The Knoxville Gun Club will use every effort to render the meeting both agreeable and profitable, not only by assisting in the proper entertainment of their guests, the adoption of sound conservative and progressive resolutions, and in the furtherance of healthful legislation, but will hold their annual shooting tournament, lasting four days, which they hope may prove an interesting feature of the meeting.

A most cordial invitation is hereby extended to all lovers of genuine sport to meet with us at this time, so that by our united and harmonious councils we may be able to arouse public opinion to the importance of this subject and construct such safeguards as will make our State in the future what it was in the past—the sportsmen's paradise.

KNOXVILLE, Tenn. J. C. DUNCAN, S. B. DOW, F. W. ARMSTRONG, } Committee.

PHILADELPHIA NOTES.

VERY few snipe were killed on our grounds this week. Atlantic City duckers have within the past few days been bringing in many sheldrakes, an unusual number of these worthless fowl having appeared, evidently on their northward flight. Some big yellow-legs are to be heard on the salt marshes, and the regular spring flight may be looked for during the next pleasant weather we will have. These birds do not stool well in the spring, and it is a fact worth noticing that they show themselves in much small numbers in the autumn migration, their place being taken in great part by the lesser yellow-leg, and we seldom see this latter-named variety on our shores in the spring. Can any one explain this? I notice to-day at some of our Philadelphia game stands many shore larks in bunches offered for sale; also blackbirds, and both varieties picked and tied together as reed birds are when sold. There is a law against selling those birds at any season of the year. While writing of illegal trading in game, I might say that in Philadelphia, where game dealers were once so fearful of violating the law, they are now doing as they please with their stock in trade. When our Philadelphia Game Protective Association had its eye on these people they were kept in check, but now it might be said we have no law. An effort is being made on the part of the Philadelphia Kennel Club to procure the charter of the old organization, and a move I hope will be made to extend the usefulness of the Kennel Club to the protection of game and the prosecution of existing laws.

An ex-vice-president of the old Philadelphia Sportsman's Society said to me the other day when we were conversing on dog matters, "What earthly use is it to own a dog when there is no game?" He deplores the present condition of affairs in Pennsylvania, and I am sure would aid in reorganizing in some way the old association.

I am told that the freshets of this year in the Susquehanna carried so much mud and trash on to the flats at Havre de Grace that the wild celery has been entirely destroyed; hence the failure of this season's duck shooting at that point. I am compelled to think, notwithstanding this fact, that box-shooting also is having its steady and sure effect on the fowl also. HOMO,

PASSAIC COUNTY, N. J.—A meeting of the Passaic County Fish and Game Protective Association was held last week in Paterson, N. J.; the permanent organization was effected. The secretary reported that Senator Griggs was unavoidably absent, but that he had made some suggestions to the secretary with a request to bring them before the meeting. The first suggestion was in relation to the preservation of American song birds. The law at present prohibits the killing of all song birds, but as it is a State law with only a small penalty attached, it is very seldom enforced. The charter of this city gives the Aldermen the right to pass ordinances for the protection of song birds, and if the Aldermen could be induced to take action in this matter, the whole Paterson police force would be compelled to make arrests whenever they saw any person killing any song birds. Most of the killing of song birds in this vicinity is done within the city limits by boys and men who go out either for the sport of killing or in order to get birds to stuff. In this manner hundreds of birds are killed nearly every month in the year. Mr. Griggs's suggestion was to ask the Board of Aldermen to pass a stringent ordinance prohibiting the killing of song birds. The secretary was instructed to request the Board of Aldermen to pass such an ordinance. Another suggestion made by Senator Griggs was the printing in pamphlet form of the present laws in relation to the protection of fish and game. The laws have been fixed up every year by the Legislature, so that it is only with the greatest difficulty that persons can keep on the track of what is going on. The Senator offered his services in the matter, and was requested to draw up the compendium. A room for meetings will be procured, and until that time the association will meet at the corner of Cross and Oliver streets, where the next meeting will be held on Friday evening of this week.

ARROWHEAD IN GAME.—I read with great interest the article regarding the iron arrowhead found in the swan at Chesapeake Bay. Mr. Erastus Keith told me that some years ago, a wild goose, shot near Lake Village, Indiana, had an arrowhead imbedded in the breastbone. I own a bow and arrows from Washington Territory; the arrows are 26 inches in length, the iron heads are 2¾ inches long and ¾ of an inch wide; the bow is very strong, covered with snake skin, and is 38 inches in length, no mean weapon in the hands of a brave. None of these arrows are barbed where they enter the shaft, which makes me think the one in your cut may have come from the remote north, and there may be some among your readers who have seen such that are barbed where they enter the shaft, as iron arrowheads are still used by many tribes, and they may know the names of tribes using such. As game escapes from white men with the best weapons, there must be more that escape from the arrow of poor Lo.—W. A. N. (Springfield, Mass., April 7).

GAME IN IOWA.—Latimer, Iowa, April 10.—Ducks, geese and brant have visited us in large numbers this spring, and a few of the hardy duck shooters that could lie in a snow bank where the corn was not gathered, met with good success. Thousands of sandhill cranes are here now, but they are very poor. Ducks have also proved to be in miserable condition, which is another argument in favor of the abolition of spring shooting. Prairie chickens wintered well, and there seem to be more old birds than I have seen for several years, so that if there is any reasonable hatch the shooting will be excellent next fall. Some curlew are to be seen. Our little favorite, the Jack snipe, has not put in an appearance, but is reported as being plenty 100 miles south of us. A great many pickerel have been speared and shot along the small streams this spring.—RAW.

LIVE QUAIL FOR NEW JERSEY.—At a meeting of the Board of Directors of the New Jersey Game and Fish Protective Society, held in Plainfield, N. J., on Friday evening, April 11, the committee on distributing quail for stocking purposes, reported that the birds had been liberated on farms in the counties of Union, Somerset, Hunterdon, Middlesex, Morris, Monmouth and Essex, where they will have protection and good cover to breed. Some 300 birds, cared for during the winter months, were liberated. The percentage of loss in caring for them since December was small, in comparison to that of last year. Good results may be expected from this plant if the game laws are properly observed.—FOX.

A MAINE DECISION.—The following opinion has recently been rendered by the Law Court of Maine: "Penobscot County Case.—Thos. F. Allen vs. Benj. L Young.—'Plaintiff nonsuit.' Rescript—It is the opinion of this Court that if deer are killed during the time when it is lawful to do so, it is not a crime to carry or transport the hides or carcasses from place to place in this State during the time when it is unlawful to kill them; that such a carrying or transportation is not a violation of the statute for the protection of game. Barker, Vose & Barker for plff.; Davis & Bailey for deft." This applies to the transportation of all game.—J. F. S.

GAME IN MUSKEGON.—Notes are scarce in this part of the country, but I will give you one that probably the Muskegon Sportsman's Club will be proud of. Game—quail, ruffed grouse and venison—has been openly sold in this place all winter, even into March. Let the State society appoint some more missionaries. Personally, I do not feel much aggrieved, as my sporting proclivities do not extend beyond a fishing-rod; but I do not like to see the laws so flagrantly violated, even if I never shoot a bird.—A. P. S. (Muskegon, Mich., April 2).

BRANTING AT CHATHAM.—I promised to write you in regard to branting. There are lots of brant here, but the tides have been very high indeed. We killed 37 the last week in March; 17 the 3d of April; 17 the 4th, and this morning, the 5th, we killed 33 before 7 o'clock. These were killed from one box. April 7 we killed at one shot, with four barrels, 36 brant, and got five more, making 41 brant in all, and got back to my island home before 8 o'clock A. M.—I. G. C. (Chatham, Miss., April 8).

MARSHALLTOWN, Ia., April 5.—Your correspondent in company with Mr. L. C. Abbott, our crack shot, spent the afternoon of the 4th on the "Snipe Bog," with the result of a small bag. It is rather too early, and the birds are wild.—L. T. D.

SALEM, Mass., April 7.—Woodcock are yet in our pastures. Some black ducks (*A. obscura*) noticed; also snowbirds (*J. hyemalis*) and tree sparrows (*S. monticola*). We look for snipe soon.—X. Y. Z.

PAY FOR THE MECHANICS.—In the clerk's office of the U. S. Circuit Court at Trenton, N. J., in the case of Charles E. Quincey *vs.* the Yellowstone National Park Improvement Company, there was filed, on Tuesday, April 15, a petition asking the Court to permit the receiver to borrow $7,000 to pay the laborers, who have taken possession of the hotel and fixings, and refuse to let the receiver take possession until their claims are paid. Judge Nixon signed an order to that effect.—L. N. C.

BIRDS IN ILLINOIS.—We lost a good many quail last winter, although there are some left. The duck shooting is about over. The weather is very fine, and birds have gone north. I should like to see the spring shooting stopped, especially for market.—L. G. (Lewiston, Ill., April 3).

DUCKS NEAR MONTREAL.—Our spring duck shooting has just opened with prospects of very good shooting. One man was out last Friday and shot 54 yellow-eyes, 11 whistlers and 4 geese; not so bad for these parts.—TUQUE BLEUE (Montreal, April 8).

Sea and River Fishing.

THE ROD—PAST AND PRESENT.

Editor Forest and Stream:

The article written on the "dowel question" in late numbers of FOREST AND STREAM are instructive as well as amusing; and any apology for troubling your readers with what may follow, is due to the truth stated in Mr. H. P. Wells's excellent article of Feb. 21, wherein he justly arraigns the followers of Walton for not writing more on what pertains to the art of angling and the implements used.

But their silence is due, no doubt, more to the gentle, unobtrusive spirit which pervades this fraternity, than to any selfish motives or ignorance on the subject.

Many years have passed since I have used a rod made with dowels. My first departure from the creed of the fathers occurred shortly after the debut of that most excellent work, "The American Angler," by Thad. Norris.

The teachings of that eminent author were so plain and thorough that I concluded to try my hand at rod making. My first attempt was to reduce the unwieldy proportions of a store rod which I had used some seasons. This rod was furnished both with dowels and rings, such as were considered orthodox in those days. As I had made up my mind to try the experiment of making a rod without dowels or rings, I proceeded to remove both, but to my surprise on putting the rod together I found the joints as shaky as an old window in a March wind.

That experiment proved the use of dowels in rods constructed with badly made ferrules. To make a good ferrule I soon found required more skill and tools than I possessed. However, I believed that a perfectly fitting ferrule could be made, and on the strength of that belief continued to make all my ferrules, some fairly good, others bad, until I found a brother of the angle, who had both brains and tools enough to make ferrules of so perfect a fit as to leave nothing more to be desired in that direction.

Next, I replaced the old rings with standing guides which I made of hollow wire. At first I made them large, but when John Shields produced the enamel line—the greatest improvement in lines the world has seen—I found that a guide a little larger than the line answered every purpose.

After experimenting with the construction of the standing guides, I found that two perfectly round rings of wire soldered together so as to form a A shape with a piece of metal at the base, thus constructed so as to be attached to the rod by silk windings, gave the best results. These guides have lately been improved both in fineness and finish by the same party that makes the ferrules.

With these ferrules and guides the amateur can construct as perfect a rod as any professional, provided he knows how to make the wood part of a rod. Last season I was gratified to hear that salmon rods had been sent to the East from California to have the rings taken off and these guides put on.

While on a fishing trip last summer, in the Provinces, I was shown bamboo rods, made by our best makers, and owned by resident anglers, that had been sent to Boston to have these guides put on, and they expressed themselves more than satisfied with the change.

From some of the articles written by the angling fraternity, and those anglers whom I had formerly met, living in the Provinces, I had been led to suppose that the antiquated "spliced rod" was the only one considered the thing in those regions. But I was mistaken.

Before closing, I will state for the benefit of those of the craft who desire to make their rods, that the ferrules and guides that I have found so satisfactory, can be had in New York of Hawks & Ogillvey; in Boston, of Appleton & Litchfield, Washington street; C. F. Pope & Co., 33 Weybasset street, Providence, R. I., or of the manufacturer, A. Seekel, 409 Pine street, Providence, R. I. The ferrules are made of eighteen per cent. German silver, finely finished and reinforced so as to admit the same size of wood above the joint as below it, thereby obviating most of the danger of the rod breaking at the ferrules.

The following sizes can be had for fifty cents each, viz.: $\frac{5}{32}$ to $\frac{1}{2}$ inch inside diameter. Guides are made in four sizes, and sell at sixty cents per dozen, all sizes, and will fit the finest fly-rod or heaviest bait-rod.

To recapitulate. The history of the rod may be summed up somewhat after this fashion. First, we have the pole intact from butt to tip, as used by "the fathers." Second, the pole cut in two or more pieces, probably for the convenience of transportation, or in some instances to avoid the trouble of cutting a "mast" for each expedition. The uniting of these pieces with strings constituted the "spliced pole." Third, the uniting of the sections of a pole by ferrules which were so poorly made as to require some device of the wood-worker to help out what the metal-worker lacked. This device consisted in adding a piece of wood below the end of the male ferrule, and was called a "dowel."

But I had nearly forgotten to mention a companion piece of the dowel, credited to our English cousins. I refer to those wire loops placed both above and below each joint for the purpose of tying the joints together, and when a "pole" is thus rigged out for action, it presents an appearance as substantial and ornamental as that of an Italian team in the streets of Florence or Rome, with the Jack harnessed to the cart by rops and rags.

Finally, instead of the larval state called "pole," we now have that most perfect of all angling implements, the split-bamboo rod with short ferrules that fit perfectly, and guides that do not hinder or fray our elegant enameled lines.

Therefore, at this stage of "evolution," I conclude that the day is fast approaching when the "pole," the "spliced pole," the "doweled rod" and the ringed rod will be relegated to the past, as stage coaches, etc., etc., have been by the advent of the railroad, telegraph, telephone, and electric light.

ESPRIT FORT.

PROVIDENCE, R. I.

AN OLD-FASHIONED ROD.

Editor Forest and Stream:

Let me fully indorse Mr. Wells's articles about dowels, and corroborate him by saying that I have an old rod, made without them, which has seen hard service for twenty-five years or thereabouts. I think it was in 1859 that I went to a gunsmith in Manchester, N. H., and selected the slenderest bamboo rod that I could find, 20 feet long, and had it cut into five lengths of 4 feet each, and put together just as Mr. Wells describes. The three top joints gave me a 12-foot trout rod for brook fishing; the addition of the next one made 16 feet, and was occasionally very useful for wide, shallow streams or mill ponds, and the butt, when added, gave me a long pickerel rod.

Of course I had no reel-seat, but a few feet of strong cord or old linen line, and a few minutes' work, would fix the reel firmly to either joint.

The original tip came to grief against a stump, in an alder swamp in Maine, while I was endeavoring to keep the mosquitoes off with my left hand, and also trying to avoid getting over boot-tops in the mud.

An old lancewood tip, from an older rod, was then spliced on and lasted for some years, until it met with a somewhat similar mishap, and was finally replaced by a foot of whalebone which I worked down from one of the ribs of an antideluvian umbrella, and which is still capable of good work. To be sure, it is not a fly-rod, but in most of our mountain brooks a fly-rod is of no use, and we have to depend on the primitive mud worm.

In all this long service only one ferrule has worn loose, and that might be easily tightened if I did not always forget it, so that when I get out on a stream and put my rod together I usually wrap that ferrule with one thickness of thin paper.

I have not used the rod much the last six years, except for trolling and bass fishing, as the charms of a light split bamboo have caused it to be honorably retired, for the good it has done, but I mention it now in evidence of the truth of Mr. Wells's theory, that dowels are non-essential, and I also fully believe them to be detrimental to the strength of a rod, as I broke one of my split bamboos two years ago, just below the butt ferrule, in the endeavor to disengage the hook from a sunken log, where a malicious black bass had left it, too deep under water to be reached by hand.

SAMUEL WEBBER.

LAWRENCE, Mass., April 5.

TROUTING ON THE BIGOSH.

THE COLONEL'S STORY.

A HEAVY shower kept us in camp in the morning for over an hour, and as we sat in our dry bough shanty the Doctor turned to the Colonel and asked: "How did you pass the day, yesterday, while we were wading the stream?"

"Jack and I took a few trout."

"Lakers, I suppose; lugged them up from the bottom, much as one pulls up a water-soaked stick that his hook has fastened to, and can't tell whether it be stick or trout until it heaves in sight."

"That uncertainty," answered the Colonel, "is what gives variety to the sport. If variety is the spice of life, then uncertainty is the salt which gives the relish. It is the uncertainty whether it will cost seventy-five cents or a dollar a piece to raise turnips, which makes amateur farming so attractive to the city merchant, and this reminds me that Cape Cod is the most charming agricultural country in the world. They are always sure of a crop, but there is the delightful uncertainty before the spade is put in the ground whether it will be potatoes or clams. But you are wrong in your guess, Doctor, we took some fine trout here in the lake. We found a spring hole and fished it from the boat."

I groaned audibly. There I had been, climbing logs and forging through thickets, to reach a stream which I missed, and merely to keep the Doctor company, getting wet and having no luck, while the Colonel and his son had struck good fishing from a comfortable boat, where we did not even think of finding brook trout. "Where is this spring?" I asked.

"It is about six boat lengths to the east of the big sycamore across there, and about the same distance from the shore. After you had gone we rigged up our fly-rods and rowed across the lake on a voyage of discovery, and going along shore carefully and casting ahead of the boat to see if chubs, trout, or dace would rise, I hooked a small trout. About twenty feet in advance of where he rose we could see a slight boiling motion to the water, and I told Jack that we had found a spring hole and might get some good trout. I let the little fish go back in the water, and Jack was for rowing right up where we could cast into the center of the spring at once. I explained to him that such a course would frighten all the fish in the pool as soon as the first one was hooked, and that we had best stop where we were and fish carefully all around the spring, and pick off those on the outside first. He saw the point, and we arranged that one should take the oars while the other cast, and as soon as a trout was hooked the boat should be pulled from the hole, so as not to disturb the inhabitants of it by allowing them to witness the plunging of their friends at the end of the line. After a capture we would change positions. We worked in this way until about 9 o'clock, full three hours, and took in that time thirty trout, of which we returned to the lake twenty-one that were under six ounces in weight. Here are the others, nine trout, whose united avoirdupois is four and a half pounds, just enough for dinner."

"It was too bad to put all those trout back," said Jack; "they would have made a nice show and were big enough to eat, every one of them, but father insisted on it, and that settled it."

"It is very hard," said the Colonel, "to make a boy understand that all life is sacred and should not be wantonly destroyed. The desire to kill seems to be part of our Anglo-Saxon heritage. The Frenchman who said that when an Englishman asked his friend what they should do to enjoy the morning, was answered, 'Let us go and kill something,' struck many a bird with a single stone, and especially our younger men and boys. Not that boys in all ages are not the same, but I mean to say that the older we get the more

we value life of all kinds, including our own, as something, which we can take but cannot give."

"Colonel," said I, "you have stated a fact that we all acknowledge as time passes. I remember, when a boy of twelve years old, that three of us borrowed a gun, an old musket, and went to the outskirts of the village to shoot 'game.' We saw a little yellow bird on a thistle-top picking the seeds in a perfect sense of security, and, as the oldest, I claimed the right to shoot. Advancing behind the fence, I put the old musket through the rails and rested it on one of them, with the muzzle of the gun within ten feet of the little innocent, pulled the trigger, and then jumped the fence and exulted over a shattered mass of skin and feathers, which a moment before had been a living thing of beauty in the full enjoyment of life. O, had some sensible man, wearing a stout boot, been there, and had he applied the boot impartially, he would have enforced a lesson that took years to learn in a slow way."

"True," broke in the Doctor, "but having learned this lesson of the value of life by years of observation, and the ease with which it can be destroyed and the impossibility of restoring it, you are in duty bound to teach this to the new crop of boys which is constantly coming to the front, and who are as thoughtless and heedless as you were."

"It's no use," said the Colonel, "there are many things that boys must learn for themselves. One of those is the value of life. Some boys learn it at forty, some at fifty and some never seem to know that any life is of value except their own and that of their fellow man. I once talked with a man on the subject of shooting birds in the nesting season. He asked why he should not kill birds at any time he wished, and when I said that the idea of young birds starving in the nest should be enough to deter one from killing the parents, he brutally answered that their sufferings were nothing to him, he only considered his own wants. Of course, there is no more to be said to such a man, yet he was a professor in a German university."

"How many fish did Jack take?"

"Jack has not yet learned to give his line time enough behind him in retrieving and he snapped off seven flies, which lost him that number of chances, or our system of alternate fishing would have equalized our catch. I made him lose his chance every time he lost his fly, hoping to make him more careful in future." Fred Mather.

BLACK BASS IN MASSACHUSETTS.

An article in the Worcester *Spy*, which from the style we think was written by our friend Mr. S. H. Coe, sums up the character of the black bass in all its qualities of game, table and other points. We make the following extracts from it, though we do not agree with the writer on the odor of the black bass, which to us seems an agreeable weedy flavor, yet we do not care for them on the table. He says:

Of the several towns in this vicinity which began experimenting with black bass, it is doubtful if there is one which is fully satisfied with the result of the undertaking. Mendon Pond was one of the first to receive attention, through the efforts of a company of sportsmen, and they were among the first to be dissatisfied with the results attained, or rather the lack of results. There are bass, large ones too, to be seen in the waters of the pond, but they defy the ingenuity of an angler and the dead-falls of the potter alike. Occasionally one can be taken by still-fishing with a mud worm, but there is no sport for a sportsman. Experiments were tried at Asnebumskit, in Paxton, but the results have not been satisfactory. At Lake Chauncey, in Westboro, there has been a fair measure of success, and the same may be said of Crystal Lake, in Gardner, but at neither of these places has the outcome been what anticipation pictured. In Brookfield all has not been realized that was anticipated. In the Lynde Brook reservoir the fish were considered as doing well till the disaster of 1876, which carried away the dam, the waters behind the dam and the bass in the waters. Millbury is the last of the towns in this vicinity to make the experiment and the result is unsatisfactory. Webster was one of the first of the Worcester county towns to make the experiment and is satisfied with the results as far as numbers and sport are concerned. While the various towns have met with varying degrees of success, have the bass been yet given a fair trial?

An alien to New England waters it has been brought here and left to shift for itself. Turned loose among fresh-water sharks in waters abounding in other fish which prey not only upon their own, but the spawn of all other occupants of the same waters, has the bass experiment been tried under the most favorable circumstances? Once large enough it is well able to take care of itself, and it seems to be the verdict of all who have studied its habits that it is more of a fresh-water shark than the pickerel, and every half-pound pickerel is looked upon as having eaten three times its weight in other fish. The bass has been here but a few years, hardly more than ten in the ponds first stocked. Other varieties, pickerel, perch and the like, in the waters where the bass have been introduced, have not held their own. All interested seem to agree in testifying that they have diminished rapidly.

And the black bass is the gamiest fish of its size that swims in any water, fresh or salt. It fights continuously from the time it is hooked till it is brought to net. It never sulks, like the salmon, and goes to the bottom after being hooked only when it sees a possible chance for escape among the rocks or weeds at the bottom of the pond or stream. A bass always forces the fighting, and is never upon the defensive. The moment he is hooked he comes to the surface, jumps clear of the water, sometimes to a height of between two and three feet, and shakes himself vigorously while in the air, in the effort to dislodge the hook. Then he makes a rush through the water for the same purpose, following the first with other rushes, and often breaking water two and three times, and sometimes more, in his efforts to escape. Only when forced by sheer exhaustion to swim on his side, does he show signs of quitting, and then he usually has vitality enough left for another struggle in deep water when he nears the boat. He seldom breaks water again after once turning upon his side. He is a better fighter than the trout, but the pleasure of catching him ends with the landing. A trout landed is beautiful to look at; to the enthusiastic sportsman there is no handsomer sight. The bass has nothing to recommend him in this direction, and he is the "stinkingest" fish found in fresh water, and admiration of his fighting qualities is often turned to disgust by the disagreeable odor he emits when being unhooked.

For the table he is pronounced undesirable, because of the coarseness of the flesh, but he has not grown coarse since he was the general favorite for introduction in New England waters. He was as coarse then as now, and under a coarse scale fine flesh is seldom found, especially when that scale is set into a skin tougher than that worn by any of the fish found in the waters of this vicinity, when the bass was introduced. But there is no bad taste about a bass. On the contrary, although coarse, it is sweet, with the added merit that the bones are large and easily detected.

Even at Webster, where the bass is quite freely taken, his habits are not yet fully understood, and he still defies the sportsman's cunning, refusing many times to be taken after the latter has exhausted all his patience, drawn upon all his resources, and employed all the art he may possess. They seldom take an artificial fly, although on other Worcester county ponds they rise fairly, and it is believed can be brought up by a "Ferguson" at any time in July or August. Sometimes a trolling spoon coaxes them to strike, but it is never sure. A common mud worm is good at times, but fails often. Grasshoppers are good to-day, useless to-morrow. Live bait users tell the same story. Bass are not strong biters as a rule, showing their strength only when hooked. Then coolness, judgment, skill and good tackle are necessary, or the bass, no matter how securely he may be hooked, has a good chance for escape. Whether using artificial or natural bait he can be handled best with a fly-rod and click reel.

The Fish Commissioners do not abandon the bass, although many who have taken the trouble to introduce them do. It may be possible that they have done so hastily. It is certain that there is more sport taking black bass than any other kind of fresh-water fish, and if taken for sport alone there is no reason for finding fault with him. For food he is as desirable as when the experiments were begun. He has not increased in numbers as fast as was anticipated, but has time enough elapsed to make the experiments thorough? In size he excels any fish that will live in ponds in this vicinity, specimens weighing two pounds being freely taken, with those weighing three and four not infrequent, while occasionally those weighing five or six pounds are captured. The friends of the bass say give him a chance and you will be satisfied, while the sportsmen admit that for sport he is unequalled. The raising of any fish in fresh water for profit save trout in very retired localities, is out of the question. Is not the bass, the sportsmen's delight, then, preferable to perch or pickerel?

THE DUBLIN POND TROUT.

Prof. Spencer F. Baird, Director U. S. National Museum:

Sir—With reference to the trout recently received from Mr. Walter J. Greenwood, fish and game warden, Dublin, N. H., I have the following communication to make: These trout have also been made the subject of a letter to Mr. Richardson from Mr. J. H. Kimball, of Hillsboro, N. H. They have been referred to, also, in the Boston *Journal* of March 22, under the title of "Dublin Trout," and are also mentioned in Forest and Stream of March 27, 1884, page 170, second column, under the title "A Peculiar Fish."

After a careful examination of the individuals received from Mr. Greenwood, I arrived at the conclusion that they are the common brook trout, *Salvelinus fontinalis*, differing in no respects, so far as I can see, from the usual type of the species, excepting in their pale coloration and few vermilion spots—variations which I have frequently observed in trout from widely different localities. In order to aid in determining the species, I record the following characters of the Monadnock lake trout:

It is a *Salvelinus* without hyoid teeth. The gill rakers are fifteen to sixteen in number; there are about 115 tubes in the lateral line, the number of rows of scales, of course, being much greater. The eye equals the snout in length, and is contained four and one-half times in the length of the head. The maxilla reaches a little beyond the vertical from the posterior margin of the orbit, and is nearly one-half as long as the head. The origin of the dorsal is nearly midway between the tip of the snout and the root of the upper caudal lobe. The length of the pectoral is one-sixth of the total without caudal. Dorsal ten; anal ten. Coloration silvery-gray on the upper parts, whitish below; pectorals, ventrals, and anal, largely vermilion; vermilion spots on the sides few in number. Tarleton H. Bean,

Curator, Dept. of Fishes, U. S. National Museum.

Washington, April 5, 1884.

"BIRCH LAKE PERCH."

A letter from "S. E. B." appeared in these columns two weeks since deprecating the wholesale destruction of fish in Michigan lakes by netting and fishing with hook and line through the ice. Although "S. E. B." is "away off" as regards the law and also as regards the location of "Birch Lake," still his strictures are timely, and his intentions evidently are to do good. The clause he quotes as from the laws of Michigan, however, is not to be found in them anywhere, while his suspicion that "Birch Lake" is a misnomer for some Northern Michigan sheet of water is altogether unjust. Mr. Gillman has never heard of "Birch Lake"; never fished it to his knowledge; in fact is surprised to have "S. E. B." quote him as knowing its whereabouts. And as Mr. G. has never been in Manitoba, I don't wonder at his ignorance of the lake; for "Birch Lake," be it known, is but another name for Lake Winnipeg or a small lake near Lake Winnipeg. At all events, seventeen car loads of fish have been brought down from Manitoba by the Buffalo firm that our skeptical brother thinks also a myth. Of the seventeen car loads three or four have been distributed by Detroit parties, who acted as agents for the Buffalo firm, in Michigan, Ohio and Indiana.

The fish were of the variety called shovel-nose pike, and ran remarkably even as regards size and weight, averaging from three pounds to five pounds each. None were larger than five pounds and few less than three pounds. They were caught by Indians who fished through the ice with hooks and lines, and the fish were nearly incredibly voracious and hungry. They bit at anything dropped in the water, and could be jerked out as fast as one pleased. Caught in a temperature of 20 to 40 degrees below zero they froze at once, and then were hauled nearly 100 miles to a railroad, where they were packed in cars, or rather corded up like so many sticks of wood. Upon the arrival in Buffalo or Detroit, the inside of the car would be found literally covered with frost and the fish as solid as ice. Arriving as they did in superb condition, they met with ready sale, and the meat moreover was pink in color, and like nearly all the fish from the northern lakes, very palatable.

When the first lot reached Buffalo, the question with the fish firm was, what shall we call them, and then the Birch Lake name was pitched upon and they were called "Birch Lake Perch." Anything to make them sell, you know. The season is now by for them. At any rate, a carload, I am told, went begging for a purchaser last week in Chicago.

So much for Birch Lake, but after all I don't wonder that "S. E. B." is skeptical, or that he apparently has great confidence in the contents of our Michigan lakes to feed the multitude, at least for a while. Had he not the confidence he would never have imagined that Birch Lake, from which seventeen full carloads of fish have been taken inside a few weeks with hooks and lines, was situated in Michigan. He knows perhaps a few lakes as I do that might pan out nearly as well. I took the pains to ascertain the above facts, and my authority is undoubted for declaring that "S. E. B." is all wrong in the conjectures he made. His letter won't do any harm, however, for our Michigan fish are certainly greatly lessened in numbers yearly. Delta.

Detroit, April 12, 1884.

FISHING THROUGH THE ICE.

Editor Forest and Stream:

In your issue of March 20 is an article on fishing through the ice. Now let me say, and I speak from actual knowledge, it is a mistaken idea that fishing through the ice lessens the amount of fish taken by the rod during the summer. I know of several large ponds that have been fished through the ice thoroughly for years, and the supply seemed to be inexhaustible. Ten years ago they were stocked with black bass, and fishing was prohibited for seven years. Since that time it is almost impossible to get many fish, while other ponds of small area have been thoroughly fished, winter and summer, and now yield good strings of good-sized pickerel in only a few hours' fishing. The facts are that the large fish eat up the small ones, and that is the whole secret. I say if a man wants to freeze up and fish through the ice and catch the large ones, let him do so, and then in the summer he can have better sport than if no traps were used through the ice.

A few years ago, while fishing for trout in the early spring at Rangeley Lake, a party of three of us caught in one hour thirteen trout that averaged four and a half pounds apiece, on ground that had been thoroughly fished through the ice all winter, and I hooked one and took from his stomach a dace, or chub, that was over a foot long, that was partly digested. Fortunately for the fish, but unfortunately for me, it hooked in his dinner instead of his stomach.

S. P. Hubbard, M.D.

[When we wrote the article in question we were under the impression that if a pond contained a certain number of fish after the season's fishing, all those taken through the ice would necessarily be subtracted from that number. We now see that a lake which is thoroughly fished through the ice all winter is not robbed of its fish, because only the big ones are taken, and the fingerlings grow to take the places of the captured ones in a few weeks. The results of fishing in the Rangeley Lakes, as quoted by our correspondent, are convincing, and instead of propagating fish to stock these waters, it will be well for the Commissioners of Fisheries to have them thoroughly fished through the ice each winter.]

TENNESSEE NOTES.

The angling season began in earnest on the 1st of April, and already a number of parties have been out to the various streams of Middle Tennessee. Ben McCann, Anderson Crosswaite and four others returned from White Oak on the 7th, having had royal sport each day they were there. General Ira P. Jones had a splendid day in the preserved waters of the Rockvale Club, at Turnbull. Hermann Burkholz, Jim Palmer and Jack Bentley are at present on the banks of South Harpeth, and Messrs. Eugene and Allert left for Buffalo to-day.

Besides the above, hundreds of less well-fixed disciples do White's and Mill creeks, bringing home very creditable creels. It is generally conceded that the streams are more abundantly supplied with fish this year than any within the last ten. I am glad to learn, from every section of the State, that the feeling in favor of enforcing the protective laws is gradually growing stronger. This is all that is necessary; for, situated as is this favored region, millions of fine fish from the Cumberland and Tennessee rivers will annually seek spawning grounds in those of their tributaries which rise in or run through it.

Mr. Warner is succeeding admirably at his trout hatcheries near Craggie Hope, in Cheatham county. Hitherto he has imported the spawn (to be hatched) from the North, but last year he stripped a number of his native bred fish, and their spawn came to maturity and yielded a large percentage of healthy fry. There are a great many localities in the State where an abundance of sufficiently cold water can be found, to establish even larger hatcheries than the one above mentioned, and it is safe to predict their early utilization since Mr. Warner has practically tested the feasibility of the industry.

It is amusing to read the various opinions as expressed with reference to the German carp as a food fish. It has been considered a delicacy in Europe for the past 1,000 years, and is so much in demand at present, that carp pond projects (on colossal scales) form the theme of hundreds of newspaper items. Compared to the flesh of the salmon, trout and bass, or red snapper, Spanish mackerel, pompano, sheepshead, or codfish, it is less firm and savory, but then there are thousands of persons who cannot enjoy the pleasure of eating them, while the carp can be raised anywhere and in unlimited quantities, and serves as an elegant substitute for the more delicious varieties named. J. D. H.

New Law in Iowa.—The Iowa Legislature has enacted a law preventing the spearing of fish in any of the permanent lakes or ponds or outlets or inlets thereto within the State, between the first day of November and the thirty-first day of May next following. The sale of fish so taken is made unlawful. Any person who may draw from the water any game fish, such as pike, bass and the like, when seining for minnows for bait, shall return the same without injury under the penalties of this act.

The Adirondacks.—April 10.—It may be interesting to Adirondack fishermen to know that a letter with date of 8th inst. has just been received from Blue Mountain Lake, Hamilton county, N. Y., which says, "Sleighing is good as any time this winter, and the ice in the lake is two and one-half feet in thickness."—T. S. S.

The Limited Payment Policies of the Travelers, of Hartford, Conn., concentrate payments into the *working years* of a man's life, and leave him free from all worry in his later years even if helpless.—*Adv.*

Fishculture.

NEW HAMPSHIRE.

AT the recent meeting of the Fish and Game League Mr. E. B. Hodge, Fish Commissioner of New Hampshire, was called upon and spoke as follows:

"Mr. President and Gentlemen of the Fish and Game League: I will endeavor, in as brief a manner as possible, to give you a short review of our work during the past year. Since our last meeting the Commissioners of Massachusetts and New Hampshire have planted 400,000 salmon fry in the Pemigewasset River. We have now in the hatchery at Plymouth 600,000 eggs of Penobscot salmon, which will constitute the plant for this year. There were not as many salmon taken at Plymouth last season as in 1882, as the water was so low in September that the usual fall run did not reach there. I think that the usual number came over the fishway at Lawrence, but it was impossible for them to pass the falls here and at Bristol. The salmon taken at Plymouth, with two exceptions, were unusually large, the two exceptions were very small fish, seven to eight pounds, and most likely of the plant of 1880.

"From my observation of the young salmon in the Pemigewasset, I find that a part of them go down to the sea when one year old, the main body at two years of age and the small remainder at three years.

"The habits of the salmon after they reach the sea are enveloped in mystery. Two years ago the run of salmon in the rivers at the head of the bay Chaleur was very light, and the fishermen said that it was owing to the government hatching on the Restigouche. But the last season they came back in large numbers, and the catch on the Restigouche, Matipedia and Cosopsicul was much larger than for many years. From the large number of parr and smolt in the river the past three years, I feel confident that the only difficulty in restoring the salmon to the Merrimack is the want of water in the river. The volume of water in the Pemigewasset during the summer months of the past three years has not been over one-half as large as it was six and seven years ago. The falling off cannot be attributed to the cutting away of the forests, for in that valley there is a larger area of woodland than there was twenty-five years ago, and the main part of the river comes from an unbroken forest not yet disturbed by the ax of the lumberman, but is due to causes over which man has no control, and as one extreme always follows another the series of dry years through which we are passing will undoubtedly be followed by a series of wet ones, when success is certain to reward our labors in this matter.

"Last year at this time we had in the hatchery 125,000 eggs of the land-locked salmon. The young fry were distributed as follows: Roxbury, 5,000; Hancock, 5,000; Andover, 5,000; Squam Lake, 10,000; Haverhill, 5,000; near Manchester, 15,000; Newfound Lake, 15,000; near Laconia, 5,000; Hillsborough, 5,000; Francestown, 5,000; Sunapee, 15,000; Pittsfield, 5,000; in the eastern part of the State, 25,000. We have now in the hatchery 120,000; they will be ready for distribution in June. We are getting good reports from the various parts of the State where they have been planted, and in some places the growth has been extraordinary, reaching fifteen pounds in six years. We received from the U. S. Fish Commissioner, through the courtesy of Prof. Baird, 200,000 whitefish eggs. The young fry were planted in Newfound Lake. We have the same number this year from the same source. It is only an experiment, but as it costs only the express charges on the eggs it is well worth trying.

"Fifty thousand brook trout were distributed last year, and we shall have 125,000 ready in May and June for this year's plant. During the past year over 2,000 trout have been added to the stock in the ponds at the hatchery, and 5,000 more will be added this season. It is the intention of the Commissioners to extend the cultivation of the trout as rapidly as possible, so that in a short time we can have a million of young fry instead of 100,000 or so as at present, but of course it will take time to collect and raise a stock of breeders in this work as in everything else of the kind.

"We have also 100,000 eggs of the Lake Superior trout. These fish are of the red flesh variety, and are beyond a doubt the finest of all the lake trout species. I have made some experiments that have never been attemped before in fishculture. Impregnating the eggs of the brook trout with the milt of the Saibling or German trout, Penobscot salmon eggs with the brook trout, Penobscot salmon eggs with the California salmon. I am in hopes that the cross between the brook trout and Saibling will produce a fish that will breed and not a hybrid.

"The senseless cry against the black bass has died out, and people are beginning to find that they are a great addition to our game fishes.

"And now while we are doing all we can to increase the supply of food fishes by introducing new varieties and propagating our native fish, there is a large class of men that are doing all they can to destroy and exterminate not only the fish, but what little is left of our game. Our laws are ample as far as laws go, to protect our game and fish, but the difficulty lies in enforcing them. One reason is that it takes more direct evidence to convict a poacher than it does to convict a man of murder. In Lake Winnipesaukee hundreds of trout are destroyed on their spawning beds every year with spears and nets; yet it is almost impossible to obtain evidence against the guilty parties. There are some that think that it is a disgrace to furnish information of the violation of the game laws, and in many cases they are afraid to do so. For my own part I believe it to be as much the duty of every person to give information to the proper parties of the violation of any of the game laws that may come to his knowledge, as it would be to furnish information of the violation of any of the laws upon our statute books. The Commissioners are willing to enforce the laws against any one, no matter who, provided they can get evidence that will convict; and we ask and urge all to take hold and help us in the matter.

"In this State during the months of December, January, February and March over 200 deer, 1 moose and 1 caribou have been killed illegally, and some of them by parties who think that their social position will prevent proceedings being instituted against them.

"And now, gentlemen of this League, allow me to urge the necessity of having help from you. In this State we have no State police that the Governor can place at our service to aid us in enforcing the law. We are compelled to rely upon ourselves, and it is impossible for us unaided to prevent violations of the law in our 240 towns.

"In many parts of the State a sentiment is fast growing that we must enforce our laws if we wish to have either fish or game left, or remove the game laws from our statute book and give a man who is willing to observe, or who is afraid to violate them, an equal chance with those who snare our partridges, spear our fish on their spawning beds, and cut the throats of the deer on our mountains when deep snow renders escape impossible from the ruthless hand of the cruel hunter.

"I do not believe that the people of this State are willing to do the latter, and as long as our laws remain as they are, the Commissioners will use every means in their power to enforce them. And we ask not only the co-operation of the members of this League, which indirectly as well as directly in the years past, has done a good work in this matter, but of every sportsman and law-abiding citizen to take hold and help us."

Mr. E. A. Brackett, one of the Fish Commissioners of Massachusetts, gave a brief history of the movement which sprang up favoring the construction of fishways along the line of the Merrimack River, and of the early efforts of the Commissioners to secure salmon for the restocking of the river. The cost of securing salmon, which was $40 in gold, we have reduced to $2.50. In 1885, you may expect a large run of salmon up the Merrimack River, and an increasing run yearly afterward. Massachusetts, besides sustaining one-half of the expense of supporting the hatching-house at Plymouth, has paid out $500 yearly for salmon spawn. Last year, at the annual meeting of the League, I suggested that a committee be appointed to visit and examine the fishways along the line of the Merrimack River. We have a population on the lower part of the river who are determined to break down our laws for the protection of fish in this stream. I have no question that when people begin to understand the cultivation of carp that they will enter upon their encouragement. The speaker closed by making an appeal that the men residing on the lower Merrimack be given no encouragement in their efforts to do away with the laws regulating the catching of fish.

REPORT OF THE NEW JERSEY COMMISSION.

We have the report of the Fish Commission of New Jersey covering the operations of 1879 and 1883. For some time preceding the death of Commissioner Howell, he had in preparation an elaborate report upon the shad fisheries in the Delaware River, which branch of the State fishing interests was especially committed to his care, and to which he had consequently given more attention than any other member of the Commission. By reason of his death that report was never completed, and the presentation of a full report of the operations of the Commission was necessarily postponed to permit of the collection of the data requisite for the preparation of the report herewith presented, which, while it will aim to give a comprehensive view of the work of the Commission, will of necessity lack the completeness of detail and the full statistical information which would have characterized Dr. Howell's account of that branch of the work which was under his particular care.

The ordinary work of the Commission consists of a supervision of the wardens of the several counties, in the performance of their duties in enforcing the laws regulating and governing the times, seasons, and modes of taking fish; and through the judicious legislation of the past few years, supplemented by a vigorous enforcement of the laws, they have had the gratification of seeing immense benefit to our coast and river fisheries, in an annual increase in the catch of food fishes.

Much attention has been given to the enforcement of the law relative to close time, affecting the shad fisheries on the Delaware River below Trenton. These fisheries employ more capital, provide employment for more men, and furnish a greater amount of food fish, than the fisheries of any other section of the State, and although they are not usually in active operation for more than three months in the year, constitute an industry which is of immense importance to the citizens of the counties bordering upon the Delaware River. It has not been possible to procure perfectly accurate returns of the number of shad taken from the Delaware River each year, although the wardens of the several counties have made every effort to procure reliable information. Many of the fishermen being residents of the States of Pennsylvania and Delaware, but little can be learned of the catch made by them. In the report of the Commission for 1878, it is stated that, from the data available, it appeared that the whole number of marketable fish taken during the three months of the fishing season was about 7,000, and that the value of this product, at the prices realized, was $175,000. In each of the two succeeding years there was an increase of about 200,000 fish over the year before, and in 1881 the increase was so great that it is estimated that at least 1,400,000 fish were taken. In the opinion of the Commissioners, this great increase in the value of the important industry is due to the vigilant enforcement of the laws respecting close time, and to the effects of artificial propagation.

The operations of the present and former Commissioners, in connection with the attempts to stock the Delaware with salmon, were set forth with considerable detail in the last report. Efforts had been made by the United States Fish Commission, for some years previous to the appointment of the present New Jersey Commission, to stock the Delaware with this most valuable fish, and Prof. Spencer F. Baird, United States Fish Commissioner, was deeply impressed with the possibility of accomplishing this desirable result. During the four years included between 1879 and 1882, there were 1,121,200 salmon fry planted in the Delaware and its tributaries, part of which were California salmon and part were the Penobscot species. No attempt has been made to capture any adult salmon which may have returned to the river, and it was not expected that they would make their re-appearance until four or five years after they were placed in the stream. In the spring and summer of 1877, however, six or seven fish were taken in shad nets at different points on the river. They were medium-sized fish, averaging about ten pounds, but had evidently been to the sea and returned to the river to deposit their eggs. This was deemed highly encouraging, and the next season was looked forward to with much anxiety, by those who were interested in fishculture, and who appreciated the immense importance of the success of the efforts to establish this valuable fish in the rivers of the State. In 1882, the plantings were discontinued, notwithstanding the offers of the United States Commissioner to continue the annual shipments of impregnated ova. Prof. Baird, in correspondence with the State Commission, expressed himself in favor of a continuation of the work, and as strongly of the opinion that it would yet prove successful. It is now being carried on, the Commissioners believe, under his auspices, by the Fish Commissioners of Pennsylvania, but in view of the meagre results which had been attained, and the uncertainty as to the future, the Commissioners of New Jersey did not feel justified in continuing the annual expenditure involved in hatching and distributing the fish. The Commissioners say that it would be idle, or at least profitless, to speculate upon the causes which operate to render these efforts unsuccessful. The well known instinct which impels anadromous fishes to seek, at the spawning season, the head-waters of the streams in which they originated, was relied upon to bring an annual run of salmon into the rivers of the State, and many theories have been advanced in explanation of the failure of the habit in this case, but these theories are necessarily not capable of being reduced to a certainty. In the opinion of the Commissioners, the most probable explanation is, that in the late summer and early autumn, the waters of the Delaware are usually very low, and of a higher temperature than that of rivers to which the salmon is indigenous, and for this reason the fish have been deterred from ascending the stream, and have sought more congenial spawning grounds.

The efforts of the Commission to restore the partially depleted trout streams of the State have been continued, and have met with a cheering measure of success. There was planted in 1879, 169,800 brook trout; in 1880, 153,000; and in 1881, 93,500.

Since the date of the last report, they have distributed 23,420 black bass and 98,192 land-locked salmon.

Of smelt the report says: "Many attempts have been made to increase the production of the smelt fisheries by artificial propagation, and it has been found to be entirely practicable to procure impregnated ova and hatch the fish, but, on account of their infinitesimal size, it has proved difficult to confine and care for the fry until they are of a suitable age to be liberated in the stream. Mr. George Ricardo, fish warden of Bergen county, has probably more nearly succeeded in overcoming the difficulties in the way of smelt propagation than any other experimenter, and, by a device of his own, he has been able to add many millions of young fish to the supply in the Hackensack River. Mr. Ricardo is an enthusiastic fishculturist, and his ingenious efforts to restore the productiveness of the smelt fisheries, as well as his services in the artificial propagation of shad in the Hackensack River, are worthy of the highest praise. There is but little doubt that these efforts will result in a largely increased annual run of smelt in that river."

DEATH OF EDWARD M. SMITH.—A telegram to the Rochester papers, dated London, April 12, says: "Mr. Edward M. Smith, American Consul at Mannheim, died, of apoplexy, last evening." Mr. Smith was one of the Board of Fish Commissioners of New York for a number of years. At the time of his death he was on his way from Mannheim to Liverpool, from which place he was to sail for home on the 15th of this month. He was fifty-three years of age, and had held many positions of trust in Rochester, and for the past four years had resided abroad in connection with his duties as consul.

The Kennel.

FIXTURES.

BENCH SHOWS.

April 23.—The St. Louis Gun Club's Bench Show, St. Louis, Mo Entries close April 14. J. M. Munson, Secretary.

May 6, 7, 8 and 9.—The Westminster Kennel Club's Eighth Annual Bench Show, Madison Square Garden. Entries close April 21. Chas. Lincoln, Superintendent. R. C. Cornell, Secretary, 54 William street, New York.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1115.** Volume I., bound in cloth, sent postpaid, $1.50.

EASTERN FIELD TRIALS CLUB.

AT a meeting of the Board of Governors of the Eastern Field Trials Club, held at Delmonico's, on Tuesday evening, April 8, it was voted that the Members' Stake and the All-Aged Stakes close Oct. 1. The prizes and conditions for the Members' Stake are the same as last year, the judges will be selected from members of the club, if available, by the nominators the evening previous to the running. There will be two All-Aged Stakes this year, one for pointers and one for setters. The purse in each event will be $400, with $250 to first and $150 to second. Forfeit $10 with $15 additional to fill. Open to all pointers and setters which have not won first prize in any All-Aged Stake or any special pointer cup. There will also be a special champion sweepstake, to close after the finish of the All-Aged Stake, with $50 entrance and $200 added by the club, all to go to the winner. Open to all first prize winners in any All-Aged Stake, and to winners of any special pointer cup. Three dogs, the property of different owners, must enter to fill. The order of running will be as follows: The Members' Stake, the All-Aged pointer stakes, the All-Aged setter stakes, the champion sweepstake, closing with the Derby. In response to a request for instructions as to the distribution of the donation of the club to the schools at High Point, to which a member generously added $50, it was voted that Mayor Snow and Prof. W. A. Blair be requested to distribute the same as they may think best among the schools that are situated within 500 yards of the grounds used by the club at the trials. The revised running rules, as soon as printed, will be sent to applicants.

NEW YORK DOG SHOW.

Editor Forest and Stream:

Arrangements have been completed with all the express companies to return dogs free of charge, providing they have prepaid the usual rates to the show. Nearly all the railroad companies will carry dogs free when accompanied by their owners or care-takers. For dogs coming over the Erie Railroad their owners must apply for a pass for the same to Mr. Jno. Abbott, general passenger agent, Cortlandt street, N. Y.

It has been decided to leave the entries open for the sweepstakes prizes until 12 o'clock at noon on the first day of the show, but all entries for the regular classes close on the 21st inst. Following are additional special prizes: Silver cup, value $100, for best fox-terrier, dog or bitch, in the show. Silver cup, value $100, for best pair of bulldogs. $10 cash or silver medal for best collie dog, sired by champion Robin Adair or Tweed II. $10 cash or silver medal for best collie bitch, sired by champion Robin Adair or Tweed II. $25 cash for best-looking setter dog or bitch, placed in field trial in England or America, the Westminster Kennel Club to be allowed to compete. $25 cash for best-looking pointer dog or bitch, placed in field trial in America or England, the Westminster Kennel Club to be allowed to compete. Large framed photograph from Mr. J. M. Tracy's picture, "The Eastern Field Trials," for best pair of pointers. Large framed photograph from Mr. J. M. Tracy's picture of "Dog Talk," for best brace of English setters. Silver medal for best brace of Irish setter puppies of same litter. For best English setter dog or bitch, over twelve and under eighteen months old, a valuable solid silver flask, suitably engraved. $20 cash for the best trained setter or pointer, which has been trained by the methods laid down in "Training vs. Breaking."

Messrs. Sterling and Higgins, assisted by some one selected by them, will judge the pointer and English setter sweepstakes.

CHAS. LINCOLN, Sup't.

ENGLISH KENNEL NOTES.

TO begin where I left off, I have not seen my namesake quoted in the betting since I posted my last notes, but I don't despair of hearing, on Derby Day, Lillibulero in everybody's mouth, as it was in the year 1688, when all the King's army were singing "Lillibulero and Bullen-a-lah."

So the truth is out. We now know why the Rev. A. Carter gave £300 for the smooth St. Bernard bitch Leila. She has been transferred to the American purchaser of Rector, for whom the same figure was paid.

I could not understand an Englishman paying such a price for a bitch, as he stood no chance of ever seeing his money back. After all this very tall dog dealing, and chiefly on the part of Kennel Club men, I hope we shall hear no more silly sneers at a man for turning to a profitable account his judgment and experience, both of which he may have acquired dearly in cash and time.

The same thing is daily done by gentlemen with horses and cattle, then why should it be *infra dig.* to do a "deal" in dogs or birds when the opportunity occurs? Smooth-coated St. Bernards are not so valuable as rough, but Leila is by far the handsomest specimen of the type. She has, I think, won the Challenge Cup twice.

Alongside the prices that have been given for Rector and Leila, £250 was cheap for Leonard, and Mr. J. F. Smith has a bargain. I have heard that the great Thor once changed hands at £300. I should like to buy his equal at stud for the same price. From a show point of view, he was not a wonder, but his stock, Hector, Oscar, Avalanche, Abbess, and many other giants, proved where his value lay.

He was himself a mangy old brute and of very uncertain temper. His stud fees were a considerable source of income

o his successive owners—Murchison, Stiff, Mackillop, Montgomery, etc.—and it was probably due to the heartless use made of his services that his nature became soured.

He died in the possession of the father of the breed in this country, the Rev. Cumming Macdona, in whose grounds he obtained an honorable burial. But enough of St. Bernards, or my readers may mistake "Lillibulero" for the man who once had a name in the breed and was lately a reporter of the *Live Stock Journal*.

The entries have closed for the Warwick show, and I shall be on the lookout for any wonders that may make their first appearance there. I will give a full description of them in this column.

Last year the collies were in great force, and we may expect the champion class to be of unusual interest this time, as it is organized on the sweepstake principle. The meeting of several champions is always interesting. Collie men are speculating upon the chances of Eclipse turning up to win the spurs. He has sulked since Edinburgh, they say. I saw in the office this morning the *American Kennel Register*, with a picture of this dog on the title page. Writing from memory, the dog struck me as being more lithesome than the picture conveys, besides which, it is difficult to recognize a sable dog in an engraving.

Speaking of doggy pictures, that is a splendid page of the basset hound hunt in the London *Sporting and Dramatic News* last week. The peculiar incidents arising in this diminutive form of sport are comically portrayed by the artist, a Mr. Dadd, whose whimsical expressions of dog life have afforded amusement on several other occasions. I miss any mention of Mr. Krehl, whose name is so closely connected with these odd little hounds.

I see the New York schedule gives them a class, from which I suppose some of them have already found their way across the Atlantic. I generally see a few of them in the foreign classes at our large shows, and I read in the *Kennel Gazette* that Mr. Krehl lately sold one named Fino V. for £140, a big price for a small dog of a new breed.

They have been termed the dachshund's rivals, but their introduction does not seem to have affected the position of the Fatherland's pets. The Dachshund Club deserves great credit for this. There is no more energetic or orderly conducted specialist club than that which jealously guards the rights of these animated yard measures.

There are few breeds now that are not protected by a club. The last that has honored itself in this way is the black and tan terrier. It owes its birth to the perpetual activity of Mr. James Berril, the well-known judge of bulldogs and toys. He wrote a letter to the papers, an enthusiastic meeting was held in a public parlor, a sanctum dear to old members of the "Fancy," and the thing was done.

The Black and Tan Terrier Club, by passing an emphatic resolution forbidding the continuance of the cropping, has already won the approval of dog lovers who cherish and admire their pets for themselves, and not solely as means to gratify their owner's vanity by winning pots and medals.

Now, then, ye bull-terrier, Irish terrier, Great Dane men, will you rest content to be distanced in the policy of humanity? Putting aside the cruelty of the practice, do not its supporters tacitly admit their incompetence to breed good ears when all alike are sliced off by the operator's knife? And when cropping goes let docking follow.

Even the free lance of the kennel press must join in the praise of this specialist club's action. Mr. Hugh Dalziel, to whom I allude, has lately led a crusade against specialist clubs in the columns of your English contemporaries.

I don't believe the charge of cliquism he has brought against them. I have met most of their honorary officials who very generously devote their time and abilities to disseminating knowledge and appreciation of their hobby breeds. I am convinced of their disinterested motives and of their just claim to the thanks of breeders, their only reward.

It is also idle affectation to ignore the beneficial influence of a club—it gives a breed a spurt and position. It brings factions together, smooths out petty differences and unifies the type. So far from misinterpretating the influence of the specialist clubs, I think they are themselves unconscious of their own power.

It may rest an unrealized dream, but I am strongly impressed with the notion that if a union of the specialist clubs could be accomplished the result would be an association that would wield power and influence in dog affairs and be in sympathy with the ruled. It is a wish natural to all free spirits to have a voice in the election of those who are to govern and direct their acts. This is a Spanish castle for which even the bricks are not yet moulded. Meanwhile we have the Kennel Club, which satisfies those who are satisfied with "whatever is, is right."

How wonderful are the subtleties of legal phraseology! Here is a specimen that appeared in the police news last week. It was headed "Cruelty by a Baronet." Why throw the man's title in his teeth? It is not kind to reproach him with the accident of his birth. The unfortunate gentleman was charged "that he did beat, ill-treat, abuse and torture, and did cause to be ill-treated, abused and tortured, a certain animal, to wit, a dog." There is almost as much comfort in the description as in that "blessed word Mesopotamia."

We have been awfully amused with Mrs. Weldon's cross-examination of Dr. Forbes Winslow, the mad-doctor and mastiff breeder, owner of Crown Prince. It seems our fellow fancier had been trying to get the lady into his asylum, but I think after the terrific "powdering" she gave him in the witness box, the doctor was the more "mad" of the two.

I drink to your New York show. May it be a great success! I don't know what you do about puppy classes, but let me utter a word of warning to intending exhibitors of dogs under a year old. Let them strew well the bench and straw with a dry disinfectant—I prefer Sanitas powder, because it does not incommode the dog—and shake the same all round. This may keep the immediate atmosphere pure; if it should not, then it is two to one that your pup brings home distemper. An additional precaution is to wash the dog with a strong disinfecting soap on its return from the show, and before putting it back in the kennel with its mates that stayed at home.

I don't hear of any bloodhounds going to America. They are all noble brutes, but I believe not easy to keep. I know the trouble. Grantley Berkeley used to say "he would show his hounds the whip, but never struck them." And I have heard of more than one awkward case of these dogs turning round on their own masters.

There are only a few kennels of them in this country. The most successful is Mr. Edwin Nicholls, who can becomingly boast of having bred two of the grandest dogs of the day, Napier and Triumph.

Napier was the hero of the great doggy libel case. The reporter of the *Field* insinuated that the dog's eyes had been faked to show more of the haw. Napier's head was a study; so narrow, and the loose thin skin folded in heavy wrinkles over his forehead, his ears set on very low were thin and papery and hung quite lifeless in beautiful curves. He has gone over to the majority.

In the living pup Triumph Mr. Nicholls has a worthy successor. He is what has been termed a "fancier's fancy," all the points of beauty are exaggerated. I heard that the St. Hubert Club were going to subscribe among themselves his reserve figure, £500. I am told he has been painted by Verlat. The picture should be engraved; there are many admirers of this wonderful pup, who would like to have a copy of the engraving.

The mastiff men are slinging ink at one another, but more of them another time. I note that one of the correspondents mentions the big price, £500, paid for Turk. Mr. Nicholls was the lucky vender. This was a long time ago; the dog is dead and the man who bought him, let us hope, has grown wiser. It was Mr. Frank Robinson, who then had more money than discretion.

LILLIBULERO.

A PIOUS POINTER.

A BEAUTIFUL pointer named Sandie, owned by a lady in Avon, N. Y., has often displayed a degree of intelligence almost human, and his latest achievement deserves particular mention. A few Sundays ago the dog's mistress did not go to church as usual, and soon he began to show signs of unhappiness, and finally begged to be let out of doors. As soon as he gained his liberty, however, he ran off, staying so long that his mistress became alarmed for his safety. At last he returned in company with a lady of whom before he had never taken the least notice, and she related the following story: She said that when about half way to the church, which was within walking distance, the dog came bounding past her and ran on ahead, but all the time keeping her in view. At last he ran up to the church steps and there waited her arrival; when she came he followed her into the church and got up on the seat beside her, where he lay, putting his head in her lap. During the services Sandie paid strict attention to everything that was said and done, getting up every time the congregation rose, and sitting down again when they did, all the time as grave and decorous as possible. When, finally, the plate was passed, he put his nose wistfully into it and seemed to say, "I am so sorry that I have no money for you." At the close of the service, Sandie followed his friend home, and seemed to look with reproach upon his mistress, who had, he probably thought, neglected her duty.

A. R. CUSHMAN.

NEW YORK, March 29, 1884.

NON-SPORTING DOG SHOW.—*Editor Forest and Stream:* Kindly announce in your columns that in response to the invitation to non-sporting dog owners in your issue of the 2d inst., that over 125 entries have been promised by well-known breeders and kennels, and that letters volunteering support, both pecuniary and otherwise, have been received by the score. Everything seems to give evidence of hearty approval and an assurance of success far beyond expectation. A guarantee fund is rapidly being subscribed. A question of much difficulty has arisen in exactly defining what breeds of dogs come under the head of non-sporting dogs. A list will be shortly prepared and announced. Probably the excluded classes will only consist of dogs shot over with a gun.—THE CLOVERNOOK KENNEL (185 Fifth avenue, N. Y.).

BEAGLES AT THE NEW YORK SHOW.—The American English Beagle Club will offer several special prizes for the beagles exhibited at the show of the Westminster Kennel Club, to be held at Madison Square Garden next month. These little hounds are fast winning their way in the public favor, and we shall expect to see the classes well filled. At least one representative from the kennel of every member of the club should be present. The standard of the Association, which will be used in judging, was published in our columns last week. Although a few typographical errors crept in, owing to the incorrectness of the proof sent us, they will be readily interpreted.

THE CLEVELAND DOG SHOW.—There were two or three slight errors in our report of the Cleveland dog show. In the open class for small pointers. Mr. R. C. Cornell's Match was awarded vhc., and our comment upon the supposed omission was therefore both right and wrong. In the corresponding bitch class the types made us say that "Dora, unnoticed, deserved the three letters." It should have been Dove. We also omitted the award of the sewing machine special prize for the best brace of cocker spaniels, won by the Hornell Spaniel Club's Hornell Silk and Hornell Rattler.

PHILADELPHIA DOG SHOW.—The many dog shows held in the United States during the present spring season will be followed in the latter part of September by a very extensive display of the same kind by the Philadelphia Kennel Club in their city. This organization has also secured grounds for holding a field trial for members' dogs in November, and the meetings of the club show a determination not to be behind sister cities in trials of merit in the field and displays on the bench.

CORRECTION.—Flatbush, April 7.—*Editor Forest and Stream:* I would like to correct the pedigree and date of birth of Lit Laverack. In your paper of March 27, I gave it whelped Dec. 28, 1883, by Tempest (Pontiac ex Fairy II.) out of Lilly (Carlowitz ex Queen Bess). It should be whelped Nov. 28, 1883, by Tempest (Pontiac ex Fairy II.) out of Lilly (Carlowitz ex Princess Nellie).—THOS. F. CONNELLY.

MASTIFF IMPORTATION.—Mr. Wm. Graham, Newtownbreda, Belfast, Ireland, has shipped to Messrs. Shaw & Bates, Clinton, Mass., the mastiff bitch Hilda V., by Mr. Wynn's Young King out of Hilda IV. She won first at Birmingham in 1882, and second in 1883, and will doubtless prove a valuable acquisition to their kennel.

SALE OF MINSTREL.—*Editor Forest and Stream:* I have sold my imported black, white and tan, 13½ inches high, English beagle stud dog Minstrel, to Mr. A. C. Krueger, of Wrightsville, Pa., and would refer those who have written to me for information regarding the dog to Mr. Krueger.—W. H. ASHBURNER (Philadelphia, Pa.).

PRIDE OF CANADA.—*Editor Forest and Stream:* The Gordon setter dog Pride of Canada, winner of first at Toronto, is owned by me instead of Mr. H. F. Curtis, who had charge of him, and in whose name he was entered. By making the correction you will greatly oblige, CHAS. HUGES (Montreal, Can., April 7).

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, or breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Drake Carter. By Mr J. J. Scanlan, Fall River, Mass., for black and white English setter dog, whelped May 1, 1883, by his Cashier (Dash III.—Opal) out of his Flake (Druid—Swaze).

Cliney Carter. By Mr. J. J. Scanlan, Fall River, Mass., for blue belton English setter bitch, whelped May 1, 1883, by his Cashier (Dash III.—Opal) out of his Flake (Druid—Swaze).

Game. By Mr. Edward W. Beardsley, Hartford, Ct., for lemon and white pointer dog, whelped Sept. 14, 1883, by Guy (Snapshot—Fanny II.) out of Mr. A. Collins's Grace (Sensation—Juno).

Mink. By Mr. H. C. Bronsdon, Boston, Mass., for black spaniel bitch, whelped Oct. 27, 1883 (Diamond—Dell).

Prince of Orange. By Mr. Robt. C. Cornell, New York, for orange and white pointer dog, whelped Sept. 11, 1883, by champion Sensation (A.K.R. 217) out of Seltner's Lass (Sleaford—Dawn).

Bang Up. By Mr. Robt. C. Cornell, New York, for liver and white pointer dog, whelped Jan. 9, by Bang Bang (A.K.R. 394) out of Mr. J. O. Donner's imported Fan.

Blue Solitaire. By Mr. E. W. Jester, St. George's, Del., for blue belton English setter dog, whelped Dec. 6, 1883, by Don Juan (Tam o' Shanter—La Reine) out of Ruth (Dashing Lion—Arnida).

Watts, Jr. By Mr. Geo. T. Wells, Boston, Mass., for red Irish setter dog, whelped July 20, 1883, by Watts (Berkley—Rose) out of his Romaine (A.K.R. 638).

Lottie. By Mr. Wm. Loeffler, Preston, Minn., for chestnut and tan dachshund bitch, whelped Jan. 5 (imported Bergmann—Gretchen).

Diana, Laura and Jolly. By Mr. Wm. Loeffler, Preston, Minn., for two black and tan and one chestnut and tan dachshund bitches, whelped Dec. 25, 1883, by his Waldmann II. (Faust—Flora) out of his Babette (Buck—Waldena).

Curt and Dick. By Mr. Wm. Loeffler, Preston, Minn., for chestnut and tan dachshund dogs, whelped Dec. 25, 1883, (Waldmann II.—Babette).

Mink, Emma and Elly. By Mr. Wm. Loeffler, Preston, Minn., for fallow red dachshunde, one dog and two bitches, whelped Jan. 5, by his imported Bergmann out of his Gretchen (Unser Fritz—Waldine).

Shannon. By Mr. E. C. Alden, Dedham, Mass., for red Irish setter dog, whelped April 15, 1882, by Elcho III. (Elcho—Rose) out of Meg (Berkley—Tilly).

Joe, Nellie, Kittie, Ruffle and Black Pearl. By Major Lovejoy, Bethel, Me., for greyhounds, one steel gray dog, three steel gray bitches and one black bitch, whelped March 25, by champion Friday Night (A.K.R. 753) out of Queen Bess (A.K.R. 905).

Pride of Glencho and Lady Glencho. By Mr. John J. Scanlan, Fall River, Mass., for red Irish setters, dog and bitch, whelped Oct. 15, 1883, by champion Glencho (Elcho—Noreen) out of Lulu II. (Berkley—Lulu).

Ted. By Mr. H. N. Clark, Burlington, Vt., for red Irish setter dog, whelped Feb. 25, 1884, by Watts (Berkley—Rose) out of Skip (Max—Fannie).

Floe. By Mr. A. C. Krueger, Wrightsville, Pa., for white, black and tan beagle bitch, whelped Oct. 11, 1883, by Racer (Rally—Lill) out of Maud (Lee—Old Maud).

Van F. By Mr. F. D. Brown, Mt. Morris, N. Y., for black and white ticked English setter dog, whelped Feb. 18, 1884, by Dashing Berwyn (Dash II.—Countess Bear) out of Vanity Fair (Guy Mannering—Whirlwind).

Herzog, Hugo, Humboldt, Hilgarde and Heidel. By the Chequasset Kennel, Lancaster, Mass., for orange tawny and white markings rough-coated St. Bernards, three dogs and two bitches, whelped March 16, by imported Cæsar (A.K.R. 22) out of Nun (A.K.R. 24).

Isar, Idslein, Ion, Ivry and Iris. By the Chequasset Kennel, Lancaster, Mass., for orange tawny and white rough-coated St. Bernards, four dogs and one bitch, whelped March 19, by imported Cæsar (A.K.R. 22) out of Brunhild (A.K.R. 28).

Julien, Joyeux, Joris and Jason. By the Chequasset Kennel, Lancaster, Mass., for orange tawny and white rough-coated St. Bernard dogs, whelped March 22, by imported Cæsar (A.K.R. 22) out of Theone (A.K.R. 94).

NAMES CHANGED.

☞ *See instructions at head of this column.*

Dell to Leader. White, black and tan beagle dog, whelped June 6, 1882 (Flute—Queen), owned by Mr. W. E. Livingston, New York.

Wallace to Grouse. Red Irish setter dog (A.K.R. 993), owned by Mr. Chas. E. Sanford, Worcester, Mass.

BRED.

☞ *See instructions at head of this column.*

Flake—Cashier. Mr. J. J. Scanlan's (Fall River, Mass.) English setter bitch Flake (Druid—Swaze) to his Cashier (Dash III.—Opal), April 6.

Lucille—Don Nilsson. Mr. Samuel H. Socwell's (Indianapolis, Ind.) English setter bitch Lucille (Lofty—Fannie Kean) to his Don Nilsson (Druid—Nilsson), Feb. 14.

Nellie—Don Nilsson. Mr. Jos. Becker's (Indianapolis, Ind.) English setter bitch Nellie (Rake—Queen Blanche) to Mr. S. H. Socwell's Don Nilsson (Druid—Nilsson), Feb. 18.

Lady May—Count Noble. Mr. H. Pape's (Hoboken, N. J.) English setter bitch Lady May (Lofty—Maud Muller) to Count Noble (Count Windsen—Nora), March 14.

Nellie—Glen II. Mr. J. Crompton's Gordon setter bitch Nellie to Mr. G. E. Browne's Glen II. (A.K.R. 604), April 4.

Dashing Jessie—Zanzibar. Mr. E. W. Jester's (St. George's, Del.) English setter bitch Dashing Jessie (A.K.R. 815) to his Zanzibar (Gladstone—Mersey), March 28.

Brenda—Cossack. Capt. J. W. Foster's (Leesburg, Va.) English setter bitch Brenda (Pride of the Border—Kirby) to Dr. M. G. Elzey's Cossack (Morford's Don—Fairy II.).

Birdie—Sam. Mr. J. W. Stairley's (Butte City, M. T.) white and liver English setter bitch Birdie to Mr. S. Larabie's Sam, Jan. 16.

Frost—Dashing Rover. Dr. W. A. Strother's (Lynchburg, Va.) English setter bitch Frost (Leicester—Victress) to Dashing Rover (Dash II.—Norna).

Leah—Dashing Rover. Dr. W. A. Strother's (Lynchburg, Va.) English setter bitch Leah (Gladstone—Frost) to Dashing Rover (Dash II.—Norna).

Gipsey—Nimrod. Mr. W. N. Steere's (North Attleboro, Mass.) red Irish setter bitch Gipsey (Goldstone—Coffee) to the Ashmont Kennel's champion Nimrod (A.K.R. 631), April 4.

Maud S.—Peter Black. Mr. Herbert Symond's (Brooklyn, N. Y.) black and white pointer bitch Maud S. to Mr. D. W. C. Parker's Peter Black, April 2.

Kesmid—Don. Mr. Wm. Loeffler's (Preston, Minn.) red Irish setter bitch Kesmid to Mr. Morgan's Don, April 23.

Fanchette—Pete, Jr. Mr. C. A. Holmes's (Somerville, Mass.) pointer bitch Fanchette to Mr. E. C. Alden's champion Pete, Jr. (Pete—Nellie), March 22.

Liddersdale—Dick Laverack. Mr. T. G. Davey's (London, Ont.) English setter bitch Liddersdale (A.K.R. 502) to his Dick Laverack Thunder—Peeress), April 3.

Canadian Queen—Prince Phœbus. Mr. T. G. Davey's (London, Ont.) English setter bitch Canadian Queen (Lava Rock—Liddersdale) to his Prince Phœbus (A.K.R. 597), April 4.

Canadian Kittie—Prince Phœbus. Mr. T. G. Davey's (London, Ont.) English setter bitch Canadian Kittie (Lava Rock—Liddersdale) to his Prince Phœbus (A.K.R. 597), April 4.

Rena—Foreman. Mr. A. C. Krueger's (Wrightsville, Pa.) beagle bitch Rena (Ringwood—Spider) to Mr. W. H. Ashburner's imported Foreman (Bravo—Honesty), April 1.

Tiny—Minstrel. Mr. A. C. Krueger's (Wrightsville, Pa.) beagle bitch Tiny (Racer—Buhah) to his imported Minstrel, April 14.

Countess Rose—Don Nilsson. Mr. Wm. Keffer's (Liberty, Ind.) English setter bitch Countess Rose (Royal Blue—Modjeska) to Mr. S. H. Socwell's Don Nilsson (Druid—Nilsson), April 10.

Girl—Glenmark. The Knickerbocker Kennel Club's (Jersey City, N. J.) pointer bitch Girl (A.K.R. 697) to Mr. W. F. Steel's Glenmark (Rush—Romp), April 10.

Bessie—Glenmark. Mr. Wm. Taylor's (Jersey City, N. J.) pointer bitch Bessie to Mr. W. F. Steel's Glenmark (Rush—Romp).

WHELPS.

☞ *See instructions at head of this column.*

Ruby Croxteth. Mr. R. W. Shaw's (Galveston, Tex.) pointer bitch Ruby Croxteth (Croxteth—Lass), March 5, ten (five dogs), by champion Faust.

Lady Bang. The Knickerbocker Kennel Club's (Jersey City, N. J.) pointer bitch Lady Bang (A.K.R. 698), April 10, nine (six dogs), by their champion Knickerbocker (A.K.R. 19).

Cleo. Mr. John Carver's (Atlantic, Mass.) red Irish setter bitch Cleo (Elcho—Flourish), April 9, six (four dogs), by Dr. J. Frank Perry's champion Nimrod (A.K.R. 631).

Fanny Faust. Mr. S. B. Dilley's (Bosendale, Wis.) pointer bitch Fanny Faust (Faust—Minnetonka), April 3, seven (four dogs), by his Ranger Croxteth (Croxteth—Royal Fan).

Dinah II. Mr. W. Wade's (Pittsburgh, Pa.) mastiff bitch Dinah II. (A.K.R. 13), April 10, seven (four dogs), by Master Wade (A.K.R. 167).

Juno. Mr. George Langran's (Yonkers, N. Y.) red Irish setter bitch Juno (Berkley—Tilley), April 6, six (three dogs), by champion Glencho.

Birdie. Mr. J. W. Stairley's (Butte City, M. T.) English setter bitch Birdie, March 20, six (five dogs), by Mr. S. E. Larabie's Sam.

Queen Bess. Major Lovejoy's (Bethel, Me.) greyhound bitch Queen Bess (A.K.R. 905), March 25, seven (one dog), by Mr. H. W. Smith's champion Friday Night (A.K.R. 753).

Fly. Mr. J. Satterthwaite, Jr.'s (Jenkintown, Pa.) beagle bitch Fly (A.K.R. 1012), Jan. 17, four (two dogs), by Racket (Rally—Louise).

Black Venus. Mr. A. C. Wilmerding's (New York) spaniel bitch Black Venus (A.K.R. 300), March 16, eight (seven dogs), by his Black Prince (A.K.R. 62); dam and puppies since dead.

Phroney Jane. Mr. J. Satterthwaite, Jr.'s (Jenkintown, Pa.) red Irish setter bitch Phroney Jane (A.K.R. 634), Jan. 12, two bitches, by Rory O'More, Jr. (A.K.R. 427).

Vic. Mr. Archibald Gordon's spaniel bitch Vic (Bragg—Princess), March 6, eight (two dogs), by Mr. A. E. Godeffroy's Teddy Barr (Captain—Flirt).

Lady Bub. Mr. Herman F. Schellhass's (Brooklyn, N. Y.) black cocker spaniel bitch Lady Bub (A.K.R. 908), April 9, ten (four dogs), by his Benedict's Boy (A.K.R. 130); one liver and two black bitches living.

SALES.

☞ *See instructions at head of this column.*

Crisp. Irish water spaniel dog, whelped Jan. 11, 1884 (Irish Bob—Irish Bess), by Major Lovejoy, Bethel, Me., to Mr. W. A. Curtis, same place.

Prince of Orange. Orange and white pointer dog, whelped Sept. 11, 1883 (Sensation—Lass), by Mr. B. F. Seltner, Dayton, O., to Mr. Robt. C. Cornell, New York.

Minstrel. Imported black, white and tan English beagle, 2yrs. old, by Mr. W. H. Ashburner, Philadelphia, Pa., to Mr. A. C. Krueger, Wrightsville, Pa.

Rex. Fawn mastiff dog, whelped Jan. 26, 1884, by Diavolo (A.K.R.

543) out of Madge (A.K.R. 548), by the Ashmont Kennel, Boston, Mass., to Dr. Wm. Jarvis, Claremont, N. H.

Vesta. Fawn mastiff bitch, whelped Jan. 26, 1884, by Diavolo (A.K.R. 543) out of Madge (A.K.R. 548), by the Ashmont Kennel, Boston, Mass., to Mr. Walter D. Peck, New Haven, Ct.

Icicle. Lemon and white pointer dog (A.K.R. 82), by Mr. Geo. W. Fisher, Luzerne, Pa., to Mr. R. T. Vandevort, Pittsburgh, Pa.

Carl. Chestnut and tan dachshund dog, whelped Dec. 25, 1883 (Waldmann II.—Babette), by Mr. Wm. Loeffler, Preston, Minn., to Mr. Geo. R. Peek, Auburn, N. Y.

Lottie. Chestnut and tan dachshund bitch, whelped Jan. 5, 1884 (Bergmann—Gretchen), by Mr. Wm. Loeffler, Preston, Minn., to Mr. Geo. R. Peck, Auburn, N. Y.

Emma. Fallow red dachshund bitch, whelped Jan. 5, 1884 (Bergmann—Gretchen), by Mr. Wm. Loeffler, Preston, Minn., to Mr. C. Klocke, Pittsburgh, Pa.

Elly. Fallow red dachshund bitch, whelped Jan. 5, 1884 (Bergmann—Gretchen), by Mr. Wm. Loeffler, Preston, Minn., to Mr. A. C. Williams, Chagrin Falls, O.

Pete, Jr.—Fan whelp. Black pointer dog, whelped Jan. 19, 1884, by Mr. E. C. Alden, Dedham, Mass., to Mr. R. Jones, Boston, Mass.

Not Named. Black pointer bitch, 3½yrs. old (Pete, Jr.—Kate), by Mr. E. C. Alden, Dedham, Mass., to Dr. H. F. Aten, Brooklyn, N.Y.

Gnome—Maud S. whelp. Black and white pointer dog, whelped Jan. 26, 1883, by Mr. E. C. Alden, Dedham, Mass., to Mr. J. Philbrick, Roxbury, Mass.

Pete, Jr.—Fan whelp. Liver pointer bitch, whelped June 23, 1883, by Mr. E. C. Alden, Dedham, Mass., to Mr. C. A. Holmes, Somerville, Mass.

Hannah. Red Irish setter bitch, whelped Sept. 16, 1882, by Ned Elcho (A.K.R. 984) out of Bridget O'More (A.K.R. 964), by Major Lovejoy, Bethel, Me., to Mr. J. D. Culver, New London, Ct.

Juke. Red Irish setter dog, whelped March 14, 1884 (Ned Elcho—Bridget O'More), by Major Lovejoy, Bethel, Me., to Mr. Fred. Brown, Lewiston, Me.

Glencho—Lulu whelps. Red Irish setters, whelped Oct. 15, 1883, by Mr. John J. Scanlan, Fall River, Mass., a dog to Mr. H. P. Kent, Lancaster, N. H.; a dog to Mr. Frank S. Kelly, New Bedford, Mass.; a dog to Mr. Wm. Brownell, Fall River, Mass.; a bitch to Mr. R. M. Hutchings, Keene, N. H., and a bitch to Mr. I. R. Hope, Swansey, Mass.

Somerset. Liver and white pointer dog, whelped June 29, 1883, by champion Snipe out of Rita Croxteth (A.K.R. 168), by Mr. Geo. L. V. Tyler, West Newton, Mass., to Mr. Geo. S. Tucker, Peterboro, N. H.

Belle of Essex. Black, white and tan setter bitch, age not given (Brant—Iowa Belle), by Mr. J. S. Brown, Montclair, N. J., to Mr. T. W. Lillcocks, Brooklyn, N. Y.

Clem. Pointer dog, whelped Feb. 22, 1884 (Lord Sefton—Clio), by Mr. J. S. Brown, Montclair, N. J., to Mr. J. D. Freeman, same place.

Temptation. Black and white ticked pointer bitch, whelped June 24, 1882, by Don (Strong's Pete—Queen) out of Maud S. (Pete, Jr.—Kate), by Mr. Geo. L. V. Tyler, West Newton, Mass., to Mr. H. C. Miller, Hudson, N. Y.

Leader. White, black and tan beagle dog, whelped June 6, 1882 (Flute—Queen), by Mr. Geo. B. Inches, Boston, Mass., to Mr. W. E. Livingston, New York.

Peas. Fawn greyhound bitch, whelped Aug. 5, 1883 (Charcoal—Bess, A.K.R. 905), by Major Lovejoy, Bethel, Me., to Mr. Walter D. Peck, New Haven, Ct.

Curlew. Black and white English setter bitch, whelped Sept. 8, 1883 (Robin Hood—Leah), by Dr. J. R. Housel, Watsontown, Pa., to Mr. W. T. Hutchings, Danville, Va.

Spark. Lemon and white English setter dog, whelped Jan. 18, 1884 (Robin Hood—Countess H., A.K.R. 1056), by Dr. J. R. Housel, Watsontown, Pa., to Mr. W. T. Hutchings, Danville, Va.

Will. Black and white English setter dog, whelped Jan. 18, 1884 (Robin Hood—Countess H., A.K.R. 1056), by Dr. J. R. Housel, Watsontown, Pa., to Mr. Raymond Rudd, Glenville, Ct.

Robin Hood—Countess H. whelps. Two lemon and white English setter dogs, whelped Jan. 18, 1884, by Dr. J. R. Housel, Watsontown, Pa., to Mr. Henry May, Augusta, Ga.

Robin Hood, Jr. Black and white English setter dog, whelped Jan. 18, 1884 (Robin Hood—Countess H.), by Dr. J. R. Housel, Watsontown, Pa., to Mr. M. C. Wilson, Bradford, Pa.

PRESENTATIONS.

☞ *See instructions at head of this column.*

Bang Up. Liver and white pointer dog, whelped Jan. 9, 1884, by Bang Bang (A.K.R. 394) out of imported Fan, by Mr. J. O. Donner, New York, to Mr. Robt. C. Cornell, same place.

DEATHS.

☞ *See instructions at head of this column.*

Yorick. Red Irish setter dog (A.K.R. 725), owned by Mr. M. Richardson, New York, April 9, from distemper.

Lady Nixon. Liver and white pointer bitch (A.K.R. 699), owned by Dr. A. McCollom, New York, April 14, from distemper.

Rally II. Black, white and tan mottled beagle dog, whelped June 14, 1879 (Rally—Dolly), owned by Mr. F. D. Hallett, Winsted, Ct., from distemper.

Wanda. Red Irish setter bitch, 8mos. old, winner of first, New Haven, 1884 (Dan—May), owned by the Strong Point Kennel, New Haven, Ct., from distemper.

KENNEL MANAGEMENT.

☞ **No Notice Taken of Anonymous Correspondents.**

R. M. H., New York.—Show your dog to Mr. H. C. Glover, No. 1,293 Broadway.

J. L. K., Wilkesbarre, Pa.—Give him a teaspoonful of cod liver oil an hour after each meal.

D. B. G., Melbourne, Fla.—We do not remember to have seen the letter you mention. Write description of symptoms.

W. R. H., Albany, N. Y.—Give her a tablespoonful of cod liver oil twice daily, and give with each meal a little lime water.

A. M. C., Denver, Col.—1. When about six months old. 2. Read article on "Lice on Dogs," in FOREST AND STREAM of Feb. 28.

T. E. D., Hollidaysburg, Pa.—The fits may be caused by overfeeding, constipation, worms, indigestion, or exercise when his stomach is full. Remove the cause and the trouble will disappear.

H. L. H., Monson, Me.—"Training vs. Breaking" is the book you want. We have it for sale; price $1. If your puppy's first teeth are loose and cause trouble, remove them.

Rifle and Trap Shooting.

FIXTURES.

May 6 and 7.—Fourth Tournament Southern Illinois Sportsmen's Association, Carboudale, Ill. C. P. Richards, Secretary.

May 20 to 23.—Knoxville Gun Club Second Annual Tournament, Knoxville, Tenn. C. C. Hebbard, Secretary.

May 26 to 31.—First International Clay-Pigeon Tournament, at Chicago, Ill. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

June 2 to 9.—Annual Tournament Louisville Sportsmen's Association, Louisville, Ky. J. O. Barbour, Secretary, 157 Third avenue, Louisville.

RANGE AND GALLERY.

BOSTON SCHUETZEN TOURNAMENT.—The East Boston Schuetzen Corps have arranged for an interstate shooting festival, commencing Monday, August 11, 1884, at 10 o'clock A. M., and continuing each day following, closing at sunset on Friday, Saturday, the 16th, being devoted to the award of prizes and a grand ball and banquet. For the purposes of this festival, the corps have secured the entire grounds of Oak Island Grove, where its shooting range is situated. A target of honor has been decided upon, the first prize being $100 in money and a gold badge, the winner to be crowned "shooting king" for 1884. Other valuable prizes will be given in connection with the target of honor, contributed by sister societies. The target of honor will be a ring target, entry to be $2 only, one score of five shots per man, any rifle. All shooting to be off-hand. No telescope or magnifying sights allowed.

Other matches will take place as follows: Creedmoor Match.—National Rifle Association rules. Seven shots to a score; any rifle allowed of three-pound pull. Entry, $1; re-entry, 50 cents. Sixty per cent. of the gross entries for this match to be divided into twelve prizes. Team Match.—Open to all organized clubs in the country. Five men to a team. Entry fee, $10 per team; five shots per man allowed. German ring target. Five money prizes to the value of $170, and each member of the winning team a gold badge, to be known as the "champion team of the year 1884." The other targets will be: "Man."—Three shots to a score, any rifle. Shooting rules. First entry, $2; re-entry, $1. 18 money prizes to the value of $259. "Ring."—Same as above, 17 prizes, value $430. Bullseye.—Ten shots to a score. First entry, $1; re-entry the same. 12 prizes to the value of $130. One dollar will be paid for the first and last bullseye each day. Full particulars may be obtained by addressing, S. WOLFFSOHN, 47 Court street, Boston Mass.

BOSTON, April 5.—The prize shooting for month of March closed last Monday night at the Mammoth Rifle Gallery, Mr. M. L. Pratt winning the first prize, silver badge; A. B. Loring the second; H. M. Drew the third, in new beginners' match. This month there will be five prizes offered, open to all that have never shot better than 48 on any range. Conditions—10 rounds, the best five scores to win in each class or possible 250; range, 150ft. Following are scores made in closing match of March:

Amateur's Match No. 1.

M L Pratt	46	46	47	47	48—234
A B Loring	47	47	46	46	87—232
R Ford	46	46	46	46	46—230
R W Gardner	45	45	45	47	46—228
J T Stetson	43	45	43	43	45—219

Amateur's Match No. 3—Beginners.

H M Drew	43	43	43	42	44—215
E A Peirce	41	44	41	43	43—212
W Gray	42	41	42	42	40—207
E Metcalf	39	43	41	42	40—205
E F Stevens	39	40	40	41	42—202

April 12.—The Mammoth Gallery prizes offered for this month for amateurs: Gold and silver badge, 3 cash prizes, $5, 3 and 2, to be shot for in first class, open to all who have never shot better than 48 on any range. Bronze badge offered for new beginners. Rounds 10, the best five scores to win in each class, or possible 250. Creedmoor targets. Following are the scores:

Match No. 1.

A B Loring	46	45	45	45	46—227
B W Gardner	45	55	44	43	42—220
J H Bird	44	42	43	43	43—215
J A Hills	43	43	42	41	42—211
S Lyman	41	41	43	43	42—209
C H Hamilton	41	42	43	41	40—207

New Beginner's Match.

S A Lynch	42	39	40	40	40—201
C L Foster	38	39	40	40	41—198

BOSTON, April 12.—A nicer day than to-day would be harder to find at this season of the year. As a result there were a large number of riflemen at Walnut Hill. The wind was moderate from 11 o'clock, and the light was fine. Among the gentlemen present was a large delegation from the Harvard Shooting Club, and besides practice they indulged in a team match. J. B. Fellows made a fine 82 in the victory medal match, and Mr. Wilder made an 89 with his new Kirkwood three-barrelled gun, which includes a strictly hunting gun, a double-barrelled shotgun with a rifle barrel under the others, the whole weighing but 8¼ pounds. Following are the best scores:

Creedmoor Practice Match—J. A. Frye 46, H. C. Nash 45, re entry 45, A. L. Brackett 45, C. A. Hunt 44, W. L. Allen 43, M. R. Jafry 43, A. Faulkner 41, F. Chauncey (mil.) 40, J. D. Bradley 39, J. H. Payne 38, W. Kirkwood 38, H. N. Grover 37, F. B. Austin 36, P. H. Jones 36.

Decimal Match—W. Charles 84, B. A. Lappen 81, A. J. Look 78, W. H. Oler 76.

One-day Match—Creedmoor Target.

J B Fellows	46	45	47+1½=139½
W Charles	45	47	47+0 =139
A L Brackett	43	45	45+6 =139
J N Frye	44	45	46+3 =138
J P Bates	42	42	42+5¼=134½

Harvard Shooting Club—First Team.

J A Foye	5	5	5	3	4	3	5	4	5	4—43
A C Nash	5	5	4	3	3	4	4	4	4	4—41
A Faulkner	4	4	4	4	4	4	3	4	0	5—36
F B Austin	5	4	3	2	4	4	2	4	3	4—35—155

Second Team.

C C Foster	5	3	4	4	3	2	5	4	4	5—40
W L Allen	4	4	4	4	4	2	4	4	4	4—38
J S Bradley	4	4	3	3	3	5	3	4	4	4—37
W H Slocum	5	3	3	2	3	3	2	4	3	5—33—148

NEWARK, N. J.—The sixth tournament of the Associated Rifle Clubs was begun on Monday, April 7, with the Frelinghuysens at the butts. The following excellent scores were made: G. Williams 49, A. C. Neumann 49, W. F. Lynn 48, Geo. Weigman 48, Wm. P. McLeod 48, J. L. Tobin 48, E. O. Chase 48, J. K. Walsh 47, S. Shackelford 47, R. Westerman 47. Total 480, out of a possible 500.

On Tuesday evening the Celluloids shot, with the following result: E. Coe 32, F. Willzey 43, F. Brandt 45, A. Erhard 48, W. Babbitt 42, N. Puder 43, S. T. Simmonds 45, W. Coe 47, C. F. Jackson 44, W. Vreeland 47. Total 448.

On Wednesday night the Plymouths scored as follows: C. H. Townsend 47, J. L. Summer 45, G. M. Townsend 43, J. Brower 41, G. Kinney 39, A. A. Baldwin 48, H. L. Leibe 45, J. E. Pollard 42, H. Grewe 41, J. Kearny 45. Total 438.

The Domestic Rifle and Rod Association shot on Friday evening and scored as follows: B. Jeffreys 47, J. Reynolds 45, W. B. Pettigrove 45, J. McGuiness 46, J. Velsor 43, W. Wadams 48, J. Leitz 45, J. Leitz 45, J. Dainty 48, John Long 45, A. Milward 45. Total 459.

CARSON CITY, Nevada, April 6.—To-day was a field day among our crack rifle shots. The weather was beautiful, making all feel animated and eager for the sport. The most notable contest of the day was that between Mr. George C. Thaxter, of ours, and C. H. Galusha, Captain of the Emmet Guard team, and both members of the Nevada Rifle team. The conditions were 100 shots at the 200 and 500yd. ranges, 50 shots apiece at each range. The contestants both used the Hepburn Remington. The contest was remarkable close throughout, and if the shooters had cleaned their guns the scores would have been much higher. As it is, the scores are unusually high. The best previous record was that of Captain H. G. Parker—453. It is the opinion of all present that Thaxter and Galusha can beat any two men living at the two ranges in question. Below are given the scores in detail:

	200yds.	500yds.
Thaxter	4445544454—43	5555554555—49
	4455555545—47	5554555555—49
	4544444445—42	5544554454—45
	5554445545—46	5445354455—44
	4555455545—47—225	4455554355—45—233—457
Galusha	5444454544—43	5555554545—47
	4444544455—44	5555555525—43
	4554555545—45	5455554555—46
	5455454544—45	3454451555—44
	4444454454—42—219	5455545555—48—222—452

The four members of the Nevada team taking part in the shooting practice made the following scores:

	200yds.	500yds.
Thaxter	47	49—96
Galusha	44	48—92
Saffel	45	47—92
Crawford	44	46—90—370

This is an average of 92½, and proves that the men are more dangerous for the Californians this year than last.

Two squads were selected from members of the Carson Guard present and a match shot with the following result. Some of those taking part have not fired a shot this year, while others are new beginners. Taking these things into consideration the scores were excellent:

Thaxter's Team.	Thaxter	43	49—92
	Wright	40	42—82
	Laing	42	40—82
	Meder	41	44—85
	Little	39	44—83—424
Crawford's Team.	Crawford	44	44—90
	Saffel	44	45—89
	Cheney	44	43—87
	Alley	40	38—78
	Hark	40	39—79—423

Mr. J. D. Laing and Doc. Alley shot 100 shots at the two ranges. Laing scored 422 and Alley 308.

The bad shooting throughout the day of Mr. Alley, who is usually one of the best and most reliable of the Carson Guard team, is accounted for in the fact that he was suffering from a severe strain in the back.

GARDNER, Mass., April 12.—At the last meet at Hackmatack Range of the Gardner Rifle Club there was not as large a number of the members present as usual, Messrs. F. Parker and N. Jewett of the Ashburnham Club were present as guests. The American decimal target was used, distance 200yds., with a possible 100. Shooting off-hand. The following is the score:

G F Ellsworth	9	9	9	9	8	9	9	10	9	—90
W C Loveland	10	7	8	7	7	8	9	7	10	9—82
I N Dodge	10	9	8	7	7	8	9	10	4	9—81
A Mathews	5	4	8	8	9	9	10	8	9	10—89
F Parker	7	10	9	8	8	9	4	5	5	7—72
N Jewett	1	2	7	9	9	6	9	10	0	0—53

GRAND CENTRAL GALLERY.—The competition for prizes in the all comers' match excites increased interest as the match progresses. The leading positions are closely contested by Messrs. Brown, Fenning, Oehl and Zimmerman. Mr. Brown being an officer of the New York Rifle Club, under whose management the match is to a certain extent run, shoots for a record only, and will not contest for a prize. The match has developed considerable proficiency among new men, who have had no experience heretofore. For instance, Mr. Keator never competed either in or out of doors heretofore, and yet he stands high on the record, leaving some old and experienced shots to bring up the rear. The match will continue for two weeks more, and during that time some crack shots in and out of town will, no doubt, put in an appearance, and make those now at the head of the list look out for their laurels. The following are the best scores, the possible being 350 on a decimal ring target: J. H. Brown, 333; P. G. Fenning, 330; Henry Oehl, 325 W. Zimmerman, 322. M. Dorrler, 319; W. M. Farrow, 317; C. E. Keator, 314; L. Bird, 310; A. J. Howlett, 308; J. Coppersmith, 308; Geo. J. Seabury, 308; Wm. Simpson, 307; G. D. Weigman, 307; H. Von Derlinden, 307; W. Klein, 303; C. Rein, 299.

BRATTLEBORO, Vt., April 11.—Brattleboro Rifle Club, off-hand, 200yds., on the Massachusetts target. Small attendance but good scores, Mr. Cobb making the best score ever made on the range off-hand, it being a possible 50 Creedmoor, and 114 Massachusetts count:

Cobb	11	12	11	11	12	11	12	11	12	11—114
Knight	11	11	11	10	11	10	11	11	12	12—110
Read	11	10	11	11	11	11	11	11	11	11—109
Howe	11	11	11	12	12	11	10	10	10	10—108
Nichols	11	11	10	12	11	11	9	10	12	11—108
Taft	11	10	11	11	10	10	9	11	12	12—107
Wood	12	10	9	12	10	11	10	11	11	11—107
French	12	11	11	11	10	12	9	8	11	11—106
Brockway	10	9	11	11	12	12	10	11	9	10—105
Barnes	10	9	11	9	12	10	11	10	11	11—104
Hannon	11	11	10	9	13	8	11	11	10	11—104
Pentland	12	11	8	10	9	9	10	12	10	10—101

NEW YORK, April 3.—Regular weekly shooting of the Bullshead Rifle Club, 12-ring target, possible 120: G. Zimmerman 119, M. Dorrler 118, A. Lober 118, C. Rein 116. E. Holzmann 115, W. Steinbach 111, H. Hackmann 114, J. Schneider 104, B. Walters 103, G. D. Johnson 105, J. Jordon 101, J. F. Campbell 95, D. Lowitzki 89.

JAMESTOWN, N. Y., April 12.—Scores of regular medal match yesterday at 200yds., off-hand, Creedmoor target. Wind, at 10 o'clock, heavy:

A F Ward	4	4	5	5	4	5	4	4	5	—44
J R Moore	5	5	5	4	4	4	5	4	4	3—43
George Shattuck	4	4	4	4	4	5	4	4	4	—41
A F Warner	4	4	5	3	3	5	4	4	5	4—41
S N Ayres	3	4	4	5	4	4	0	4	4	4—36

FLORIDA RIFLE TEAMS.—Two new rifle teams have recently been organized at Jacksonville, composed of the First Florida Artillery and the Jacksonville Light Infantry, as follows: First Florida Artillery—W. W. Simpson, Captain; B. E. Oak, Theodore Ball, H. L. Weller, W. A. Styles, A. T. Williams, L. J. Stevens, M. C. Rice, A. W. Barrs, and Geo. R. Reyolds. Jacksonville Light Infantry—R. M. Call, John T. Tyler, C. Ashmead, C. C. Barrs, Perry Holland, J. B. Burroughs, S. A. Cohen, Walker Lund and W. Palmer. All are well-known Jacksonville gentlemen. The rules and regulations of the National Rifle Association were adopted. An elegant gold badge has been purchased to be contested for every month. The first contest came off April 3.—RED WING.

TORONTO, April 12.—The sweepstakes match of the club on Good Friday was well attended. The moderate wind was changeable enough to annoy the riflemen and land them in the outer or magpie when they were sure of a bull. The light was sometimes bad, yet altogether seldom do they get such favorable weather on Good Friday. The principal scores, ranges 200, 400 and 500yds., 7 shots at each, possible 105: Foreman 90, Mitchell 87, Bell 86, Mowatt 86, Lewis 81, Thompson 81, J. W. Duncan 79, Jack 79, W. S. Duncan 78, Brown 78, McQuestien 77, Kennedy 74, Allan 74, Lanskail 73, Schmidt 71.

SPRINGFIELD, Mass., April 12.—At the return match at Lake Lookout, yesterday afternoon, between the Collinsville, Conn., team and the Rod and Gun team of this city, the Collinsville team won by a score of 484 to 467.

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

LOUISVILLE TOURNAMENT.—The tournament will begin June 2 and close June 9. Secretary's address is J. O. Barbour, 157 Third avenue, Louisville, Ky. June 2. First shoot, purse $250; five single, 20yds., plunge traps; entrance, $5. Second shoot, purse, $600; eight single, 26yds., plunge traps; entrance, $8. June 3. First shoot, purse, $800; ten single, 26yds., plunge traps; entrance, $10. Second shoot, purse, $5,000. The American field cup for the championship of America, value, $250; 50 birds to each entry; fifteen single, 26yds., plunge traps; fifteen single, 30yds., ground traps; ten pairs, 21yds., plunge traps; entrance, $50, $3 forfeit. June 6. First shoot, purse, $600; four pair, 18yds., plunge traps; entrance, $8. Second shoot, purse, $600; eight single, 26yds., plunge traps; entrance, $8. June 7. First shoot, purse, $800; ten single, 26yds., plunge traps; entrance, $10. Second shoot, purse, $600; eight single, 26yds., plunge traps; entrance, $6. June 9. First shoot, purse, $500; eight single, 21yds., plunge traps; entrance, $5. Second shoot, purse, $600; four pair, 18yds., plunge traps; entrance, $6. Louisville Sportsmen's Association rules to govern. Only wild pigeons will be used. Class shooting in all matches. All purses fill or prorate. Five per cent. of purses for field expenses. In all but championship match, 40 per cent. to first; 30 per cent. to second; 20 per cent. to third; 10 per cent. to fourth. Birds extra except in champion cup shoot. Tie birds in all matches extra and must be paid for before shooting.

KNOXVILLE, Tenn.—Regular monthly shoot of the Knoxville Gun Club; Ligowsky medal match, 15 clay-pigeons, 18yds., 4th notch of trap:

Armstrong	111111111111111—15	Curtis	110110111110101—11
A H Hebbard	011111111111111—14	C C Hebbard	011101100111111—10
Campbell	111101111111111—14	Woodbury	010110110111111—10
Slocum	110111111111111—14	Deaderick	100171110000111— 9
Jaques	111111101011111—13	Townsend	101110010110011— 9
Ross	110111111111011—13	Ristine	000001101111101— 8
Dow	111111110111131—13	Worsham	000011110100111— 8
Duncan	111011011111011—12	Nicholson	100010011001100— 7
M C McClung	111011101111110—12	F H McClung	000010000101011— 5
Mead	011110101111011—11	Woods	001100011000100— 5
French	011111011111001—11	Ed Ross	000011000100000— 3
Jenkins	010111111110111—11		

Match at 5 pairs, 15yds.:

McClung	00 11 11 01 11—7	Armstrong	10 11 11 00 10—6
Mead	00 01 11 10 10—5	Slocum	11 10 01 10 10—6
Eldridge	10 11 10 10 11—7	Deaderick	11 10 10 00 00—4
Jaques	10 00 10 11 01—5	Jenkins	10 10 10 10 11—5
Dow	11 11 10 11 11—9	Chase	01 01 01 00 11—5
Ross	11 11 01 00 00—5	Duncan	10 11 01 10 11—7
French	00 00 10 11 10—4	Townsend	10 01 11 11 11—8

Ties on 7: McClung 3, Eldridge 2, Duncan 2.

Sweepstakes at five clay-pigeons:

French	11000—2	Ross	11111—5
Rutherford	01110—3	Mead	11110—4
Woodbury	01001—2	Worsham	11111—5
Woods	11011—4	Slocum	11011—4
Campbell	01010—2	Duncan	11101—4
Armstrong	11111—5	Jenkins	10111—4
Dow	00001—1	Hebbard	01011—3
W Rutherford	11111—5	McClung	00111—3
Riley	00010—1	Chase	11001—3
Nicholson	01110—3	Townsend	01100—2
Ed. Ross	00010—1		

Ties on 5—Ross 2, Worsham 1, Armstrong 1.

Ties on 4—Mead 2, Duncan 2, Woods 2, Slocum 1, Jenkins 1.

Second tie on 4—Mead 2, Duncan 2, Woods 2.

Third tie on 4, miss and out—Duncan 2, Mead 1, Woods 0.

Ties on 4—Rutherford 2, McClung 2, Chase 0, Hebbard 3, Nicholson 0.

The Knoxville Gun Club's tournament will be held May 20 to 23. Shooting to be at clay-pigeons and live birds if they can be procured. All matches class shooting, unless otherwise specified. Club rules to govern. Entrances to matches to be made on the grounds. For further particulars address C. C. Hebbard, Secretary.

NIAGARA FALLS, N. Y., March 27.—Match for Ligowsky medal:

Smith	111111111111111001111111—23
E Moody	111111111111111111111100—23
Gombert	011111111111101111111111—23
Rice	111111111111101111101111—23
Jennings	011110101111011111111111—22
Barker	111111101101101111111001—19
Tugby	111111110111101100110011—19
Philpott	010111001110011101111111—18
Howard	101011100111011101101011—18
C Moody	010100111101101101101111—16
Green	111001011010111011000011—15

Shooting off ties of 23 at 10 birds each—Smith 9, E. Moody 8, Gombert 2, Rice 8. E. H. Smith wins medal and first money, T. Jennings wins second, Barker and Tugby divide third, Philpott wins fourth. The shoot of ties for first place was a hot contest and all were pleased with the result, as it would have greatly lessened the interest in future shoots to have the same person win twice so early in the year. The boys crowded Mr. Smith very close indeed, and as may be seen from the score, he won by just one bird—23 out of a possible 25, with Rice and Moody right behind him with 21 each.

EMERALD GUN CLUB, New Dorp, S. I.—Match at pigeons for the club medal. The trophy, which is a gold representation of the sunburst of Ireland, was won by Mr. William Glaccum, who killed 8 birds straight at 25yds. rise. The president, Dr. George V. Hudson, killed his 8 birds at 21yds. rise, but one of them fell out of bounds, and he captured the second prize, $10 in gold. Following is the score: Wm. Glaccum 8, L. Viemuster 4, Wm. Turner 6, M. W. Murphy 6, Dr. Hudson 7, J. Glaccum 5, J. M. Watt 3, J. J. Ryan 4, M. Cherry 4, R. Regau 4, J. W. Godfrey 5, C. M. Grainger 6, H. Veidt 8, J. Fitzpatrick 3, Austen McHale 3, P. Keenan 3, J. Howard 3, J. Measel 5, S. Thrader 4, N. Measel 4, C. Measel 6, H. Mackin 3, Counsellor Cody 5, J. Mackin 2, J. Tane 4, H. Otten 6. After the shoot President Hudson invited the members of the club to an excellent dinner. The club meets at No. 55 Henry street the first Thursday in the month, and holds its pigeon shootings every two months at New Dorp. It is the only Irish gun club in the country. It is in excellent financial condition and proposes to rent commodious quarters for club purposes. The following are the officers for the next year: Dr. George V. Hudson, President; John Glaccum, 1st Vice-President; John Measel, 2d Vice-President; M. W. Murphy, Treasurer; John Guilfoyle, Secretary.

SOUTHERN ILLINOIS.—The fourth annual meeting and tournament of the Southern Illinois Sportsmen's Association will be held at Carbondale, Ill., Tuesday and Wednesday, May 6 and 7. The tournament will be held on the grounds of the Carbondale District Fair Association. Citizen's purse of $75 in gold, the association medal, and other valuable prizes to be contested for. The prize list is extensive, and it is anticipated that, as usual, the tournament will be a most enjoyable affair. Full programmes may be had upon application to the secretary, Mr. P. Richards.

UNION CITY, Ind.—The Union City Gun Club holds its first rifle and pigeon tournament for the season on Thursday, April 24. Three premiums to be awarded: One live deer, a Marlin rifle for the best five shots, distance 100 and 150yds., a double-barrel breechloading shotgun for best average at clay-pigeons.—THOMAS JONES, President.

ST. CLAIR, Pa.—The St. Clair Sportsmen's Club held its sixth monthly contest for club medal to-day. Clay-pigeons, 2 Ligowsky traps, screened, 7yds. apart, third notch, 18yds. rise, angle 30°, direction of flight changed for each shot:

Sprouts	1 0 1 1 1 0 1 1 0 1—7
Luthe	0 0 1 1 1 0 1 0 1 1—6
Evans	0 1 0 0 0 0 1 0 1 0—3
Daddow	1 1 1 1 0 0 0 1 1 0—6
Farne	1 0 0 0 0 1 1 0 0—3

Sprouts having won medal for third time it becomes his property.

NEWARK, N. J., April 9.—To-day, at Fred Erb's Shooting Park, Bloomfield avenue, Newark, N. J., there was a live pigeon match between Messrs. Miles Johnson and Ziegler, 25 birds; find, trap, handle and pull your own string, for $100 a side; Johnson, 21yds.; Ziegler, 25yds. Miles was a little rattled at the start, missing his first and second birds, so that bets of $100 to $20 were offered that he would not win. At this juncture a Philadelphia delegation, headed by Messrs. Robinson, Kleinz and Greenwood, arrived on the ground, and the tide turned in favor of the veteran, the betting changing to $100 to $40 against Ziegler, and finally $100 to $5 that Johnson would win.

M Johnson	0011111111110011111101—18
Ziegler	1111100011100111110110—14

A 20-bird race for $50 a side, trap and handle, was afterward shot, between Messrs. Ryan and Bunn, the latter winning by killing 9 to his opponent's 6.

PHILADELPHIA, April 10.—The double-bird clay-pigeon shoot gotten up by Mr. C. Bragg, manager of the Globe Shot Company, in imitation of field shooting, came off at Pastime Park this afternoon. The actual rise from the score to the five traps was 30yds. A slip was drawn by the referee and handed to the puller, which confined the number of yards or steps that the shooter was to advance before the traps were to be pulled, the shooter not knowing how far or how short a distance he had to go. The new style rather upset some of the shooters, but under the circumstances, the average was good, while D. Clew, of the Keystone Club, distinguished himself by breaking 9 birds out of his five pair.

Sweepstake, $1 entrance.

George Henderson	00	00	10	00	00—1
William Greenwood	00	11	10	10	11—6
J L Brewer	10	00	10	11	10—5
C A Meyers	10	01	00	01	00—3
B C Louth	00	10	11	10	00—4
A L Maddock	10	11	10	00	10—5
R Wood	00	01	11	11	10—5
W Alley	10	01	00	00	10—3
H Fox	10	00	00	00	11—3

First, 65 per cent.; second, 35 per cent.

Sweepstake, $1 entrance:

Geo Henderson	10	10	10	01	11—6
Wm Greenwood	00	01	11	11	01—6
J L Brewer	00	10	01	10	10—4
C A Meyers	10	01	00	00	10—3
B C Louth	00	10	10	00	00—2
A L Maddock	11	00	10	00	00—3
R Wood	10	00	11	00	00—3
W Alley	10	10	11	00	01—5
D Clew	11	11	11	01	11—9

First, 65 per cent.; second, 35 per cent.

BOSTON TOURNAMENT.—The Boston Gun Club has decided to continue a tournament April 16 and 30, and May 1 and 14, and the New England clay-pigeon team badge match will be continued on those dates. The highest scores made so far have been by the Massachusetts Rifle Association. As the dates have been arranged, it will be seen that April 30 and May 1 will give shooters from a distance a chance to fill the match for the gold medal offered by the club. The team match will be conducted precisely as the great Chicago shoot is to be.

WELLINGTON, Mass., April 12.—The leading feature of the Malden Gun Club shoot to-day were the badge and silver cup contests, the winners in the former being J. Buffum, J. Nichols and F. J. Scott. The silver cup was taken by J. Buffum. There are four other days' shooting in this contest.

CINCINNATI.—Cosmopolitan Gun Club is the name of a new Cincinnati gun club. The officers elected for the ensuing year are: Mr. John H. Laws, President; Mr. F. W. Moore, Vice-President; Mr. J. E. Miller, Secretary; Mr. W. H. Campbell, Treasurer.

New Publications.

"ROD AND LINE IN COLORADO WATERS."

A CHARMING little book with this title has been published by Chain, Hardy & Co., Denver. No author's name appears on the title page, but before we had read many chapters in it we thought we knew the style, and on turning to the end we found the signature "Bourgeois," and immediately jumped at the conclusion that the chapter entitled "The Lure," in "Fishing With the Fly," was by the same facile pen. The seventeen chapters of the book make no pretense to being a continued story, but each one is complete in itself, and each includes a mixture of fishing incidents, philosophy and humor, which makes it most easy and interesting reading, yet there is such a variety of incident that the stories bear little resemblance to each other. A little picture that mirrors us all is given in these words: "Did you never go fishing when a boy, and come home at the close of a Saturday without so much as a single chub on a string to console you for the anticipated dressing because of your interdicted absence? I have. But the chagrin of the ten-year-old is nothing in comparison to the mortification of the middle-aged boy under similar circumstances." Speaking of trout-hogs, he says: "There is no genuine enjoyment in the easy achievement of any purpose; there is no bread so sweet as the hard-earned loaf of the man who works for it. The rule holds good in the school of the sportsman. The fellows I have been writing of, had they their way, would become mere engines of destruction; they would catch, not for the pleasure of catching, but because they could, and a universe of trout would not satiate them." The book is neatly printed and has a map of Northwestern Colorado, and is illustrated with initial letters and vignettes. Price, one dollar.

PUBLISHER'S DEPARTMENT.

COUGHS, Colds and Bronchitis are always cured by Humphreys' Homeopathic Specifics, one and seven. They are used by thousands with the most triumphant success. Not only are the coughs and colds cured, but far graver diseases like pneumonia and chronic lung diseases, or consumption, are also arrested. No one should permit a cough or cold to linger when it is so easily and pleasantly cured.—*Adv.*

CROWN WAD WORKS, Rochester, N. Y.:—I have during the past season used your wads on various game, woodcock, snipe and ducks, and in every instance I am satisfied I obtained better results than ever before, when using the common felt wads. I most cheerfully recommend them to sportsmen, and predict that in a short time the felt wad will only be used for powder.—GEO. M. ROBERTSON, (New Iberia, La., April 2).—*Adv.*

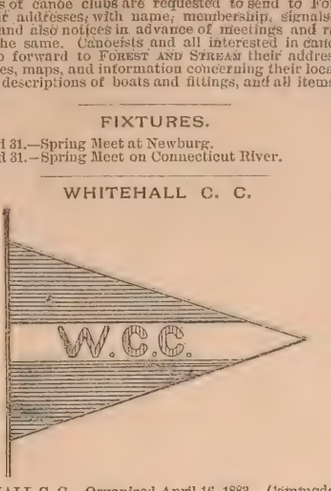
Canoeing.

Secretaries of canoe clubs are requested to send to FOREST AND STREAM their addresses, with name, membership, signals, etc., of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to FOREST AND STREAM their addresses, with logs of cruises, maps, and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.

FIXTURES.

May 30 and 31.—Spring Meet at Newburg.
May 30 and 31.—Spring Meet on Connecticut River.

WHITEHALL C. C.



WHITEHALL C. C.—Organized April 16, 1883. Commodore, R. E. Bascom; Vice-Commodore, E. P. Newcomb; Secretary and Treasurer, W. W. Cooke, Jr.; Measurer, W. C. Blodgett; Cook, Francis E. Cooke. Eleven active members; 9 canoes, 1 cutter, 1 yawl, 1 catboat. Signal, blue with white stripe two inches wide, with red letters.

THE SPRING MEET ON THE HUDSON.

ON Friday last, Messrs. Smith, of Newburgh, and Stephens, of the N. Y. C. C., visited the spot on the west shore of the Hudson where it is proposed to hold the spring meet, in order to locate a camp ground. The point selected is about three miles below Newburgh near the Moodna River. The ground rises abruptly from the beach to a height of 20 or 30ft., at which point are the remains of an old earthwork occupied by the Continentals in the Revolution. Just back of the embankment is a level piece of ground admirably fitted for a camp, and from the rear of it rises a steep hill which isolates the camp ground completely.

At the lower end of the fortification is a road leading to the beach, and on the latter a short distance above is a spring of fine water. The beach itself shelves gradually, and is composed of small stones, but a canoe can easily be beached and carried up. The rise and fall of the tide is three feet.

Canoeists from up the river can send their boats by the steamer Eagle to Newburgh, where they will be stored in the boathouse, their owners coming down by train on Thursday evening and paddling to the camp. The steamer Melzingah leaves New York every morning at 10 A. M., from the foot of West Tenth street, arriving at 3 P. M., and returning leaves Newburgh at 7 P. M., reaching New York about 4 A. M. She will carry canoes for $1 each way.

Arrangements will be made for her to stop at 152d street, near the K. C. C. house, for the boats on Thursday, May 29, dropping them, if the tide permits, at the camp ground, and on returning, to pick up the boats at the camp, and leave them at 152d street.

It is proposed to have the camp ready by Thursday, several canoeists going in advance to make the necessary preparations, the others coming by train or boat in the evening. Friday and Saturday will be devoted to a series of impromptu races, and those who are compelled to return to business by Monday will take the boat or train on Sunday evening.

General Oliver, of the Mohican C. C., also visited Newburgh on Friday evening, and discussed the details of the meet with Messrs. Smith and Stephens. It is desirable to know as soon as possible about how many will be present, and canoeists intending to do so will please send their names to the FOREST AND STREAM as soon as possible. Further information will be given in our columns, and inquiries from canoeists will be answered as far as possible.

CANOE VS. SNEAKBOX.

Editor Forest and Stream:

This "Canoe vs. Sneakbox" controversy has assumed a different aspect. Originally, as my files show me, it was as to their respective merits in rough water as sea boats. The question of speed came up then, and now, that being dropped, it is carried on by the dragging in of an outside question—that of stability.

No canoe owner disputes with "Bojum." Mr. Wild or "Seagull" on that point. Any boat 3 to 5ft. wide, on the same or less length, must be stiffer than one of 30 to 31½in. But here, and for a party of more than one, gunning in shallow waters, the superior merits of the sneakbox ceases. I maintain that the modern sailing canoe will sail faster, go better to windward, and live in as rough a sea as any sneakbox of an approximate size. For the general cruiser alone, or in company with other boats, on the sneakbox's own water, viz., open bays, the modern sailing canoe is a more comfortable and handier all-round boat.

I am not crazy on the subject of racing canoes, but I am fond of the excitement of a good race, and never unwilling to take up a challenge when fair conditions can be made. I would call your attention to the fact that my letter was an acceptance of a challenge made boastfully and containing an implied slur on canoes and canoeists. The gentleman was hopeless of a race under conditions which he stated to be so overwhelmingly in his favor, and his lame withdrawal, now that his challenge is taken up, is not very creditable.

To my good friend "Bojum" I would say that the conditions he proposes are of a nature to make a trial impossible. A reefing breeze from the southwest with an ebb tide are only to be had by "patient waiting." While that would certainly be "no loss" in his pleasant company, my duties to the N. Y. C. C. this year will necessitate my spending the summer on New York Bay, but all discrepancies of size waived, I will be most happy to sail his big sneakbox a friendly race to windward and back when I pass through the Sound, as I hope to do in July.

I claim, however, that that race will not be a test of the respective speed and merits of the two models, as no advantage of form ought to be able to overcome so enormous an advantage of beam on the same length. I consider a 15ft. canoe a match for any 12ft. sneakbox, and am willing to go half way to make a match to prove it. In conclusion I hope that "Bojum," Mr. Wild, "Seagull," and as many others interested in small boats as can, will come to our Newburgh meet on Decoration Day and see what such veterans as the owners of Dot and Snake can get out of their craft. It is, beyond a question, a work of some skill to sail a canoe well, but the possibilities of the boats are much greater than ignorant scoffers are as yet willing to admit, as several small catboats of 12ft. length have found to their astonishment on more than one occasion. WM. WHITLOCK.

NEW YORK.

TORONTO C. C.

TORONTO Bay is now (March 29) clear of ice. Mr. M. F. Johnson launched his Peterboro on that date, and had a paddle along the city front. The other members of the T. C. C. are all busy rigging up sails, centerboards, etc., and soon as a pleasant day arrives will be afloat.

Several new craft will be placed on the Toronto Club list this season. The first will be a 16x30 tandem, on the lines published in FOREST AND STREAM last fall. She will be skippered by Mr. Pelman, a new member, and is being built by S. R. Heakes. John Clindinning, our leading builder, has just commenced a new model 14ft. 8in. x3ft. 10½in. at gunwale and 3in. round of deck. She was laid down by Richard Jenkins, Clindinning's foreman, and promises to be a first-class all-round canoe for our waters. It is likely she will become the property of another new member, and if so will appear in the novice's sailing race at Grindstone Island. Her rudder, hatches, etc., will be like those on the Isabel and Boreas. Both of the new productions will have Atwood boards. In addition to these accessions, two or three open Peterboros are likely to be purchased and added to the club's list.

The Isabel will have a new style of cruising sail this season. It has not been tried much, but the captain has such confidence in its turning out a success that he has sold his balance lug sail formerly used for cruising.

The Boreas will be much the same as last season, with the possible exception of a larger dandy and the use of the aft centerboard while racing. Her owner is determined that even in a light wind the Isabel must not be allowed to beat the Boreas.

The Rushton Princess, Sadie N., Capt. F. M. Nicholson, will be much improved this spring by the addition of seats on deck, a proper deck tiller, and probably an Atwood board in place of the wooden scimitar now used. A large racing sail is also contemplated for the August meet.

As already mentioned, Mr. Johnston has ordered from English of Peterboro an open 16'x28".

Mr. J. L. Kerr will attend the '84 meet in a new craft of some kind, as he has advertised his Racine Shadow for sale.

Mr. F. W. Mason has the Whimbrel, formerly the Fairy, the property of ex-Commodore Bridgman, almost ready for launching. He will also attend the meet.

Mr. A. B. Eadie is thinking of putting the imported English Nautilus in commission this season, and being present at the Thousand Islands in August. Properly rigged and with sufficient sail area, she should be fast, but her length—13ft.—is against her in lumpy water.

The new vice-commodore of the club, Mr. Stinson, will also be out this season in his Racine Shadow; other members will have the same craft as last season.

It will be seen from the foregoing that the T. C. C. is still to the fore, and not likely to decline.

Some of the members have already had their uniforms made, and it is possible that at Grindstone Island the Knickerbockers and Mohicans may find opposition in the "mashing" business at the ladies' camp.

CANOEING IN GREAT BRITAIN.

WE reproduce the following resumé of canoeing in Great Britain from the London *Field*, as some of the points are new to our canoeists, and it also shows the present condition of the sport there. While local conditions have encouraged the growth of a fine class of sailing canoes, and of match sailing, cruising has run to the lowest ebb, and as the racing is necessarily more or less exclusive, requiring time, money and skill to take and hold a fair place, the numbers of racers have dwindled to a few. With our larger waters, cruising qualities will always be most esteemed, and there is no danger of racing supplanting the more legitimate form of the sport. We wish our cousins as much success as has attended us in their similar attempt at a yearly meet. The *Field* says:

It is now nearly twenty years since Mr. Macgregor made his famous tour of the rivers, canals and lakes of Europe in the canoe which bears the name of Rob Roy. It may be said that Mr. Macgregor invented this particular type of vessel, and indeed, canoeing itself as it is now practiced in England and America. Subsequently the Rob Roy made an expedition to the Baltic, and an account of each voyage, written in a very fascinating manner, inspired many young men with a desire for similar adventures. Disaster overtook some of these, and an evening paper of the day, discussing the subject of canoeing and the formation of the Royal C. C., said that the pursuit "unites the maximum of danger with the minimum of utility." This criticism is epigrammatic, but scarcely just, and may be classed with another epigram in the same paper, that a "Hanson's cab is very difficult to get into and almost impossible to get out of."

At any rate, a few mishaps and severe satire did not prevent the nautical proclivities of adventurous youths taking the peculiar form of development described as canoeing. That canoe traveling is open to some kind of criticism appears to have occurred to the mind of Mr. Macgregor himself, as, after describing the many advantages which a canoe has for exploring rivers or hidden nooks in lakes, he says a canoeist may well be asked, "Has he traveled in other ways so as to know their several pleasures? Has he climbed glaciers and volcanoes, dived into caves and catacombs, trotted in the Norway carriole, ambled on an Arab, and galloped on the Russian steppes? Does he know the charms of a Nile boat, or a Trinity eight, or a sail in the Ægean, or a mule in Spain? Has he swung upon a camel, or glided in a sleigh, or trundled in a Rantoone?" Mr. Macgregor answers joyfully that he has done all these things, but the pleasure of canoeing was better than them all. This was something like enthusiasm, but any one who reads his delightful books will have no difficulty in realizing the great charm of canoe traveling.

The Rob Roy, it should be said, could be sailed, and her owner appears to have been very proud of her qualities in this respect; indeed, we found in 1866 that shrewd old sea dog, the late Sir Edward Belcher, discussing canoe sails, and comparing them with those of the canoes used by the Esquimaux, at the Institution of Naval Architects, Mr. Macgregor having honored that society with a description of his vessel and her achievements. But the sailing qualities of the Rob Roy were not quite so good as her owner thought them; at any rate, when Mr. Baden-Powell, a young naval officer, took up with canoes in 1867, he thought more of sailing than paddling, and to that end produced the Nautilus, which was almost as distinct in type as the Rob Roy herself. Mr. Inwards, another canoe enthusiast, and the first "mate" of the Royal C. C., ridiculed the idea of a canoe being adapted more for sailing than paddling, and produced the Ringleader, longer and narrower than either the Rob Roy or Nautilus, and of course very much easier to paddle. Both the Ringleader and Nautilus were taken on many long expeditions, and the merits of the three types were warmly discussed. In the end the sailing canoe proved to be the more popular, and it can very well be understood that sailing affords a greater variety of incidents than paddling, from a capsize to a successful thrash to windward.

At first the sailing qualities of canoes were rather irreverently spoken of, and it was not even admitted that they could be made to go to windward at all: but by the aid of heavy metal center plates, lead ballast, and battened sails, they were not only made to ply to windward, but could do so better than any boat of similar length not provided with a center plate or lead ballast. The advent of Mr. E. B. Tredwen, with his Pearl canoe, did much to show the capabilities of canoes under sail, although it was not in the nature of things that she could be so distinct in type as the Rob Roy, Nautilus or Ringleader, each of which had, in a more or less complete manner, fulfilled the three possible missions of canoes. Then there came Clyde canoes, Humber canoes, and Mersey canoes, each noted for some peculiar "kink or knot," by which the type is claimed. The Mersey, however, is nothing more nor less than a double-ended boat, with a turtle-back deck, and ought to be placed out of the category of canoes. This everlasting "typing" of canoes has undergone even greater extension in the United States of America, where the British form of canoeing has been adopted with much vigor, and although it may be open to much ridicule, there cannot be a doubt that it tends to keep alive the stimulus for canoe building. Old hands, who have been through all the variations of sailable-paddling, or paddleable-sailing, or paddling-sailing canoes, as defined by Mr. Baden-Powell, smile when they hear of a new type; but in canoeing, as in other matters, there is nothing else to do but re-invent.

The great success of the sailing canoes and the excitement of match sailing made even paddling appear to be a very insignificant affair, and the superiority of sailing as an amusement was considered demonstrated, because any one could learn to sit in a canoe and paddle in five minutes, whereas it required weeks of patient practice to learn to sail a Nautilus or a Pearl by the wind. The originators of the pastime acquired great excellence in canoe sailing, and two or three others attained almost equal skill; but this excessive cleverness disheartened many other beginners, who had not equal patience or that intuitive kind of aptitude for the art which no amount of practice will supply. At any rate, there is no doubt now that, as the old hands in the natural course of events appear to be retiring from the sport, there are no younger men coming on who seem to care about mastering all the elaborate details of match sailing in canoes. The gatherings on Hendon Lake last season showed great falling off, and excited very little interest, even among members of the Royal C. C., and with the Nautilus, Pearl, Lurline and Merlin out of the way, the contests would inevitably collapse. Under these circumstances, it is not surprising to find that the members of the Royal C. C. are striving to arouse a new interest in canoe life, and one which seems to be more in accord with the spirit of canoeing which existed when the club was founded in 1866. The programme issued by the club for the coming season is much the same as in past years so far as racing canoes go, but the committee have set a project on foot for having a grand meet of canoes on the Norfolk Broads in August. We cannot avoid agreeing that this is a movement in the right direction, and the many successful gatherings which American canoeists have every year—and, indeed, many such have taken place in Scotland—make one think that such meetings ought to be popular in this country. A more delightful region than the Norfolk Broads could not have been chosen for a canoe meet, and one that is fairly accessible for all members of the club.

Such a project as that which we have just referred to would be well worthy of attention, even assuming that the interest in racing canoes under sail is not dying out. Something required to be done to bring the many members of the club together, which match-sailing quite failed to do, and we think there is not a doubt that a fortnight of adventure on the Broads will prove more popular than four sailing matches on Hendon Lake. Of course it can be said that sailing would be more popular were it not for the elaborated gear of a racing canoe. This may be true enough so far as sailing goes, but when it comes to racing, a competitor is bound to use the most effective means for achieving success. If a man is really fond of racing, and has the patience and patience to master the art, he will not care whether it takes two minutes or two hours to get underway; but the case is very different when a man wants a canoe to sail about by himself for idle amusement. He wants something he can jump into and be off at

once, without having to spend an hour or so over reeving gear, arranging ballast, etc. But there are plenty of sailing canoes to suit this man, and we have illustrated many in the *Field*, one of which was exhibited at the Sportsman's Exhibition. Thus, so far as canoe sailing *per se* is concerned, it cannot be justly said that the exigencies of racing stand in the way of the pursuit being generally enjoyed or retaining its popularity. Such meets as that projected for August next should show the advantages of a paddling canoe which can be sailed, over a sailing canoe which can be paddled.

A HINT TO CANOEISTS.

WE would call the attention of canoeists to the report of the condition of the Toronto C. C., giving, as it does, such an interesting statement of the prospects for the season, changes in the boats and other details, such as canoeists care for just now. We should be glad to have similar reports from other clubs, as such an interchange of information will be of value to all.

AMATEUR CANOE BUILDING.

Thirteenth Paper.

SAILS AND RIGGING.

THE success of a canoe as a sailing craft depends largely on the proportioning of the sails to the boat and the work to be done—on their proper fitting, and on the perfection of all the smaller details of the rigging. Almost every known rig has been tried on canoes, all but a few having been in time rejected, so that to-day but three types are at all popular with canoeists—the leg of mutton, the lateen, and the lug.

Before deciding on the shape of the sails, the first question is, How much sail to carry? a question only to be decided by a comparison with the boats and their rigs. Attempts have been made to formulate expressions by which the area of sail may be calculated when the dimensions and weight of the boat are known; but in a canoe the greatest elements in carrying sail are the personal qualities of the canoeist, his skill, activity, daring, prudence and good judgment; and their value is easily appreciated when on the same canoe one man can carry 100 square feet of sail, while another will hardly be safe with fifty. This being the case it is impossible to calculate what area a canoe will carry, but a comparison with similar boats will give the average cruising rig, the canoeist making such an addition to it as he considers will suit his individual wants.

Another uncertain element in carrying sail is the character of the water on which most of the work is done. If on a river or lake, among hills, where squalls are sudden and violent, the sails should be small, and the arrangements for furling and reefing them as complete and reliable as possible; if on open water, where the wind is strong but steady, a large sail may be carried, fitted with an ample reef for rough weather.

Whatever area be chosen, the almost universal practice with canoeists is to carry two sails. The cat rig, though simple, requires larger and heavier spars, a large boom and a high center of effort, and is more difficult to handle, as far as setting, furling and stowing sail, than the main and mizzen rig; and, on the other hand, a jib has been proved to be of little use, as it is difficult to set in a boat where the crew cannot go forward, a number of lines are needed, it requires constant attention, is useless when running, and of little benefit when doing its best. By having the bulk of the sail forward, it can be easily reached, is always in sight, draws well when running, and can be quickly spilled without losing the power of luffing, while the mizzen aft requires very little attention, luffs the boat promptly and keeps way on her, and even if neglected, can do little but bring her into the wind.

In a long, narrow boat like the canoe, the sail should be spread well fore and aft, long and low, rather than narrow and high, as the propelling power will be as great, and the heeling or capsizing power much less, and this end is best attained with the main and mizzen rig.

In order to obtain a proper balance of the sails, it is necessary that their common center or the point at which, if a force were applied, it would balance the pressure of the wind on the sails, which point is called the center of effort, should be nearly in the same vertical line with the center of lateral resistance of the hull, which latter is the point at which, if a string were attached, and the boat, with rudder amidships and centerboards down, were drawn sideways, it would advance at right angles to the string, neither bow or stern being ahead. These points would be described in technical language as the common center of gravity of the sails, and the center of gravity of the immersed vertical longitudinal section, including rudder and centerboard.

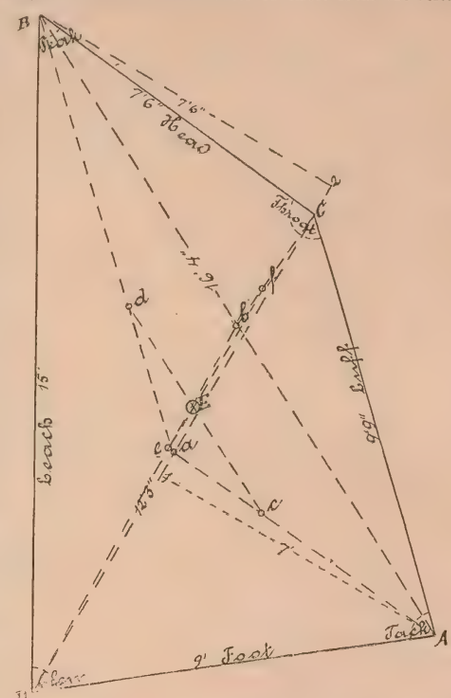
The center of lateral resistance can be ascertained by drawing accurately to scale, on a piece of cardboard, the outline of that portion of the hull below the waterline, including rudder, keel or board, taking it from the sheerplan, then cutting out the piece and balancing it on a fine needle stuck in a cork. The point on which it will balance is the center of lateral resistance.

To ascertain the center of effort, some calculation is necessary. A sail draft is first made showing the sails, masts, hull and center of lateral resistance, the scale being usually ½ or ¼in. to the foot for a canoe or small boat.

First, to determine the area of the sail, if triangular, a line is drawn from one angle perpendicular to the opposite side, or to that side produced. Then the area will be equal to one-half of the side multiplied by the distance from the side to the angle; for instance, in the triangle B C D in the first figure, which represents the calculations of a sail of 89 square feet, a line perpendicular to C D would not pass through B; so C D is produced to *g* then 12ft. 3in.x7ft. 6in. =91.87÷2=45.9ft., area of B C D. If the sail is not triangular it may be divided into several triangles, each being computed separately. The sail shown will first be divided by the line C D from throat to clew; the area of B C D has been ascertained to be 45.9ft., and similarly the area of A C D is 42.9, then the entire area will be 88.8ft A shorter rule, and one that in most sails is sufficiently correct, is to multiply the distance A B by C D, and to take half of the product, but in a high, narrow sail, this would not answer, as in this case, where 16ft. 4inx12ft. 3in.=200÷2= 100ft., or an error of 11ft.

The area being known, the center of gravity of each triangle is next found by drawing a line from the middle of one side to the opposite angle, and laying off ⅓ of this line, as in the triangle, B C D, where half of C D is taken at *a*, a line, *a* B, drawn, and ⅓ of it taken, giving the point *d*, the center of the triangle. The point *c* is found in a similar manner, and we know that their common center of gravity must be on the line *c d*. Now, dividing the sail by a line, A B, into another set of triangles, A B C and A B D, we find their centers at *e* and *f*, and drawing the line *e f*, its intersection with *c d* will be the center of gravity, and consequently center of effort, of the entire sail.

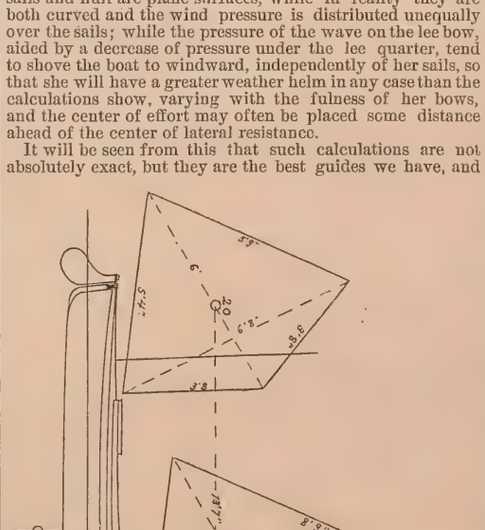
To determine the common center of two or more sails, a vertical line is drawn just ahead of the forward sail, and the distance of the center of each sail from this line is measured and multiplied by the area of the sail. In the drawing, showing two balance lugs of 45 and 20ft., the cruising rig for a 14x30 canoe, these figures would be 40x5ft. 2in.=232, and 20x13ft. 7in.=273, or 505. Now, dividing this sum by the total area of the sails, or 65ft., we have $\frac{505}{65}$=7.77, or 7ft. 9in., the distance of the center of effort from the vertical



line. In this case, the center of effort of the sails and the center of lateral resistance of the hull will fall in the same vertical.

To be safe, a boat should always carry sufficient weather helm to luff easily, or in other words, when sailing on the wind, the leverage of the after sail should be enough to require that the helm be carried slightly on the weather side to prevent her coming up into the wind, then if it be left free she will luff instantly. To do this requires in theory that the center of effort should be aft of the center of lateral resistance, but in the calculations it is assumed that both sails and hull are plane surfaces, while in reality they are both curved and the wind pressure is distributed unequally over the sails; while the pressure of the wave on the lee bow, aided by a decrease of pressure under the lee quarter, tend to shove the boat to windward, independently of her sails, so that she will have a greater weather helm in any case than the calculations show, varying with the fulness of her bows, and the center of effort may often be placed some distance ahead of the center of lateral resistance.

It will be seen from this that such calculations are not absolutely exact, but they are the best guides we have, and



if the calculated centers, and actual working in practice of different boats are recorded, a comparison will show what allowance is necessary in the case of a similar boat.

In planning a canoe's sails then, three things should be kept in view; to distribute the sail well fore and aft, keeping a low center of effort; to keep the latter about over the center of lateral resistance, and to keep as short a main boom as is consistent with the first point.

In order that a boat should sail equally well with her board up or down, the center of the board should come under the center of lateral resistance, otherwise, if the board be forward and the boat balances with it lowered, on raising it, the center of lateral resistance at once moves aft, and the center of effort being unchanged, the greater leverage is forward, and the boat's head falls off.

If it is necessary to place the board well forward, it may be done by using a small mizzen, a reef being shaken out in it when the board is raised. A mainsail is sometimes rigged and tried with a cheaply made mizzen of any shape until the proper balance is obtained, when a suitable mizzen is rigged permanently.

NEW CANOE CLUBS.—A club was organized on March 24, at Oshkosh, Wis., with six active members, all canoe owners, and two more have since joined. We have received the signal of the Ianthe C. C., of Newark, N. J. The club now numbers twelve members and nine canoes. The club house is on the Passaic River at Woodside, above Newark.

Yachting.

FIXTURES.

May 18.—Eclipse Y. C., Opening Cruise.
May 24.—Oswego Y. C., Opening Cruise.
May 24.—Boston Y. C., Opening Cruise.
May 30.—Knickerbocker Y. C., Spring Matches.
May 30.—Atlantic Y. C., Opening Cruise.
May 30.—Newark Y. C., Spring Match.
May 30.—South Boston Y. C., Spring Match.
May 30.—City Point Mosquito Fleet, 13 and 15ft. boats.
May 30.—New Haven Y. C., Opening Cruise.
May 31.—Boston Y.C., First Match,Connor and Commodore's cups.
June 9.—Portland Y. C., Challenge Cup.
June 10.—Atlantic Y. C., Annual Match.
June 11.—Hudson River Y. C., Annual Match.
June 12.—New York Y. C., Annual Matches.
June 14.—Seawanhaka Corinthian Y. C., Annual Matches.
June 16.—East River Y. C., Annual Matches.
June 16.—Newark Y. C., Open Match.
June 19.—New Jersey Y. C., Annual Match.
June 21.—Hull Y. C., Pennant Match.
June 23.—Newark Y. C., Open Matches.
June 24.—New Haven Y. C., Spring Match.
June 28.—Boston Y. C., Ladies' Day.
June 30.—Manhattan Y. C., Annual Cruise.
June 30.—Eclipse Y. C., Spring Match.
July 4.—Larchmont Y. C., Annual Open Matches.
July 4.—Hull Y. C., Review and Cruise, five days.
July 9.—Beverly Y. C., Marblehead, First Championship.
July 12.—Boston Y. C., Second Club Match.
July 12.—Hull Y. C., First Club Match.
July 19.—Hull Y. C., Ladies' Day.
July 26.—Beverly Y. C., Nahant, Second Championship.
July 30.—Oswego Y. C., Open Matches.
Aug. 2.—Kingston, Ont., Open Matches.
Aug. 2.—Hull Y. C., First Championship Match.
Aug. 6.—Bay of Quinte Y. C., Open Matches.
Aug. 9.—Boston Y. C., Open Matches, all clubs.
Aug. 16.—Hull Y. C., Annual Open Matches.
Aug. 16.—Beverly Y. C., Swampscott, Third Championship.
Aug. 23.—Beverly Y. C., Marblehead, Open Matches.
Aug. 23.—Boston Y. C., Third Club Match.
Aug. 30.—Hull Y. C., Second Championship Match.
Sept. 6—Hull Y. C., Third Championship Match.
Sept. 6.—Beverly Y. C., Marblehead, Special Matches.
Sept. 13.—Boston Y. C., Second Ladies' Day.

"BAD ADVICE."

THE proverbial jackass braying in a lion's skin is always amusing. A scribbler, who was convicted not long ago of malicious fabrication in the daily *World*, has, through some oversight, come to the surface in a paragraph of notice in the Toronto *Mail*. Guileless senility from a notoriously incapable source would be passed by without another thought, so far as I am personally concerned, but friends have insisted that the individual should be "put in his place," to double back the arrows of his ignorance, lest they might lodge casually in some spot.

Granting that my letter, read before the Toronto Yachting convention, did directly advise and urge the installation of a length and sail area rule, my advice would have been in accord with views positively expressed by all recognized and tried authorities the world over.

An expert committee of the Y. R. A. Council of Great Britain gave simple length measurement full investigation this winter, and declared that measurement totally unfit to fairly class widely differing types. Mr. Dixon Kemp has often pronounced the same judgment. The French journal *Le Yacht*, and the German publication, *Wassersport*, presided over by Von Saefkow, of high scientific research and great experience, arrive at the same conclusion. The committees of experts appointed last year by the New York Y. C., and the Seawanhaka Corinthian Y. C., after mature deliberation, with the application of length measurement in local clubs before their eyes, also condemned simple length upon the ground of prejudice to small, snugly rigged boats on a given loadline. There is a unanimity against that custom on the score of its inequity all the world over. On the other hand, even such clubs and people who have sought to establish it upon theoretic derivation have so far completely failed to agree upon any underlying theory. The Boston Y. C. and the Atlantic Y. C., which pirated its wisdom from Boston, set forth their "belief" that the speed of boats will compare as two-thirds of the cube root of the lengths, while other luminaries insist that it varies as the square root. Even where such empyrical explanations are laboriously set up as a shaky foundation, the reasoning presupposes the comparison between boats of like or nearly like bulks in proportion to the lengths. But as in the modern practice of yacht racing boats of diverging types and bulks on a length are being brought to the line, the assumption no longer includes the field and equity no longer exists. Common experience tells every man living that a 40ft. canoe or a 40ft. boat of small bulk is not possessed of the same innate possibilities for speed as a 40ft. yacht several times as big. Common sense rebels against racing boats even which differ materially in bulk on like lengths. And common expediency forbids a rule which drives boats of small bulk out of existence in slavish deference to those which are large, unwieldy and expensive. Until it can be exactly demonstrated that like lengths, without regard to bulk, can produce like speeds all round a course, until it can be shown that a 60ft. telegraph pole, whittled into shape, is possessed of the same potentiality of speed as a 60ft. sloop, common fairness points the necessity of granting compensation for difference in size on a length, unless public attention is to be focussed into one rut and confined to that small realm of experimentation which deals only with the largest possible on the length to the exclusion of everything else which may be preferable on other scores and for other purposes.

That, in view of the foregoing, a flippant ignoramus, who gives no evidence of a single earnest thought in the matter, a hand-to-mouth scribbler with no worthier aim than to fill space at the behest of a verdant master, should have the effrontery to parade his spleen in a supercilious "opinion" concerning my letter to gentlemen in Toronto, and should seek to spring a clumsy "trick of the trade" upon my audience by indecently prejudging the contents of my letter, and slurringly reflecting upon lake yachtsmen, is comment enough upon the reprehensible dishonesty of purpose animating that person.

I draw satisfaction in the knowledge that during five years past his "opinions" have never been quoted elsewhere, but have been received universally with the contempt of silence, until the Toronto *Mail* last week fell into his trap, and gave him the advertising of a paragraph under reservation. But it is nevertheless repugnant to find that my work is to be weighed even in a single instance in the scale against the disjointed jabber of an empty-pated pretender. That such persons are appreciated at their real worth, I am gratified to learn from the following editorial in the Belleville *Intelligencer* of April 8:

"We also read in the *Mail* of Monday:

"'Says the New York *Spirit of the Times* with regard to the lately formed Lake Yacht Racing Association:

"'"Acting on some bad advice from this city, the new association adopted the rule of measurement used by the Seawanhaka Corinthian Y. C., but as a trial of that will show its imperfections, that can easily be amended next year. The lake clubs are to be congratulated on having formed this association."'

"The 'bad advice' referred to is the advice which was given by Mr. Kunhardt, the yachting editor of FOREST AND STREAM, an uncompromising advocate of the cutter type of yacht—as against the sloop. Mr. Kunhardt's views are so pronounced as to, perhaps, justly lay him open to the charge of bias.'

"Our contemporary is unjust to Mr. Kunhardt, who, while advocating the cutter as the fastest and safest type of yacht, has always striven to secure fair tests as between the varying styles of craft. With this end in view he urged the general adoption of bulk measure-

ment—of the actual size of hull—as the best means of testing type, and in this we heartily agreed with him. This rule was in force in the New York Y. C. for several years, but the easy victories of the English cutters Madge and Maggie over centerboard sloops of much greater capacity gave assurance that, were a match sailed under it with one of the big British cutters for the America's cup, that very carefully guarded trophy, which was at one time emblematical of the yachting championship of the world, would infallibly cross the 'herring pond' in the plate locker of the cutter. So in 1883, owing to a rumor that a cutter would challenge for the cup, the New York Y. C. altered its rule so as to embrace sail area and length, under a formula which was less fair to cutters than a rule founded on a similar basis which had, the year previous, been adopted by the Seawanhaka Corinthian Y. C., of New York, which is now the best yachting organization at the commercial metropolis of the United States. Having thus found that he could not secure the adoption of a rule which would test model and type with absolute fairness, theoretically at least, Mr. Kunhardt therefore, like a wise man, at once accepted the fairest rule which he could get, and that is the Seawanhaka Club's rule, which the Lake Yacht Racing Association has adopted. This much it is necessary to say in order to vindicate Mr. Kunhardt—the ablest and best writer on yachting topics in America—from an unjust aspersion, and to justify the course of the Lake Yacht Racing Association in adopting the rule of measurement which met the unanimous approval of the yacht clubs of which that body is composed.

"For the *Spirit of the Times* to lecture the Lake Yacht Racing Association as it does is a piece of downright impertinence. That body numbers among its members many men far more able by nature, by education and by experience to arrive at correct conclusions than the yachting reporter of the *Spirit*, who is a mere echo of the kid-glove brigade and sea lawyers of the New York Y. C., and stupidly sticking to one style of craft will not, despite the hardest of hard facts to the contrary, admit that any type of yacht but that which his mentors favor can possibly possess any merits. We assure this 'critic' that when the L. Y. R. A. want advice they will not apply to him, but seek for it in better informed quarters."

I am sorry to take up so much space with what is more or less personal, but it is necessary that the minds of some yachtsmen should be disabused, and that the difference should be established between the trickery of a witless time server and the deductions formed by men who have given the subject at least conscientious study and who are honest in their expressions. I also confess that I resent warmly being mixed up indiscriminately with the cattle bellowing and yelping in my wake, seeking to curry favor with the "great unwashed." C. P. K.

A CRUISING STEAMER.

IN contradistinction to the extravagant display steamships building at Wilmington is the Mariana, a new cruising yacht built for yachting purposes by the famous establishment of Bristol, R. I. She possesses all the good points of a cruising steamer, and is remarkable for the originality of everything about her. At a fraction of the outlay for the New York and Electra, much more practical results are obtained. The Mariana will out-steam her big sisters in point of distance and in speed, considering difference in size. She has ample and pleasant accommodations for a family, and we are at a loss to know what more a yachting man can ask. Carting a mob of guests about at sea may afford a chance to lavish wealth, but the occasions for such Oriental magnificence will be found very few indeed in yachting experience, and ninety-nine times out of a hundred the owners of the unwieldy monsters will view with envy the superior handiness, economy and adaptibility of the Mariana. Fortunately the people who can construct Nourmahals must always be few, else steam yachting would soon degenerate into steam shipping. Enormously large yachts are built, with few exceptions, by persons who do not know what they want, and are possessed of the fallacious notion that size and quality are concomitants. Building large yachts for the sake of their size is little better than buying paintings by the square yard. We write from the point of the sporting yachtsman. We know that a great deal of real sport can be derived from steam yachting; but when sport degenerates into a race for notoriety in tonnage, we feel like disowning the monster ships and refusing them recognition in the circle of elect.

We venture the belief the Wilmington yachts will prove the worst investment their owners have ever made. They are sailors' boarding houses, consuming and wasting thousands upon thousands, too unwieldy for handy nearby service, and fit only for voyaging round the world, so far as size is concerned, and scarcely fit for that in their rapacious coal consumption and limited bunker capacity. In comparison with the typical English steam cruisers of the Sunbeam and Lancashire Witch type, of 600 tons, the two Wilmington attempts are nothing more than ridiculously overgrown steam launches, representing the maximum outlay with the minimum of return in serviceable characteristics.

Per contra, the Mariana is a scheme which fills the bill as a cruiser and smart vessel under steam, though we should certainly prefer more rig and more complete equipment aloft, so that sail might be used to good purpose in the event of running short of coal or a break down in the machinery. Mariana is a fine flush deck yacht of extraordinary strength and "toughness" combined with lightness of hull. She carries coal enough in the bunkers for ten days, steaming at ten knot speed, an endurance scarcely equalled by small English steam cruisers and due to the great economy of the Herreshoff coil boiler and superb design for compounding the steam.

The Mariana is 50 tons carpenter's measurement, Length 86ft., beam 13ft., and 8ft. depth of hold with a draft of 5ft. Her engines are compound 8 and 14in. cylinders with 14in. stroke. Four tons of lead are bolted to the keel so secure perfect immunity from being tripped in a sea, and to steady the yacht in rough water. She has a bold high side, long easy entrance, light and jaunty stern and a plumb stem. The hull is composite, having iron frame with the plank screw-bolted and "edge-nailed" besides, strong enough to be rolled down an embankment. The deck is extremely attractive with no superstructure but the pilot house forward. The smoke stack is braced in its construction below, so that no guys are needed, and nothing interferes with clear passage fore and aft. She is rigged as a schooner without head gear. Below, the accommodations are very roomy, light and cheerful, ventilated by large lights in the side and mahogany skylights overhead. Her planning and fittings are much in the style of a smart modern racing cutter. The mains companion is spiral and lands in a steerage or hallway, on the port side of which is a berth and opposite a retiring room. Aft is the ladies' saloon and sleeping cabin, having one berth each side and a large double berth at the end athwartships. The steerage leads through doors into the main saloon, with sofas each side and table in center.

Forward of this is the space allotted to engine and boiler, the latter being abaft the machinery. This space is between bulkheads and is entered by a ladder from deck. The boiler is of the improved coil pattern, in which a head of steam can be raised in three to five minutes. While the mob of stokers aboard a Nourmahal or Electra are thinking about loading up the grates with coal and slowly starting fires to wait one or two hours before steam is raised, amid smut and grime, one hand lights a few chips aboard the Mariana, throws a shovelful of fuel on top, and at once the gauge begins to rise. The operation may be performed by a lady in silks and satins and the engine started with little more trouble than getting a sewing-machine under way. The room is at all times cleanly and cosy as a studio. The space occupied by the motive power is very small and the bunkers handy at each side. Coal passers get no show aboard the Mariana. One hand, if required, can fire up and attend to all below if desired, as the furnace room is within reach of the man attending the engines. Comparison would be odious between the sweet, clean and ever ready arrangement of Mariana and the ancient, clumsy and time-wasting preliminaries aboard the Wilmington vessels. When steam is up, in a few minutes the anchor is catted by deck hoisting gear operated from the engine room, and the pilot in his house steers the vessel at will by pressing the lever of the steam steering gear with his little finger. The Mariana would be fifteen or twenty miles on her course by the time the master of the Electra sends below to find out whether ten pounds has been raised and the screw can be turned over. Three hands all told in a watch will run the Mariana if needs be, and three times that many would be a short allowance for the Electra. Yet Mariana is capable of all and more than the service the Electra can ever hope to accomplish. She draws but 5ft., and for work about the coast, for short runs from residence to place of business in the morning and return the same day, she is infinitely better adapted than the Wilmington ships, which in fact cannot perform such service at all. Furthermore Mariana will go to sea and stay at sea with the best.

Forward of the engine space is a forecastle with berthing for captain and crew, both ends of the boat and hold being devoted to storage. All the cooking is done in a galley of oil stoves, and no nuisance or lost time warming up a range are permitted. In finish, the Mariana is stylish all through, without any pretense to lavish and improper display which ought to have no place aboard a well regulated vessel. She is a new type of steam cruiser, and one we welcome as a refreshing variety and great improvement upon prevailing customs among the builders about New York, whose conceptions of a steam yacht consist of a dugout with a tug engine and coal yards at short intervals. For ordinary day cruising about the coast the coal supply of the Mariana will last from four to five weeks. We consider she marks a new departure ahead, and that in time her characteristics will find expression in an entire fleet.

THE LAKE Y. R. A.

IT has been further decided that the classes should include yachts of 38ft. corrected length and over, 25 to 38ft., and under 25ft. These figures were adopted in order that yachts accustomed to particular classes under the old tonnage rule would continue to race with the same boats. A yacht must sail in her own class and no other. Shifting ballast prohibited in first and second classes. First match open to the union will be sailed off Oswego July 30. Kingston will follow suit Aug. 2, Bay of Quinte Aug. 6, affording a round in a fortnight.

WHICH SHALL IT BE?

THE yacht of common sense—say 30ft. loadline, 8ft. beam, 6ft. hold and 5ft. draft, with 24ft. hoist, and 11 to 12 tons displacement, at a cost of $2,000? Or,

The yacht of length measurement—30ft. loadline, 12ft. beam, 6ft. hold, 9½ft. draft, with 34ft. hoist and 15 to 18 tons displacement, at a cost of $3,000?

Which shall it be? Shall both be allowed to exist, pay for their size, through sail area, and the most meritorious of the two survive after fair competition?

Or shall the large boat smuggle in her power and size under length measurement, avoid a just accounting, and overwhelm the smaller, more economical and more serviceable boat, profiting by a rule playing into the hands of the big and swindling the small, until warped interpretations bestow upon the larger boat's form praise wrung from her smaller sister by brute force, victories which in truth are to be attributed to superior size and not to superior fashioning of body at all?

WANTED, YACHT SKIPPERS.

Editor Forest and Stream:

Some time since, I read with considerable surprise that the Fortuna hove to in a gale, had lain broad off, and naturally been considerably swept by the sea. The other day I had an opportunity of asking what sail was she under, and the answer, "double reef foresail," of course solved the mystery, and gave me another proof of the stupidity of the average yacht sailing master.

Generally, an individual whose brains seem to have stopped expanding at the age of say twenty-five, and who handles all successive vessels in the manner which was applicable to the Mary Ann or Betsy Jane, on which he served his time. It is twenty-eight years since my first yacht race, and I have seen a great deal of the sport in all sorts of boats, and year after year I notice the same mistakes made by our sailing masters. Attempts to carry balloon sails to windward, forestaysails held on to when tacking, beamy boats in light winds trimmed until the life is all out of them, and then abused for not going fast; vessels like Fortuna, with a midship mainmast, hove to under what is practically headsail, and villified for laying wide and being wet, and so on *ad nauseam*. The only chance for an improvement in these matters seems to lie in more study and observation on the part of the owner, and the practice of an understanding that the owner is supreme, and if he chooses to lose his races by bad sailing he has a right so to do. I should advise all intending yacht owners to religiously avoid American masters, above all the fisherman variety, and to select instead Danes, Swedes or Germans, as these latter have some idea of subordination, and can be made to see that the man who pays the bills has a right to give the orders. M.

MEASUREMENT ON THE LAKES.

THE letter below we print by request. It was forwarded in answer to some private correspondence with Toronto. The recipient thought well enough of the communication to read it before the recent convention for the formation of a Y. R. A. The subsequent deliberations of that convention resulted, as is known, in the adoption of the Seawanhaka rule for lake racing.

A buffoon in this city, actuated by jealousy, thereupon blurts forth his venom in the columns of one of the turf papers of this city, and reflects upon the intelligence of the Toronto meeting, with the assurance that the delegates had acted upon "bad advice from this city." This particular personage, long a laughing stock to all but the "great unwashed," has proven over and over again a cringing time server of a low order of intellect, and of too little account in the community to waste many words over. The Toronto convention can get the true gauge of a gentleman by consulting the record of his own pen.

The writer of the subjoined letter is not surprised that the meanest newspaper trickery should be resorted to by an unprincipled clown seeking to coin cheap capital by the methods of literary "shysters." But he learns with regret the failure of the sporting editor of the Toronto *Mail* to distinguish between a private letter written with honest intent and purpose, and the brazen chicanery of a vulgar nonentity superciliously summing up that letter as "bad advice," without even knowing a word of its contents, or what influence it had in bringing about the decision of the conference.

The letter was written as a private communication. It contains no advice, but seeks to explain the reasons for granting time allowance. It champions no scheme for benefitting any style of build, but on the contrary, keeps in view throughout equity for all.

Finally, no matter what the correspondence may have contained, we decline such flattery as the implication that a single letter from our pen could turn the heads of all lake yachtsmen and make them accept black for white and white for black. True, no yachting publication has ever exerted such widespread and radical influence upon yachting affairs as FOREST AND STREAM, that much we know to be so, but we refuse to think we are able to rob other people of their own straight senses. If the Toronto convention was influenced by the letter below, it was because the members agreed with its logic, and were about to come to just the same conclusion by themselves, and not because they accepted in blind faith anything at all which the editor of these columns might choose to send forth.

It is our chief punishment that in a position before the public, we have to meet and hustle men who earn from us nothing but that contempt we feel for the demagogue of the curbstone or the bravo of a gin palace. And when untenable positions like the Toronto *Mail* can be hoodwinked by such worthies, and we are made to sail in the same boat with such cattle, we fain would haul down our flag in disgust and turn the wheel of the future over to the *sans-coulottes* without further word, in preference to clubbing clowns under hatches any longer.

George E. Evans, Esq., Toronto:

DEAR SIR—In reply to your letter of March 20 in relation to coming Y. R. A. meeting of the Lake yacht clubs, I offer the following, hoping it will not reach you too late for your purpose:

Leaving out of question all that relates to purely theoretical derivation of measurement rules, and viewing the subject only in its practical bearing, I should say that whatever your proposed association concludes to accept, it ought at once to abolish the present Royal Canadian L. and B. rule. No matter what type a person may prefer, he has no right to force his preferences upon others through prejudicial measurement. The choice of model should be free. The wants of all are not alike, and it is not desirable to proscribe those who, to meet the requirements of their environs, choose to build different from the particular style, to foster which an empyrical rule has been set up. Liberty of choice is the only fair basis of intelligent competition. No person can assume to dictate what style should prevail, as long as opinions and tastes differ. But the style should be allowed to grow out of trial of all kinds by a natural process of evolution or selection of the best by the decision of each man for himself. Hence, I take it, no rule ought to be looked upon with favor which dictates model to any serious degree. A free field and no favor, or else our ideas are bound to become warped on the subject of design, as it will not be the best boat which wins, but may be only that boat which happens to suffer least from improper discrimination of a rule showing partiality to one style and nursing it into prominence and favor beyond its deserts. It can be understood that by such partiality the best boat may actually be driven out of existence and the worst kind may be made to prevail. The door would be shut against all improvements, variations or new ideas, and the evolution of yacht building would come to a permanent standstill with "vested interests," finally so strong that efforts to restore logical methods of comparison would be sure to fail.

My first proposition is that a rule should show no appreciable partiality to any class of boat, and a rule which does so is upon the very face of matters illogical, and of baneful influence in the long run.

For this reason I should say the tonnage rule L—B×B×½B should

at once be abolished for the common good, no matter what private interests it may for a moment affect. It has been already materially modified in England, where the hold of L×B rules are fast weakening every day. Moreover, it would be impossible to expect international competition with yachts from the American side, as they would probably refuse to submit to any tax on their beam for the benefit of others deriving the same quality from a depth not taxed.

The question is then what substitute to offer, so that all boats can be matched with as much equity as possible. Such a rule should take no account of model. During all the agitation of the subject and the numerous propositions made, there has been a gradual "settling of the mud," and we are now able to see ahead pretty clearly.

The propositions have to all intents and purposes narrowed down to only two which deserve serious consideration.

These are measurement by plain waterline length (with possibly some definite limit set to overhang to avoid circumventing the spirit of the method) and second, a measurement of waterline modified in some way by sail area.

The first rule is decidedly objectionable because in opposition to the first principle set down. On equal lengths the large boat is certain to drive out of existence the small boat. In consequence, only the largest and heaviest (most costly) boats of greatest draft and running expenses would, after a while, survive. The small boat would be forced out of racing and, of course, go under, as all will gradually accept the fashion and the economy of the sport seriously undermined. In Boston they have already built a sloop of 20 tons displacement, 10½ tons ballast, and 8ft. 2in. draft, with 32ft. hoist on only 31ft. loadline as the direct outcome of competition under length. Now what chance against such a monster can another boat of like length, but with 5 tons (reasonable amount for all yachting purposes) ballast and 22 or 24ft. hoist possibly have in the majority of cases? She would be simply overpowered by her big sister and quickly go out of existence. No fair rule should leave any such effect. Let A build as big as he chooses, but also let B for his purpose build as small on the length as he prefers. He may have just as good reason for so doing and no one has a right to command him to the contrary at the penalty of being handicapped in having to race with much larger boats which may happen to be of same length. On the contrary, from reasons of economy and for shoal water and for handiness, the small boat ought to receive just as much recognition from a fair measurement rule as the large one.

We then come to this problem: How can the small boat be compensated in equity as against a large one of like length? The answer is this: A small boat will, broadly considered, carry proportionately smaller sails than a larger and more powerful boat. Hence, if we introduce sail area as a factor in the rule, the correction is easily made and it only remains to place the proper value on the factor of sails in the formula so as not to offer a premium so great upon small sails as in turn to bear against large boats and rule them out by too great favor to the other side. This would be altogether a matter for experience to decide by the tentative plan, as no theory can afford a basis for the extent to which sail should be taxed. A comparison of performance of two well known boats, considered good or best of their kind, will show how much one can allow the other to bring them home alike. With that correction applied, any difference at the finish between other boats brought about, in competition, would represent the superiority in design of the victorious party.

One objection to such a rule has to be met at the outset. It is possible that a large boat, through being crank or of an unstable form, may actually carry less sail in practice than another smaller, but, nevertheless, stiffer boat. Example the Bedouin 43½ beam cutter of 104 tons displacement carries the same sail only as the flat broad 3 beam sloop Gracie, of 55 tons displacement. Their total size will not show quite the difference of their displacements, as Bedouin is narrow and small comparatively above water, and the Gracie big and heavy. Still the total size of the Bedouin is perhaps one-quarter more than that of the Gracie of same length. Yet she carries only same sail area, and would bring her extra bigness to the line free of tax under a sail and length rule in consequence of the foregoing.

Here that rule would appear to be an unfair imposition upon the smaller boat of the two. But a good answer or explanation lies in this: If the Bedouin, owing to her form, can drive a larger body with same sail as Gracie drives a smaller body, at same speed, so much the better for Bedouin. She is really performing a meritorious feat, as the largest boat driven by the smallest sail must be considered the most successful and praiseworthy design. Such a design accomplishes with relative economy what the smaller Gracie only accomplishes by the aid of greater sail area in proportion to her size. Hence the Bedouin profits not by the introduction of the sail factor, but really because her narrow, deep form is so much superior to the flat, wide form of Gracie, that she reaches the same speed in spite of her (Bedouin's) greater body with no more driving power. And if she does this, it is no reason why in equity she should be made to pay for that superiority in form due to proportions which enable her to do so.

Again, a *crank* boat will carry small sail, and it might be supposed the L. and Sail rule would be putting a premium upon bad unstable forms. But it does not, because the unstable form carries less driving power, and what might be supposed a gain under the rule one way is exactly lost in the other.

The conclusion is that Length and Sail area is equitable as near as a rule can be made in practice, in its general application, and that under it a person can choose a narrow deep type driven with small sail or a broad type with large sail, the latter paying for her large sail, it is true, *but also* receiving in return the benefit of large driving power.

Under this rule, the opposite types of like length can be raced, being only asked to put themselves on equality in driving power, or else pay for the use of more than an adversary. In practice the greater sail area is as often found on one type as upon another.

If a person takes great beam and great depth and draft, he obtains the largest boat on the length, requires the biggest sail and through the sail factor pays for the bigness of his boat.

If a person wants a small boat, takes moderate beam and depth, he carries less sail, and through the sail factor of the rule, cognizance is taken of the fact that his boat is small on the length.

If a person spars heavily or overspars and another builds on the same model but rests content with a snug rig, the rule in artificially bringing about an equality in the driving power of the two would (extraneous causes excluded) bring the two boats even at the finish, and that would be perfect equity, as both being like in model, neither one can claim superiority over the other.

Without the sail factor the largest rig would win in the case cited, not from any superiority in the planning of the boat but from the fixed, inherent and well-known advantage of excess in driving power, to demonstrate which no race is at all required. To eliminate that inherent advantage of greater power, the sail factor serves. Then if two boats differing in shape or proportions compete, the result has a logical meaning, and from it we can derive a correct opinion of the worth of the two forms.

As to what importance or weight the sail area should be given, it is comparatively a minor question, if the general principles or basis for measurement can only once be agreed upon.

The Seawanhaka Corinthian Y. C. gives it a little more weight than the New York Y. C., and the English proposed rule more than either, by the following formula:

English Rule: $\frac{L \times \text{sail}}{6000}$ = tonnage. The divisor being a fictitious figure adopted only to bring out the tonnage about as it is by the old L. and B. rule to make former time tables serve. Seawanhaka Rule: $\frac{L + \sqrt{\text{sail}}}{2}$ = corrected L. New York Rule: $\frac{2L + \sqrt{\text{sail}}}{3}$ = corrected L.

If you wish to bear light on large rigs, follow New York rule. If heavy, follow English rule. If an average between the two, nearer the New York rule a little, adopt the Seawanhaka rule.

If none of them suitable, compare well-known standard boats of radically different types of same length, and give such weight to sail area that both (on assumption they represent equal talent in the shaping of their lines) shall be figured at the finish at the same corrected time.

As for the amount of time in minutes and seconds, only experience can guide. Although theory gives a table based upon the assumption that speeds vary as $\sqrt{L}$, it does not serve, when length is modified by the introduction of sail, at least not in a direct way. If two boats with proportionately like sail are supposed to compare in speed as $\sqrt{L}$, then those two boats having different proportions of sail would not come up to the theory, and the difference between their performance and the theoretic results (with equal proportion of sail) will represent the weight to be given to the difference in sail.

Thus, if two boats 35 and 38ft. long, with like proportion of sail, finish, by theoretic formula, 5m. apart, and in practice, with different proportions of sail, say 8m. apart, then the extra 3m. is to be laid to the smaller sail area, and the sail factor should have just such weight in the length and sail rule that upon applying the time table, the figuring should just cover or wipe out the extra 3m. So that the value to be given to sail depends upon the time scale you accept and *vice versa*.

If you start with the theoretic comparison that speeds vary with the $\sqrt{L}$, and first build or adopt a time scale on that, then sail area should be given such weight as will cover the difference observed in practice with different proportions of sail beyond and above the difference deduced from the theoretic comparison by $\sqrt{L}$ *and equal sail*. It is customary to accept for practice only 40 per cent. of the theoretic time allowance, as full speed would seldom be attained and 40 per cent. is supposed to be the average proportion of the maximum speed the lengths are capable of, which is achieved in actual racing. Or in short, the factor of sail is a correction of the theoretic allowance (based upon assumption of like proportions of sail) for those variations of sail in practice, not in accord with the theoretic assumption. The intention of the correction being to assimilate the differences

of driving power to the equality in that respect demanded for the equitable application of allowances of time deduced from the comparison of speeds on the theory that they vary as the $\sqrt{L}$.

You will find in Kemp's "Yacht and Boat Sailing," pages 563 and 564, a time table figured according to $\sqrt{L}$, but 50 per cent. of theoretic amount is given instead of 40 per cent., as I mentioned. The percentage will be governed by the prevailing winds, though a perfect scale ought to be adjustable to the strength of the wind for each occasion, were it practicable. If much strong racing weather, then 50 per cent. If much light summer weather, then 40 per cent., and so on. For our New York climate 50 per cent. has recently been reduced to 40, as the former tax was deemed too heavy for the average weather.

Time is computed in any scale or under any formula by starting with some speed of which a boat is assumed to be capable, and with variations in that assumption will occur variations in the scale also, after interpolating for other sizes of boats. Thus Kemp assumes a boat 64ft. long, able to make 10 knots, and upon that deduces the speeds of other lengths as per $\sqrt{L}$ theory. Had he started with 10½ knots, all the scale would have been increased throughout. But for practical purposes he is as near the truth as need be with 10 knots for 64ft. Yours very truly,

NEW YORK, March 23. C. P. KUNHARDT.

THE NEW STEAMER ELECTRA.

WE glean the following concerning Mr. Elbridge T. Gerry's new yacht from the *Herald*. She is building at the Harlan & Hollingsworth yard, Wilmington, Del., from models and plans by Gustav Hilman, of this city. Conforms to Lloyd's specifications. Length on waterline is 161½ft.; beam extreme, 23ft.; depth, 13ft. 6in.; draft, 9ft. 6in.:

Her keel is of the best hammered iron 6in. deep and 2in. thick, while the stem, also of iron, is 7in. by 1¾in., rabbeted to receive the plating, and her stern frame forging is 6in. wide by 3½in. thick. The frames are of steel angles, spaced 22in., and are in one piece from keel to under side of rail, 8in. by 2¾in. The floor plates (of iron) are 21in. deep at the center and run up to the bilge to a line of double their height, with a thickness of 6-16in. under the boilers and engine and 5-16in. forward and aft of the machinery. The reverse angles in the frames are of steel, 2½in. by 2½in, by 5-16in.. every other one running to the upper deck, and one of 12in. to the cabin deck, while they are doubled under the machinery to the lower turn of the bilge. There are doubling pieces at all keelsons and stringer angles. The keelson at the center is an intercostal plate 6-16in. in thickness, 25in. wide, and runs well forward and aft. The side plates are 8in. wide by 7-16in., and are held to the intercostal by 3½in. by 3in. by 6-16in. angles, while the clips are 2½in. by 2½in. by 5-16in. The bilge keelson runs the full length of the vessel. The beams are of bulb T steel, 6in. deep by 3¾in. by 5-16in. for the upper deck, with steel stringers 22in. wide by 6-16in. thick. The deck is of 3-16in. iron plates, covered with 3in. square white pine plank, though the cabin deck is covered with 1¼in. Georgia pine, tongued and grooved. All the plating is of steel, and varies in thickness from ⅜ to 7-16in., the plates being worked flush and riveted and strapped as usual. The keel, stem and stern frame are double riveted with ⅞in. diameter of rivets, while the garboard and sheer strakes are double chain riveted with ¾in. rivets, and the balance of the outside plating is single riveted with rivets ⅝in. in diameter. There are six bulkheads made water tight of 5-16in. iron plate, which is stiffened with iron angles 3in. by 2½in. by 5-16in, every 30in., all extending from the frame up to the upper deck beams. The doors in the bulkheads will shut water tight, and can be closed from the deck.

The Electra is to have one inverted, direct acting, surface condensing, compound engine. The high pressure cylinder is 22in. in diameter and the low pressure cylinder 40in. in diameter by 26in. stroke of piston. All the journals are of such size and length as to insure uninterrupted work for any length of time without heating or needing the use of water or excessive lubrication when working at maximum speed. There is an independent condenser not built in the frame of the engine, and independent air, circulating and feed pumps, and also an independent steam, fire and bilge pump, with a blower, which will do much to secure proper ventilation, in addition to its providing for a good draft. The propellor is 8ft. in diameter, 13ft. pitch, and capable of 160 turns a minute. Steam is provided by two cylindrical steel shell boilers of the Scotch pattern, each 10ft. 6in. in diameter by 11ft. long, with two furnaces 42in. in diameter. Each boiler has from 1,500 to 1,600 sq. ft. of heating surface. The smokestack is double and fitted with a hood.

On deck forward is a house 27ft. long, 9ft. inside, and another aft 24ft. long. Built of iron with mahogany casing. Pilot house located in forward structure and a bridge with a wheel is arranged in connection. Remainder devoted to stateroom with companion leading below. Under deck are the usual quarters for crew and rooms for mate and pilot. Opposite a family stateroom. Abaft this the main stateroom of the owner 13ft. long and the whole width of the vessel. Connected with this is a ladies' room 9x11ft., with bath and toilet. A passage way leads along the boiler and engine space to the accommodations aft. On port side is the engineer's room, on starboard side the galley, which is 9ft. long. Beyond these is a large dining saloon 17ft. long, then a companion with guests' rooms on either side, with cook and steward, wine lockers and store rooms in the stern. Such is the huge white elephant building for Mr. Gerry in the competition for making the greatest show afloat with the least return in sport or pleasure for the largest outlay of money. What the owner will do with such a vessel is a problem, and that there is no economic relation between her size and cost and the sport to be derived from her possession is quite certain. She is not to be classed as a yacht but as a steamship.

THETIS.—The Boston *Herald* gives the following particulars: Mr. Henry Bryant will command his cutter Thetis, and Mr. William Crocker will be his mate. In important races, Mr. Aubrey Crocker, the successful captain of the yacht Shadow, who divides with Capt. Watson the honor of being the most skillful navigator along the south shore, will handle the Thetis. Length over all, 72ft.; length on loadline, 64ft.; breadth, extreme, 19ft.; depth, 9ft. 6in.; draft, 8ft. 6in.; draft, with centerboard, 18ft. 6in.; keel of oak, sides 26in., moulded 26in.; stem of oak, sided at head 11in., sided at keel 8in.; post of oak, sided at head 11in., sided at keel 4in.; floors of oak, sided at head 4in., moulded 6in.; first futtocks of oak, sided at head 4in., moulded 6x8in. First futtocks are in one piece from keel to gunwale; top timbers, sided 4in., moulded 5x8in.; stanchions of locust, sided 4in.. moulded 8in.; clamp, in one length, 64ft. of yellow pine, 12x8in.; shelf, in one length, 64ft., of yellow pine, 13x8in.; beam partners of oak, moulded and sided, 6in.; beam of hackmatack, moulded 6in. and sided 9x5in.; coamings of mahogany, 8x12in.; bilge strakes, one length, 4x4in., square bolted and clinched with ⅝ iron; twelve iron floors, 3x2in., arms 3ft. 6in.; ten iron floors, 3x2in., arms 1ft. 6in.; covering board of oak in one length of 65ft., 9in. wide and 2¼in. thick; lock strake, 65ft. long and 3½x2½in.; beam ends bolted through the lock strake and shelf, ⅝ iron; steering gear, quadrant and horizontal wheel. Chain plates and union plate extend 5ft. below the gunwale, 2¾x½in. between plank and timbers; centerboard case, first rim, 6x12in.; second rim, 4x12in.; rest, 3x10in.; rails of oak, 64ft long and 5x2in.; deck plank of selected pine, 2x2in.; outboard planking of hard pine, 2½in. thick; garboard and next strake of oak, in one length; garboard, 3in. on lower edge, the bottom treenailed with inch treenails all through and wedged in and out; bottom plank, butt bolted with ½in. copper through and clinched; topsides and wales, square fastened with galvanized spikes, 6x⅜in.; clamp and shell bolt of ⅝ galvanized iron; lead keels, weighing 20 tons, bolted with 1⅛ yellow metal between each frame; room of frames, 18in.; centerboard, 19ft. 6in. long, 10ft. deep, 3½in. thick; mast, 71ft. long; at partner, 16in, in diameter; main boom, 61ft. long; at sling, 15in. in diameter; gaff, 35ft. long; bowsprit, outboard, 27ft. long, 13x13in. topmast, 35ft. long, 9½in. at cap; skylights and companion of the McIntyre patent, after skylight and cockpit circular, and made of St. Domingo mahogany. The Thetis will carry two boats, one a Spanish cedar gig 19ft. long, 4ft. 3in. wide and 29in. deep, and the other a working boat 14ft. long, 4ft. 6in. wide and 22in. deep.

LAGONDA.—Mr. J. C. Hoagland's new steamer was launched April 8, from Mumm's yard, Bay Ridge. She is 130ft. on deck, 120ft. on water line, 19ft. 6in. beam and 10ft. hold, with 6ft. 6in. draft. Will receive her machinery in Wilmington from designs by Chas. Emory. Cylinders 14 and 24in. by 16in. stroke. Boiler of the Scotch pattern, 9 by 9ft. 6in. Space occupied fore and aft by the motive power, 26ft. Engine will be forward of the boiler. Bunkers for 40 tons. Flush deck with open iron round rail. Pilot house forward 15ft., feet long. Least freeboard 5ft. Rigged as a schooner. Accommodations consist of a saloon abaft the mainmast, stateroom each side of companion and a large owner's room with bath, etc., forward of saloon. All forward of machinery given up to crew and officers. Cabins finished in bird's eye maple and mahogany. Eighteen 9in. lights each side.

SINGLEHAND SAILING.—Our Paris contemporary, *Le Yacht*, is republishing, with illustrations, the series of articles on singlehand sailing we wrote for these columns some time ago. *Le Yacht* is pleased to remark: "The articles denote a deep sympathy and love for a boat on the part of the author, and a complete practical experience. The composition of those articles is as fascinating as instructive, and for this double reason we believe them well worth reproduction, conserving their original character, which gives such picturesqueness to the description, and grace of style of the author."

ATHLON.—The new deep centerboard, built by John Mumm, of Bay Ridge, for Dr. J. C. Barron, has been launched and is fast fitting out for the campaign. In point of model she is clean cut and fair and gives promise of a good record. In point of rig she is a cutter in principle so far as Bay Ridge dared venture upon such an innovation. The forestay has been carried out 6ft. on bowsprit and it is hard to say whether she carries jib and flying jib or foresail and jib. This will put the skipper in a quandary as to what plan to show in a breeze. Jib only would be almost too small and far out ahead, and yet foresail only would be a ludicrous and lubberly arrangement. When Athlon's rig was determined upon, it was supposed to be something original, as Bay Ridge is constitutionally opposed to learning too much at a jump. The sloop being now in bad odor, was no longer wanted, and the cutter too advanced for the local mind. Besides, all good patriots disdain to copy the cutter outright, though they come it nevertheless in the end. So things were split up half way aboard the new Athlon with the result that she is a half breed in rig with few of the good attributes of the cutter, but enough of the sloop left as salve to the good patriot and in deference to the love of old. It is more than likely that Athlon will soon discover in her racing career the value of shifting jibs to adapt her sail plan nicely to the occasions, and that in a season or two the half-hearted copy of the cutter will give way to an arrangement more creditable to all concerned. If course this is high treason to tradition, but Athlon will come out a full fledged cutter in due season, as all smart racers are sure to do with the acquisition of greater experience. Athlon is 58ft. over all, 51ft. 6in. on water line, 17ft. 4in. beam, 7ft. 6in. hold, and 6ft. draft without board. Keel post and stem of oak. Frames of hackmatack 3in. sided and 7in. moulded at heel, reduced to 4in. at head. Plank of 2¼in. yellow pine with oak topstreaks. Decks of 2¼in. square white pine. Cabin house is the stereotyped, 15in. high and 24ft. long; locust stanchions. Fastenings galvanized nail work. Shelf clamp 4x6in., through riveted. Finish in mahogany. Spars as follows: Mast, over all, 62ft.; deck to hounds, 49ft.; masthead, 7ft.; topmast, 35ft.; boom, 50ft.; gaff, 31ft.; bowsprit, outboard to stay, 24ft. Accommodations below include small stateroom each side the companion ladder, saloon 12ft. square, owner's room 7ft. long, with bathroom on starboard side forward and guests' room to port, also pantry, kitchen, etc. Finish in white ash with mahogany trimmings.

NEW SLOOP.—Miller Bros., of Chicago, have a new sloop under way, from a model by Cuthbert. According to the Toronto *Mail*, she is 50ft. over all; length on water line, 45ft.; length on keel, 40ft.; beam extreme, 14ft. 10in.; depth amidships, 5ft. 6in.; draft aft, 4ft. 6in.; draft forward, 1ft. 6in.; length of centerboard, 12ft. 2in.; drop of centerboard, 4ft.; frames, double, of oak, 5in. moulded 2in. sided; 21in. between centers; keel, oak, 9in. moulded, 6½in. sided; plank sheer of oak, 9 by 3; mast, deck to cap, 48ft.; mast deck to hounds, 43ft.; mast doubling, 5ft.; topmast, extreme length, 24ft.; bowsprit, outboard, 24ft.; inboard, 4ft.; mainsail hoist, 33ft. 3in.; mainsail foot, 44ft.; mainsail after leach, 51ft.; mainsail on gaff, 24½ft.; jib after leach, 39ft.; jib foot, 28ft.; jib on stay, 48ft. 3in.; mast from stem, 14ft.

NEW BOOKS.—From Norie & Wilson, 156 Minories, London, we have received a neat little volume containing all the laws and regulations governing the ownership of yachts in Great Britain. It is entitled, "Yachting Under Statute," and being compiled by R. A. B. Prested, a lawyer versed in maritime affairs, supplies a want very generally experienced. No owner abroad can any longer plead ignorance of the law, as the little volume covers the whole ground including interpretations of the courts as to responsibility, insurance claims, shipping articles, liabilities, navigation laws of the various authorities controling the chief rivers and harbors, etc. Laws relating to yachting in America are much simpler, but still a similar publication on this side of the Atlantic will be needed before long, as the value of property at stake is increasing very fast.

NEWARK Y. C.—Officers for the year: Commodore, E. M. Grover, Vixen; Vice-Commodore, J. W. Williams, Onward; Treasurer, C. E. Cameron, Emmy C.; Secretary, A. F. Adams, Rambler; Measurer, G. Hartung, Jr., Maud L.; Regatta Committee, C. E. Cameron, Chairman; A. F. Adams, Secretary; J. Skellenger, B. H. Price and E. M. Grover. Opening race on Decoration Day. June 16, open match, free to all. Six classes cabin sloops, jib and mainsails over 24ft., over 20ft., and under 20ft.; cats over 18ft., under 18ft. Prizes, $20 cash, with entrance $3.

SOUTH BOSTON Y. C.—Has 158 members and 9 honorary members. Expenditures for past year $4,869. Has joined the New England Y. R. A. Officers for the year: Commodore, Henry Hussey of the Nora; Vice-Commodore, J. W. Sherman, Jr., of the Echo; Fleet Captain, C. L. Braman of the Zulu; Measurer, James Bertram of the Sylvan; Secretary, John Winniatt of the Blush; Treasurer, Thomas Christian. Regatta Committee—S. A. Crowell, John Bertram, C. McKenna, H. J. McKee, J. E. Chandler, R. V. King, F. G. Cooley.

AMERICAN Y. C.—The steam yacht club has elected the following officers for the year: Commodore, G. S. Scott, Viking; Vice Commodore, A. De Cordova, Promise; Rear-Commodore, C. F. Timpson, Julia; Treasurer, W. B. Dowd; Secretary, H. A. Taylor. Trustees—J. A. Bostwick, Orienta; J. C. Hoagland, Lagonda; H. A. Taylor, Sphinx; A. De Cordova, Promise; C. F. Timpson, Julia; F. R. Lawrence and W. B. Dowd. After making first payment for new harbor at Charles Island, the treasurer reports $16,000 on hand.

DORCHESTER Y. C.—Has 227 members. Fleet comprises 36 sloops, 45 cats, 2 cutters, of which 32 are keels. Club will join New England Y. R. A. Expenses last year were $460. Officers elected: Commodore, S. P. Freeman; Vice-Commodore, Dr. C. G. Weld; Secretary, Edward G. Chase; Treasurer, C. H. Whiting; Measurer, Hartford Davenport. Directors—W. H. L. Smith, C. Barnard, C. H. Nute, Dr. L. B. Shepard. Regatta Committee—S. G. King, C. H. Whiting, Erastus Willard, H. B. Callender.

ORION.—This historic cutter, in which Mr. R. T. McMullen made the memorable voyages subsequently transferred to print in the "Cruise of the Orion," etc., and in the columns of FOREST AND STREAM, is now offered for sale, as her owner is obliged to retire from active sea life. She is of twenty tons, strongly built of hard wood and copper fastened, looks like a new vessel and likely to last another fifty years. Thoroughly rigged and equipped, capable of navigating round the globe.

THE NOANK SCHOONER.—Dimensions of Mr. H. D. Burnham's new schooner building by Palmer, of Noank, are as follows: Over all 115ft., beam 23ft., hold 10ft., draft 12ft. She is a keel vessel of wholesome form. Working sails 13,000sq. ft., lower sails of 14in. No. 1 duck. Spars as follows; Mainmast 87ft. 6in., foremast 86ft., mainboom 70ft., maingaff 33ft., foreboom 32ft. 6in., foregaff 29ft., bowsprit outboard, 21ft., flying jibboom 25ft. outside the cap, fore and main topmasts 40ft.

OSHKOSH Y. C.—We have received the new club book, containing list of 128 members, constitution and by-laws, etc. The club now measures by multiplying mean length by greatest girth wherever found. Club signal is a red pointed burgee with white Maltese cross. Officers: Commodore, Geo. W. Burnell; Vice-Commodore, John Dickinson; Fleet Captain, A. H. Woodworth; Secretary, G. M. Hasbrook; Treasurer, Frank Heilig, and Measurer, S. P. Gary.

IMMENSE DRAFT.—What length measurement leads to, is shown in the boat J. H. Buckley, of Boston, has built for himself this winter. Length, 24ft.; on loadline, 21ft.; beam, 5ft., and draft, 6ft. On keel is a lump of 900 pounds and 1,500 pounds inside. Hoist, 18ft.; boom, 23ft.; gaff, 14ft.; bowsprit, outboard, 9ft. Six feet draft on 21ft. loadline! Can people close their eyes to the pressure upon model exercised by the length rule in face of such evidence?

MAGGIE.—This beautiful cutter has been receiving more lead on the keel, and with a larger rig this season, ought to make it pretty warm for all comers, including the sloop Vixen. It will be remembered that Maggie does all the pointing you can ask for but failed to foot like Vixen for want of sail, though she has shown herself good enough as it is, for all the rest who tackled her.

CLEVELAND Y. A.—Officers for the year: Geo. W. Gardner, Commodore; P. W. Rice, Vice-Commodore; W. H. Eckman, Rear Commodore; J. Geo. Downie, Secretary; H. G. Phelps, Treasurer; Henry Gerlach, Measurer; B. Lyman, Surveyor. Executive Committee—R. E. Mix, W. Scott Robinson, Joseph Corrigan, H. D. Coffinberry and N. P. McKean.

PETREL.—We hear this smart cutter has been sold to Mr. Stevens, of Hoboken. We hope the Petrel will be put in thorough condition and ship a live crew of lithe and quick-witted amateurs, in which case Petrel ought to make a clean sweep of her class from here to Maine. Those who really know the boat concede her to be the fastest of her loadline.

QUINCY Y. C.—Will join New England Y. R. A. Officers for the year: Commodore, George W. Morton; Vice-Commodore, C. F. Adams, 3d; Fleet Captain, P. B. Turner; Treasurer, H. H. Sheen; Secretary and Treasurer, N. B. Furnald; Regatta Committee, B. F. Bass, G. C. Adams, George H. Hitchcock and J. E. Maxin.

STEAM LAUNCHING.—Wood Brothers, of East Boston, have been busy with launch work all winter. They have nearly completed one of 50ft., and will start another for Mr. S. Pickering, to be 37ft. long, 33ft. 6in. water line, 7ft. beam, 8ft. depth, 4 and 7×7 compound engine and coil boiler.

ANOTHER CUTTER.—They are turning them out fast in the East, by the dozen in fact. Jacob Rood, of East Boston, is at work on a cutter 31ft. over all, 26ft. loadline, 7ft. 8in. beam, and 6ft. draft. Sails by McManus.

RACING UNDER STEAM.—The secretary of the American Y.C. has issued a letter proposing a series of steam races this year, open to all clubs, and suggests correspondence on the subject from all interested so as to make suitable arrangements for the equitable test of steam tonnage.

SEAWANHAKA CORINTHIAN Y. C.—Hereafter five professionals will be allowed for schooners, and four for first-class cutters in the Corinthian races. This is on the English plan, and will be productive of more entries, as large vessels are difficult to man with Corinthians throughout.

XANTHE.—Is the name of a new steam yacht built by the Herreshoffs, of Bristol, for Mr. J. B. Watkins, of Lake Charles, La. Over all, 45ft.; water line, 41ft.; beam, 9ft.; depth, 4ft. 3in., and draft, 2ft. 9in. Cylinders, 4½ and 7×7in. stroke, taking steam from a coil boiler.

ROYAL BERMUDA Y. C.—Officers for the year: Commodore, Staff Commander E. Scobell Clapp, Royal Navy; Vice-Commodore, Lieut. P. C. Gubbins, Royal Engineers; Rear-Commodore, James L. Trimingham. Committee of Management—R. D. Darrell and C. H. Santi.

SPRING CRUISING.—On a recent cruise the cutter Surf, 35ft. loadline, ran with quartering wind from Oyster Bay to New London in 12h. 35m., from anchor to anchor; distance 95 nautical miles. Next day, close-hauled from New London to Northport during daylight.

LYNN Y. C.—Officers for the year: Commodore, E. C. Neal; Vice-Commodore, J. F. Lee; Fleet Captain, W. S. Doak; Secretary, W. B. Newhall; Treasurer, C. B. Taylor; Regatta Committee, W. M. Rand, W. Hawkes, C. H. Lockhart, W. B. Newhall and F. S. Newhall.

ON SPECULATION.—D. J. Lawlor has put up a schooner for sale. Length, 80ft.; beam, 18ft.; depth, 8ft. Michael Horton has got out a keel sloop 25ft. long, 9ft. beam, 5ft. 6in. deep, and 5ft. draft. Both are offered to buyers.

ANOTHER GOOD RECORD.—*Editor Forest and Stream:* The record of the Gleam is no better than that of the Boston sloop Hera. She won four races; all that she started in, and the prizes amounted to $1,600.—C. G. W.

SURF.—This seven-ton cutter has been in commission, and cruising since early April. She was the first to show a yacht's burgee in the Sound ports. Had some strong weather, but the cruising was enjoyable nevertheless.

THOUGHT SO.—Last year Mr. J. E. Bake, of Harrison Square, Mass., had a huge catboat built, over 30ft. long. She is now to be altered to a sloop. Simplicity is one thing, practical economy a much better thing.

"HUNT'S" FOR APRIL.—The last number of *Hunt's Magazine* is more than usually full of interesting yachting sketches, among which we note with pleasure the accounts of several cruises in small boats.

"NAUTICAL MAGAZINE".—The April number of this London publication contains some instructive articles on compulsory pilotage, stability of ships, navigation, and merchant shipping affairs.

BOUND THIS WAY.—New York gentlemen have bought the Boston keel sloop Gracie M., hauled out at Hutchings & Frior's, City Point. She is to receive an overhaul and have her name changed.

NEW CAT.—Harris, of South Boston, has launched a catboat 21ft. 3in. over all, 17ft. 10in. loadline, 8ft. 4in. beam, 18in. draft, 8in. forward. Hoist of mainsail, 19ft. 6in.; boom 22ft., gaff 13ft. 6in.

ANOTHER CAT.—Borden, of South Boston, is building for J. P. Bullard a cat 19ft. over all, 15ft. 6in. loadline, 7ft. beam, and 14in. draft without board. Hoist 14ft. 6in., boom 19ft., gaff 11ft.

NEW SCHOONER.—Mr. H. W. Collender is having a keel schooner built at Bay Ridge. Length 87ft., waterline 76ft., beam 21ft. 4in., depth 9ft. 6in., draft 8ft. 10in. To be named Speranza.

NEW CUTTERS.—Toronto is building a smart 5-ton cutter, of which particulars later. Quebec gentlemen advertise for a 20-ton cutter to be delivered in Quebec from England.

NICE REGATTA.—The Boston schooner Gitana won the big purse for yachts over thirty tons on a sail over, the only other entry being the small English cruiser Gladys.

CRICKET.—This Boston sloop has become the property of J. Q. Adams, who proposes to put her in racing trim. She is 29ft. 4in. loadline, 11ft. beam, and 7ft. 6in. draft.

NEW YAWL.—Lawley & Son are to build a yawl-rigged yacht 24ft. loadline, 6ft. beam, and 5ft. draft, with 4 tons iron on keel, for Mr. Wellman. She will be named Fad.

HULL Y. C.—The appointments for the season will be found in our fixtures. They include a five days' squadron cruise in midsummer.

SMALL CUTTER.—Mr. John W. Truesdell, of Syracuse, is having a 20ft. cutter built. McManus & Son, of Boston, will supply the rig.

NEW CUTTER.—H. A. Davis has laid the keel for a 30ft. stunner of the modern style, at his yard, foot of Marion street, East Boston.

THE PILOTAGE BILL.—Remarks will be found on the editorial page, which we trust may have the desired effect before Congress.

HUNTRESS.—Webber & Son, of South Boston, will launch a new sloop 26ft. 8in. long, 10ft. 2in. beam, with 1,000lbs. on the keel.

SARACEN.—This is the name of Mr. Fowle's new 22ft. cutter built by Lawley & Son. She is a promising craft.

RAJAH.—This is the name of the new cutter building in Greenpoint for Com. Beecher, New Haven Y. C.

SAPPHO.—This famous schooner is now in the hands of Mr. W. F. C. Wigston, and lies off Cowes, England.

NEW ENGLAND Y. R. A.—First annual meeting at Parker House, Boston, April 23.

NAUTILUS.—This 40ft. schooner, of Boston, is to have 1½ tons iron on the keel.

LESLIE.—This Boston sloop, 22ft. long, will receive new iron keel.

MONTAUK.—Arrived at Kingston, Jamaica, April 9. All well.

AMY.—This Boston sloop, of 33ft. will receive 1,000lbs. on keel.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

E. A. R., Baltimore, Md.—Can find no trace of it.

R. T. D., New York.—See answer to "Razor" this week.

J. L. N., Philadelphia.—The cheapest and best way would be to take it to a gunsmith.

W. A., Bay View, Mich.—Grease is a lubricant. Tallow, either of beef or mutton, is very good.

W. M. B., Philadelphia, Pa.—The gun you mention is a good and safe arm, and worth the price asked for it.

C. H. C., Philadelphia, Pa.—"Training vs. Breaking" will tell you how to teach your dog to retrieve. We can send it. Price $1.

C. H. S., Hartford, Conn.—Such a canoe should need no ballast besides the weight of her crew. The boat is smaller than is customary for sailing.

W. T. B., Brooklyn.—The gun you mention is a good shooting gun, and the other is also good. We cannot recommend one over the other. You had better consult a gun dealer.

RAZOR, Wrightsville, Pa.—1. It will be safe to show her. 2. See FOREST AND STREAM, Feb. 2, 1882, for article on conditioning dogs for bench shows. 3. An ordinary collar and chain will answer every purpose.

W. G. D., Boston, Mass.—1. Yes. 2. Generally from nine to twelve months old. 3. We prefer to commence training a dog when two or three months old; six months is not too old, if he has not been tampered with.

WALLIN.—1. A mature pure white setter we have never seen, although we have seen many that came very near it. If your bitch is absolutely free from any other color, we should like to see her, as she would be quite a curiosity. 2. The color is not an indication of impure blood.

E. G. B., New Britain, Ct.—Stonehenge says that the coat of the cocker spaniel is "flat, slightly wavy." The standard of the American Cocker Spaniel Club says, "Straight or wavy, but without curl," and that of the International Cocker Spaniel Association says, "Straight or wavy, but without distinct curl."

W. P. C., Elmira, N. Y.—1. The game protectors are appointed by the Governor. 2. At request of protector or other officer, district attorney is required to prosecute, and is empowered to make requisition on county treasury for necessary funds. We can send you the law in full; price twenty-five cents.

M. A. B., Olean, N. Y.—Is there any law compelling owners of dams, in the State of New York, to build fishways over them? Ans. We were of the opinion that such a law was passed but have failed to find it. We wrote to Gen. R. U. Sherman, secretary of the Board of Fish Commissioners, and he replies that he knows of no law

this kind except in the case of the waters flowing from Cayuga Lake into Lake Ontario. In 1862 a law was passed covering the dams in these waters, but we do not think that a general law covering the whole State was ever passed. All the dams on the Seneca and Oswego rivers belong to the State and fishways were placed on all except two of them last year.

A. M. H., North Springfield, Mo.—Where can we of this region be t obtain brook trout to stock our streams, and which is best to place in them, the spawn or the live fish? Ans. Perhaps the Fish Commissioners of Missouri may have them. They are John Reid, Lexington: J. G. W. Steedman, 2,803 Pine street, St. Louis, and Dr. J. S. Logan, St. Joseph. If they have none, you may write to B. F. Shaw, Anamosa, Iowa.

IGNORAMUS, St. Johns, Mich.—There is no such book published at present. The papers on "Canoe Building" now appearing in FOREST AND STREAM will be published in book form when completed. 2. The "Long Lake" is not a canoe, but a boat used by the guides in the Adirondacks. They are about 16ft.×33½ft., sharp at both ends. 3. The Pearl, and also the canoe spinaker will be described in "Canoe Building" shortly.

C. D. W., Portland, Mich.—Will you kindly inform me as to the best works extant on ornithology, also cost of same? Also best work for a beginner to study? 2. Is it good or bad shooting to put 225 pellets inside a 30-inch circle 40yds. distance, load 1⅛ ounces No. 8 shot? Ans. We regard Coues's "Key to North American Birds," price $7, as the most useful book for a beginner. There are many other works varying in price from $1,500 to $2.50. 2. Very good.

RO, Detroit, Mich.—1. Is it possible to procure a good serviceable camera (nothing fancy) with a lens capable of doing good work on interiors, exteriors, landscapes, machinery, etc. 2. What lens for above purpose would you recommend? 3. What would be reasonable price for such an outfit? 4. Will single achromatic lens do good square work on machinery, interiors, etc., or will outside lines be curved? Ans. 1. Yes. 2. A platyscope costs about $30. 3. Camera for view 5x8 and above, lens about $90; with single achromatic lens about $65. 4. No; lines will be curved. A double lens only will take straight lines. We send you some views taken with single lens.

E. E. E., Greenport, L. I.—Where can I obtain Schultze gunpowder, and also is the Col. Hawker ducking powder a good article? I use breechloaders, and my shooting is mostly ducking at long range. I have found Hazard's DS. to be quite good, but I want a strong clean powder. Ans. The Schultze powder cannot be obtained in this country. Hawker ducking powder is made by Curtis & Harvey (English), and but little of it is imported. Can sometimes be procured, but not often.

C. H. C.—1. To settle a dispute please tell us whether good English guns can be bought for less money than American guns; a friend says that they can. 2. Same party says that in order to be a good snap shot one must commence shooting that way. I said it was the wrong way for an amateur to practice at first, that "deliberate shooting" was essential to make a good snap shot. Please give us your opinion. Ans. 1. Yes. 2. It takes long practice to become a good snap shot, but it comes more natural to some than others.

W. H. D. B., Montrose, Pa.—1. What do you consider the best length of barrels, weight and size bore, for a double-barreled shotgun, for all kinds of shooting? 2. Should it be choked or cylinder bore? 3. What is your opinion of an English double-barrel gun (new) with all improvements, laminated barrels, that a dealer can afford to sell for $25, and is such a gun preferable to an American gun (new) that could be bought at the same price? 4. Do you consider a .32-caliber Winchester rifle suitable for deer shooting, if not, what caliber would be allowable for shooting squirrel, duck and deer? Ans. 1 and 2. We should select an eight-pound, 12-gauge, 30-inch gun, right hand cylinder, left modified choke. But it is a matter of fancy very largely. 3. We have no opinion to offer, and can tell nothing from the form your question takes. 4. Depends on the powder charge. .32-caliber is large enough, if you can place the balls on the right spot. It would probably be effective within ordinary distances.

C. L. W., Cambridge, Mass.—Will you please inform me if there is any way of catching the common black turtle found in rivers and fresh water ponds? I have tried several ways but have always failed. Ans. If you mean the snapping turtle they can be found on land only when they are laying their eggs in May and June. At other times they can only be taken with baited hooks or spears, as they never sun themselves on logs. The smaller water turtles can be netted, or if the object is to get rid of them, they can be shot, when on the logs, with a rifle.

R. T., Topeka, Kan.—1. Does chilled shot make a better pattern than soft shot? 2. Is a jug choke as good as one bored cylinder to within 1 or 1½in. of muzzle? 3. How many No. 5 pellets (172 to ounce) 1⅛ ounces to charge, can be placed in 30-inch circle at 40yds.? 4. Would you advise a jug choke? 5. My gun gives as good penetration at 30yds. with 3¼ drams powder and 1⅛ ounces shot as 4 drams powder and 1⅛ ounces shot; in fact, it gives a better penetration, the 3¼ drams and 1⅛ ounces than 4 drams and 1⅛ ounces. I would like to know the full amount a 12-gauge will burn and why my gun will not burn more powder? Ans. 1. Chilled shot makes a better pattern because fewer of the pellets lose their spherical form in passing through the barrel. 2. No. 3. About 140 pellets. 4. No. 5. The proper charge for a gun is the one that it will do best execution with: overloading is to be avoided as much as underloading.

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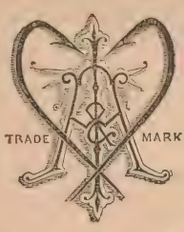
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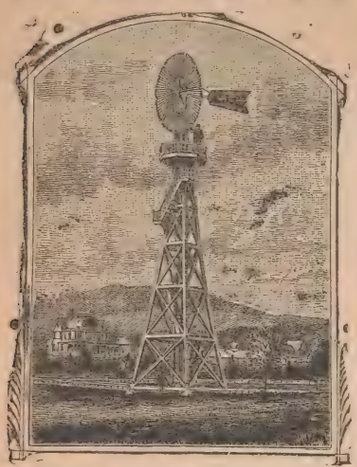
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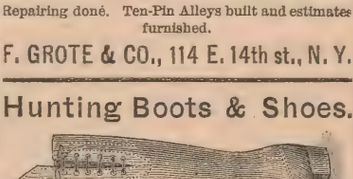
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OFF FOR THE ARCTIC.

TO-DAY one of the vessels of the Arctic expedition sails for the North, to be followed in a short time by the other two which are to assist in the work of rescuing the Greely party. The little fleet starts under favorable auspices, and appears to be in all respects, so far as can be learned, well found in its ships, in its supplies and in its *personnel*. It will, no doubt, accomplish all that is possible, and we shall not have to record another disgraceful failure like that of Lieut. Garlington's expedition.

It had been hoped by many of those who have watched the preparations of this rescue party, that some steps might have been taken toward enlisting for each vessel a couple of woodsmen. We have urged time and again that the services of such men would save for explorers many valuable lives and much treasure. Had two such men been with De Long on his disastrous retreat along the Lena Delta, there is little doubt that the whole party would have been saved, instead of miserably starving to death. Food was all that was needed to enable them to reach a settlement, and this food was present in quantity, had there been any one in the party who understood the ways of the wilderness and of game. They passed through a region where ptarmigan were abundant, but had left their shotguns, and knew of no other means of capturing the birds; the idea of traps and snares does not appear to have entered their heads. There were plenty of reindeer in the country through which they marched to their death. They saw and shot at them, and their tracks were frequently seen, but there was no hunter in the party to kill the single deer which in all probability meant life to the hopeless, starving crew; and so in the midst of what to a man used to the wilderness would have been plenty, they struggled on a little further, and then one by one they died. The expenditure of a few dollars for the pay and equipments of a single man, such as may be found in any wild section of our country, might have saved all this loss of life.

That the landsman is a necessary part of any Arctic expedition is perfectly apparent to any one who has traced the history of the various expeditions which have tried to penetrate the mysteries of the frozen North. He knows a hundred secrets about animal life, which help him to succeed in his search for food, and can make himself a warm and comfortable shelter, where the sailor man would freeze to death.

And why should we not utilize this special knowledge, which can only be acquired by years of labor, and in the stern school of experience? Our Arctic expeditions occasionally take along an Esquimau or two, which is certainly a step in the right direction; but the Esquimau's pluck often gives out just when it is most needed, and then he becomes useless. It is hard to say why such men as we have referred to have never been employed in this most difficult work. Probably the real reason may be found in the inability of a Department to move itself out of a rut until it is absolutely forced to do so.

With the record of the Jeannette and other sadly unsuccessful expeditions before its eyes, it would seem as if the Navy Department would spare no pains to make the present rescue party successful. If the Alert, the Thetis and the Bear had each two men on board who were thoroughly familiar with the lonely, self-reliant life of a trapper and hunter, the prospects for a safe return for the members of the expedition would be much more favorable, and if, without any public announcement of the fact, the services of such men have been secured, the Navy Department is to be given credit for unusual foresight and appreciation of the progress of events.

This subject we have treated before at considerable length, and for our views upon it we cannot do better than refer our readers back to FOREST AND STREAM of May 10, 1883. We shall all of us watch the progress of the Greely rescue party with anxiety, and hope that before many months the prisoners in the North may be welcomed back again.

SHOW OF NON-SPORTING DOGS.

IN our issue of April 3, a correspondent suggested than an exhibition of non-sporting dogs be held in this city. Since the publication of this call a number of communications have been received, all in favor of inaugurating such an exhibition.

We suggest to the gentlemen who have interested themselves in this matter, that they confer with the managers of the Westminster Kennel Club. It is possible that the club might be induced to organize such a show; and if under their control, the success of the enterprise would be assured.

The public interest in the several non-sporting breeds is increasing at a remarkable pace; witness the crowded non-sporting classes at the bench shows. There is certainly sufficient material for an exhibition exclusively made up of these animals.

The entries for the coming bench show of the Westminster Kennel Club are so full that the capacity of the Madison Square Garden will be taxed to accommodate them all. A less number of entries would provide a more satisfactory exhibition. If the popularity of the shows given by this club increases at its present rate, the Westminster managers might find it advantageous to give two exhibitions annually, one of sporting dogs and the other of the non-sporting classes. The former could be given in the spring, and the other in the fall. The public would support two shows of this character; and there is no question that greater satisfaction to visitors and exhibitors would be secured by the added facilities such a division of classes would permit.

MASSACHUSETTS FISH AND GAME PROTECTIVE ASSOCIATION.—Following are the officers for 1884-5: President, John Fottler, Jr.; Vice-Presidents, Hon. Thomas Talbot, Hon. Daniel Needham, Walter M. Brackett, Esq., Charles W. Stevens, Esq., Horace T. Rockwell, Esq., Ivers W. Adams, Esq., Dr. John T. Stetson; Treasurer, James R. Reed; Secretary, E. S. Tobey, Jr.; Librarian, John Fottler, Jr. Executive Committee—Frederick R. Shattuck, Warren Hapgood, Wm. S. Hills, Walton C. Taft, Edward T. Barker. Committee on Membership—W. M. Brackett, George Mixter, B. F. Nichols.

INTERCOLLEGIATE SHOOTING.

GUN clubs have been established at several colleges, and in some instances the members have acquired a very fair degree of skill in trap-shooting. We note with great satisfaction the growing popularity of the sport among college students. As has been said already in these columns, shooting with rifle and shotgun is a recreation worthy of college students, and a form of amusement which one is not likely to throw aside after commencement day. In this it differs essentially from baseball, football, cricket and rowing. The college student who learns how to use a gun, has found a means of recreation that he may employ in after years.

We are so thoroughly convinced of the good results likely to follow from increased participation in college shooting, that we are quite willing to do something as a practical encouragement of it. To that end we propose to offer a $100 cup or trophy as a prize for intercollegiate shooting competitions. It is probable, since the college year is already so far advanced, that the trophy will be given for the next year, beginning in the fall. Further particulars will be shortly announced.

SOME QUESTIONS.

EVERYWHERE the game is growing scarcer. We all realize this, and grumble about it. There is a vulgar saying to the effect that "talk is cheap," and, like many another proverb, there is a world of truth in it. We are all of us good at talking about game protection; how many of us have done anything besides talk? Suppose some one were to come around to-morrow soliciting subscriptions for a fund to pay a detective to secure evidence against some individual for killing or selling game out of season, or to pay a lawyer's fees in some game case, how many of us would contribute $10 to such a fund? How many men, among all our readers, who believe that birds should not be shot in spring, have refrained from starting out after snipe or ducks since the birds came on? Has not each one who could take the time for a day's shooting, said to himself, "Every one else will go, and my staying at home will make no difference," and then gone and killed or tried to kill?

How long is this to continue? Surely, at the rate things are going now, the game cannot last much longer. It looks as though the day were at hand when there will be no shooting grounds open to the public. And who is to blame for all this? No one but those who shoot. With what show of reason can we complain, if twenty years hence, we find that there is nothing for us to go afield for?

When the forests are gone, and with the forest the game, we shall probably all think that this wholesale destruction might have been avoided, but then it will be too late to seek a remedy.

WEAPONS FOUND IN GAME.—If a list could be had of all the old weapons and missiles found in the tissues of living animals, and a complete history of them all collected, the record would be an interesting one. Such finds are, we think, much less infrequent than is generally imagined. We have seen a number of them, and many others are on record. Several years ago we saw taken out from beneath the tenderloin of an elk, an old-fashioned round ball from a muzzle-loading rifle. The imprint of the cloth patch was still distinctly visible on it. The arrow head from the swan's breast-bone, figured a short time since in our Natural History columns, has reminded some correspondents of similar finds, both in birds and mammals. "Caballero" sends us from Buffalo, N. Y., a vertebræ, in the body of which is imbedded the point of an iron arrow head, and asks to what animal the bone belongs. The specimen was picked up in the Nation by a man who was gathering bones for market. The bone is one of the anterior dorsal vertebræ of a young buffalo, probably a two year old, and the arrow head is one of the common iron points which, until within a few years, have been used for hunting by all the tribes of plains indians.

SHOOTING TOURNAMENTS.—The early summer of 1884 will be a busy season for the man who lives to attend all the big shooting tournaments. There is nothing upon which we may base a prediction of the number of wild pigeons that will be killed, but it is very certain that the demolition of the "clays" will be unparalleled.

THE MASSACHUSETTS GAME BILL passed the Senate unanimously, but was lost in the House. Our dispatch says, "Country members advocate poaching."

The Sportsman Tourist.

DOWN THE YUKON ON A RAFT.

BY LIEUT. FRED'K SCHWATKA, U. S. ARMY.

Tenth Paper.

WHEN our miners were encountered they were packing on their backs their scanty supplies of "grub," according to frontier parlance, and anxiously inquiring the distance to the next lake, where they hoped to find a canoe or two, and thus make better time back. So dense was the undergrowth and fallen timber in the valley of the Yukon and its tributaries, that they had been forced back along the mountain ridges, where the fires had partially cleared out the underbrush, and although the fallen timber was a little worse, in the sum total it was the least of the two evils. So absolutely impregnable had it become in places for them that, waiting for a favorable wind or one sweeping before them, they then set fire to the woods and again waited until it had cleared a way for them, and then proceeded through the burning path. They also confirmed the Indian reports that the moose and caribou (woodland reindeer) follow the snow line in the spring and summer as it retreats up the mountains under the effects of the warm weather, and this undoubtedly from the dense swarms of mosquitoes that appear all over the face of this country as soon as the snow is lifted, as if that mantle held them down in layers several inches thick.

During the 9th of July in the afternoon we had seen dense volumes of smoke ahead, showing the pine forests to be on fire, probably set by the miners, although we afterward ascertained that Indians often do this, not only carelessly while camping, but also in a premeditated manner to drive game to certain runways. This firing of the woods, however, is more likely to take place in the winter, when the runways of game are limited to fewer trails, and the Indians can, therefore, stand better chances of intercepting them on these few, than in the summer months, when, after all, their principal diet is fish and fowl when the latter are moulting. I also heard that when a brown or grizzly bear invades a neighborhood which is of value to the Indians for purposes that fire will not destroy, they do not hesitate to burn out the woods when a favorable wind makes them think that the blaze will be carried in the direction of the bear.

The 10th of July we got away early and about ten in the forenoon, passed through forest fires on both sides of the river (here from 300 to 400 yards wide), and the natural query was how it could have crossed unless set fire on both sides, for there was so little wind that great billows of smoke went lazily upward directly for the zenith, and these, when seen in the morning, looked like vast banks of cumulus clouds arising up from that direction. At 1:15 in the afternoon we passed the mouth of a large river coming in from the eastern or right bank and was the one the miners had been prospecting before their party broke in two. They said they had ascended it nearly 200 miles and that from its width at that point they believed it to be 50 to 75 miles further to its very source. At this point the caribou tracks had been very thick and so recent that the deer could have only migrated but a short time before. One active Nimrod among them, maddened by so much sign, had taken his gun and kept tramping for 30 or 40 miles up one of the branches of the river until he overtook a herd and killed two, and putting their meat on a raft started down to join his party. The raft was a very rude affair and finally brought up on a big boulder in the center of a rapid, where it stuck until it was liberated in two sections. The miner not being a double bareback rider abandonded his twin rafts and walked home with one saddle of venison and a couple of reindeer tongues.

It was not until well past eight that we camped in a dense grove of small poplars. A great number of them had their bark chipped around by rodents at an altitude of eighteen to twenty inches from the ground, and as there was a considerable amount of rabbit (hare) sign about the place it must have been these little gnawers, when food was the scarcest at the deepest snow, which therefore could not have been much deeper than that during the past winter. Among the grove were many trees that had been killed in previous years, and probably in this very way, but the thicket was so dense that the intertwining branches with live ones on all sides held them erect. From the slight depth of snow, I imagined that the winters must be ushered in with a sort of Arctic suddenness peculiar to polar regions, rather than like the nearer coast country where the snow falls deep and nearly all winter. Rummaging around, we found a couple of places where a number of dead trees were standing in a cluster, and readily pulling them up by the roots, we turned them over to the cook, and spreading our canvas and blankets in the spots, bivouacked as well as the weather and mosquitoes would permit us. We had passed a small family of abject Takh-heesh a mile or so before camping, and the man having mustered up the remaining courage of his life, managed to walk down to our camp, where he stood around with his mouth wide open, almost paralyzed with astonishment, and I think if I could have only deodorized him and varnished him up, I could have gotten a fortune out of him at a San Francisco Chinese "josh" house, he looked so much like one of their idols.

Shortly after starting on the morning of the 11th we saw a magpie or two sailing around near the bank and finally disappear across an opening into the groves near the foot hills. Only once after that were magpies seen on the Yukon River. Several owls were seen during the day. During the day we passed several "Stick" or Takh-heesh families (a family seems to be about the highest organization they can get together at any one place), and at every point there were seen small rafts of logs bound together with willow withes tied up at the shore in front of their brush houses, and nowhere would there be seen any canoes.

As we approached the last rapids on the river, a huge number of gulls rose in swarms from the rock towers where they were breeding and gave us the most discordant reception of screechings and splashings that I had heard for some time. When the ice breaks up in the spring (although I doubt if these rapids are frozen over at all during the winter so swift is their current), these castles of rock become impregnable to foxes, wolves and all other carnivora not supplied with wings, and here these gulls find a safe and secure breeding place. As we rushed by some of the small gulls just from their calcareous bandbox were standing around with that stupid astonishment characteristic of the young of all species, from an oyster to a man.

During the day we had passed the mouths of two rivers; one I called Daly River, after Chief Justice Daly, of New York. Some twenty miles below this the river became very tortuous. About forty miles beyond the Daly River came in another of quite formidable dimensions, about 200 yards wide at its mouth, and, to change the order of things, came in from the west, the first noticeable stream on that side since we had passed the mouth of the Tahk River, a few miles below Miles's Cañon. Nearly opposite its mouth was a bold bald peak that we caught a glimpse of a few miles away. It seemed to be on the river bank directly ahead, but a sharp bend in the river sent us well off in another way, and showed it, as we supposed, to be inland. Another curve, and we started for it and ran up much closer, but not past it, before we were again hauled back along another stretch of the river, as if there was some repulsion in its great mass, and this oscillation we kept up until no less than seven times we had pointed our raft toward it on as many different "reaches" of the river. It appears on the map as Tantalus Butte, and the river opposite I named after Sweden's great Arctic explorer, Baron von Nordenskiöld.

A few minutes past two a crackling of brush was heard on our right, and in a few moments a big buck moose came bolting out into an opening of slight scrubby willows, and before a gun could be brought to bear on him again disappeared, but still kept persistently parallel with us as he struggled through the brush. Occasionally through the brush a vista of his dark brown sides and swaying horns was seen, but directly ahead of him was a small creek putting in with wide grassy banks, and here I felt sure of a shot. Just as he reached the open creek bottom, he whirled like a flash and once more buried himself in the deep brush of its upstream side. This animal and another about two hundred and fifty miles below this point were the only moose the party saw the whole length of the great river, a stream noted for the large number of these animals in its valley. The Indians of this country know nothing about "moose yards," and when described to them say they are not made by the moose of this part of the world. I afterward heard this corroborated by an old Hudson Bay trader, who had hunted them in lower latitudes and knew by experience what "moose yards" meant. Again a Mr. Carr, a very intelligent miner, who had wintered on the river a good ways below this point, spoke of this. From what I could learn from the Indians I do not believe their sense of hearing is so acute in these parts as in the southeastern districts of the moose, as they are said to be easier to approach and kill in the summer than the caribou, and the stories of their sense of hearing as told by hunters from Maine and Nova Scotia borders almost on the miraculous. The greatest number of moose are killed in this end of America while crossing rivers where they are completely at the mercy of their pursuers in their swift birch-bark canoes. Mr. Hearn, who was an Arctic explorer in these northern regions of the Hudson Bay Company, by whom he was sent over a hundred years ago when everything was purely primitive, says that he has seen an Indian paddle his light canoe up to one of the moose calves after its mother had been killed, and take it by the nape of the neck without its showing any resistance or apparent fight whatever, the doomed defenseless animal seemed, at the same time, as happy and contented alongside of the canoe as if it was swimming by the side of its mother, and looking up into the faces of those who were about to be its murderers with the most apparent innocence, using its forelegs and feet every now and then to clear its eyes of the numerous mosquitoes which alighted upon them, and which seemed to be intent on eradicating as preventing its keeping up with the canoe. This reminds me of a very similar incident occurring with a little buffalo calf whose dam had been chased and killed by some cavalrymen, the little creature following the company on its scout for several days when, there being nothing to feed it, and the scout ahead but little prospect of termination for a long time, it was killed out of sympathy for its forlorn condition.

OWLING.

ON several occasions during my morning or afternoon rambles through the lower meadows, I had awakened from his midday sleep a great white and brown horned owl, just as during more than one night in the past summer and autumn he and others of his fraternity had disturbed the midnight and early morning slumbers and dreams of a dozen or more cowpunchers. Frank, the ranch cook, being quite a skillful amateur taxidermist, had frequently expressed a wish to get him and see what kind of an appearance he would present with his wings and tail spread on the wall and his head peeping through them. I promised Frank that I would locate Mr. Blink and capture him; and though finally succeeding in fulfilling my contract, it was only after considerable hard work and hard luck in connection with some thoughtlessness that I redeemed myself.

My first attempt at finding him was a successful venture, so far as the simple finding was concerned; but the capturing of him proved quite a dismal failure. I had tramped for a couple of hours through snow, from one to two feet deep, meanwhile carefully and thoroughly inspecting every tree that seemed likely to afford him a hiding-place and shelter. Finally, on the banks of the creek I came to a large beaver dam, and while inspecting it and the signs of recent work done by the beavers, had laid my gun aside and stepped out on the ice above the dam, when from a tree close by my intended victim darted away with almost the speed of a woodcock. I watched him as he dodged his course among the cottonwoods and box-elders. Up stream he went for nearly half a mile and alighted in the top of a tall cottonwood, where I sighted him when about three hundred yards away. But he was wide awake, and again hit the breeze, this time going down stream by a circuitous route; and he was lost to me for that day at least. However, he had divulged one of his hiding-places, which was a great point in my favor, as they are almost invariably difficult to find, as they hug the trunk of the tree very closely. The first day was not barren of results.

The owl is considered a wise bird, *vide* the old saying, "wise as an owl;" but this individual was a foolish one in at least one respect, inasmuch as he chose for his perch a tree with a dark background, which, on one's coming toward him from the right direction, showed him up perfectly; but he was a lucky bird.

The following afternoon I strolled down to the old place, taking no special precautions to conceal my movements, and not expecting that the foolish bird with the magnificent orbs had come home so soon. The first time I was in search of him he was indebted for his life to the beavers; this time it was to a jack rabbit, which sprang out from a cluster of willows, and on my making a quick snap shot caught the rabbit and lost the owl, for at the report of the gun he was again wending his way by the air-line toward the Eastern States. I had learned that there was no use in following him at the time.

Before owls are followed they must be given a long rest to divert any suspicion, and when they find that they are not pressed too closely they may resume their doze and give you another chance. They can be approached very closely before they are aware of any danger, but after once awakening to the situation, it is a most difficult matter to get anywhere near them, for we verily believe that their eyes are able to detect any hostile or other advance, and being fortified by ears more capacious in proportion to their weight than a burro, a second approach to them is rendered almost impossible. If their night sight is any better than their day sight, they would not be able to answer as Sam Weller did, "Yes, I have a pair of eyes and that's just it. If they wos a pair o' patent double million magnifyin' gas microscopes of hextra power p'raps I might be able to see through a flight o' stairs and a deal door; but bein' only eyes, you see my wision's limited." The owl can pretty nearly do those things at midday.

A few days after the rabbit had forfeited his life and thereby saved the owl, I went out again in search of him. Coming in sight of the tree which had by this time become quite a familiar object, I carefully slid down the bank on to the creek a few rods above the beaver dam; quietly walked down on the ice, and soon had him in sight. There he was, perhaps seventy yards away, peacefully and contentedly sleeping on his perch, all unaware of the danger he was in; and so was I in as blissful ignorance of my own danger. Sinners, it is said, stand on slippery places, but I could not; for while trying to reach the little snow drift on the edge of the ice my feet suddenly went from under me, and again the owl took his departure toward the east, but not soon enough to save all his feathers, for from a sitting posture I had a chance to "turn loose" (pardon the quotation) one barrel. A couple of feathers floated a while in the still air, then came softly down like two big yellow brown snow flakes and anchored themselves in the willows. His splendid run of good luck was nearly over, the charm was about to be broken and my unlucky stupidity at owling was also drawing to a close. A wise owl would have changed his habitation after the repeated interruptions he had experienced, but this hunted and persecuted bird dreaded not the fire, though he had been slightly scorched at long range.

The love of home was strong within him, and heedless or forgetful or ignorant of the danger menacing him, he would hoot "Home, Sweet Home," and return to the hospitable shelter of his own box-elder which was soon to know him no more, and no more would he contribute his hoot to disturbing the slumbers of wearied "cowpunchers." Over the same ground I tramped again, and this time succeeded in administering to him part of an ounce and a quarter of No. 4 shot backed up by four drams of powder, just as he was spreading sail for another voyage down the stream.

There he is—what remains of him—with wings and tail outstretched, and looking down at me through a pair of glass eyes from over the mantle-piece, and he is the handsomest ornament in the room, looking as wide awake and life like as when he was darting among the trees, with only the one instinctive idea of escaping danger. MILLARD.

BEAR CREEK, Wy.

WHERE THE BUNG TREE GROWS.

'TWAS early in July, the Professor and I left the land of Gotham to the bulls and the bears of barter and trade, for a couple of weeks sojourn in the land where the bung tree grows. Our quest was rest and recreation from the corroding cares of business, and like many another, who sometimes got bit by a trout, we felt the old longing stealing o'er us, and when I whispered the magic word "trout" in the ear of the Professor, he suffered himself to be led off without remonstrance.

The land where the bung tree grows? "Now what in the name of goodness is a bung tree?" says the Professor.

"What, John don't know what a bung tree is? A bung tree is—is—is—John, did you ever casually observe men, of doubtful mien and wistful expression, cautiously approach something standing on the sidewalk like, which looked very like a beer keg, and stealing a quick, apprehensive glance up and down the street, slowly remove that protuberance discernible under his coat, which might be a tomato can, and witness the intense satisfaction with which he gloated over the find if it were large, or the all-gone hopeless look if the reverse? John, did you know a beer keg had a bung hole, and the same is stopped by a bung, and these bungs are made from hard wood, such as beech, maple, and other bung trees, which grow away up in the mountains, way up where the deer, the bear, and the wily trout, do disport themselves and propagate their species, and furnish enjoyment to such miserable fellows as you and I, John—grow, along with hemlock, the same you once essayed to walk, when the peeler had just left it, and John, you 'got left,' didn't you, old boy? I could wipe the tears from my eyes now, just thinking about it. I can see the spray fly way above the pile of old driftwood, as your gravity and mine was upset, and how cold the water was, and how scared the trout who took my fly, almost at the same instant you took yours, dear John. That was the most sagacious trout I ever saw, for he evidently foresaw what was coming down 'among him' when he took his place in your element and you took your place in his. Do you remember that pole you carried into the woods? That pole, you had builded it a purpose for the occasion. Your experience down on the Shrewsbury doubtless led you into this conceit, and you had the last big weakfish in your mind while you were building it. Well, the first trout you treed with it went about twenty feet straight up into the blue ethereal, and there took two or three turns round the limb of a bung tree, and I reckon it is hanging there yet. When you first exhibited the production I could see the look of pride on your face as you drew it from it's case, and fondled it before the astonished 'natives.' Never shall I forget the emphatic exclamation, joined in by all hands simultaneously, and one old fellow with a sadness he could scarcely control, tremblingly muttered, 'Hanged if I haint seen most every kind of pole brought inter these woods to ketch trout with, but that 're beats 'em all, blamed if it don't.'"

That pole was a short time ago still to be seen, being preserved in the family like some huge two-handed, prehistoric sword, handed down to posterity to excite its wonderment and surprise.

And now we were once more at the haven where we would be, and these old scenes came back upon us—reminiscences of other days—and the trout were rising ever and anon in the pool just in front of the house, as some luckless fly or insect hovered temptingly over their hungry maw. The June bugs had not all gone yet and a few had been drawn inside the house on a tour of investigation, and were now buzzing round a light which our host had kindly placed inside, in the gloaming.

"John, would a trout rise to a June bug?"

"I don't know why they wouldn't; suppose we try."

A couple of old hats were brought into requisition in capturing a dozen or so, and, stepping down to the water's edge, one was flung out into the eddying current. Round and round he spun, then, catching the edge of the swift current, shot down into the pool below with the velocity of an arrow. Vain were his frantic efforts to escape from the surging current, when the well-known splash and the sudden disappearance of the bug decided that a trout would accept a June bug for his dinner. Many went the way of the first, until the Professor, who by this time was worked up into a high pitch of excitement, declared he was going to see what a little investigation with hook, line and June bug might do toward solving the enigma of the size and temper of the fish we had been feeding.

Hanging under the eaves of the piazza were several bait-rods belonging to our host, and some were already rigged out with hooks and lines. Seizing one, which gave promise of holding a fish were we to hook one, a bug was carefully adjusted. The line had no sinker on, and the bug remained on top of the water for some little time, long enough to float down to the spot where his predecessors had disappeared. Splash! and the Professor reeled in the biggest chub it has ever been my lot to witness; but cheer up, John, there's trout in there; try again. And sure enough there were, for a good half-pounder took the next bug, then another and another, until we had a dozen fine fish, for our experiment had proved a complete success, much to the surprise of our host, who said he knew the trout were in there, for he had often seen them jumping, and laughed at the futile efforts of his guests to catch them.

At daybreak the writer was up taking his usual survey of the horizon and making preparations for a good tramp up stream. The air was clear and bracing, laden with the odor of balsam, which grows in great abundance in close proximity to the house. "Old Sol" had not shown himself above the mountain tops yet, but the rays illuminating the mist rising over High Peak gave tokens of his early appearance, the sparkling, foam-flecked waters before me flowed rippling along, lending their melody to the song of the birds; a spring of icy cold water, distilled way up among the clouds and brought down to the dwelling through a series of wooden tubes, poured its crystal waters into a tub half buried in the sand near by—its music lulled me to sleep last night—while ever and anon, from far up the mountain side, came, faintly echoing, the sound of cow bells, as the herd came slowly down, urged at intervals by the sharp barking of the dog Shep, and the maid of the house, Jennie, was wending her way with song to meet them; the tall mountains looked down upon the valley in majestic silence, their heavy foliage dense and impenetrable to the eye; a long, slender thread of smoke, slowly curling up from the kitchen chimney, and a savory odor of melted butter, with a suspicion of frying trout, permeates the atmosphere.

As we journey up the stream, we follow the remains of an old bark road, part corduroy, part rock, and part swampy ooze, into which our brogans sink ankle deep, every step, or outline a double row of hob nails in the mud. After journeying some three miles, we came to a small clearing—big enough for its lazy occupant and his dozen or more frowsy tow-headed youngsters, whom we accosted for information as to our bearings. He had lived there three years, so he said, and had not been a half mile from the house either way during that time, and he looked it. When we made his acquaintance, he informed us what a bad time he had the night previous, laying both fat "paws" over a corpulent pair of crushed strawberry jeans.

"Yes, the old 'oman hed made me some pennyr'yl tea, but it did not tech the spot, an says I—Hanner, says I; if some er them York fellers was only to kem along this way, says I. Yes, the pain iz awful, it's bin tremenjis bad; it did let up a leetle this mornin like, but now its cummin back wus en ever.' And the wily old rascal bent over, his face a study of assumed suffering, until finally my companion, taking compassion on the old fraud, contributed the longed for alembic. We sat there a full half hour and listened to tales of family troubles, bear fights, in which the old rascal pretended to have come off victorious, and of how in the winter he went to some trout pond, known only to himself, and cutting holes through the ice, "shoveled em out with a dung fork." To cap the climax the old rascal set his dog on us when we came back that way.

About half a mile above the house had been a mill pond; the dam had been worn away by frequent freshets, until only a few projecting timbers remained to show where the once pent up waters poured and seethed. The trout, eager to join their companions in the stream above, no longer leaped up in frantic endeavor to surmount the impassable barrier to their progress, and the waters now rushed through a great fissure where the dam had formerly stood and seemed to invite a sweep of the rod over its surface. The old mill still stood there, a ghostly relic of former activity, weather beaten, stark and grim, its wheel dismantled—silent forever. Passing on up stream to the head of the pond (still so called), I quickly adjusted pole and line, and before the Professor had decided which fly to select I was struggling with a one-pounder, which took a coachman dropper almost at the very edge of the old hemlock, whose roots and branches trailing in the water had long afforded him a safe hiding place. I stood on a deposit of pond ooze left by the recent high water, and my footing, to say the least, was very insecure, as I was every second sinking deeper and deeper into the mire. A few yards off was a large rock, if I could only reach that; between the struggling fish and the mire I was badly handicapped, but making a determined effort I reached the rock and saved my fish.

Perched on my elevated island I took a survey of my surroundings. The water came down a ravine, and entering the pond at an angle, formed a deep pool, at the foot of which I was standing; the Professor had selected his flies, and was moving up toward the head of the pool preparatory to making a cast, and the very first cast he made caught my old felt hat on his leader and whirled it far out into the current. He broke the tip of his rod as he did so. Here was a dilemma, which, as experienced fishermen, with the aid of some strong waxed silk, we soon overcame, and securing the hat which had stranded on a projecting point, went on our way rejoicing. Our catch was about forty each, none as large as the one I caught at the old mill, and at 5 P. M. we were glad to avail ourselves of the home comforts at our domicile, whose welcome portal loomed up before us as we cast off leaders and reeled in for the night.

It is a singular fact that large trout seldom bite from sunrise to sunset except for about a half hour or so at midday, when the water becoming warmed by the fierce rays of the sun, they will occasionally work out into the stream from their hiding places, seeking a cool spot where some spring of water oozes up from the bottom or empties its waters into the stream. One reason why large trout are not more frequently caught in the day time is because you can't get your bait where they lie hid, for if you do, it will be frequently taken by him even when he is not on the feed; perhaps he hates to see it waxed, suggests the Professor.

About a mile up the stream from our house the waters make a sudden bend against the mountain side, the abrupt declivity against which they force themselves, rising hundreds feet above the eddying current, turning the stream almost at right angles to its former course. The surging current had washed a side stream extending back a hundred feet or more alongside the mountain. This was overhung with dense foliage, reaching almost to the water's edge. Being of an investigating turn of mind on this occasion, I made a wide detour, coming in at the head of the side stream where, as I surmised, a spring of very cold water flowed in. I carefully adjusted my flies, and with a deft twist of the wrist, sent them some twenty-five feet below me, past the overhanging boughs, the flies circling underneath and dropping lightly on the dark water. In justice to myself, I must assert that I took a good many chances on that cast, resting on my knees in the sand so as to expose as little of my body as possible, for if I got fast to a bough all further attempts would be useless, as it would have been impossible to get loose without exposing myself to the gaze of the old settlers, which I felt sure had worked their way up from the pool below to refresh themselves in the cooler water, and subsequent events showed my judgment correct. My flies went right to the very spot I could have wished; I could not do it again in a hundred casts, and I don't know who was the most excited over the result, the wielder of the rod, or the big trout going down toward the pool with my fly imbedded in his jaw. So soon as I could get on my feet I plied reel and showed myself to the rest of them; I believe every trout who made his home in that pool was "taking a day off," and visiting that binnikill either for my benefit or his own. I could plainly see my trout side by side with one which might have been his grandfather, so much larger was he as they sped along, in fact I could not tell at first which of the two was trailing my line after him, so close were they together; but I quickly brought the smaller of the two up with a short turn and soon had him panting in my basket, his head and tail forming a crescent therein. For the next half hour I might have been mistaken for a sentry on post, so still I sat there, puffing away on my pipe and waiting events. Soon the other big trout came, slowly working his way up the binnikill as if reconnoitering every foot of the way—he did not notice that bunch of old gray tweed on the sand peering down upon him with eager eye through the protecting branches, watching proceedings with such intense interest—whether he was seeking his mate or not I shall never know. He swam up into the shallow water until it barely covered his back, and then I began operations; pulling my leader through the rings on my rod I shortened it to about three feet, then poking the rod through the branches, whisked a fly over his nose; fly after fly was tried, then a grasshopper, a worm, everything available, nothing would suit his fastidious palate. After working over him some time, and seeing my efforts were futile, an evil spirit suggested, "You have tried all fair means, try foul." Taking off my leader and cutting off a couple of yards of line, I tied it to a branch, then splicing three hooks together attached them to the end of my line. Carefully reaching out, the hooks were placed directly under his jaw, and then I pulled with all my might; and then—and then—well, the branch broke, and a streak of lightning went down that binnikill into the pool with the broken end of my branch bobbing up and down like a pea in a hot skillet, and me dumbfounded and inconsolable. Confound it! "Serves you right," said a brown thrush over my head. "Serves you right," croaked a frog in the spring. "Serves you right," said I to myself, and I bade adieu to the binnikill, the pool, blasted hopes and blasted luck.

[TO BE CONCLUDED.]

Natural History.

A QUAIL NEW TO THE UNITED STATES FAUNA.

THROUGH the kindness of an Arizona correspondent I am enabled to announce the occurrence in that Territory of *Ortyx graysoni*. This species has not hitherto been known as occurring north of the western Mexican boundary.

Ortyx graysoni was first made known by Mr. George N. Lawrence, in a paper entitled "Descriptions of New Species of American Birds," published in the Annals of the Lyceum of Natural History of New York, Vol. VIII., p. 476, May, 1867. The type of the species was collected by Col. A. J. Grayson, and came from Guadalaxara, in Western Mexico. The species bears a general resemblance to the common Bob White, being most like the form *Ortyx virginiana texana*. In fact, the females of the two forms are almost indistinguishable, but the male of *graysoni* may easily be recognized by the uniform reddish chestnut of the lower breast and belly.

For the knowledge of the existence of this form of *Ortyx* in Arizona, I am indebted to the courtesy of Mr. Herbert Brown, of Tucson, who sent me an almost complete skin of a female bird, and portions of the wing, breast and tail of a male. These fragments were submitted to Mr. Robert Ridgway, of the Smithsonian Institution, who pronounced them undoubtedly *Ortyx graysoni*.

From a number of letters received from Mr. Brown on this subject, I am enabled to give some details as to the habits of this species, and especially as to its range within the Territory. In the country lying between the Barboquivari range in Arizona, and the Gulf coast in Sonora, and more especially between the Barboquivari and the Plumosa, this species is quite abundant. In fact, the bird appears to be exceedingly common in Southern Arizona. They are to be found on the Sonoita, about sixty miles south of Tucson, and perhaps thirty miles north of the Sonora line. From the Sonoita Valley they can be found to the west for fully 100 miles, and through a strip of country not less than thirty miles in width within the Territory. Very possibly they may go beyond that both to the eastward and westward. Further observation must settle this point, but over this stretch of country they have been reported. There is some evidence that the northern range of the bird extends somewhat beyond the limits above fixed. I hope before long to receive more definite advices on this point.

The habits of *Ortyx graysoni*, so far as we know them, appear to resemble very closely those of the common quail, only slightly modified by the conditions of their environment. They utter the characteristic call "Bob White," with bold, full notes, and perch on rocks and bushes when calling. They do not appear to be at all a mountain bird, but live on the mesas in the valleys, and possibly in the foothills. Mr. Brown has kindly promised to collect further information about this species, and to advise me of the results of his investigations. GEO. BIRD GRINNELL.

NEW YORK, April 22.

SOUTHERN LIMIT OF QUAIL AND GROUSE.

Editor Forest and Stream:

In this week's issue I notice under the above heading an account of the supposed occurrence of Bob White (*Ortyx virginianus*) and ruffed grouse (*Bonasa umbellus*) in Costa Rica. The birds observed by your correspondent were probably Leyland's partridge (*Ortyx leylandi*), and the large-tailed partridge (*Dendrortyx macrurus*). The former belongs to the same genus as the Bob White, and while possessing similar habits and notes, is very distinct in plumage. The latter is a large bird, nearly equal to the ruffed grouse in size, and with a somewhat similar, long, broad tail, but belongs to the partridge, and not to the grouse, family, the genus being quite peculiar to tropical America.

As to the southern limit of the Bob White and ruffed grouse, I would add that the former occurs indigenously in Cuba, and has been naturalized in others of the West Indian islands. On the continent, however, it does not, so far as known, occur south of the Rio Grande, its place being taken in Mexico by allied representatives, but quite distinct species. Of the grouse family no member is known to occur south of the United States and Mexican boundary, the species which has been traced furthest southward being the dusky grouse or "blue grouse" (*Canace obscura*), which is abundant on the higher portions of the White Mountains in Arizona. It is not impossible that both this species and the Rocky Mountain race of the ruffed grouse (*Bonasa umbellus umbelloides*) may eventually be found on the more elevated parts of the mountains of Central Mexico; but there is little chance of either extending very far over the border.

The bird fauna of Costa Rica is probably more thoroughly known than that of any other country in tropical America, more than seven hundred species having already been actually taken within the contracted limits of the small republic. The temperate districts of the interior especially have probably been more completely ransacked by the ornithological collectors than any other State in the Union with the exception of Massachusetts, and possibly one or two others of the United States. Therefore, it is not likely that any two birds of the partridge and grouse families can have been overlooked. ROBERT RIDGWAY.

U. S. NATIONAL MUSEUM, Washington, April 18, 1884.

DEER IN THE ADIRONDACKS.

BY C. H. MERRIAM, M.D.

[From advance sheets of the Transactions of the Linnean Society of New York.]

Cariacus Virginianus (Bodd.) Gray.

COMMON DEER; VIRGINIA DEER; RED DEER; WHITE-TAILED DEER.

DEER are at present so abundant in most parts of the Adirondacks that they outnumber all the other large mammals together, and this in spite of the fact that during the present century alone, hundreds of them have perished of cold and starvation, hundreds have been killed by wolves and panthers, and thousands by their natural enemy, man. And there is every reason to believe that if proper game laws are enforced, their numbers will not materially decrease.

This beautiful and graceful animal, by far the fleetest of our mammalia, roams over all parts of the Wilderness, being found high upon the mountain sides, as well as in the lowest valleys and river bottoms. It frequents alike the densest and most impenetrable thickets, and the open beaver meadows and frontier clearings. During the summer season, which is here meant to apply to the entire period of bare ground, loosely reckoning, from the first of May to the first of November, its food consists of a great variety of herbs, grasses, marsh and aquatic plants, the leaves of many deciduous trees and shrubs, blueberries, blackberries, other fruits that grow within its reach, and largely of the nutritious beech nut. While snow covers the ground, which it commonly does about half the year, the fare is necessarily restricted, and it is forced to subsist chiefly upon the twigs and buds of low deciduous trees and shrubs, the twigs and foliage of the arbor vitæ, hemlock and balsam, and a few mosses and lichens. In winters succeeding a good yield of nuts the mast constitutes its staple article of diet, and is obtained by following the beech ridges and pawing up the snow beneath the trees.

When the first warm winds of approaching spring uncover here and there in the beaver meadows small spots and narrow strips of ground between the snowdrifts, the new marsh grass is found already sprouted, and its tender blades afford the deer a tempting change from the dry twigs and tough lichens that constitute its winter fare.*

From this time until the latter part of September much of their sustenance is procured in the immediate vicinage of water. After the snow has left the forests and the new vegetation has fairly started, they gradually work back into the woods, but return again in early June to feed upon marsh plants and grasses, and wade or even swim to procure the lily-pads and other aquatic plants that thrive in the shallow water near by. During June, July and August, hundreds of deer visit the water-courses of this wilderness every night, and retire at break of day to the deep recesses of the forest.

It has been stated that they do this to rid themselves of black flies and mosquitoes, but a little reflection will suffice to show the absurdity of this assertion, for nowhere in the entire Wilderness are these insect pests so abundant and annoying as on the marshes and in the immediate neighborhood of lakes and streams. And since it is rare to find a deer above his thighs in water, the fallacy of this supposition is apparent. The fact is that, for the sake of obtaining the plants that grow in such situations, they submit to the annoyance of swarms of insects, most of which they would

*I was particularly struck with this fact on the 29th of April, 1882, while crossing from Big Moose Lake to Lake Terror, in company with Dr. F. H. Hoadley. Here, along the banks of a sluggish stream which was still bordered with ice eight to ten inches in thickness, we observed fresh green grass already over an inch and a half high in small bare spots between snowdrifts two and three feet in depth. The same day we saw a deer standing on a mass of ice and snow on the shore of Lake Terror, doubtless in search of food.

escape did they remain amid the mountain fastnesses. It is true, however, that deer, particularly at the South, do sometimes enter water when not in search of food, and sink to such a depth that little save the nostrils and eyes remain in sight; but whether this is done for the riddance of insects, or for the refreshing effects of the bath, is an open question, and for my part I incline to the latter view.

Mr. E. L. Sheppard tells me that he has on two occasions seen deer enter the water and immerse themselves until almost the entire body disappeared from view, and this when not "skulking," or endeavoring to elude an enemy. The Rev. John Bachman once witnessed this diversion and described it in these words: "We recollect an occasion, when on sitting down to rest on the margin of the Santee River, we observed a pair of antlers on the surface of the water near an old tree, not ten steps from us. The half-closed eye of the buck was upon us; we were without a gun, and he was, therefore, safe from any injury we could inflict upon him. Anxious to observe the cunning he would display, we turned our eyes another way, and commenced a careless whistle, as if for our own amusement, walking gradually toward him in a circuitous route, until we arrived within a few feet of him. He had now sunk so deep in the water that an inch only of his nose, and slight portions of his prongs were seen above the surface. We again sat down on the bank for some minutes, pretending to read a book. At length we suddenly directed our eyes toward him, and raised our hand, when he rushed to the shore and dashed through the rattling canebrake in rapid style.†

Early in September our deer begin to desert the water courses, and before cold weather sets in there is a marked decrease in their numbers in the localities which a short time previously were their favorite feeding grounds. The reason is apparent; the marsh grasses have matured and are now dry; the tender aquatic plants near shore have mostly withered and decayed; and the lily-pads and pickerel weed, cut down by September frosts, no longer remain to tempt their appetites. They retire, therefore, to the higher ground in the forest, which still affords them abundant subsistence.‡

A large number of the Adirondack lakes are heavily bordered with a dense frontage of arbor vitæ (here called "white cedar"), which so overhangs the water that the lower limbs barely clear the surface. Around many of these lakes all the lower branches, up to a certain height, are dead, so that on viewing the shore one is struck with the strange appearance of a sharp cut line, about the height of a man's head, extending partly, or entirely, around the lake. Above it the dense foliage presents an almost continuous and unbroken front, impenetrable to the eye, while below it not a green sprig can be seen, the dead limbs and branches remaining in the form of a broad belt.

The cause of this phenomenon long remained a mystery, and many and amusing theories have been advanced for its explanation. It has been supposed that some unusual and unknown agency operated to produce a great overflow of these lakes, and that the present green line indicates the high-water mark of this unrecorded inundation, the branches below it having been killed by the water or ice. Were there no other reasons for disbelieving this hypothesis, its absurdity is demonstrated by the fact that on many of the larger lakes the line is confined to one side. The only other theory, so far as I am aware, that is worthy of refutation, was advanced by no less distinguished a gentleman than Mr. Verplanck Colvin, superintendent of the Adirondack Survey. Mr. Colvin's theory is, the snow which is blown off from the ice on some of the larger lakes, and is sometimes piled in drifts in certain places along the borders, buries the lower limbs of the cedars; and he thinks that this snow "in some unfavorable season, becoming compact and icy, had killed the inclosed evergreen foliage."§

The fallacy of this view is proven, I think, by the following facts: First, branches on the opposite or shore side of these very trees are usually alive and green, which could hardly be the case were the drift theory true; second, the line is often more strongly marked on the shores of ponds that are too small, and too closely hemmed in by hills, to afford the wind a chance to drift the snow about their borders; and, third, the foliage line is, in all instances where I have observed it, perfectly straight and exactly parallel to the surface of the water, which could not possibly be the case were it caused by irregularly drifted snow.

Moreover, it is now an ascertained fact that the green line is a result of the wintering of deer along the shores where it exists, and the evidence on this head may be summed up as follows: In the first place, it is absent from at least half of the cedar-bordered lakes, and is only found, of recent origin, in localities where deer are known to winter. On some of the larger lakes it is confined to one shore and sometimes to a single deep bay, while the cedars about the rest of the lake remain unmarred. Furthermore, it is a fact, which can be verified by any one willing to take the trouble, that where the deer still winter in these places the snow which covers the ice is literally trodden down by them, a well beaten path follows closely the outline of the shore, and the stumps of newly broken branches may here and there be found. The height of the line shows the distance that a full grown deer can reach when standing on the snow and ice. And finally, trustworthy witnesses affirm that they have observed the deer standing on the ice in the act of browsing upon the low branches of cedars overhanging the lake. I regard all this evidence as conclusive.

Though deer are generally spoken of as nocturnal, they are by no means strictly so, their habits in this particular being modified by the environment. In localities that are much frequented by man they keep their beds during the greater part of the day, and feed mostly by night; while in the remoter sections the reverse seems to be true.

The spot on which one lies to rest is called its bed. It is generally hidden in some thicket, under the low branches of an evergreen, or by the top of a fallen tree.*

They have no fear of water, and, when pressed by wolves or dogs, take to it as a means of escape. They are excellent swimmers, moving with such speed that a man must row briskly to overhaul them. Even the young fawns swim well, and I once caught one alive that had been driven into the lake. It was in the spotted coat, and not more than three months old.†

The extraordinary sagacity of some of these animals, and the temerity, I might even say stupidity, of others, is astonishing. As a general thing, a deer is always on the alert; his eyesight is good, his hearing acute, and his sense of smell developed to an unusual degree. Under ordinary circumstances he detects the whereabouts of man at a considerable distance, and even if abundant is seldom seen. At other times, particularly when feeding on the margin of a lake or river, if the wind is right he may be approached in broad daylight by aid of a boat, and will only raise his head from time to time, gazing at the intruder in a vacant sort of way; but let the wind shift a trifle, so that he gets a whiff from the direction of the boat, and he is off in an instant. Along the borders of the Wilderness a deer will sometimes join a group of cows or sheep at pasture, and follow them home within gunshot of the house. Not a few have met their death in this way.

During the deep snows of our severer winters deer are apt to congregate and remain in one locality till the food supply in the immediate vicinity is exhausted, when they move off to some other place. By working to and fro in search of browse the snow becomes much trampled, and pathways are beaten in various directions. These places are called yards, but they fall far short of the regular inclosures, walled in by deep snow, that we so often read about, and even see pictured under this head. They afford the much-persecuted animals no shelter or protection, for if discovered by either the panther or the infamous "crust-hunter," they become graveyards for many. Mr. Verplanck Colvin, speaking of one he had found on the south side of Seventh Lake Mountain, Feb. 15, 1877, said: "It was impossible to estimate the number of deer which had occupied this yard, as they had fled at our approach, plunging into the deep snow below. The ground of this central area resembled a sheep yard in winter, the forms of the deer being plainly discernible in the beds of snow, in which they had slept, on every side.

"Here we were startled by the sight of the fresh tracks of a panther or cougar, which evidently made his home in this abode of plenty; and shortly thereafter we found the body of a deer freshly killed, and shockingly torn and mutilated. The guides were now all excitement, and followed the cougar's trail eagerly. In less than thirty minutes a shout announced that he had been encountered, and rushing forward to the southern front of the plateau I came upon the monstrous creature, coolly defiant, standing at the brow of a precipice on some dead timber, little more than twenty feet from where I stood. Quickly loading the rifle, I sent a bullet through his brain, and as the smoke lifted, saw him struggling in the fearful convulsions of death, till finally precipitated over the cliffs he disappeared from sight in the depths below."‡

It is stated by several writers that the deer delights in destroying snakes. Dr. Harlan thus speaks of this proclivity:

"This species displays great enmity toward the rattlesnake, which enemy they attack and destroy with singular dexterity and courage; when the deer discovers one of these reptiles, they leap into the air to a great distance above it, and descend with their four feet brought together, forming a solid square, and light on the snake with their whole weight, when they immediately bound away; they return and repeat the same maneuvers until their enemy is completely destroyed."§.

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*Quadrupeds of North America, Vol. II., 1851, p. 223.

‡The largest and best conditioned deer I ever saw was a magnificent buck that Dr. F. H. Hoadley shot at Big Moose Lake, Oct. 31, 1881. Its stomach was full, containing a quantity of the leaves and stems of the "bunch berry" or dwarf cornel (*Cornus canadensis*), a small amount of wintergreen (*Gaultheria procumbens*), and a few leaf-stems of the mountain ash (*Pyrus americana*), while throughout the mass were scattered numbers of beech nuts with the shucks on.

§Report of Adirondack Survey, 1880, p. 162.

*While on a snowshoe tramp from Big Otter to Big Moose Lake, in January, 1883, I counted upward of forty deer beds—mere depressions in the snow. One only was in an exposed position, being in a little opening alongside a maple sapling. With this single exception all were under shelter of small spruce and balsam trees, the space between the bed and the overhanging branches, loaded down with ice and snow, being in most cases barely sufficient to admit the animal.

†In FOREST AND STREAM for Dec. 6, 1883 (Vol. XXI., No. 19, pp. 362), occurs the following: "Deer at Sea.—Portland, Me., Nov. 29.—The British schooner Howard came in yesterday with one of Howard Knowlton's deer on board, which had been picked up about five miles out at sea. The animal escaped from the garden on Peak's Island last summer, and had not been seen since, probably having kept in the woods at the lower end of the island. This is the biggest feat of capturing deer in the water on record."

‡Report of Adirondack Survey, 1880, pp. 159-160.

§Fauna Americana, 1825, p. 242.

[TO BE CONTINUED.]

CONGRATULATIONS AND SPECULATIONS.

[Extracts from a speech that might have been made on a late "solemn and interesting occasion," had not circumstances prevented, or rather, had they been propitious.]

OWING to a constitutional weakness I am perhaps a little late, but as my congratulations are somewhat different from those you have already received, they may be acceptable even now, at any rate they will be ready for next time.

Ten years is no great of a life in journalism; I have known dreadful mean papers to live longer than that. The question most prominent at present seems to be the progress made by the FOREST AND STREAM in all those years, with its assured prosperity for the future. Why and from whence does it come when so little is ventured by its managers in either department it represents? I see no prizes sought or awarded to any of its "staff officers," and yet the paper fills a place that has long and sorely needed just such a representative, and consequently its permanent success is a legitimate result.

Starting at first as a sportsman's journal, that plebian recreation has risen to respectability under its influence, so that one may be proud of his rifle or gun, where once he was ashamed to be seen with one on his shoulder. Now we willingly acknowledge that the keen-eyed hunter in his light canoe, penetrating regions unknown to civilization, has brought to light facts and fancies in organic life new to science and the world.

The call for living issues, for facts as they appear to-day under our advanced intelligence, has brought out an overwhelming amount of contribution and incident, raising the question as to the reliability of certain early writers of natural history, and laying bare discrepancies and omissions which should no longer exist.

Here are opened channels of thought and research before unused. The sportsman in his record of facts and incident becomes a naturalist and scientist without effort, a source of human knowledge, now as never before showing its importance; and as new fields are under consideration and grow broader with each day, just so the interest, enjoyment and real soul, as well as bodily profit, is increased. It is the full free breath of mountain air that fills his lungs with oxygen, the living flame, and gives him strength and endurance beyond other men. The man of study and letters finds in the woods renewed energy from the same source, his writings have sharper edge and point, while to the "wit" the field is new and just exhaustless. And yet this particular advantage has been overlooked, its necessity in the maintenance of a well-balanced mind underrated in the fret and fever of business life. It is here that the FOREST AND STREAM steps in to fill a place compilers have been obliged to leave blank, or a story half told. The hunter tells his own story in his own way, and with a directness no other man can reach. The lion, tiger or panther in the menagerie is one thing; in their wild state, where the hunter's life depends on his coolness and precision, they are quite another. As one said to the writer: "We were standing side by side; the panther gathered his feet for the spring, but hesitated a fatal moment, as we knew he would do. My companion raised his rifle, with 'See me put his eye out,' which was done."

Its columns also offer a broad field where rival theories can be sustained or demolished; an elevated plateau overawed by no institution, governed by no clique, and not likely to sacrifice its dignity and position by bolstering a failing dynasty or a prestige that is passing away.

All honor to the projectors of the Central Park Museum and the State foremost in its fostering care of natural history; but beyond precedent fortunate that the FOREST AND STREAM is under its shadow. Both are necessary, I might add indispensable; but if one must be sacrificed, which shall go first? In the Park we see form, size and color, pictures which every child knows and can name at sight, while character, habit, passion, emotion—that which constitutes its story through the whole realm of organic life—must be sought outside its walls. It is, therefore, no idle boast that, as natural history is being re-written, the compiler must draw largely from these columns both base and structure of his work.

Ornithology as a pure science is exhausting itself. Microscopic distinctions, which at best only confer microscopic honors, have reached a point where common sense gives up the helm and abandons the guidance. The mighty craf already touches gravel, and unless a new tack is made it will stick fast where a neap tide will not float it off.

I have read somewhere that "man cannot live by bread alone." A striking illustration of its truth is herein apparent. Making no pretense to be a scientific journal, the FOREST AND STREAM has on its pages more of what natural science is built upon than any other publication in the language. Look at the exhibitions of canine sagacity. Look at our yachts, true sea birds of the ocean, marvels of improvement in naval architecture; the rifle of to-day, the deadliest arm the world has ever seen, and deny, if you dare, the strides natural history has made, gleaning in old fields, picking heads of abandoned grain and shaking out the grass in sheaves already gathered—all living issues of to-day, and for which, anxious to know and have their children know, men are pouring out money like water.

I might as well here as elsewhere crave the reader's indulgence while I offer a word in explanation of a devious course. I was drawn into the publication of papers on natural history as subjects came up for discussion in the FOREST AND STREAM, until, before I was aware of the danger, honorable retreat was impossible. I now go back to an article written years ago, and which should have appeared at first as defining the position assumed, only hoping, if the same idea is sometimes repeated, it will bear the repetition. The primary object of the essay was to engraft science back upon its parent stock, natural philosophy; because science is only a human method of studying creative works, and may go astray, while philosophy, the law under which all works were accomplished, came with them from the Creator's hand. The man who cannot see this is to be pitied, the man who denies it is a fallen angel.

I offer, therefore, a simple record of what I have seen in more than half a century of research, and what others have seen, and which I believe true statements. My own discoveries are neither brilliant nor numerous, and yet they are such as I hardly feel willing to see "appropriated" or forgotten, to be rediscovered by and by. If the conclusions drawn are given with the confidence of strong belief, rest assured that that is precisely the case since many an episode cost years of attention as its month came round, and many questions could only be settled in certain degrees of latitude. I may be pardoned for writing that a mushroom growth is here of all places most pernicious. To the young and superficial mind there is a charm in classification, orders, genera, and minor divisions. An array of hard names and indefinite distinctions obscure all above or beyond, the conclusion is at once reached that if these terms can be fluently repeated and profusely written, the whole matter is understood, and that this constitutes the study of nature in all its fullness and fruition. This weakness of young writers is a sad and fatal mistake; it has filled our pages of natural history with crude unphilosophic theories, improbable "probabilities" and strange reports, ready to seize any real discovery that is made, and still, erroneous record if no occurrence brings them to light. What I would impress is, that beyond this dark barrier of technicalities lies a field boundless as the love of God for his creatures, where is spread out all that is beautiful, all that is elevating and satisfactory to an inquiring mind. It is the little story of life in the simple language of nature that every creature brings before us; the place they occupy in the great chain of intelligences; the contemplation of which raises us in the same scale, ennobles our position and leaves us to feel and think.

I would also impress a more close observance of the laws which govern and sustain life in the orders below us, ministering as they do by life and liberty to our pleasures and our necessities. They have a claim on our mercy at least, which it is sin of deepest dye to disregard.

When we deprive a bird or animal of liberty, we also perhaps take from them ability to obtain the food on which they live, and without which they must die. We may exhaust invention in mixing substitutes, but the broken natural law remains, and the penalty is death. Take the Southern mocking bird, an insect and worm eater exclusively. Not one in ten survives the first year in confinement; not one in twenty lives two years, and not one in a hundred lives over five years. And why is this? Not because you did not give food in abundance, but because you did not and could not give the food the Creator made necessary to sustain that life. "Why did my bird die when he sung so beautifully but yesterday?" I have heard many times repeated, with only the same answer to give: "Your bird had only the language of song, and the last wail of starvation could be nothing else." Here is your bird, a mere skeleton covered with feathers; as I said before, the unremitting penalty of a broken law, immutable through the whole realm of organic life.

There's an old book "laying around," you will find one in almost every house; in fact, every well regulated family possesses one or more copies, for "there is a great deal in it." Not particularly a work on ornithology, although a bearing in that direction is perceptible. Turning its pages one day

my eye fell on this passage, "If a bird's nest chance to be before thee in the way, in any tree or on the ground, whether they be young ones or eggs, the dam sitting upon the young or upon the eggs, thou shalt not take the dam with the young, but thou shalt in any wise let the dam go and take the young unto thee." (Deut. xxii. 6–7.)

I sat a long while in deep thought over it. Here was a key to what had been for years to me a mystery, and although giving no clue to the origin or process, such was my confidence in the authority of the command that I accepted the fact, willing to abide by it. But why was this command necessary in this and in no other phaze of organic life? Yes surely, why?

The pet fever touched me at the usual age, to be supplanted by love for higher objects as years formed new tastes and aspirations, and culminating at last on that last work of creation, where it sticks to this day. (I account for the anomaly only on the simple fact that it leaves nothing further to be desired in that direction.)

I took from the nest a brood of young birds with both the parent birds, put them in a cage, placed in it abundance of food, congratulating myself that the old birds were quiet and did not worry, and of course would tame easily. Six hours afterward I looked into the cage; the mother bird lay dead, while the male survived a short time. Wishing to preserve the skins, I found the flesh dry and shrunken, the fluids exhausted, with every appearance of starvation a week rather than the work of a few hours. I tried the same experiment several times, with the same result invariably, and grew discouraged.

After reading the above quotation the mystery was greater, while the liberty of investigation was abridged. Thoroughly human, I sought to evade the letter of the law and see how near I could come without incurring its penalty. I found a family of grosbeaks and carried the young in my pocket, the old birds in a basket. I placed the old birds in the basement and the young birds in the attic. When I came in at evening the old bird was dead. It being warm weather the windows were open, the old birds would hear the call of their young, and hence the result. I must confess that seeing this my heart was far from flint. One trial more and I ceased forever. I took a pair of grosbeaks with the young, carried the young to my house, and the old ones to my office. They all lived. The young grew large and beautiful, the old birds easily domesticated, and all were lovely as tame birds could be. The question comes up then, what is this power, this influence of the passions and emotions which will so quickly exhaust the functions of life, shrink the living tissue and paralyze muscular action?

The power of mind over matter is acknowledged in general terms, but the particular province and physical effects of passion, emotion, will and like attributes in organic life, science has not reached, and could not if it would. This train of thought I propose to follow, noting the physical results of their influence and power, in moulding forms of life, changing and breaking up its organizations, with such other phenomena of interest as may occur.

To return to the question, why was this single class of creatures designated among myriads to receive special privileges and exemption from calamities to which all organic life is subjected. We shall find the answer in their peculiar nervous organization and susceptibility. They could not be the fairy creatures they are with less. The rapidity of motion, the circulation of blood and muscular action, all show sentient intensity not possessed by any other warm-blooded creature. To offset and counterbalance this, comes in the wise provision of short memory, and a cessation of nervous excitement when the cause is removed. As was said before, the moment the call of the young bird ceases, whether from death or removal, the parent bird becomes quiet, and after a short time gathers food for itself, and all is forgotten. We see then, how the passions and emotions paralyze the functions of life, and how quickly the living tissue is affected by them. We find also that desire, effort, or will, though less rapid in operation, is not less wonderful in physical results.

When I first looked at the American crossbill, creative design was beyond my reach. The consideration followed of how far circumstances might have influenced the distortion of mandible, and that led me to keep one in confinement where neither desire nor opportunity could be indulged and where the mandibles would not be twisted, now right and now left, nor elongated by efforts to reach a seed a little beyond his reach. At the end of one year I saw the mandibles were assuming a natural position. At the end of two years the bird died when the crossing was hardly perceptible. It may be urged that this being the case, the mandibles of the young bird should be parallel and straight. I reply, not necessarily so, since no fact is better substantiated than that in the transmission of life, both character and bodily deformity are carried with it. Here is positive evidence of natural effort to restore symmetry to a distortion brought on by the varying circumstances and necessities of life. What we urge is that subjects fraught with such serious consequences to the best interests of life should receive the attention due to them, and we may rest assured that the line between what the Creator has done and what he has left us to learn and do, will grow definite and plain as we proceed. The laws which govern the physical universe, govern also the beating of your heart and mine, and when understood, leave less and less of His dealings with humanity inscrutable.

Henry Little grew from boyhood to manhood by my side. From a burn on his neck when quite a small child the injured muscle contracted, and laid his head down on his right shoulder. He grew up a strong, healthy, spirited young man, but continually cramped by this misfortune, which did not in the least impair intellect or ambition. Every moment of waking life was an effort to raise his head to an upright position, and this grew more intense as the approach to manhood made the misfortune more apparent. A physician, skillful, though somewhat given to hazardous experiments, said to him one day: "Henry, I can part that contracted muscle and set your head up right." "Do it—do it," said Henry. "Cut my head half off if necessary. I'll risk it."

So one day he thrust in his knife, and feeling around among nerves and blood vessels, severed the strap, and over the head went to the opposite shoulder. Bracing it up in proper position, the wound soon healed, and his head was all right. But a new phenomena now appeared, the face was all awry, the whole side was carried upward, the whole orbit of the eye and eyeball was carried three-quarters up into the forehead, so that the distortion was really more painful to look at than before. What counteracting influences might have followed we are unable to record, as a few months afterward he fell from the yard arm in a stormy night at sea and was lost. B. Horsford.

Springfield, Mass.

Bird Notes.—Robins, bluebirds and larks are here in force. The song of the lark is especially sweet after the terrible winter just experienced. Long before summer the meadows are vocal with his songs. The robin has not got tuned up yet, but is practicing. Several mornings I have heard him near my bedroom window. The bluebird warbled all through the month of March. It was pretty tough on him, but when he got here he stayed. The English sparrow was here all winter, but with the first breath of spring has gone hence. The 15th of March I counted forty-nine wild geese, and on the 19th ult. sixty-one, sailing northward. Some five days later I heard a flock in the dusk of evening, but did not see it. I have not noted the flight of our wild ducks this spring, though I am informed that a great many have come in along the Hock-Hocking River. I usually see a great many this time of the year. Quail will be scare here this fall. Reports from the country around say that entire flocks perished during the extreme cold weather. Last winter was one of the worst ever experienced in this State. Near the office of our iron works (which, by the way, is way back in the woods) is a large coal slack dump which has been burning for several years, and over which is dumped hundreds of bushels of slack every week. Adjacent to this dump is a woodland, and one morning a flock of twelve quail filed out of the woods down to this fire. After a little time they flew away to the stables and were fed by the stable boss. Every morning I watched them, and with each visit the number was less. At last only three were left to answer roll call. All day they hovered close to the heat, but when the firelight began to brighten the dark landscape, and night was fairly on, they fled. In the morning the encampment was silent, and after a search, made this entry in the note book: "Found dead upon the picket line." Grouse wintered well, and are to be found in abundance.—Parson O'Gath (Baird Iron Works, Gore, O., April 6).

The Deadly Wires.—A large flock of wild geese passed over here northward this morning, the first I have observed this season. Last week the boys picked up in the road an English snipe and a woodcock. Both were probably killed by flying against the telegraph wires which line the highway. From the numerous similar instances noticed, must we not conclude that the total number of game birds killed in this way is very large indeed? Unfortunately for this kind of destruction there seems to be no help, but on the contrary it must continue to increase as the cause increases. —H. W. C. (Rye, N. Y., April 8).

The Speed at which Ducks Fly.—A few weeks ago the writer was riding at the side of the Connecticut River on a train which was running not less than twenty miles an hour. As it passed a certain point a duck flew up and headed the same way we were going. It came just in a line with the edge of the window and kept there for several minutes without losing an inch until it began to slow down preparatory to settling into the water again.—Curtis.

Game Bag and Gun.

SHOOTING IN CUBA.

A DAY AMONG THE QUAIL.

I HAVE just risen from the perusal of my weekly file of the *Herald*, filled with terrifying details of the disastrous floods in the West, the destructive cyclones in the South, and the piercing blizzards in the North of our grand republic, and cannot help feeling satisfied for the nonce that I am smiled upon by kindlier skies. While our fellow sportsmen north of Mason and Dixon's are blowing their fingers and kicking their toes against the ice-covered trees to keep up the circulation of blood in them, I am kicking Bob White out of the matted grass in green fields and pastures new. No wonder then that the New Orleans and Cedar Key steamer of this week brought us seventy-three passengers, and nearly every week from forty to sixty, when, but three or four years ago, from six to ten was the usual number brought in by this line each trip. The fact is, increasing numbers of my countrymen are discovering that this is a wonderfully fine winter climate, generally with clear skies and the temperature ranging between seventy and eighty from November to April, frequently below seventy, with an occasional dive down to sixty for several days at a time during the northers which are probably the spent breath of your northern blizzards.

Since sending you my last letter ("A Day Among the Wild Guineas") I have not been out until this week, on account of the sickness of my dog, which I will briefly mention *en passant* as a matter of interest to sportsmen.

The dog in question is the red Irish setter bitch Fire Fly, formerly owned by Mr. Crause, of Baltimore and Ohio Railroad, for which he paid, as he assured me, $1,150, and was purchased by me and brought to this island about eighteen months since. Soon after her arrival here I noticed she was very deaf on one side, and would often scratch her head furiously on the deaf side, and this continued until the day referred to in my last letter. That day she did unusually heavy work, and suffered from lassitude and lack of appetite for several days thereafter, when her head became much swollen with an offensive discharge from the deaf ear. Becoming alarmed at her symptoms, I laid the ear open and found the inner ear completely filled up with a blood tumor with broad base, which I dissected out, a suppurating mass with more than thirty maggots a half inch long and full line in diameter within it.

The wound was dressed daily with water medicated with chinolin tartaric, two grains to the ounce. She made a good recovery, and now, four weeks after the operation, is entirely well, with hearing perfectly restored.

Yesterday, 24th of February, I took her to the country for a day among the quail, which we both thoroughly enjoyed, she appearing desirous of showing especial gratitude for her improved abilities.

The morning was particularly cool and pleasant, we, in the best form, were on the ground at sunrise. Light dewdrops sparkled upon the grass, refracting the cheery light that played upon and through them; the twitter of song birds filled the morning air with animating sounds, which wonderfully harmonized with its charming freshness, while we enjoyed the thrill of the quickened circulation that coursed through its circuit of arteries and veins, the pleasure of which is heightened by our pleasing expectations of our favorite sport. The dog, in full sympathy with these expectations, is inclined to widen her range as she goes rollicking over the field, but to my great delight is now quick in hearing and obedient to the whistle.

Our first bevy we flushed wild in a field denuded of cover, and they scattered badly; one quartered within reach of my left barrel, and I scored my first bird, which the bitch retrieved in her usual handsome style, laying in my hand a plump bird without ruffling a feather. These birds were so scattered I was unable to mark them, so did not try to follow, but at the other side of same field the dog commenced roading another bevy which she worked very cautiously, and finally located. They were in good cover, and so cautiously had the dog crept upon them, that when flushed they rose in one bunch within a yard of her nose and two yards of the nose of her master, who did not molest them, only trying to mark them down. All except two, however, went out of the field; these two made the second and third birds contributed to my bag.

I now followed into the field where the last bevy had flown, a full hour having been devoted to the last field with a result of only three birds in the bag.

Before proceeding far in the next field the dog began roading and soon came to a point. I flushed and killed a large water hen (*Crex porzana*), and a little further, on a second point, I flushed a bevy of quail and killed the Jaggard, marking the rest down, but little scattered, in a splendid cover of short, but thick and matted grass. Here I at once knew I was to have the best sport of the day. The grass was such as the quail, when flushed, love to hide in, and in which they will not run; so I called the dog to the cool shade of a neighboring tree to rest and cool off in the gentle breeze. Near us we had the bevy marked down, within a space not exceeding two hundred feet square, in such cover that I knew they would rise in ones and twos.

The owner of the hacienda rode up to invite me to breakfast with him and his family at 10 o'clock, and I told him of the game marked down, inviting him to remain to see the sport. Asking me to be careful not to shoot in his direction, he accepted my invitation. When both I and the bitch were quite rested, keeping her close, I commenced at one side and worked that patch of field as closely as if looking for needles in hayfields, she seeming to be as well aware as myself of the vicinity of the whole bevy, and that any unnecessary fuss would spoil our sport. How very like a cat she did all that delicate piece of work, constantly talking to me with her eyes as she successively and surely pointed with her nose to their secret hiding places without ever making one mistake, her knowing glance saying to me, "There is your bird, are you ready?" and how quietly she would slip away to retrieve the dead birds and how carefully she laid each in my hand and resumed her work. I think it was the prettiest piece of canine work I ever witnessed, and my enjoyment of it was greatly augmented by my friend remaining to witness it also. His enthusiasm for the dog was boundless, and I could not help doing my part better than ever before. One by one (except once when two rose together) she found and pointed for me fourteen quail, and never before do I remember having killed twelve quail out of fourteen successive rises. This time, as if to honor the fine work of my dog, twelve of these fourteen went into my bag, and then we adjourned to the house for breakfast, both I and the bitch having acquired a high reputation for skill in the estimation of my host. Sixteen birds fat as squabs, a glowing satisfaction with myself and dog, and a rousing appetite, were the results of my morning's work.

The breakfast was worthy of my preparation for it in my glorious tramp over those fields, and I honored it with gusto such as only a sportsman can comprehend. My host and I were full of the enthusiasm brought in from the field, and we killed all those birds again over the breakfast table in company with his family.

After two hours devoted to our breakfast and quiet rest, the gentle breezes under the wide balcony, the thermometer marking there about seventy degrees, I amused myself by a few shots at the wild pigeons which were plentiful in a millet field near the house, bagging ten of them in a half hour. Until four o'clock I strolled about the place, and observing the domestic animals, among which is a phenomenal friendship, existing since several years, between a cow and a sturdy old gander, which are inseparable. Wherever that cow ranges that gander is ever by her side, and her champion against all violent aggressions, and will put to route even the most ferocious cattle that attack her by striking them violent blows with his sturdy wings and sharp, horny bill about their eyes, sometimes leaving incised wounds in their eyelids. This you may think a very improper gander, but that is the only kind permitted in this anomalous country, no propaganda being allowed by the authorities of the "Siempre Fiel" to be even talked about, and I quail before indulging in such a thought.

This being so, and 4 o'clock coming around, with myself and Fly perfectly rested and refreshed, I followed her to the fields, this time with the head and small boys of the family to show me where the game was most quickly to be found, and with a desire on their part to witness a renewal of the performances so celebrated at the breakfast table.

The birds were already running. Several bevies were successively found, and they furnished us fair sport, though I was not able to mark down any in so favorable a cover as to repeat the morning's performance; consequently I somewhat injured my reputation for great skill by more frequent misses. Notwithstanding this I had a very enjoyable tramp, at sunset had flushed five bevies during the afternoon, and had added thirteen quail to my morning's score. Total bag for the day, 29 quail, 10 pigeons and 1 water hen—40 birds—with which I arrived home by early train yesterday, the 25th inst. Note the date, and that I say "total bag," not "total results," which are still more far-reaching and important.

It is big medicine, and I take it whenever I can get a day off, from November to April, for all bodily ailments, not to mention the alimentation which is one of its minor advantages also agreeable to your subscriber.

Notwithstanding that there is no legally closed season here, the birds are plentiful because the absence of snow, abundance of cover and food, and comparatively few sportsmen do for them what only the most stringently enforced game laws can accomplish in the States. Included under the word "cover" are the cane fields, tangle woods and their vicinities, where shooting is impracticable, so it will ever be impossible to exterminate the quail by much shooting, as it will always be replenished from these impenetrable preserves, and the same is true in some degree of the deer.

Nemo Niemand.

Habana, Feb. 26, 1884.

Central Lake, Mich., April 16.—Crow blackbirds first seen April 14. No wild geese reported as yet. The inland lakes are opening fast, but there is still a good deal of ice. Grand Traverse Bay not open yet.—K.

INCREASE OF MAINE LARGE GAME.

ALMOST cheering report to the sportsman and friend of game protection comes from Maine. Moose, caribou and deer are increasing. The information comes from good authority and there is no buncombe about it. Protection of these kings of game animals was not begun in real earnest till the jack-shooters and crust-hunters had made a heavy beginning in the work of utter extermination—was not thoroughly begun till the winter of 1881-82, and followed up with a vengeance till the winter of 1882-83. But when early last winter Payson Tucker, Superintendent of the Maine Central Railroad, issued his remarkable order to forward no more moose, caribou, deer, or other unlawfully-killed game over his road or its branches, the backbone of Maine market hunting was broken. He was immediately followed by a similar order from the managers of nearly every other express and transportation company with lines leading out of Maine. The result has been most gratifying. Instead of nearly two thousand deer, forwarded from that State a year ago, there to be wasted or sold for a mere pittance, the winter is now over, the crust-hunting season is past and not over fifty deer have been received in Boston.

But the effect upon the game itself is most pleasing. A gentleman thoroughly familiar with the history of the moose in Maine, who has just returned from a trip through Aroostook county, says that the most noble of game is surely on the increase. Lumbermen report their tracks as more plenty than ever seen before. The lumbermen have frequently seen them. Alas! for the love of fresh venison they would probably have killed them, but the game wardens and detectives made themselves too much of a terror a year ago, when they suddenly "dropped into camp," helped themselves to moose hides, and called upon the lumbermen to call at the county attorney's office and settle in the sum of $100 and costs for every moose killed. Deer are reported as more numerous than ever before in that county, and they have not been molested by either lumbermen or crust-hunters.

From Piscataquis and Penobscot counties the reports are equally good. The game wardens have done efficient and seasonable work, but the moose and deer unlawfully killed have been very few, while a few hours' drive from the city of Bangor would bring anybody within sight of deer tracks as plenty as sheep tracks. Occasionally moose also have been seen. Though respectable citizens of that city have not been bitten by them, yet the question may be asked in sober earnest, what would have been the result of the seeing of a deer, or even his track, without the efficient arm of the game law over him?

But the good work has been done, and too much credit cannot be reflected upon the earnest efforts of the worthy fish and game commissioners of that State. The reports are cheering, and only equalled by the fact that the admirable code of laws, published already in the FOREST AND STREAM, have passed the Massachusetts Senate without a single damaging amendment. A veteran lover of the rod and gun in Maine sends a greeting to the Massachusetts Fish and Game Protective Association, and offers to extend it to the editor of the FOREST AND STREAM. He says, "Moose and deer have made a decided gain in our State. I expect to live to kill yet another moose by square still-hunting in open season. And it now looks as though there were going to be enough for all of us. Come down next fall, in open season, and look over your trusty rifle barrel at the roots of a pair of antlers that stand ten feet above the ground!" SPECIAL.

BOSTON, Mass.

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

Rifles and mechanics have been my hobby, and added to this is an experience of fifteen years in rifle shooting. I have hunted from Texas to the Canadas and used all kinds of rifles in match shooting. I have owned one of each gun worth anything appearing in the market and have made some barrels according to my ideas of rifling, twist, etc., so this *ipse dixit* will have some solid basis.

One correspondent advocates a bottle-neck shell. This pattern has been long since discarded both by government and long range-experts; it is a type of the past. The recoil of a bottle-necked shell is fully two foot-pounds heavier than that of the same charge in a straight shell. The powder blow becomes more percussive (with equal charges) in proportion as the chamber is shortened within practicable limits.

This percussive force we must get rid of and endeavor to make the conditions as nearly similar to the accurate muzzle-loader as possible, *i. e.*, a ball so hard as to upset only for one-fifth its length, and of the same diameter as the barrel at bottom of grooves. Results of trials show same accuracy as when ball is loaded from the muzzle in the grooves.

Upon the subject of recoil another contributor speaks with such temerity as in a measure to vitiate his opinion. I have used as much as 130 grains powder and 550 grains lead, off-hand, and although case-hardened by firing thousands of shots each year, can get better work from lighter charges. The less the recoil the greater percentage of hits will be made. It is a curious fact, too, that the closer the shot the harder the gun seems to kick.

We can expect only recoil and unaccountables from this .40-90 bottle shell, and it seems a shame to spoil a good barrel by chambering it for it.

Use in its stead a taper shell of same length, loaded in the following manner, which will give the same initial velocity with 25 per cent. less initial pressure, and has 10 grains less powder to dirty the barrel. I saw in an Ordnance report that in the shell for the Austrian "Werndl" rifle a cake of compressed powder was used, with a resultant gain of some 250 f. s. initial velocity over shells loaded with same weight loose powder. This set me thinking, and experiment indorses the following: Load with 20 grains FG in bottom of shell, then put in a cylindrical cake of compressed powder of 50 grains, then add 10 grains of a small-grained quick powder, say FFFG.

The primer should be No. 1 Winchester, as its safety in a magazine is in proportion to the size, besides we want only enough flame to surely ignite the base of the charge to get the desired accelerative effect.

The ball should be 300 grains, 4 canelures, with a point terminated by a flattened spheroid, to get the maximum area of striking surface.

An alloy of $\frac{1}{10}$ is best, while the rings on the ball should caliper same as the barrel at bottom of the grooves.

Sir Joseph Whitworth and Dame Experience both tell us that to insure the rotation, a twist of one turn in twenty inches must be used for a ball of three diameters in length. The energy wasted in starting a ball not seated in the grooves, and it cannot be in a repeater, is equal to a loss of two inches in trajectory.

On some balls fired in snow to determine this, the grooves in the lead were from .01 to .10 inch wider than the lands in the gun, and *vice versa*. I find that for a ball started not in the grooves, an increase twist starting one turn in sixty inches and finishing one turn in sixteen inches, will deliver it most perfectly, giving at the same time so little recoil, with a marked increase in accuracy and trajectory, as to recommend its adoption.

The number of grooves may be 6 or 8, .005 inch in depth and twice the width of the lands. All corners should be rounded off to reduce the area of friction and fouling. We cannot choose a better action than the Winchester.

To remove the fears expressed by some, I relate the following: I use from 3,000 to 10,000 Winchester cartridges in their guns every year. Such was my faith in them that, to convince a friend who doubted, I shot first 18 shots in 9 seconds, with only one link; then fired from the shoulder a charge of 120 grains and three 200-grain balls on top of it. He is a convert.

Every accident with these guns may be traced to home-made shells and badly-seated primers.

With a .76 inch Winchester, chambered for the taper shell, adding thereto the modes of charging and rifling I have advocated, we have a gun that has all the requirements called for by expectant readers of the rifle column.

Let us hear the criticism of some of your correspondents who replace experiment with theories hatched in fertile brains, and portray them with a more fluent pen than mine.

W. DEV. F.

PHILADELPHIA.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

In ante-railroad days in Arizona, together with several others, I went to the first station west of town, known as the Nine Mile Water Hole, to meet the incoming California stage, upon which we expected friends. The place was at that time kept by Colonel Whipple, a frontiersman of no mean renown, who has since died from the bite of a rattlesnake. In the immediate neighborhood of the station was an immense mesquital that swarmed with the birds common to that neighborhood, and although it was July, many were nesting. Among them was a thrush, at that time a stranger to me, and as I had noticed the customary shotgun standing behind the bar of the station, I took it and blazed away at my bird. What exactly followed I cannot tell, but I have and had then a faint recollection of being over-ended some four or five times in rapid succession and finally of bringing up with a bump against a neighboring tree with a bleeding nose, an aching head and an almost dislocated shoulder. I rested till I could properly get my bearings, then started back with the gun, that during my gyrations in the air had never left my hands. On the way I met Whipple, and he expressed surprise at my want of judgment in the use of a gun that stood specially loaded for special purposes behind the liquor bar of a station on a lonely stage road. He then told me how much he had paid for it, and what a good gun it was. It had, he acknowledged, been pretty well filled up, and then added, by way of condolence, that he liked to feel a gun when it went off, inasmuch as the result was always the more positive. I of course felt satisfied that he was right, and am yet convinced by the back action of that one load that the performance of shotguns is a something not to be despised. I afterward gathered up the little remaining skin and feathers of the bird and sent them to a gentleman in San Francisco for identification, and, by way of apology for the rags sent, recounted my sad experience. In reply, he advised me to "load lighter and shove a little on the breech." I regret much that I do not know the weight and gauge of the gun, or the pounds of shot and powder used; but it was a muzzleloader, and I have my own experience and Whipple's word for it that the gun was a good one.

ADIOS.

TUCSON, A. T.

Editor Forest and Stream:

I hope I will be excused for stating facts, as my personal experience has proven them to be, not guess work, in the performance of shotguns, in points wherein the facts are at variance with what many persons have stated as facts in late numbers of this journal. Not that I believe that these persons, any of them, would knowingly make misstatements of facts, but have done so, by accepting as true a proposition that at the time to them seemed self-evident, but which, put to the crucial test of actual trial, would have been proven erroneous.

Let us take, for example, the most common of these misstatements of fact when speaking of shotguns both by editors and correspondents, which is the expression, when speaking of charges, "The 10-bore will stand much heavier charges than the 12 or 16-bore because it is the strongest gun." Is this a fact as written? Most certainly no. The 16-bore, with the same thickness of metal at the breech as the 10-bore, is very much the strongest, and the 20-bore in the same way, very much stronger than the 16. A tension that would lay a 10-bore wide open would be easily withstood by the 20-bore of equal thickness of metal. The strength to withstand tensive force of your gun or your steam boiler is in proportion to the area of its inner surface, the greater the area the less tension a certain thickness of metal will stand. The dentist's boiler of thin brass, four by six inches, withstands a tension of 900 pounds to the square inch as safely as the boiler of an ocean steamer made of the best steel ten or twenty times the thickness withstands twenty pounds to the square inch. This I give as a sample, easily understood, of some of the assertions of seeming facts that are not facts, and no one is excusable for presenting them as facts.

I will now take up in sequence some of the assertions made in the issue of this journal in the number of March 13 and other sportsmen's journals that actual experience has proven, and will prove in all trials, are not true. We will take the assertion by "* * * *," on page 125: "A close, hard-shooting gun * * * will kill with No. 8, 9 or 10 shot * * with remarkable certainty 45 to 50 yards." This is not true of any shotgun, be it "hard-shooting" or close, with No. 9 or 10 shot, and generally not so with No. 8. Try it and see. Put your quail up at 50 yards—measured yards, not guessed at—and see how much shooting at with No. 10 shot he will stand; if you can make him "lay down" oftener than once in ten shots then I know nothing about shotgun shooting. I think my experiments in the line of testing the killing range of fine shot have been careful and extensive enough for practical purposes, and I have found it to be as follows: For No. 12 Chicago shot, 26 to 27 yards; for No. 9, 34 to 36; for No. 8, 36 to 44. I mean that this is as far as any gun will injure a quail so badly sitting, as to be retrieved. Perhaps for one on the wing, if the gun be properly held, 5 to 10 yards further could be added. Try it and see. It is no more possible to kill a goose 100 yards with No. 10 shot than it is to kill one a mile with the same charge, unless the shot should in some way cement together by "balling."

Again, we have in the same article: "But the larger the shot the larger the pattern." The writer evidently means the larger the shot the wider the spread, while exactly the reverse is the fact with all shotguns.

In the following article, by "Spicewood," we have: "If I load my 26-inch gun with the coarser grade (of powder) I find some of it blown out without being burnt." This is truly wonderful. But as preposterous as it is, how often do we see the same sentiment in print; yet I do not believe but what the men writing it believe it. I believe—yes, I think I know—that if we had a tube reaching from here to the moon filled from end to end with gunpowder of any of the ordinary kinds, or extraordinary, and we set fire to one end of it, that each and every grain of that power would be burned before that powder got rid of that fire. That a gun can be overcharged with powder so far as to even reduce its effectiveness is a fact that trial has proven. But gun powder is quite sensitive to fire, notably so, and never becomes so disgusted and demoralized from misuse as to fail to explode or burn when subjected to the white heat of the flame issuing from the muzzle of an overloaded gun when fired. A. is out shooting when there is snow on the ground; he accidentally overcharges his gun. When he fires it he finds strewn on the snow in the line of fire something that very closely resembles grains of powder. He at once concludes without further examination that it is unconsumed powder. What is it? Simply the loosened powder scale left in his gun by former charges; and powder being a compound substance, made up of three very different things, with no two things exactly alike, some of them are consumed or changed into gas instantly, while others (notably those which have nothing in their composition but sulphur and charcoal) burn very slowly and are projected on the snow while still burning, and are "put out" by contact with the snow, resulting in a pellet of charcoal looking very much like powder, these being the only two kinds of powder ever found on the snow in front of a fired gun.

In the next article Mr. Alden seems to have struck a snag with his first breechloader, when there was really no snag there. He says: "It proved to be a very inferior weapon, although I paid a high price for it." I suppose, of course, he means that it did not shoot well. A remedy correcting that is easily found. The art of manipulating shotguns has for years reached that stage whereby the good gunsmith can, with his reamer, give any well-built gun any desired closeness of pattern in reason that one may desire. Therefore, I consider one shotgun as good as another, all other things being equal, if it only has metal enough to withstand the requisite reaming or chokeboring.

A gunsmith with his reamer will manipulate the despised muzzleloader as readily as a breechloader, then how is "38" (in issue of March 13) going to beat it, all other things being equal? The only, only advantage the breechloader has over the muzzleloader, is its ease of manipulation, and its self-evident disadvantages are, that it "kicks" a little harder and requires a little more powder to do the same work.

"38" is very nearly as lame in his next paragraph, taken as a whole. There is no measurable, or rather discernible, difference in the shooting of a 18 and a 12-bore gun, loaded with 4 drams of powder and 1¼ ounces of shot, all other points but the bore being equal, except that the 10 gives appreciably the most recoil in all the experiments that I have made, and they have not been few. Why should the 10-bore "cover more territory" than the 12, with same loads?

Your correspondent, "Mark Ivel," has at last got a gun so very much superior to the rest of the boys, and so far ahead of any gun mortal man on this planet ever built, that I know without asking that he had it built on the planet Mars to special order. Does "Mark Ivel" himself believe that he was writing facts when he wrote, "This gun, when properly loaded, is sure to kill at 100 yards if held on the game"? He may if the Alabama yards are short, very short.

The next paragraph by Mr. Newcomb. Who can find any fault with it? Not I. There is not. I should judge, an overdrawn statement in it. We have all made wonderful shots, shots that seemed far beyond the range of possibilities, but we must leave the "kill every time" off if we wish to live happily and go to some place when we die. Have our mouths and pens chokebored, as it were, so that they may not scatter so outrageously.

The next man, "New Subscriber," will find plenty of men to enter the lists with the 12-bore against his 10-bore, all things being equal, except the bore, and many of them without qualifications, and not get beat on any point.

So much for the notes on "The Performance of Shotguns" in one number of FOREST AND STREAM. If I have gone beyond, in these remarks, the spirit of fair critisism, it is not my fault, but that of the writers. My excuse is, we want facts and nothing but facts. Yes, only one issue, but it has been going on week after week and year after year. When "Almo" says positively that he can kill a goose one hundred yards with No. 10 shot, and the tyro, having purchased an expensive gun and goes out to test it by this standard of "Almo's," and finds that he cannot ruffle the feathers, or even make the old gander dodge, or scarcely, if at all, find the marks of his shot on a soft pine board that distance, he is liable to throw away a good gun, or try to ruin the reputation of its maker. Therefore I say, let us all get chokebored very frequently when writing on gunnery. BYRNE.

LACON, Ill.

Editor Forest and Stream:

I use 9¼ lbs., 10 gauge; load 4½ drams powder, one pasteboard wad and one felt wad on powder, 1¼ ounces shot, one felt wad on shot, and wads two sizes larger than bore. Find good work on all sizes of shot; No. 9 shot for snipe and quail, 5s chilled for ducks. I killed a mallard clean, and she struck a treetop as the gun cracked, at eighty-four paces. Of course such shots are a scratch, but still the shot must fly hard to kill at that distance. WADS.

LEWISTON, Ill.

ARKANSAS.—Memphis, Tenn., April 16.—Messrs. W. A. Wheatley ("Guido"), D. H. Poston and John H. Freeman had some rare sport last week across the river. They bagged 167 game birds in one day, and in half the next 150 fell before their unerring fire. From 8 to 11 o'clock Saturday morning, at Madison Station, on their way home, they killed fifty-six. Nearly all were snipe, and a run of sixteen straight kills (four doubles) was made. All their families and friends had a feast Sunday morning.

PHILADELPHIA NOTES.

DURING the past week we have had some real snipe weather, about the first of the season that can be called favorable in every respect. Some birds were killed, yet very few compared to the good old times, when a dozen snipe in a forenoon was considered only fair work within a radius of five miles of Philadelphia. Nowadays a pair of snipe for a morning's tramp seems to satisfy our city men who carry the gun, and lucky is he who makes even this showing from our Philadelphia meadows. On the warm days of last week it would be safe to say there were fifty men with dogs on the Broad street meadows, and the Schuylkill and Darby Creek grounds had as many visitors.

A snipe once found on these near meadows generally jumps out of gunshot, and circling round and round in a wide, diverging flight, keeps up an incessant squeaking that always tells of fright, and vainly seeks for a safe place to pitch into, not daring to trust himself in such populated quarters; until at last, weary of the cannonading and saluting he is receiving in his course away out of gunshot, he betakes himself to a more congenial section.

A day's journey from Philadelphia, and by this I mean in neighborhoods only reached by steam railroads, good snipe shooting can very frequently be had. Delaware State has many spots and so has Maryland. Just now Milton Creek, Delaware, has many birds on its borders. This section is reached by railroad and stage, and therefore few visit it, the grounds are quite isolated and the local gunners "do not bother with snipe." They wait for the quail season and only go "a birdin." Milford, Delaware, neighboring snipe meadows are more easily gotten at and have many Philadelphia visitors, but there is a very large extent of good ground and plenty of room when birds are numerous, and they are often struck. The early coming varieties of shore birds have made their appearance on the New Jersey coast and the big yellow-leg has arrived in fair numbers. The later spring visitors of the wading tribe do not show themselves until next month, and those that enjoy and follow spring bay bird shooting wait for them. Of these there are the black breast plover, the robin snipe and the dowitcher, their stay is short and the flight must be hit just in time.

Some of my friends, who have made the acquaintance of Western market shooters, whom they have at times employed as guides on October shooting trips, have been the recipient in the spring from some of these men of boxes of snipe. I have seen these packages of game opened, and am sorry to say, on more than one instance found half of the birds to have been upland plover, or as the market shooters termed them, "prairie keets."

Snow can be still seen in the hollow places on the northern side of our Pennsylvania mountains. The season is late for trout fishing, and one may look for spring to tumble right into the lap of summer. HOMO.

April 19.

DECREASE OF BIRDS IN FLORIDA.—I found nothing new or strange in Florida worth reporting; in fact, did not get away from beaten paths and the currents of travel. Thus much for going alone. I observed this, however, that the birds of Florida are greatly reduced since I first traveled in the State ten years ago. Ducks and other common water fowls have apparently diminished three-fourths, while the more rare and finely plumaged birds have almost entirely disappeared along the lines of travel. This result, in the latter class of birds, is caused in some degree by the shooting of visitors, but mainly by their destruction for commercial purposes. The steamer lines have stopped promiscuous firing from their decks, for which good step the officers deserve great credit. Formerly a Florida steamboat resembled a gunboat in constant action, except in the lamentable fact that all the shots were from her decks. Now she is an orderly, respectable craft in the main. At Tampa I found a commercial man fitting out a bird-killing expedition for the southwest coast further down. He declared his intention of bringing back 10,000 bird skins. I hope he will be disappointed. Further up toward Cedar Key, seeing many deer skins en route to market, I made inquiry and learned that deer are habitually hunted in the less-inhabited districts for their skins alone. This kind of butchery will soon destroy Florida's attraction for sportsmen. The diminution of ducks and other migratory water fowl is probably caused by their destruction further north. Comparatively few of them are killed in Florida. The most accessibly fishing resorts are also perceptibly depleted of their finny game.—W. N. B.

WILDFOWL IN NEW BRUNSWICK.—*Editor Forest and Stream:* In your issue of March 27, I noticed a communication from "B." on "Wildfowl in New Brunswick." I live on Northumberland Straits, but have never seen the time when even one hundred geese could be bagged in one day. Most of our gunners would be very well satisfied if they could secure that number during the whole season. I admit that there are better shooting grounds on this coast, but I think, for all that, that "B." has exaggerated, unless he means birds of all kinds, including "coots." Most of the shooting here is done in icehouses (a structure of circular form two or three feet high) over decoys. The boats described by "B." are used for a short time only, when the ice is breaking up in the channels. In my opinion they injure the shooting, for the birds are driven from their feeding grounds and become very wild. We have had very bad weather for the last fortnight, and but few birds have been killed. The largest score for last week was five geese and one black duck.—C. (New Brunswick).

MINNESOTA.—Long Prairie.—Although the snow went off early, and the streams opened up in good season, we have had but few ducks when compared with the flight of 1880 and 1881. There have been but few bags made here, the largest being fifteen ducks in a day by two men. Last spring the river opened late, and there were no ducks to speak of, and they were scarce last fall. Our sportsmen are puzzled to know whether the good old days are gone to never return, or whether the ducks have simply taken a different route in their northerly flight, and next spring may come again. In the fall of 1882 the high waters destroyed most of the crop of wild rice, and this may have caused the ducks to shun us for a year or two. We have to content ourselves with looking forward with high hopes for the fall shooting.—A. W. S.

HALLOCK, Minn., April 10.—Yesterday ducks and geese were coming over in large flocks. The coulees connecting with Two Rivers are filling up with them and sport will be fine; a warm rain will start them north by the hundred.—NORMAN.

EXPERIENCE WITH LIVE QUAIL.—Downington, Pa., April 7.—On 12th of February I had ten dozen quail shipped from Tennessee. They arrived evening of the 15th with twenty-eight dead. The rest were put in a room 10ft. x5ft. 3in. high, covered with a blanket, and branches of cedar trees leaned against side of room for cover. Two days after I found thirty dead ones. In five days they had all died except four, which I turned out, thinking they might live, but have every reason to think they went the way of the others. Can give no reason for their dying, unless they caught cold, as they seemed to have a sneeze and be stopped up in head. I accept this reason. As you see, my first attempt has not been very successful, but not disheartened, I am going to try it again. If any one can advance any reason for their dying I would be glad to hear from them. —HENRY E. ELSTON.

BUFFALO, N. Y., April 15.—A sad accident—the old story—took place Saturday last. Henry K. Childs, a young man of twenty-one, was returning from a duck hunt. In taking his gun out of the boat it was discharged, striking him in the chest; he lived four hours. This was the second casualty of the week, the other being caused in the same way, when "Billy" Stewart, a market hunter, lost the greater part of his forearm. Several of our fly-fishers have been to Caledonia and succeeded in making fair catches. Perch are beginning to bite, but the fishing will not begin in earnest for some weeks. Snipe are coming in slowly, one or two good bags having been made up the lake shore.—CABALLERO.

NEW HAMPSHIRE.—Colebrook, April 21.—State Commissioner E. B. Hodge, of Plymouth, N. H., made us a visit last week, and three of the crust-hunting fraternity paid for their dog-chewed venison, and the fourth bound over for trial. There are others to follow. Much snow remains in the mountains about here. Not as many deer crust-hunted in this State as in 1883, but done without regard of a probable enforcement of game laws. Wild geese and ducks have been here ten days, grouse have wintered well, while many owls found shelter in barns. Saw hawk owl yesterday with mouse in claws.—NED NORTON.

BIRDS IN DAKOTA.—Chickens are quite plenty this spring, but many are being killed, which should not be done at this season of the year. Geese and ducks are quite plenty, but very wild, ten to fifteen rods being about the nearest that we can get to them. Three of us went to the lake hunting yesterday. We got eight ducks and two geese; one of the geese when it struck the water, tore its gizzard and some of the intestines out.—G. E. C. (Letcher, Sanborn county, Dak.).

DROP OF GUN STOCKS.—Hartford City, Ind.—*Editor Forest and Stream:* Will you invite one of your correspondents of a recent issue to please give his method of changing the drop of a gun stock as he promised that he would in a future issue? I have one that is too straight for me.—C.

Camp Fire Flickerings.

"That reminds me."

110.

FISH were rather scarce at Put-in-Bay that fall, and the capture of a big bass was a rarity; so in order to keep even, some of the more unscrupulous of visiting fishermen were known to stoop so low as to drop a hook in a "crib" and quietly disentangle a large bass, while the oarsman kept a lookout for the owner. But fish so caught usually had some tar sticking to their scales, owing to having brushed against the net in their efforts to regain liberty, and when a string of fine fish would be brought to the hotel and hung up for exhibition, there would always be questions put and equally suggestive glances made in relation to tar, etc. Rob P., a young lawyer from Cincinnati, caught an elegant bass, and as it was his first experiment in fishing, he was greatly elated with his trophy. I hadn't caught any, but was "going to" shortly, and intent upon that was sitting in the other end of the boat paying no heed to Rob. Happening to look around I saw Rob with the big bass between his knees rubbing its nose with a piece of sandpaper in a vain endeavor to erace a coal black birth mark, extending from the nose to one eye, with which the poor fish had been unfortuuately endowed. I promised not to tell, but being a fisherman my brethren will not be surprised at my transgression. TAR.

111.

It was in the days of muzzleloaders. Dominie M. was fond of an occasional outing with gun or rod, in company with a congenial spirit. On this occasion he had gone after ducks, with lawyer T. for a companion. They had concealed themselves on a point, and toward night ducks were flying lively, exciting the gentlemen, who found it difficult to load and fire fast enough. In the midst of the melee the Dominie forgot to put powder in one barrel and rammed home the shot vigorously. Along came the ducks. Bang! went one barrel, and snap went the other cap. Fresh cap with like result. Another. Then the good man, striving to restrain his—well, call it impatience—remembered his omission. Calling to his friend, he said:

"T., do you know what hymn this reminds me of?"

"Don't know as I do," replied that gentleman, whose acquaintance with hymn books was quite slim.

"Well," said the dominie, eying the gun regretfully, it runs this way:

"A charge to keep I have." S.

MONTHLY LIST OF PATENTS

For Inventions Relating to Sporting Interests, Bearing Date March 25, 1884. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

295,630. Cartridge Loader and Cap Expeller.—L. Keller, New York, N. Y.
294,429. Fishing Rod Reel Fastening.—G. L. Bailey, Portland, Me.
295,056. Animal Trap.—H. B. Sargent, New Haven, Conn.
294,856. Cartridge Decapper, Recapper and Reloader.—F. Gifford, Burlington, Ia.
294,772. Barrel Lock for Break Down Guns.—N. R. Davis, Freetown, Mass.
294,993. Row Lock.—S. H. Haas, Chicago, Ill.
295,350. Artificial Fish Bait.—W. D. Chapman, Theresa, N. Y.
295,246. Armorplated Gun Carriage.—H. Gruson, Buckau, near Magdeburg, and M. Schumann, Magdeburg, Prussia, Germany.
295,245. Gun Carriage.—H. Gruson, Magdeburg, Germany.
295,585. Magazine Gun.—A. H. Russell, U. S. Army.
295,286. Magazine Gun.—A. H. Russell, U. S. Army.
295,235. Gun Wad.—J. W. Dennis, Cincinnati, O.
295,234. Gun Wad Retainer.—J. W. Dennis, Cincinnati, O.

Sea and River Fishing.

BLACK BASS FISHING IN CENTRAL NEW YORK.

EVERY lover of the gentle and health-giving sport of fishing regrets to see the disappearance of the brook trout from the streams where they once were so plentiful. But so long as the people are so indifferent to their own interests as to take no measures for their preservation, we can look for no increase, but rather for the total extermination of this beautiful and game fish in all the settled portions of the country. This compels all lovers of the rod who cannot spare the time or the money for a trip into the North Woods, to Maine or Canada, to look for a substitute for the trout.

The only fish worthy of being called a substitute for the trout, is the small-mouthed black bass. Those who have become familiar with the habits of this wary fish will agree with Dr. Henshall that he is the coming game fish of America. There are several reasons for this. Among them that the black bass will readily take any kind of bait, or spoon, and is the only fish besides the trout that will rise to the fly, and when caught throw himself out of the water in his struggles to escape the hook. The Oswego bass will also take the fly, but rarely throws himself out of water, and, however gamy he may be in the West or Florida, is tame indeed compared with the black bass in New York.

The black bass is very prolific and hardy, and thrives in lakes and sluggish streams where no member of the salmon family can live. He grows to a good weight, and is an excellent table fish when properly cooked. But to the sportsman, his chief value is in his splendid fighting qualities, his strength, endurance and artful resources. He is as coy and shy as a young girl, as cunning and uncertain as an old one. To-day he is content to feed upon the humble angle worm and to-morrow nothing less dainty than a moth-miller or a butterfly will satisfy him. Minnows are his most regular diet, yet he will rise eagerly to the R. W., silver doctor, Ferguson, Mann, peacock hurl or magpie when minnows are swarming around him. And then, his local habits have to be studied if the sportsman would lure him from his home.

An Onondaga Lake bass and one from Oneida Lake differ as much in manner and habits as a New Yorker differs from a Bostonian.

Central New York is very fortunate in having so many beautiful lakes and streams where the bass are plenty, and each year growing more numerous. With Syracuse as a center, the angler can go in any direction and in half an hour to an hour's ride get on good bass-fishing ground. East, Cazenovia Lake; south, the Tully chain of lakes; west, Skaneateles, Cayuga and Seneca lakes and Seneca River; north (almost at our door), Onondaga Lake, Oneida Lake and River, the Oswego River and Lake Ontario. Good fishing can be had in each of these waters during the season.

Fly-fishing begins in the Seneca River May 20, and is good upon the reefs throughout the season till November. In the other waters the season opens June 1. In the lakes fly-fishing actually does not begin much before July 1, as the fish will not rise much before the water gets warm. July, August and September are the best months for the lake fishing.

On Lake Ontario at Mexico Point and near Oswego, and on Oneida Lake at Messinger's, north of Canastota, and at Lakeport and Shackleton's Point are rocky, blind islands where the bass come in great numbers from deep water to feed. At each of these places the bass will rise to the fly for a brief period in July and August, when rare sport may be had; but during the greater part of the season minnows are the most killing bait. In the other waters mentioned, especially in Onondaga Lake and the Seneca and Oswego rivers, more fish are caught with the fly than by any other method, and as nearly all our sportsmen are expert fly-casters, those waters are their favorite resorts.

The bass of Onondaga Lake bear off the palm for game qualities, for hardness and firmness of flesh. In this lake the shore slopes very gradually until it is four or five feet deep, and then suddenly very rapidly into deep water. The steep slope is covered on all sides of the lake with a luxuriant growth of aquatic plants, which afford shelter for the fish. Just within the weeds in shallow water are the spawning beds, scooped out like great bowls in the clean sand, so that the bass have excellent lurking places for themselves while guarding the beds and their young.

There are two methods of fishing—either row the boat in shallow water and cast over the weeds to the edge of deep water, or to row in deep water and cast up to the edge of weeds. The danger of the first is, that a powerful fish may dart into the weeds when struck, and get the flies entangled before the boat can be get into deep water.

Most fishermen prefer fishing from deep water, as there is less risk of loss. In the excitement of the struggle with a three-pounder, or possibly two, one does not care to take too many chances with rod and tackle.

As a rule, a bass will not rise to the surface for the fly, at the instant it touches the water; sometimes, though rarely, it will rush up and out of the water to meet the dropping fly, and sometimes it will only take the fly beneath the surface, when gently trailed after the cast. Some fishermen put a split shot on the stretcher fly to sink it after the cast, but no one who loves his delicate split bamboo rod and its deft handling will so abuse it.

The flies to be used can only be determined by actual trial, the state of the weather, wind, clouds, sun, and water, and the special food the bass are seeking on the day, all having to be considered. Generally early in the season, when the water is high and discolored, light-colored, white and gray flies, and bright tinsel-bodied flies, like the silver doctor, are the most killing. Later dark brown, black, green and orange-bodied flies are most attractive.

Frequent changes are desirable until the killing fly is found. Then arrange the cast with reference to that fly, and look for your reward. WAVERLY.

SYRACUSE, N. Y., April 12, 1884.

GIGANTIC TURTLE.—Capt. Augustus G. Hall and crew, of the schooner Annie L. Hall, of Gloucester, vouch for the following: On the Grand Bank, March 30, in latitude 44° 10', longitude 33, discovered an immense live trunk turtle, which was first thought to be a vessel bottom up. The schooner passed within 25 feet of the monster, and there was ample opportunity to estimate its dimensions in comparison with the length of the schooner. The turtle was at least 40 feet long, 30 wide, 30 from apex of the back to the bottom of the under shell. The flippers were 20 feet long. It was not deemed advisable to attempt its capture.—*New Bedford Sentinel.*

LONG VS. SHORT FLY-RODS.

Editor Forest and Stream:

Premising that these remarks are confined solely to single-handed rods, may not this problem be analyzed, and at least in part determined by reference to well settled mechanical principles?

It would seem that the excellence of a fly-rod depends on the perfect embodiment of each of the following qualities:

1. Power to cast the fly.

2. Power to control the fish after it is fastened, or "killing power."

3. Ease and comfort in use.

Other qualities of importance there are, but on reflection they seem either to be embodied in, or necessarily to follow one of the above. For instance, elasticity is a necessary concomitant of the first, strength of the second, lightness of the third.

That a fly-rod is a lever is too plain to admit of argument. Whether the rod be lengthened or shortened, but one element of this lever is varied, and that element is the longer arm. To the end of this longer arm, the weight against which the angler must labor, is applied, whether it be the strain of the struggling fish, or the weight of the line and the resistance it encounters from the air and water in casting.

It needs no Sir Isaac Newton to assure us, that with the same weight of line or fish, the muscular effort required from the angler is greater with a long, than with a short rod, since the power he must overcome is applied against him at the end of a longer lever.

The next question in order seems to be to determine, if possible, what sacrifice in this respect each additional foot of length requires.

Using for this purpose the table computed by Mr. William Mitchell of this city (as I am informed from direct experiment), we find the leverage upon a rod:

12 feet long, 9½oz., reel and line 6½oz.... ...leverage 30oz.
11 feet long, 7½oz., reel and line 5 oz. .....leverage 26oz.
10 feet long, 4½oz., reel and line 3½oz... ....leverage 16oz.

Of course the leverage changes with the angle at which the rod is held, but since this affects every length alike, the relative proportions are not varied thereby.

If this table is correct, it would therefore appear that between two individuals, one using a twelve-foot, and the other a ten-foot rod, the former is compelled to do nearly twice as much work as the latter. Though this seems a large difference, still I hardly think it will be questioned by one who tries such rods comparatively, one immediately after the other. At all events such an one will admit that the difference is very marked, and quite sufficient, after some hours' use, considerably to affect the pleasure of an angler of the average endurance of men of sedentary life.

Therefore that the longer rod is under considerable disadvantange in this respect, seems to be certain.

But let us consider the question further; for it may well be that the longer rod offers advantages in other directions, more than sufficient to offset this.

We will then pass to the second consideration—the power to control the fish after he is fastened, which I take to be substantially the same thing as "killing power."

But the same laws of mechanics apply here as well; and from them and the table it necessarily follows that to apply the same strain upon the fish, he who uses a twelve-foot rod must exert nearly double the effort of him who employs one of ten feet. If the relative proportion stated be thought excessive, still it must be admitted that a very considerable difference does exist, and in the direction indicated.

The question may be advantageously viewed from another standpoint. Which has the greater killing and controlling power, a twelve-foot fly-rod, or an eight and a half foot stiff rod such as is employed in salt-water fishing for striped bass? This admits of but one answer; and it therefore seems unquestionable that the killing power of a rod depends on its length, *only* in so far as increase in that respect increases the effort the angler must exert to produce a given effect on the fish; and that consequently the longer rod is again at a disadvantage.

The foregoing seem to rest on established mechanical principles, not to be gainsaid without at the same time controverting rules, recognized as truths in designing every construction of modern engineering skill.

But the first proposition—power to cast the fly—cannot be tested in this way.

Here we stand on fairly debatable ground, for our only appeal seems to be to experience; or, in other words, to the individual opinion which each reader may have formed from the experience he has had. The circumstances under which experience is gained are so important an element in determining the value, and the applicable limit of the teachings derived therefrom, that divergent opinion must necessarily follow. It may well be conceived that he whose angling has been confined to waters where a pound fish is a rare event, and he who habitually fishes where such are regarded as small fish, would differ on many points, perhaps radically.

The writer has for quite a number of consecutive years fished the streams of New York and Pennsylvania and the ponds of Long Island for small trout, as well as the waters of the Rangeley region of Maine for large. He is, therefore, emboldened to express his individual opinion on this branch of the question, and the reasons on which it is based. Many, doubtless, will disagree with his conclusions, in just as firm belief that they are erroneous, as he does that they are sound. We all seek the truth, and only by fair discussion and honest comparison of all sides of this important question can that truth be reached.

Those who at the tournament at Central Park, on Oct. 16, 1883, saw 85 measured feet cast with a 10-foot rod, weighing 4⅜ ounces, will hardly question the ability of a rod of that length, and of say 6½ or 7 ounces in weight, to meet every requirement in this respect. Perhaps the discussion might be rested right here by an appeal to the hundreds who, in common with the writer, witnessed that feat. To such as may be unfamiliar with that event, it may be remarked that the caster stood upon a platform elevated one foot above the water; that the distance was accurately measured from the edge of the platform; that the weight and length of rod were correctly ascertained, and that a possible error of 18 inches in the distance credited to the cast would be a very liberal allowance.

Attention might also be called to the fact that at a similar event in the preceding year—the caster standing three feet above the water—91 feet were reached with an eight-ounce rod 10 feet 4½ inches long, though it must be admitted that this was a "rolling," and not an overhand cast.

These facts would seem pretty decisive; still, let us go into the matter a little further.

At one time the opinion was current, that an increase of one foot in rod length, would be answered by a corresponding increase of five feet in the possible length of the cast. This allowance is now thought by many to be excessive.

But admitting the five-foot standard, we then allow a gain of ten feet in casting distance to the twelve over the ten foot rod.

For some years I have each season been in the way of seeing many excellent and skillful anglers cast day after day, and all day long; and this where there was unlimited space to swing all the line they might wish. In no instance can I recall a single cast in actual fishing that would exceed 65 feet measurement from the caster. I doubt if any would even reach 60; while it is believed to be the general experience, that more than ninety-five out of every hundred casts in actual fly-fishing throughout the length and breadth of the land, will fall within fifty measured feet.

With average skill, 60 to 65 feet can readily be reached with a ten-foot rod.

The question then seems to resolve itself into this: Shall double labor be constantly undergone, and power to control and kill be sacrificed, to attain ten feet increase of cast—an increase seldom or never to be utilized in actual fishing?

It is a question of personal preference, which each must decide for himself; but it seems to me it is "paying rather dear for the whistle."

One advantage, however, should in fairness be accredited to the longer rod, and as far as I can learn from the teachings of theory and practice, it is the only one.

In fishing for the small trout of much-fished waters, so handling the flies that the droppers just drop upon the surface, undoubtedly gives the best result. It is clear the length of cast can be more varied without losing this advantage with a longer than with a shorter rod. Still, by adjusting the flies on the leader at somewhat increased intervals, it is believed that the disadvantage of the shorter rod in this respect becomes slight, and by no means sufficient to offset its other and decided points of superiority.

I seem to recognize a radical change of opinion on this subject within the last few years. At first short rods were only fit for baby-fishing, now their sphere of usefulness is asserted by many to be confined to long-distance casting from the tournament stand.

Beginning with a twelve and a half foot rod, year by year and little by little, I have reduced the length of my rods to ten feet, and even below; after some experience in that region, I confidently believe that with rod of the length last named, the largest trout that swims the Rangeley waters can as readily be enticed, and be more certainly handled and killed, than with a rod of twelve feet.

In advocating a ten-foot rod, I do not wish to be understood necessarily to mean one limited in weight to 4½ ounces. On the contrary, I strongly believe in plenty of backbone in a rod. Have this first, if then the material employed will give the other as well, so much the better. A rod should be flexible to the very handle, but never to such a degree as to prevent absolute command over the upper part of the rod, or even to render this a matter of question.

This, of course, is a mere matter of personal preference and opinion, for I freely admit than in nothing more than in the action of a fly-rod is it true, that "what is one man's meat is another man's poison."

But however this may be when the preferred action is determined on, there is no reason why a fourteen-foot rod and a nine-foot six rod should not have the same action. Not the length alone, but the other proportions as well should be, and usually are, varied. This, it seems to me, has not always been duly considered in the discussion of this subject.

It might be supposed that all would admit that for equal lengths, a heavier material must make a heavier rod—to get the best possible action—than a lighter material; unless the heavier were at the same time the stiffer. But the common practice does not appear to sanction this supposition. The tendency seems to be to sacrifice everything to lightness. It seems to me that the propriety of this may well be questioned; as well as whether in this strife for excessive lightness, the diminution of the timber allowed to a rod has not fully reached, if it has not quite gone beyond, the prudential limit.

One other consideration occurs to me, which to some will seem to have an important bearing on the question in point, if it is not its solution.

After all, what are we after—what is the end in view? It is not merely obtaining possession of the fish, for this result can be had at far less cost, with much greater certainty, with a silver hook in the fish market.

Recreation and amusement are the objects we seek; and therefore is it not reasonable to conclude, that whatever methods and whatever appliances best conduce to these results, are the best in themselves, even though the total catch were a little diminished thereby?

Since this depends solely on the personal preference of each individual angler, it may be claimed that I leave this question just where I found it.

But this I think is scarcely just.

To one escaping but seldom from the weary routine of office work, to swing even a seven-ounce rod all day may become a burden; while to him whose muscles are braced by abundant exercise and robust health, it seems but as a feather's weight. The truth is, that there is in this matter no hard and fast line where dogmatism may take its stand and say, *this is right and that is wrong.* Let each use that rod which to him affords the most pleasure, and for him that rod is the best, whether it be forty feet long or only two.

I have only sought to maintain what I believe to be the truth, that any considerable excess over ten feet in length is attended with an increase of labor, for which no compensating advantage can be found. To some this unnecessary work may be a pleasure, but to many, and those the very persons to whom this diversion is the greatest boon, I know it is a burden. To benefit the latter, if I may be so fortunate, I have said my say. HENRY P. WELLS.

NEW YORK, April 17, 1884.

CALIFORNIA TROUT IN WESTERN NEW YORK.—Olean, April 16.—On May 20 last we put in 30,000 California mountain trout in our streams here, and to-day I have two caught in Wolf Run near here by Burnside, they measure four inches in length. We also put in 15,000 brook trout, and we have an order for more this spring, and we shall keep at the good work until our streams are restocked with the beauties. They were put in by the Olean Sportsmen's Club.—FRED. R. EATON.

LITTLE BROOKS.

ONE day some two or three years ago the Doctor and the writer determined to hunt up a brook laid down on the map, and find out whether there were trout in it or not, and if so, whether they might be caught. After a drive of several miles we turned down a side road, a stony, overgrown track, with bushes on either side that nearly met in the middle, and after following this about half a mile, came out in a little valley. Here was the place, and we began to look for the brook. At last we crossed a small bridge, a mere hole under the road, and concluding that it must be the stream, got out and tied the horse to the fence. Rods in hand we plunged into the bushes, and after struggling through an alder swamp for a quarter of a mile came out into the meadow. Here we found the brook, a mere trickle of ice-cold water from a mass of woodland springs forming a swamp above. I was scarcely a foot wide on the average, and almost entirely covered over with the tall grass. Flies being of no use, we put on good, lively worms, and wherever we could find an opening dropped them in. In this way we fished down the meadow and took sixteen trout, nine inches, just the size for the pan, and much to our surprise, too, for it was a bright, hot afternoon in July. After we had worked down through the meadow, we found that the brook, receiving more water from an open swamp, became larger and formed some fine pools. The first one we came to in the edge of the woods was an ideal trout pool. A little cascade tumbled into it and sent a swirl of water along a huge hemlock log, that for thirty feet formed a mossy embankment along the side.

There were fine lurking places all along under this log. The Doctor, standing well back, dropped his bait into the fall, and let the water roll it along the bottom in front of the log. I waited eagerly. We had had such unexpected luck in the little stream above that I anticipated rare sport in this pool. I saw the Doctor's line tighten. He struck and the next instant was lifting carefully ashore, a large, well-fed—dace. Noticing the expression on his face I said nothing, but leaving him struggling with the fish, which had snarled his line in a bush, I took his place and cast. I had a bite, struck, and lifted ashore—another dace. Well, we stood there ten or twelve minutes and lifted out dace alternately. I put on a cast of flies and caught—dace. We worked down stream to experiment, but it was all dace and no trout, and as the afternoon grew late we retraced our steps, and drove home in time to see our trout smoking on the supper table.

This incident illustrates well some points I wish to make in regard to little brooks. It is, alas, an undeniable fact that the trout in our brooks and streams in the New England and Middle States are every year decreasing in numbers, and deteriorating in size and quality. The cause of this is not difficult to find. It is not so much the illegal taking of the fish by spearing, snaring, netting, and poisoning the pools with lime, though this is bad enough, for trout have stood all this and have not been entirely exterminated; it is not so much the dumping of sawdust, filth and chemicals into the brook, for there are thousands of small streams throughout the country where this has never been done, and yet where trout once swarmed now they are not, but it is by the reckless and injudicious cutting down the woods. I am not now speaking of the wholesale destruction of vast forests, such as is now agitating the public at large; it is a much more simple and every day matter.

Our trout is not a true trout, in one sense of the word, but a char, and like all of the chars, icy cold water is his very life. In the Thames, where his congener, *Salmo fario*, is every year caught of enormous size, our trout could not, probably, thrive at all. Now, that which gives the water of our streams this quality, so necessary to *Salvelinus fontinalis* (does not his very name bespeak it?), is spring water. Every year the farmers, in cutting down woods, lay bare some spring. This may not always be an open one, but there are always indications that it is there. Thus uncovered to the sun, the spring either dries up or its waters become warm and bad. In this manner the brooks, and of necessity the larger streams, gradually become tepid in temperature, and in summer diminished in volume, killing the trout in time, and causing them to decrease in size and quality in the process. At the same time, it favors the spread and growth of coarse, soft-fleshed, inferior fish, which take the food from the trout and devour their spawn. In the incident I have related, the tiny beck which issued from a swampy piece of ground, filled with springs, was alive with trout, because its water, being sheltered at its very source from the fierce July sun, was cold and clear. But as we went lower down, another stream of larger volume joined the little brook. The water of this latter stream came from an open swamp exposed to the midsummer heat, and as a natural sequence we found no trout below its mouth, but dace. Now, had this swamp been covered with a heavy growth of timber, I venture to assert its waters would have been much improved in quality and temperature, and the trout would not have been obliged to leave the main stream and crowd up into the little brook in order not to stifle.

I think that twenty acres of woodland, rightly distributed in protecting the springs and marshy, springy spots, which form the headwaters of the little brooks and their confluents, would be of more value on a farm than fifty acres in one patch left at random, and could this be realized generally we would have less of the shrinkage of water and water power in summer time. Unfortunately, most farmers seem to have no idea of the value of a piece of woods beyond that of some day being able to cut it all down to sell, or use the lumber. They think that a patch of woods is waste ground till it is down, and never realize that it is really, if rightly placed, a vast sponge to store up water which will make their land more fertile and help them out in time of drought. This is well illustrated by one of the correspondents of this paper, who told of the increased fertility and value of his land from having formed a trout pond. The thirsty land by capillary force drew the water many rods inland, and thus improved the crops. There are many little water-courses which run dry in summer, which, if their sources were properly protected, would be little trickles of water even in the hottest weather. These are of untold value to the farmer and the streams. It is, of course, well nigh impossible to get the farmers in the settled parts of the country to do anything radical to improve this matter, but show them it will pay, and the right spirit once aroused, much will be done. In parts still unsettled an ounce of prevention is worth a pound of cure.

As I write, an instance of this thing rises before me, and I feel impelled to give it. I know a stream that once, from its source to its mouth, was a fine trout brook. It is formed by two main branches, and on the map looks like a little Y. Both branches rose in woodland fields, their waters were

clear and cold. A number of years ago the woods which covered the source of the right-hand branch were cut down. Now a miserable bog occupies the site. No trout are to be found any more in this stream, but it is filled with dace, etc. It is a torrent in winter, a mud hole in summer. The land along its course has suffered with it. The other branch has not been injured in this way. It flows with a more even volume, and is filled with trout. It cools the main stream, so that trout are plenty to its mouth, and not a dace is to be found below the fork.

I did not intend to write so much of an agricultural treatise when I started, but as agriculture is more important than sport, let us sportsmen cry commerce and agriculture with all our might. We will be listened to with an infinitely greater amount of attention, and will gain our own ends at the same time. In conclusion I would only say, take care of the little brooks and the streams will take care of themselves.

PERCYVAL.

DACE FISHING.

I SAW an inquiry in your last week's issue in reference to dace rising to a fly. Occasionally in the last few years I have, in default of good trout fishing in Vermont, taken many a dace in fly-fishing. Last summer, in July and August, I had excellent success. My experience is that a medium-sized fly, rather showy than otherwise, is the best, although I found the professor, the brown hackle and the grizzly king very good. Large dace take the minnow in deep pools, but I long ago discarded bait in fresh-water fishing, and can speak of the minnow only from observation and hearsay. The grasshopper in season is very attractive, and along by the first of September fly-fishing is not as successful as earlier. But I had no difficulty in taking enough with a fly.

The residents who fish for count in Vermont make, if their stories are to be believed, prodigious catches of small trout. I was casting for dace in a deep pool last summer, when one of the citizens kindly informed me that I would "never take a dace with that trap," and that I "ought to go up on the mountain where his boy and another one took seven hundred and fifty-three trout in two days." I asked the weight, and was told they would average nearly two ounces each. Just then a dace of one and a half pounds rose and was soon landed. "Well," said the old gentleman, "I never knew there was any such fish as that in this river, and I've lived on it over fifty years."

Last summer my companion and myself took them weighing as high as two and a quarter pounds. We found a long cast most successful, as they are very shy. Very quiet fishing is required; fully as quiet for good-sized fish as for trout. With delicate tackle I found the sport good. But after having fished the "North Shore" and the Nepigon, with trout seldom below two pounds and up to five and a half, I cannot say dace fishing in Vermont is as good sport as angling for trout in those waters.

H.

INDIANAPOLIS, April 14, 1884.

TROUT FISHERMEN AND THEIR RIGHTS.—When in the course of events the snow, which still lies in the woods and on the hills, disappears, the trout season will open actually as it has done legally—and illegally, since several persons went out successfully about a week before the law was off. It is said that there will be a great display of bran new signs along the brooks this season, and that some men in this city can tell about how they were placed. For two or three years there has been considerable of this putting up of signs that have no authority to back them, and which operate merely to keep off fishermen who regard what they suppose to be the law, to the benefit of those who do not, or who have reason to know that the signs mean nothing. For instance, Mr. X of Hartford has some handsome signs painted, reading: "No fishing; trespassers will be prosecuted to the extent of the law," or whatever it may be. He goes out and plants them along some brook that has not been protected and where owners of the land care nothing about the matter or do not care enough to protect the stream. To say the least the scheme is unfair. It is, however, doubtful whether these signs or a great many others that are put up by land owners in good faith, are worth anything legally. A notice that fishing is not allowed should specify to what part of the stream it applies. According to common usage, one or three, or four, stuck up near the road seem to be enough to cover the whole brook which may flow through the land of a dozen or fifty owners, none of whom except the man next the road may have any objection to other people taking trout there. It is not too much to ask that notices should be signed by the owner or lessee of the property, and should state exactly what the tract is to which the protection applies. It is fair too, that there should be a penalty for the unauthorized placing of notices by those who have no right in the property. As to the first two items it is said that although the law is not explicit it really covers the case already, and that no action brought against a person trespassing on land defended only in the way just mentioned can hold good. It is certain at least that when a prominent lawyer was asked by a client what he must do to legally protect certain waters he was told to sign the notices and put up enough to make the warning conspicuous all along the water to be protected. The whole matter might very well come up for action that should at least make the law and penalty clear and leave no doubt of what is required on either hand.—*Hartford, Conn., Courant.*

HALLOCK, Minn., April 10.—The fish are beginning to run up stream, though the ice is only just breaking up. The time for pickerel is not yet, but when they come the youngsters are in high glee. The golden eyes will come with the spring weather; then we expect to try the flies once more. The speckled trout will get a rest this season, for we can find none without taking a long wagon ride of ninety miles, or going up into Queen Vic's dominions to get to Lake of the Woods.—NORMAN.

RAINBOW TROUT IN SALT WATER.—Among a lot of flounders and mixed fish caught in East Bay, a portion of the Great South Bay, Long Island, and sent from Moriches to Mr. Blackford in Fulton Market, last week, was a rainbow trout of half a pound weight. The water there is brackish, and the fish is supposed to be one of those planted in the streams of that vicinity in 1881 by Hon. R. B. Roosevelt.

THE ACCIDENT POLICIES of the Travelers, of Hartford, Conn., indemnify the business or professional men for his profits, the wage-worker for his wages, lost from accidental injury, and guarantee principal sum in case of death.—*Adv.*

Fishculture.

MIGRATION OF HERRINGS.

Editor Forest and Stream:

The appearance and disappearance of fishes on our salt-water coasts, as intelligently described by Daniel T. Church, in FOREST AND STREAM of Feb. 21, must certainly attract the attention of all who take interest in the harvest of the sea. The "flood and drought" or the coming and going of fishes in their season and in their peculiar way, the cause of which we have little knowledge, must yet be studied out. Man, in addition to other enemies, may cause much destruction of fish life, but nevertheless they appear at times after seeming annihilation in greater numbers than ever before, as is well illustrated in Mr. Church's eleven articles. To add to this experience allow me to make some extracts from L. Lloyd's "Sweden and Norway" accounts of floods and droughts of the herring on the Scandinavian coast during a period of over 250 years, which, perhaps, may interest many of your readers who have not access to the book.

The Swedish herring fisheries were at one time the largest and most flourishing in Europe, but owing to the disappearance of the fish from the coast for the past sixty years, they have dwindled down to almost insignificance, and at the present day there is little to remind one of them except the curing houses and other buildings, now in a state of decay. These fisheries along the coast of Bohus Skärgärd may not be without interest both to those connected with similar establishments and to the naturalist. Though for ages previously herrings had been most plentiful, yet during the first half of the sixteenth century, beyond which it is needless to go back, they in great measure deserted the coast. In 1556, however, there was a "land stötning," as it is called, that is, the fish having emerged from the deeps, their usual place of resort, appeared in incalculable numbers along the shores of the Skager Rack, and they continued until 1587, a space of thirty-one years, when they for the most part once more absented themselves. During the period of glut (flood) from 1556 to 1587, the fisheries are described as having been more productive than at any other on record. We learn from the old chronicles, indeed, that for the space of fifty or sixty miles the shores of the mainland and adjacent islands were studded with curing and salting houses, many of them two and three stories high, and inhabited by vast multitudes of people, who had congregated there from various and distant parts, and whose sole occupation was in connection with the fisheries. "Herring were then so very abundant that thousands of ships came annually from Denmark, Germany, Friesland, Holland, England and France to purchase the fish, of which sufficient were always found for them to carry away to their own and other countries." This would not seem to be an exaggerated account, as from the small town of Marstrand alone some 2,400,000 bushels were yearly exported. The disappearance of the fish from the coast in 1587, which reduced many people to poverty and misery, was attributed solely to witchcraft, which was quite as plenty in those days as herring themselves.

From 1587, the concluding year of the glut (flood), to 1660, a space of seventy-three years, the herring only appeared in small numbers on the Bohus coast; but in 1660 there was another land stötning, though not equal to that of 1556. But as during the dearth of fish most of the people connected with the fisheries had deserted to their distant homes, and the fishing houses had fallen into decay, few beside the inhabitants of the province were enabled to avail themselves of the opportunity, and these men, having now the fish all to themselves, so to say, soon became comparatively rich. This continued until 1675, when the war put an end to the fishery for that time. Subsequently the fish appeared at intervals on the coast, especially in the year 1727; but there being a want of people, and also of proper fishing gear to enable them to take advantage of the opportunity, no very great captures were made. In 1747 there was again a land stötning, though much less abundant that that of 1556, and the same continued until 1808, when the fish once more departed. In this while, a space of sixty-one years, the fisheries were prosecuted with great ardor and success. Herring were so very plentiful during one particular year that four bushels could be purchased on the spot for two shillings, and though the fish were converted to all manner of purposes, people hardly knew what to do with them. One year when the herring were unusually numerous, it was calculated that not less than 3,938,000 barrels were taken; and as each barrel is supposed to contain about 1,000 fish, the aggregate would be something like 2,938,000,000 of herring. During this glut, extending from 1747 to 1808, the Bohus fisheries was considered a second El Dorado; indeed, when in its glory, it was computed that independently of its inhabitants themselves, fifty thousand strangers took part in them. In 1808, as shown, the herring once more left the coast, and have never since visited it in any considerable numbers.

The absence of the herrings from Skärgärd for the past sixty years (this account by Mr. Lloyd was written in 1867) has given rise to a great deal of speculation. The reasons assigned by Swedish naturalists and others who were deputed by the government to investigate the matters, were many and weighty. Among the rest the noise and uproar in the Skärgärd when the fisheries were flourishing, caused by tens of thousands of congregated people, which noise in calm weather, or when the wind was off the land, might be heard miles and miles out at sea; the enormous quantity of refuse of all kinds cast out from the curing and boiling-houses into the sea, which, on sinking, destroyed all submarine vegetation, and masses of which, resembling floating islands and emitting a dreadful stench, might at times be met with far away from land. Another cause! The reduction in the size of the meshes of nets, and lastly, the use of the wad, a drag net of gigantic proportions, which, sweeping the bottom, proved destructive to all the grasses and other plants among which herrings are accustomed to spawn. This wad of 200 fathoms in length and fifteen fathoms in depth, with hauling lines 500 fathoms long, often landed at a single haul 2,000 barrels of herrings, and sometimes inclosed such a multitude of herrings that the men were unable to draw it on shore, consequently thousands were killed and left to rot on the bottom of the sea.

Though the reasons assigned by the learned and others for the absence of the herrings from the Bohus coast are plausible enough. They are not altogether satisfactory. One or more of the nuisances complained of—such as casting the offal of the curing-houses into the sea, and the noise in the Skärgärd, may not improbably have deterred the fish from entering inlets near the shore, but they do not sufficiently account for their altogether absenting themselves from the coast. The cause for this must be sought elsewhere. The herring, as known, is a most capricious fish, seldom remaining long in any one place. There is scarcely a fishing station around the British Isles that has not experienced the great variation, both as to time and numbers in their visits, and that without any assignable reason. Their present absence from the coast of Bohus is owing, perhaps, to some hidden law of nature of which we are ignorant, than to the causes alleged. A good authority, Dr. Culloch, takes a similar view of this subject. He says: "Ordinary philosophy is never content unless it can find a solution for everything, and is satisfied for this reason with imaginary ones. Thus in Long Island, one of the Hebrides, it was asserted the herrings had been driven away by the manufacture of kelp, some imaginary coincidence having been found between their disappearance and the establishment of that business. But the kelp fire did not drive them away from other shores, which they frequent and abandon without regard to this work. It has been a still more favorite and popular fancy that they were driven away by the firing of guns, and hence this is not allowed during the fishing season. A gun has scarcely been fired on the Western Islands or on the west coast since the days of Oliver Cromwell, yet they have changed their places many times in that interval."

In a similar manner and with equal truth, it was said they had been driven from the Baltic by the battle of Copenhagen. It is amusing to see how old theories are revived. This is a very ancient Highlander's hypothesis, with the necessary modification. Before the days of guns and gun powder, the Highlanders held that they quitted the coast where blood had been shed, and thus is ancient philosophy renovated. Steamboats are now supposed to be the culprits since a reason must be found to prove their effects.

Loch Fine, visited by a steamboat daily, is now their favorite haunt, and they have deserted other lochs where steamboats have never yet smoked.

Taking all things into consideration, therefore, and as the herring has on many previous occasions absented itself for years and years together from the Bohus coast, it seems not at all improbable that the inhabitants will some fine day be rejoiced by another "land stötning" of these fish.

DR. E. STERLING.

CLEVELAND, Ohio, March 20.

WHITEFISH RAISED IN CONFINEMENT.—At the display of trout at Mr. Blackford's on April 1, among other fishes sent by Mr. Frank N. Clark, Superintendent of the U. S. hatchery at Northville, Mich., were a number of young whitefish (*Coregonus albus*), one year old, which had been raised in confinement. The specimens were about five inches in length, and attracted a great deal of attention from fishculturists on account of their novelty. These are, we believe, the first whitefish that have been artificially reared.

New Publications.

THE GAME FISH OF THE NORTH.*

IN the preface to his book the author says: "Having always been an enthusiast with the rod and gun, attributing to the sports of the field and stream the retention of good health amid confining and sedentary occupations, I made the preparation of this work a labor of love, and have with time come to be more than ever impressed with the importance of out-door recreations. Inspiration acquired from the woods and streams, and vigor earned by exercise in the pure air of Heaven are good for the soul as well as for the body. I was one of the first to press on the State and National Goverments the importance of establishing fishery commissions, and being myself appointed on that of the State of New York when it was created, in the year 1867, and having remained on it ever since, I have necessarily kept up with the times, and all improvements which have been made either in the science of fishculture or in the tools and methods of fishing. Looking back, and still more I may say, looking forward to what the future will bring forth, I have a right to claim that in aiding the cultivation and protection of the objects of the sportsman's pursuit, and the means of his pleasure, in protesting against their unreasonable and improper slaughter, and in describing the most legitimate and scientific methods, and taking them, I have conferred some advantage upon mankind as well as amused some idle hours."

The work before us is a new edition of the book first published in 1862, and, with the exception of the chapter on fishculture and the appendix, is reprinted verbatim. Mr. Roosevelt is a most entertaining writer and his lines flow pleasantly, enticing the reader to try to finish the book at one sitting. He avoids committing himself on the question of the identity of the sea trout, and there are several questions which have been settled since the first edition of the work which he does notice, such as the classification of the cisco, the federation pike, etc. There has been a steady demand for this book, which has been out of print for some years, and all who own the first edition will certainly want the second, if only to see what changes have been made. The appendix of the new work contains, instead of fish laws, a treatise on flies, rods, reels and lines. This chapter contains much information of a substantial character, but is condensed perhaps too much, and we confess that we do not understand the difference between dying and staining gut, which Mr. Roosevelt says is important, nor do we agree with him that it is essential that a split bamboo rod should be round. No matter what a man writes, it is certain that some one will differ with him. The price of the work is $2.

*The Game Fish of the Northern States and British Provinces, with an account of the salmon and sea trout fishing of Canada and New Brunswick, together with simple directions for tying artificial flies, etc., etc. By Robert Barnwell Roosevelt, author of "Superior Fishing," "The Game Birds of the North," "Five Acres too Much," "Polyanthus," etc., etc. Illustrated. New York: Orange Judd Company, 751 Broadway. 1884.

The Kennel.

FIXTURES.

BENCH SHOWS.

May 6, 7, 8 and 9.—The Westminster Kennel Club's Eighth Annual Bench Show, Madison Square Garden. Entries close April 21. Chas. Lincoln, Superintendent. R. C. Cornell, Secretary, 54 William street, New York.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1115.** Volume I., bound in cloth, sent postpaid, $1.50.

A PRIVATE FIELD TRIAL.

SNIPE are on here in limited numbers, but very wild. With warm weather, fair shooting may be had. An interesting match between a dog of unknown pedigree and one of the bluest of the blue is to take place here the last week of the present month on snipe. Both are owned near this place. The match to be run on the low lands bordering the marshes of Lake Erie, where the grounds are of such a character that every movement of the dogs can be seen, and enough mud and water exists as to try the mettle of the best; the dogs to be down four hours and hunted together. Both are fine field dogs. The friends of the stranger think he has the heart to go to the front and the power and action to keep him there. His opponent has also many admirers, and his friends are also very sanguine, and they have certainly no duffer. A lively time is anticipated. I will post you as to the result. The judges selected are practical sportsmen of large experience in the field with dogs, and were chosen not from their social standing in society but from their knowledge of what a dog ought to be in the field, which can be gained only by great experience. Why can't our Canadian neighbors get up a field trial the coming season on some of their preserved grounds, giving moderate purses and making the entrance fee so that people of limited means can enter? Some excellent dogs might be thereby brought to light that under the present arrangement of field trials must forever remain in darkness. Many would enter that I know of, and a good meeting would certainly be the result, as few Northern sportsmen can afford the expense of preparing and running their dogs in the Southern States, where the field trials are now held, and unless prepared there they are handicapped to such an extent as to render success almost impossible, who would readily patronize field trials where accessible to home.

JOHN DAVIDSON.

MONROE, Mich., April 15.

NIMROD.

WE give this week a cut of the red Irish setter dog Nimrod (A.K.R. 631), owned by Dr. J. Frank Perry, Boston, Mass. Nimrod was whelped March 20, 1880, and is by champion Elcho (A.K.R. 295) out of Lorna (A.K.R. 296). He has been shown but twice. At New York, two years ago, he won first in the open class and the special for the best Irish setter in the open classes. At Ottawa last year he won the champion prize, and with Meg the special for the best matched pair of Irish setters. In writing of him, Dr. Jarvis says: "In attempting to describe champion Nimrod, I cannot really do him justice, for he has all through that 'high quality' which cannot be put on paper; he looks very much like Elcho, is about the same size, has the same rangy upstanding build, and the long, lean, narrow head his sire has been noted for. He is strong-boned and well-muscled, with the best of feet and legs; his eyes are brown, soft and loving in expression; his disposition could not be milder. In coat and color, Nimrod is about perfect, the former short and flat, but with good feather; the latter a beautiful deep, rich red mahogany, and dark all through. In brief, he is one of the very best Irish setters to be found anywhere, as his record proves." The cut is from a sketch by Harry Tallman, and is an excellent likeness.



Dr. J. Frank Perry's Champion Red Irish Setter Dog "Nimrod."

A JERSEY FOX CHASE.

MANY a pleasant day's hunt I have had after deer, fox, quail and cotton-tail. Even down here in South Jersey we have some good hunting grounds. True, they are not varied by rugged crags and cliffs, deep cañons and roaring waterfalls; and yet these woods are not without their charms. I have seen on a bright autumn morning the sun's rays dancing through the needle-like boughs of the pine, on which the frosted dewdrops looked like millions of rainbow-tinted diamonds. The air is clear, crisp and bracing. On such a day one forgets all his infirmities. I feel that I have added years to my calendar by frequent visits to these pine woods in search of health and game. Some of our Western hunters may smile, and ask in whose barnyard we find our game. Let such an one come and see, and if he starts into these pines, scrubs and swamps of Atlantic county on a cloudy day, let him take with him an extra day's rations, for he may become so completely lost that he will look about him for a place for a comfortable night's lodging. He will even lose faith in his compass, so completely will his head be turned. This is owing to the perfect similarity of this upland country. Each particular locality looks exactly like the other. Scrubs and saplings everywhere are higher than your head, almost impenetrable, and interspersed with pines. The only extensive view one has is zenithward. There are no mountain ridges nor prominent boulders as guide-posts to direct one on his way.

But I hope that I do not frighten any one from coming here to hunt lest he should be lost in the wilderness. I only wish to have you know that we have genuine hunting grounds, all the more enjoyable because they are wild and unfrequented. I know it is not considered proper by many of the FOREST AND STREAM readers to hound a deer at all in any locality. If this be so, then it is not proper to kill a deer at all here, as in this part of the country the man who does not get a deer until he secures one by stalking, might not live long enough to taste of venison. You can track a deer to twenty paces of where he jumps up, and only hear the bushes rustle, without catching even a glimpse of the game any more than if it had plunged beneath the waters of the ocean.

I want to tell you of a delightful chase, last week, after the gray fox. At 8 o'clock Monday morning last, we stepped down from the Camden and Atlantic train, twenty miles from home, at Ellwood station, slipped the chains from Texas and Trap (they being selected for trailing), while Jack, Sport and Doc, having a propensity for chasing the rabbit, were kept in string until reynard should be up and going. Doc is a short-legged Dutch beagle, fourteen inches high. I mention this because some have asked how about beagles for foxes. The station was not yet out of sight when Texas announced the discovery of a trail, which he kept close to, giving us music as he gave us exhibition of his genius in tracing up the devious route of this sly game to his forest retreat. Now and then he doubled around over his own trail, or walked in the rut of every wagon road that he came to, knowing that the first wagon to pass would cover up the scent and prevent pursuit from his enemies. But it was too early in the morning for the wagon, so on we went two miles from where the trail was first found, to the edge of a dense cedar swamp, when the hurried and excited notes of Texas proclaimed reynard on foot and hastening away.

Quickly all the dogs were unloosed, and away went a full chorus chiming through the forest; what soul-stirring music! It thrilled through the whole frame, and accelerated the throbbing of that important little organ beneath the left side of the vest, and quickened our pace to head off and keep in hearing of the music, which means healthy, energetic exercise. These enlivening strains were kept up until about midday, leading us several miles away. Then the explosion of a cartridge from a No. 16 gun put an end to this chase, and each dog coming up gave the prey a shake of satisfaction, while the little beagle, who was close in at the death, seemed not to be satisfied until he had made the bones crack the full length of the spinal column.

I have often wondered at the seeming bitter antipathy of the hound to the fox. We excuse ourselves here for killing them, as they are plentiful and so destructive of the quail and rabbit. After removing the pelt a fire was built, and seating ourselves on fallen trees, we engaged in that other enjoyable part of a day's hunt—satisfying our sharpened appetites. While thus engaged, the wind suddenly veered around to the north, and came rushing down upon us like a Western blizzard. The snow flew thick and fast, the trees bowed, twisted and squeaked, while the scrubs and bushes seemed to be disturbed as if by a stampeding herd of buffalo; it was wild and grand, and we were happy, for we enjoyed the storm.

On our way out after lunch, we struck another trail, and away went all the dogs pell mell. In a moment they were lost to hearing amid the roar of winds and consequent confusion of sounds. On tracking them to leeward a mile or more, we found they had crossed an immense swamp and nothing more could we hear of them. We waited until it was growing late and our home train must be made at the station we left at 6 o'clock, while we are now four miles away, to make which required a little extra will power brought to bear on the flexors and extensors, we made on close time and returned home. After a good night's rest, the early train was again taken, and we started in search of our lost hounds. The wind was still blowing, and although we searched beyond the great swamp, where last we left their trail, no tidings were had of our lost dogs, so we returned home again without them, and again on Wednesday morning we went in search of them, taking with us two fresh hounds, Sport and Drum. While on our way to the same swamp we struck a fresh trail; away went Sport and Drum to the swamp, giving tongue to the routed fox, until the sound died away far up toward the head of the branch. While we were intently listening after them, we distinguished the sound of running hounds far off in the opposite direction. The fox before the two hounds doubled and came back, was shot and quickly skinned.

We then hastened off to where we last heard other dogs. A walk of a mile and a half brought us in with them, they were our lost dogs still pursuing the fox, their voices so changed we could scarcely recognize them; poor little Doc was so weak he could scarcely make an audible sound. One of the party caught him and while in the effort to get him something to eat from his game bag let go of him and away he slipped, and soon rejoined the others in the chase. The two fresh dogs were put on and of course soon left the tired ones far in the rear. This was probably an unfair thing for us to do, for they were completely thrown out of the chase, but one of the party soon after killed the fox. Texas and Doc were secured, but Sport and Jack must have lain down somewhere on the last round; Texas, a large black and tan, had injured his shoulder and has not been able to walk since, while Doc was blind for three or four days after. Trap was found at a station the same evening ten miles on the way home; a telegram on Saturday informed us of the arrival at Ellwood station of Jack and Sport, appearing in right fair condition. Now what do you think of the beagle for foxes and of the sticking qualities of these dogs? R.

ATLANTIC CITY, N. J.

THE KENNEL HOSPITAL.

RESULTS OF INFLAMMATION.

IN my last article I attempted to show that inflammation was a process taking place in the minute blood vessels of a part, having for its chief accompaniments dilatation of the blood vessels with more or less stagnation of blood within them and blood through them. This condition may simply rise to its height and then gradually abate, or it may cause other changes to take place in the tissues. A pimple on the skin is an inflammation—there is swelling, heat, pain, and redness, due to the changes we have already described. Its simplest termination is to gradually subside, which it does by the blood vessels resuming their healthy tone and the exuded fluids being re-absorbed. When this best of all terminations of an inflammation does not take place, the pimple, which was hard as well as red and swollen, begins to soften in the center, its apex turns white, and if it be punctured a white fluid escapes called matter or pus.

Suppuration, which is the term used to express the formation of matter or pus, is an event of such frequent occurrence that we must devote a little time to its consideration. There are three forms in which we find it. On mucous membranes, such as line the nose, mouth and eyelids, pus is often formed as the result of an inflammation. In ordinary colds in the head and in distemper a purulent discharge from the nose and eyelids is a common symptom. In the case too of wounds and some diseases of the skin a discharge of pus is seen upon the surface of the inflamed part. Under all circumstances pus is produced in the same way, not by any healthy secretion, but by a perverted growth or development of the cellular elements of the part; thus it is that inflammation in some parts is seldom productive of suppuration, whereas in others a very slight degree of inflammation gives rise to copious formation of pus. The morbid process is the same always, but the tissue affected being different, we have different results. Good pus is a harmless, even if not a bland and protective fluid. It should be white, without smell, and thicker than milk. When thin, stinking, and altered in color by assuming either a greenish, blackish, or reddish hue, we look for some cause of decomposition, which may be a diseased condition of bone or ligament at the part, or it may be some constitutional disease affecting the whole system. So long as pus escapes freely from the inflamed surface, it does no harm beyond the drain upon the animal's system. When, however, pus is formed in some part where, instead of escaping from the body, it burrows under or infiltrates other tissues, great danger to the animal ensues. Whenever there is much tissue of a loose texture, such untoward result may be anticipated as the result of suppuration. In the dog the skin of the neck is attached to the body by a lot of loose tissue (connective tissue). No part is so liable as the under part of the neck to be affected by diffuse suppuration as the result of inflammation following bites and tears. Pus formed here is very likely to diffuse itself down the neck and between the muscles and other structures. It rapidly decomposes and causes fatal gangrene. A very common form in which suppuration is found is when it is unable to escape as it is produced or to diffuse itself among surrounding tissues; where, in fact, it is surrounded, and forms a collection known as an abscess.

Abscess.—An abscess is simply a swelling containing matter, the result of inflammation. As the contents of the swelling increase it becomes softer, and the tissues nearest the external surface are by absorption made thinner. The thinning and softening of the skin over an abscess is well known under the popular term of "pointing." If an abscess be not interfered with, it finally bursts at the spot where it is most prominent, and from which the hair usually falls. It is, however, not advantageous to wait for an abscess to burst. As soon as we are sure that a swelling contains matter, it is advisable to open it with a knife, thus allowing the matter to escape and saving the animal further pain. The formation of an abscess is accompanied by great pain; and its treatment should consist of such measures as are likely to allay pain and hasten the development of pus. The application of heat and moisture does this, and may be effected by either warm fomentations or poultices. Such remedies are often abused by being continued after the contents of an abscess have escaped. They then do more harm than good, keeping the parts in an unfavorable condition for healing. When an abscess is emptied, either by bursting or by the judicious use of a lance, no squeezing is requisite; it does no good, and causes great pain. I say judicious use of a lance, because the opening should always be made at the lowest point, and thus permit the contents to escape by gravitation. The treatment of an opened abscess consists merely in cleanliness, the use of mild disinfectants, and, when it has been large, some support to the pendulous lips of the wound by a dry bandage and a pad of carbolized tow. The old practice of filling the cavity of an abscess with ointments or other dressing is quite unnecessary.

Ulceration.—When a sore shows no disposition to heal, or when it gradually spreads, the condition is known as ulceration. This is the result of inflammation still going on in the part, preventing the reproduction at the same time that it is destroying the normal structure of the tissues. Ulceration in the dog is not common. We sometimes see it on the hind limbs of paralyzed animals when the prominences of the hips and thighs are damaged by constantly lying in one position not unfrequently the coat being soaked with dirt and moisture. We find it, too, on the tips of the ears, when some disease causes the dog to constantly bruise the parts by violently shaking the head. Sometimes a simple sore is converted into an ulcer by the dog persistently licking it. In all cases the first thing to do is to find out the cause which keeps up the inflammatory process, and remove it, after which treat as a surface wound.

Mortification, or the death of a part, is not often seen in dogs. As the result of stoppage of the circulation from a tight ligature, I have seen the ear and the limb mortify. A similar result is sometimes seen to follow inversion of the womb, and the bowels are liable to mortification from strangulation or intersusception—the latter statement often traceable to violent remedies employed to remove worms.

TREATMENT OF INFLAMMATION.

In one of Youatt's books the old notion of the nature of inflammation is very tersely put thus—"When the nerves communicate too much energy and the blood vessels consequently act with too much power, inflammation is produced." He then proceeds to say—"If inflammation consists of an increased flow of blood to and through a part, the ready way to abate it is to lessen the quanity of blood. If we take away the fuel, the fire will go out. All other means are comparatively unimportant contrasted with bleeding." There is a plausibility about this line of treatment, and the argument leading to it that has misled many people. It seems logically to fit in with or to follow the statement that inflammation is accompanied by "too much energy" of the nerves, and "too much power" in the blood vessels of a part. Our own sensations of an inflammation (say a whitlow on the finger) also incline us to accept the explanation that extra activity is the essential feature of the disease.

We now know that dilatation of a blood vessel is due to deficient nervous energy, and that if the nerve be paralyzed the vessel is unable to contract or to prevent its contents distending it to its utmost caliber. We know also that the flow of blood in an inflamed part is not active, but retarded. Such facts, of course, quite upset the old theory and all the methods of treatment which were based upon it. They are quite incompatible with the use of remedies whose only action was to depress the system. Fortunately the dog is not so easy to bleed as most animals, and thus often escapes an operation which can never do any good to an inflamed part, and which must always do harm to an animal that has to resist a violent affection of an important organ. There are no cases in which bleeding can remove the stagnating blood from the vessels of an inflamed part. The blood flows from the running stream—from around, not from within the affected center. To directly cut into an inflamed part would only aggravate the mischief. Bleeding, however, not only does no good to an inflammation, but it does much harm to the patient. It causes debility. It renders the blood watery, and thus favors a dangerous accompaniment of inflammation in most organs—viz., exudation. In short, bleeding can never cut short an inflammation; it tends to aggravate the local results of the disease, and it puts the whole body into a condition unfavorable to making a quick recovery.

Other ancient means of abating inflammation, such as the administration of mercury and antimony, must also be discarded, their adoption being simply based upon an erroneous theory. They do no good to the inflamed part, they depress the general system, and often produce disturbance of some organ not implicated by the disease.

Having now cleared the ground by pointing out what is not to be done, let us see what we can do. First, we must endeavor to determine the stage of the inflammatory process; then we must try and guide it to the best possible termination; and, lastly, avoid all complications. The simplest inflammation to treat is one in some external part, such, for instance, as may result from a bruise, sprain, or other injury to a limb. Such a case, in the earliest stages, may properly be treated by cold applications, with a hope that we may be able to limit the quantity of blood in the part by constricting the vessels. If, however, much pain and swelling exist, we do good by cold applications. What we wished to prevent has already taken place, and our aim must be to favor a return to health by other means. We try to relieve pain and to favor reabsorption of the swelling. Warmth and moisture do this. Warm fomentations or poultices may be used. When much pain exists some local sedative may be used, such as decoction of poppies, or it may even be advisable to act upon the whole system by administering such a sedative as morphia or chloroodine. It must be borne in mind that warmth and moisture favors the formation of matter, and that matter is most undesirable in some parts—for instance, near a joint. Nature can always be trusted to do her share in restoring parts to health, and, therefore, we must take care not to unduly press even such apparently simple measures as poulticing or fomenting.

When a superficial inflammation is abating—*i.e.*, when the pain and heat are lessened, but a good deal of swelling remains

—our aim is simply to assist in the absorption of exuded material and in the repair of injured tissue. Stimulating applications are then employed, varying in activity from an ammonia liniment to a blister. Too often these agents are used while inflammation is still going on, and then, instead of effecting a reduction of swelling, we increase it, and, most probably, render it permanent, at the same time that we retard the repair of injured tissues.

In the case of inflammation of internal organs, although our principles of treatment are the same, we have one extra care to take. We have to consider the interference with the special function of the part. When the lungs are inflamed the respiratory functions are affected, and it behoves us to judiciously regulate the admission of air to the animal, to avoid great changes of temperature and all volatile impurities which might aggravate the already overweighted organs. When inflammation of any of the organs of digestion exists the special care is, of course, applied to the judicious selection of food. When the kidneys are inflamed we not only avoid all sources of irritation, but endeavor to relieve them by calling into increased action such other organs as may be able to take upon themselves some part of their function.

Although inflammation is necessarily always a local condition, we can usually do some good by general treatment. The judicious use of aperients is advisable, and sometimes diuretics may be given with advantage. They remove fluids from the body, and thus promote absorption, even if they do not positively retard the exudation at the inflamed spot.

These general principles of treatment will be considered more in detail when we come to apply them to each organ or part. Meanwhile they will not be superfluous if they have the effect of saving some poor dog from injury by causing his owner or doctor to relinquish the old heroic method of attacking inflammation.—*Wm. Hunting in Land and Water.*

NEW YORK DOG SHOW.—The entries for the eighth annual bench show of the Westminster Kennel Club closed last Monday, with a total of over eleven hundred. So many entries were received on Monday and Tuesday that it has been impossible to obtain full particulars regarding them. Enough is known, however, to warrant the belief that the show will excel its predecessors in the quality of the exhibit if not in the number of animals shown. The St. Bernards promise to be the feature of the show. Nearly one hundred are entered, and, with the exception of the show of the St. Bernard Club in England last November, there will be a display of these grand dogs that has never been equaled. Many of the other classes will be well represented, and Mr. Lincoln is confident that this show will be the best that has ever been held.

TRIAL BY JURY.—Cleveland, Ohio.—Abner, the fox hunter, was once brought before the Cuyahoga Court for selling rum at his tavern, on the Euclid cross roads. His lawyer gave him able defense. As the jury retired, he turned to his client, remarking: "Ab., we have lost our case." Abner, with face serene, simply replied: "Not much." "How so, old boy?" Abner, with open hand to his mouth, softly whispered in his attorney's ear, as only a giant can, "There are two fox hunters on that jury." The next day that jury could not agree. The court dismissed them and told them to go home and stay there. Shall the jury system be abolished? That is the question nowadays. The case of Abner is a fact and is on record in our court to-day.—DR. E. STERLING.

THE COLLAR DOG.—It was announced in our issue of March 7 that the dog receiving the number 1,000 in the *American Kennel Register* would be presented with a collar by the Medford Fancy Goods Company, 101 Chambers street, this city; but we have neglected to state what dog received the collar. No. 1,000 was Dr. J. S. Niven's spaniel Niven's Darkey. The *Kennel Register* entry reads: "1000. Niven's Darkey, black dog, whelped Sept. 11, 1883. Breeder and owner, Dr. J. S. Niven. London, Ont. Sire—Frank (A.K.R. 251). Dam—Niven's Nellie (A.K.R. 522). The collar is a handsome affair, made specially for the purpose by the Medford Fancy Goods Company.

ST. BERNARD IMPORTATION.—Mr. E. R. Hearn, Passaic, N. J., has just received from England the rough-coated St. Bernard dog Duke of Leeds, the bitch Rhona, and the smooth-coated dog Don II. and bitch Leila. They were selected for Mr. Hearn by Rev. Arthur Carter, the well-known St. Bernard judge. All of them are exceptionally fine specimens of the breed, and with Bonivard and Gertie, also owned by Mr. Hearn, make the finest kennel of the breed in this country. All of them will be exhibited at the show next month.

THE ST. LOUIS DOG SHOW.—*Special Dispatch to Forest and Stream:* St. Louis, April 22.—The St. Louis Gun Club's dog show opened this morning. There are 265 entries, including many bench show and field trial celebrities. The show is well arranged, and promises to be successful. There is a large entry from Pittsburgh, Pa., but owing to the illness of the attendant none of them were present. The display of pointers and setters is very good. The collies are also out in force, many fine ones being present.

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, or breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Duke of Orange. By Mr. Louis B. Wright, New York, for orange and white pointer dog, whelped Sept. 11, 1883, by champion Sensation (A.K.R. 217) out of Seitner's Lass (Sleaford—Dawn).

Grouse, Jr., Jock, Jr., and Dora. By Mr. Jas. T. Walker, Troy, N. Y., for black and tan setters, two dogs and one bitch, whelped Nov. 20, 1883, by Jock (Grouse—Moll) out of his Black Bess (A.K.R. 422).

Glenclaire. By Mr. Jas. T. Walker, Troy, N. Y., for red Irish setter dog, whelped April 10, 1884, by champion Glencho out of his Claire (A.K.R. 233).

Spark. By Mr. A. C. Tufts, Somerville, Mass., for black and tan Gordon setter dog, whelped Feb. 1, 1884, by Bailey's Tom (Dash—Fly) out of Davie's Cute (Don—Nellie).

BRED.

☞ *See instructions at head of this column.*

Domino—London. Mr. W. G. Chisholm's (London, Ont.) English setter bitch Domino (Prince Royal—Nettie) to Mr. J. W. Humpidge's London (Paris—Lill), April 17.

Princess Belle—Colonel Thunder. Dr. G. A. Seaman's (Maryville, Kan.) English setter bitch Princess Belle (Rufus—Rose) to his Colonel Thunder (Thunder—Moll), April 7.

Little Maggie—Grand Duke. Messrs. R. & W. Livingston's (New York) bull-terrier bitch Little Maggie (A.K.R. 525) to their Grand Duke (A.K.R. 524), April 1.

Dido—Skip. The Forest City Kennel's (Portland, Me.) Skye terrier bitch Dido (A.K.R. 889) to their imported Skip, April 9.

Sibyl—Cæsar. The Forest City Kennel's (Portland, Me.) rough-coated St. Bernard bitch Sibyl (A.K.R. 757) to their imported Cæsar (A.K.R. 22), April 19.

Juno—Young Toby. The Forest City Kennel's (Portland, Me.) pug bitch Juno (A.K.R. 406) to the Chequasset Kennel's Young Toby (A.K.R. 473), March 21.

Mollie—Brandy. Mr. H. C. Miller's bull-terrier bitch Mollie (Peter—Rose) to Mr. M. Gifford's Brandy, April 16.

WHELPS.

☞ *See instructions at head of this column.*

Claire. Mr. James T. Walker's (Troy, N. Y.) red Irish setter bitch Claire (A.K.R. 233), April 10, nine (two dogs), by champion Glencho.

Maud. Mr. Max Wenzel's (Hoboken, N. J.) red Irish setter bitch Maud (Larry—Gussie II.), April 5, twelve (six dogs), by his Chief (A.K.R. 238).

Lodin. The Ashmont Kennel's (Boston, Mass.) imported mastiff bitch Lodin, April 8, eleven, by their Diavolo (A.K.R. 543).

Ruby. The Knickerbocker Kennel Club's pointer bitch Ruby (Dick—Fan), April 16, eight (six dogs), by Mr. D. G. Elliot's Scout (A.K.R. 216).

Meta. Mr. A. G. Bloomfield's (New York) collie bitch Meta (Lord Elcho—Margie), Feb. 6, nine (three dogs), by Mr. George R. Krehl's Eclipse (E.K.C.S.B. 12,919).

Collette. Mr. N. Elmore's (Granby, Ct.) beagle bitch Collette (Chanter—Beauty), April 10, six (two dogs), by his Ringwood (Ranter—Beauty); all white, black and tan.

Belle. Mr. D. S. Gregory, Jr., 2d's, pointer bitch Belle (A.K.R. 203), March 27, five (two dogs), by Mr. C. H. Mason's Beaufort (A.K.R. 694); all since dead.

Fancy. Mr. H. C. Miller's (Hudson, N. Y.) pointer bitch Fancy (Croxteth—Royal Fan), April 10, seven (three dogs), by Ducahon (Dan—Lady Sensation); two since dead.

Peg Peg. Mr. H. C. Miller's (Hudson, N. Y.) pointer bitch Peg Peg (A.K.R. 920), April 18, three (two dogs), by champion Knickerbocker (A.K.R. 19).

Brenda. Mr. J. A. S. Gregg's (Fordham, N. Y.) mastiff bitch Brenda, March 4, thirteen (seven dogs), by champion Nevison (Gurth—Juno).

SALES.

☞ *See instructions at head of this column.*

Duke of Orange. Orange and white pointer dog, whelped Sept. 11, 1883 (Sensation—Lass), by Mr. B. F. Seitner, Dayton, O., to Mr. Louis B. Wright, New York.

Landseer. Mastiff dog, whelped March 4, 1884 (Nevison—Brenda), by Mr. J. A. S. Gregg, Fordham, N. Y., to Prof. A. H. Dundon, South Fordham, N. Y.

Cassandra. Fawn mastiff bitch, whelped Jan. 26, 1884 (Diavolo, A.K.R. 543—Madge, A.K.R. 548), by the Ashmont Kennel, Boston, Mass., to Mr. W. D. Peck, New Haven, Ct.

Leicester A. Black, white and tan Edglish setter dog, age not given (Leicester—Nellie), by Mr. J. M. Avent, Hickory Valley, Tenn., to Mr. Samuel Giles, Graniteville, S. C.

Clara. Black and white English setter bitch, age not given (Penn—Pocahontas), by Mr. J. M. Avent, Hickory Valley, Tenn., to Mr. Louis Melcor, Battle Creek, Mich.

Ringwood—Silver whelp. White and black ticked beagle bitch, whelped Nov. 12, 1883, by Mr. N. Elmore, Granby, Ct., to Mr. Casper Lancer, Kenosha, Wis.

Rita. Fawn mastiff bitch, whelped Jan. 26, 1884 (Diavalo, A.K.R. 543—Madge, A.K.R. 548), by the Ashmont Kennel, Boston, Mass., to Mr. F. E. Rogers, Portland, Me.

Dolly Varden. Mastiff bitch (A.K.R. 75), by Mr. W. P. Wright, to Dr. J. Frank Perry, Boston, Mass.

Ringwood—Maida whelp. Beagle bitch, whelped Feb. 3, 1884, by Mr. N. Elmore, Granby, Ct., to Mr. Harry Clark, Utica, N. Y.

Folko. Rough coated St. Bernard dog (A.K.R. 477), by the Chequasset Kennel, Lancaster, Mass., to the Millbrook Kennel, New York.

Nyon. Smooth-coated St. Bernard dog (A.K.R. 804), by the Chequasset Kennel, Lancaster, Mass., to Mr. Robert Elliott, Hannibal, Mo.

Montreux. Smooth coated St. Bernard dog (A.K.R. 800), by the Chequasset Kennel, Lancaster, Mass., to Mr. A. S. Van Winkle, Cleveland, O.

Grouse—Belle whelp. Black and tan Gordon setter dog, whelped Sept. 23, 1883, by Mr. N. Elmore, Granby, Ct., to Mr. F. N. Manross, Forestville, Ct.

Gay—Grace whelp. Lemon and white pointer dog, whelped Sept. 14, 1883, by Mr. N. Elmore, Granby, Ct., to Mr. E. W. Beardsley, Hartford, Ct.

Watts—Skip whelps. Red Irish setter dogs, whelped Feb. 24, 1884, by Mr. Geo. T. Wells, Boston, Mass., one to Mr. W. N. Clark, Burlington, Vt.; one to Mr. H. N. Coon, Burlington, Vt., and one to Mr. E. Sweet, Malden, Mass.

PRESENTATIONS.

☞ *See instructions at head of this column.*

Landseer. Mastiff dog, whelped March 4, 1884 (Nevison—Brenda), by Prof. A. H. Dundon, South Fordham, N. Y., to Mr. Henry T. Edson, Fordham Heights, N. Y.

DEATHS.

☞ *See instructions at head of this column.*

Chiefly. Red Irish setter dog (A.K.R. 966), owner by Mr. H. C. Miller, Hudson, N. Y., Feb. 26, killed by bulldog.

KENNEL MANAGEMENT.

☞ **No Notice Taken of Anonymous Correspondents.**

M. A. D., Newman, Ga.—We fear that the lameness is of too long standing to yield readily to treatment. The best linament that we ever tried in such cases is the following: Two ounces of camphor dissolved in a pint of alcohol, then add a beef gall. This should be well shaken and applied twice a day and well rubbed in; rub with the hair, not against it.

J. H. W., Boston, Mass.—Dew claws are occasionally seen in nearly all breeds of dogs. They can be easily removed when the animal is young. They do not disqualify for the bench show.

PUBLISHER'S DEPARTMENT.

THE power of the pen is incalculable. Its cost is easily known by asking the nearest stationer for Esterbrook's Falcon No. 048 and other numbers.—*Adv.*

FROM the edition of Messrs. Geo. P. Rowell & Co.'s "American Newspaper Directory," now in press, it appears that the newspapers and periodicals of all kinds at present issued in the United States and Canada reach a grand total of 13,402. This is a net gain of precisely 1,600 during the last twelve months, and exhibits an increase of 5,618 over the total number published just ten years since. The increase in 1874 over the total for 1873 was 493. During the past year the dailies have increased from 1,138 to 1,254, the weeklies from 9,062 to 10,028, and the monthlies from 1,091 to 1,499. The greatest increase is in the Western States. Illinois, for instance, now shows 1,009 papers in place of last year's total of 904, while Missouri issues 604 instead of the 523 reported in 1883. Other leading Western States also exhibit a great percentage of increase. The total number of papers in New York State is 1,523, against 1,399 in 1883. Canada has shared in the general increase.

THE A. J. CORCORAN SOLID WHEEL STORM-DEFYING WINDMILL.—One of the comforts of modern civilization in rural districts is a good windmill. To farmer or stockraiser it is a necessity. But there are windmills and windmills. The antique object of Don Quixote's wrath is out of date, but not more inefficient than some of the traps now offered at so-called cheap rates. On the other hand, there are mills which, without fuss or trouble, unobstrusively and diligently get through a vast amount of work. One such, made by A. J. Corcoran, of 76 John street, New York, has for many years supplied three fishponds of six acres each at Pierre Lorillard's famous Rancocus stockfarm. It has been known to raise the ponds an inch in a single night, and has never cost a cent for repairs. The mill is made with a solid wheel, strongly tired like a wagon-wheel, and under heavy wind pressure simply luffs up to the breeze, as it were, and steadily pursues the even tenor of its way. In some other kinds, twenty-five per cent. of the power at least is lost by the action of counterbalancing weights, while the wheel itself, opening in sections, is racked by a blow, and like a lady's watch, is always wanting something to be done to it. This letting the wind blow through the wheel instead of making the wheel turn its feather-edge to the wind is as unphilosophical and unmechanical as it would be unseamanlike to have valves in the middle of a yacht's mainsail to relieve pressure. The Corcoran mills are well known and deserve their great popularity.—*Adv.*

COPY OF A LETTER written by Senator John I. Mitchell to "Nessmuk" in relation to the latter's new book: "Senate Chamber, Washington, March 4, 1884.—*Dear Sir:* I am very glad to know that your book on "Woodcraft" is about to get published. Your life-long experience as a woodsman, and your peculiar gift in this kind of literary work, evidenced by the popularity of your writings, leave no doubt in my mind of complete success in this new undertaking. The book is so compact and full of meat for those who seek the forest and stream for recreation, that it must be well received, and it is so cheap that it appears to me its circulation must be general. I am anxious to see it printed and in covers, and you may depend upon me for twenty-five copies, which I will circulate among my friends.—Very respectfully, JOHN I. MITCHELL."

Rifle and Trap Shooting.

FIXTURES.

May 6 and 7.—Fourth Tournament Southern Illinois Sportsmen's Association, Carbondale, Ill. C. P. Richards, Secretary.

May 20 to 23.—Knoxville Gun Club Second Annual Tournament, Knoxville, Tenn. C. C. Hebbard, Secretary.

May 26 to 31.—First International Clay-Pigeon Tournament, at Chicago, Ill. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

June 2 to 9.—Annual Tournament Louisville Sportsmen's Association, Louisville, Ky. J. O. Barbour, Secretary, 157 Third avenue, Louisville.

SMALL CALIBER RIFLES.

Editor Forest and Stream:

Being confined to the house by a touch of malaria I will occupy myself by detailing for the benefit of my fellow riflemen some of the recent experiments with the "spiral groove." My practice has been confined to small bores, .28 and .25 cal., and have confined myself to rest shooting at 55 and 100yds., without wiping the rifle between shots. Have experimented with various powders and various weights of powder and lead, also various tempers of bullets. The best results I have obtained so far with the .28cal. have been with Hazard No. 3 duck powder and an 85-gr. bullet about 1 tin to 9 lead. With this cartridge 30-85-gr. I fired 20 consecutive shots in two groups of 10 shots each, the groups measuring from center to center of the widest shots, 2 7-16 and 2⅞in. respectively; or, in other words, it would take circles of these diameters to contain the groups. At the same time I moved the target up to 55yds. and firing 7 shots at this distance without change of sights, I found these grouped but 1in. higher, taking the average of each group, than at the longer distance. In fact, there was but one shot at the shorter distance that struck above the highest shot at the longer distance, and that but ⅛in. As near as I can judge from several similar tests, the bullet from this cartridge rises only about 1½in. at the highest point of the curve in firing at 100yds. In other words, this cartridge will shoot continuously into a 3in. ring at all distances up to 100yds. without any change of sights or allowance for the varying distances within that range.

To show how superior this ammunition is to the ordinary stuff in the market, I wish some rifleman having an ordinary .32-caliber would make a similar test with the ordinary .32-cartridge, care being had to use peep and globe sights, and to see that the average of the group at 100yds. be slightly below the center of bull, as if the average is above the center at the longer distance the group at 55yds. will not show the actual rise. If a ring front sight is used, a proportionately reduced bull should be used at the shorter distance. The average vertical position of the shots should be obtained by measuring to the center of each bull. Of course, if the average is below the center at 100yds. it will be proportionately lower at 55yds.

In practice at 55yds. one day my powder ran short, but wishing to expand another new shell I poured in what I had, filling the shell about one-half full (I had been shooting 30-85 grain cartridges). To my surprise, this half-filled cartridge sent the bullet full 2in. higher on the target. This, I thought, must be a wild shot, but subsequent practice satisfied me that this rifle, a 9lb. Remington Hepburn—the same action in all respects as their long-range rifles have, an action as strong as any in the market and perfectly safe under the heaviest charges—was actually buckling (being depressed at the muzzle) under the strain of my .28-30-85 cartridge. I had long known that rifles using heavy charges would do this, but it was a genuine surprise to find this result with such a cartridge.

I am satisfied from recent experiments that it is impossible to judge of the comparative merits of different powders and bullets by shooting them at any one distance. Nothing but the paper screens or careful practice at two or more distances without change of sights will tell the true story with rifles using over a 20-65 cartridge. It is probable that the test of the Bullard by Mr. Farrow, described by him in your issue of Jan. 17, in which he states that the government cartridge struck the target 24 to 30 inches lower than the 85-295 grains, would look somewhat different had the test been made with screens. I think it would then have been found that the heavier bullet started decidedly lower than the lighter, owing to this buckling of the rifle under the greater strain of the heavier projectile.

I am glad to see a growing dissatisfaction among riflemen with the miserable small-bore ammunition generally in use, but the majority do not yet realize the immense advantage of a flat trajectory, else they would make it warm for the rifle and cartridge makers of this land. For sporting purposes the proportion of powder to lead should never run much below 1 to 3; for target practice at fixed distances almost any proportion will do, so the shooting is accurate, though it is doubtful if it is ever advantageous to run below 1 to 6.

While I am having my growl about small-bore ammunition I may as well relate my experience with the U. S. C. Co.'s .32-19½ c. f. shells. Early in the winter I purchased of the company a small lot of these shells and 1,000 primers to fit same. Found the shells poorly finished, and the primers very sensitive, as many as four to six per cent. exploding in recapping. I managed to get along with them, but recently I received another small lot of same make, length and caliber, but reduced at mouth by Messrs. E. R. & S. to 25-100 bore. The primer pockets of these shells are about 1-32 less in depth, and I have had to drill them deeper before they would fit their own U. S. C. Co. primers, and be reloaded. In trying to use these shells—there being none other of this length in the market—I have exploded several in closing the rifle, the first injuring my finger considerably. Had the rifle been of the rotating breech block kind, the accident would probably have been serious, as in that case I might have received the entire shell instead of the primer only.

Later on I may have something to say of the little .25-bore.

F. J. RABBETH.

Editor Forest and Stream:

Your correspondent "G. H." complains of the popular .22-cartridge, stating that this ammunition is most unsatisfactory. Concerning the short or gallery cartridge I think no complaint should be made. Whether furnished by the Winchester or the U. M. C. Co. the accuracy is all that can be desired. I have frequently seen from seven to ten successive balls go through the same hole at 25yds. At Conlin's gallery may be seen a series of one hundred consecutive shots, of which 99 were bullseyes, made at the distance indicated, the bullseyes being one inch and a quarter in diameter. The cartridge is, however, very sensitive as regards elevation, and is therefore not adapted to even the smallest game except at very short ranges, as no fellow can calculate where to hold for longer distances, except after an interminable series of experiments. If for squirrels and the like, we select the long or extra long .22, we are still worse off, for I have yet to find any brand of cartridges of this size that make even the slightest pretense to accuracy. If manufacturers would take the same pains with these as with their short cartridges, there would be a good demand for them, and sparrow pot-pies would prevail.

GREENHORN.

MORE RIFLE QUERIES.

Editor Forest and Stream:

The communications of "W. M. F." and "E. A. L.," each in its way, has contributed very satisfactorily to the discussion which it was my aim to elicit, and I shall be somewhat relieved from the suspicion of obstrusiveness in offering this second instalment.

1. It is authoritatively stated that the heavier bullet has a longer range, because of the momentum it derives from weight. At shorter range the lighter bullet may have more momentum resulting from velocity. Approximately, what is the distance at which the force of the two bullets will be equal? What of 200 yards?

2. Has it been demonstrated that a bullet driven with extreme velocity is less affected by wind across the line of fire than one moving at a reduced speed?

3. Is there any exact and ascertained ratio between the force of a powder charge on a bullet, and the resistance of the atmosphere in the bore of the rifle? What increase of pressure behind will be more than held in check by the unexpelled air before the bullet? If the relative force of a bullet is lost in any degree within the barrel, can it be regained in the least on its flight outside?

4. The books refer to the drift of a rifle, and describe it as the tendency of a bullet to deviate in the direction of the twist, right or left as the case may be. This deviation is put down as about five inches at 200 yards. Now, in the common practice of sighting rifles, is it found necessary to make allowance for any such variation as is here indicated? In a still atmosphere, if the sights are on a line with the center of the bore, is it not usually found that the bullet strikes the target perpendicularly to the center?

5. Is not the rifling of target rifles, with very shallow grooves, detrimental to even shooting, on account of the bullet being held in too weak grip? The modern system is shallow grooves and hard bullet, and these two conditions match each other; under perfect adjustment they may approximate perfection. But suppose the variation of deeper rifling and the use of a hardened bullet. Should the upset not fully fill the grooves, will not the air-pressure in front of the bullet prevent an escape of gas; and even if slight currents of air mingle with the expanding gas, would the force of the charge thereby be weakened?

6. Many riflemen prefer to use at their option either a patched or a

lubricated bullet. Is there any system of rifling for which manifest superiority can be claimed, taking into account the twofold service indicated? Or are the requisites named so different that they cannot be combined in one weapon?

7. The matter of bullets has only to be mentioned, and innumerable questioners who have gone through hopeful, baffling, disappointing experiments, clamor for answers that will at least give them temporary rest. The leading manufacturers of target rifles are alloying their patched bullets of the same weight and shape in widely different proportions, varying from 1 to 16, to 1 to 40. Is the result of the experience of expert riflemen so different?

If there is any standard authority for the length of a bullet adapted to guns having a short uniform twist, it is three times the measure of its diameter. Yet, it would be interesting to know how arbitrarily this standard is to be adhered to, more especially in the case of difference of caliber, or variation of powder charge. The blunt, pug-nosed bullet seems to have won its way to nearly universal adoption. It has the obvious advantage of being weighty at the point, and thereby aiding the counterpoise of its polarity. It strikes the air so as to leave a larger circular vacuum in which to maintain its rotary motion unimpeded. It is an open, and perhaps urgent question, whether bullets of blunter points than are in general use might not raise the scores of all grades of marksmen. J. J. P.

WORCESTER, Mass.

IGNITION OF THE POWDER CHARGE.

Editor Forest and Stream:

In your issue of April 3 James Duane would have us believe he goes to the bottom of "the distance the flash of a primer permeates the charge of powder." He selects a shell with three holes for the flash of the primer to be divided into. Let him take a shell with a central orifice, so the full force of the primer may go up the middle of the charge; then he must think that the flash burns a hole as it goes in, which it cannot accomplish when entering sand.

The "point," which he also makes, is something out of his province to decide, and he goes a long distance out of his way to put it in, the reason for which I cannot fathom. HOLDING WELL.

CHICAGO, April 15.

Editor Forest and Stream:

My innocent article on powder ignition in a recent issue of your journal has developed such a storm of opposition among my friends that I have undertaken a new series of experiments, substituting a variety of materials, covering a wide range of specific gravities, for the sand used in my first experiment.

I had intended to hold my peace until these experiments were concluded, but your note received this morning, inclosing the comments of "Holding Well," has decided me to speak at once. I hope that this effusion of "Holding Well" will be published in your next issue, that your readers may appreciate the unfair, not to say dishonest tone of his criticism.

In the first place, he says that I "would have us to believe he goes to the bottom," etc. Now, I do not think that my communication warrants any such statement. I made a few experiments to satisfy myself, sent you my results, with a description of my manner of making them, and drew my inferences in all diffidence.

It may be proper to add that my subsequent experiments, made with materials varying in specific gravity from charcoal to shot, confirm my first deductions. Practically non-combustible materials were purposely selected, as the mechanical and not the chemical action of the flash is what we wish to investigate. I find that the depth the flash will penetrate is nearly independent of the specific gravity of the interposed medium, but is greatly influenced by its coarseness of granulation. That is, the larger the grains the larger will be the voids between them, and the less will be the loss of head of the jet of flame due to friction. (I employ a term more applicable to water, but it will serve to illustrate.) The great objection, however, to employing any granulated material, is the difficulty in obtaining uniform granulation.

An admixture of small grains, filling the spaces between the larger ones, will occur in spite of all ordinary care, and will be destructive of uniformity. I have, therefore, devised the following method for testing the relative performance of primers, which, when properly applied, will give practically uniform results. Hold the gun muzzle down, push a bullet a short distance into the barrel from the breech, insert a tube and pour a small quantity of powder through it on top of the bullet, the object being that no powder shall adhere to the sides of the barrel; then insert a primed shell and discharge it.

If the powder is ignited, repeat the experiment, the bullet being pushed in further, and so on until the powder is not ignited. This will give a correct limit to the range of the flash in an air space in each case. [The air space should be of a uniform temperature, as the flash will range further in hot air than in cold.]

For the benefit of "Holding Well," I will state that I have tried this experiment in a .45-cal. gun, with both the Berdan No. 1 and the Winchester No. 2½ primers, with the following results: The Berdan will ignite the powder at an average distance of 3½in., once it did so at 4in., but there was a distinct hang fire, and the result may have been due to grains of powder adhering to the surface of the barrel at less distances than 4in. The Winchester failed to ignite the powder at 2¾in., but did ignite it at 2¼in. Thus we may infer, with "Holding Well's" permission, that the Berdan No. 1 is stronger than the Winchester No. 2½. It will also ignite the charge more thoroughly through its three holes than the Winchester through its one.

"That the flash burns a hole as it goes in" is irrelevant. It ignites the grains with which it comes in contact, these ignite the next, and so on. Thus, if we take a pound of powder and make a train of it several feet long, and apply a match to one end, the match may be said to ignite the further end of one train, but it does so by very indirect means.

Next he comes to the "point" that I made, and considers it something out of my province to decide. I think there are many men who are at least the equals of "Holding Well" on both theoretical and practical gunnery, who will agree with me that my point was well taken, and that I did not "go a long distance out of my way to put it in," as I gave two very pertinent illustrations of my point in this same letter.

Before giving another illustration I wish to assure "Holding Well" that I do not intend to be offensively personal, but that I must be personal to be understood.

To quote Mr. O'Brien, though I do not wish "to revayle to him the fact that I had penethrated his incognitow" I may venture a shrewd guess that he is an off-hand marksman of some note. Thus he is a fair type of a certain class of riflemen who have had considerable experience in a narrow field.

Contrast with him Prof. Francis Bashforth, who may never have fired a gun in his life, and possibly could not hit a barn off-hand at 200yds. Yet Prof. Bashforth could probably give us more points on scientific rifle shooting in a day than a dozen such men as "Holding Well" in the course of their natural lives. JAMES DUANE.

NEW YORK, April 19, 1884.

NEW YORK STATE PRACTICE.—General Orders, No. 7, current series, Adjutant General's office, Albany, promulgates the classification and order of duty in rifle practice for the season of 1884, prescribed by Brigadier-General Charles F. Robbins, G. I. R. P. With the exception of some few modifications the order is identical with that of 1883 in its requirement. The principal change is the doing away with carbine practice, only those troops armed with and using the rifle being required to perform field duty as riflemen. In general practice (class firing by individuals) it is directed that five consecutive shots will be fired at each distance, instead of "five shots only," as formerly. Explicit instructions are laid down to be observed by officers in conducting skirmish drill with ball cartridge. Instead of commencing at 250yds., firing on the advance at such points as they may determine best, ordering the march in retreat at 50yds., and firing two shots while going to the rear, it is directed that "commandants should use discretion and tact, varying the drill according to their ground and targets, commencing at 275yds. in front of the targets, deploying men and taking such distances as target and range will allow, firing on the advance one shot at 250, one at 150 and the third at 50yds. At this point order the march in retreat and fire one shot at 100 and one shot at 200yds." The prizes offered last year to the companies having the largest number and percentage of marksmen and highest figure of merit, based upon an enrolled strength of not less than 60 men, have been dispensed with this year. The practice for the season will close on Saturday, Nov. 8, and no scores made after that date will be recognized. No alteration is made in the conditions attaching to qualifications in matches, and ammunition will be limited to forty rounds for each officer, non-commissioned officer and private enrolled, as per quarterly returns for quarter ending March 31, 1884. Transportation will be furnished by the State only for first general practice to each organization located more than three miles from its range, at the actual cost of the same, but not in any case exceeding fifty cents for each man actually parading. All subsequent practice will be had at the expense of the individual or organization.

NEWARK.—The total scores for the season of six tournaments are as follows, the Frelinghuysen leading. Possible 3,000, 10 men per team, 10 shots per man: Frelinghuysen R. A., 2,797; average, 466 1-6; Essex Avenue R. C., 2,773; average, 443 1-6; Celluloids, 2660; average, 443 1-6; Domestic R. and R. A., 2,645; average, 441; Warren R. C., 2,557; average, 428 1-6; Plymouth R. A., 2,508; average, 418.

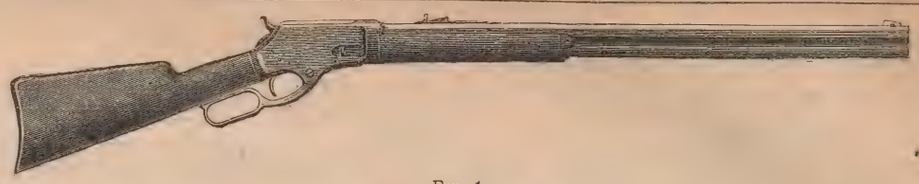


FIG. 1.

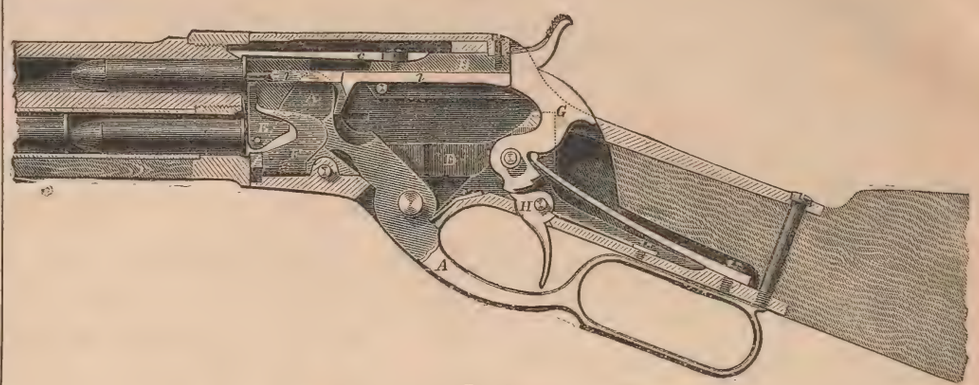


FIG. 2.

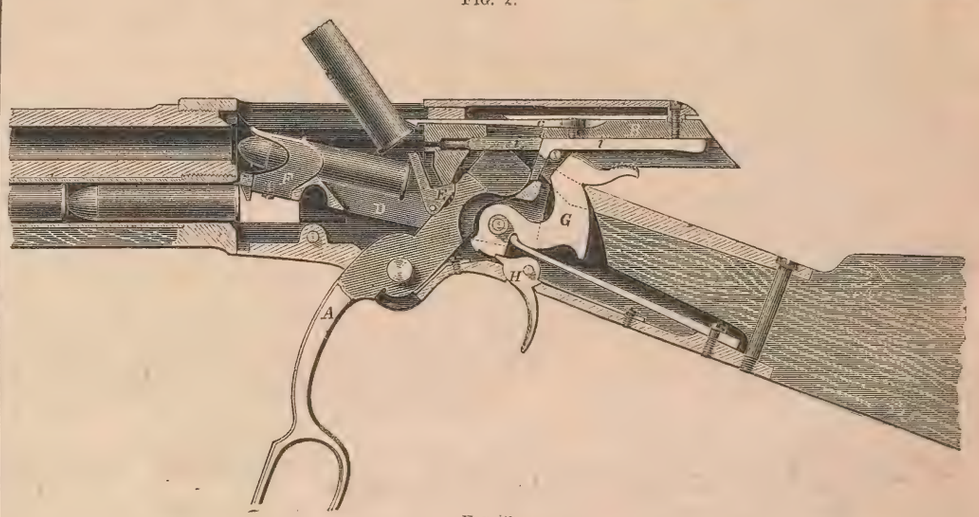


FIG. 3.

THE RIFLES OF TO-DAY.

MARLIN REPEATING RIFLE.

THE Marlin repeating rifle, manufactured by the Marlin Fire Arms Company, New Haven, Conn., is an arm of the "Colt" class, operated by the lever. It has only recently been pushed in the market. There are a number of inventions embodied in it, which were perfected at various times. For a long time before its introduction it was, in the opinion of its manufacturers, apparent that the magazine guns then on the market did not meet the sportsman's practical wants in a number of ways. The .44-40-grain rifle had too little powder and lead to be effective, while the larger calibers used special ammunition not always obtainable readily, and of but poor range and accuracy. This, combined with the call for a gun having fewer pieces, and an action which was not likely to break down through a defective cartridge or rough handling, was the first incentive toward producing the Marlin.

Although a number of other magazine guns have since been put on the market, it still claims the lead for simplicity, strength and accuracy. The fact that the Ballard rifle is made by the same company is guarantee of good workmanship.

The Marlin is made to use the regular .45-70 Government cartridge, copper or brass, also a .40-cal. cartridge with 60grs. of powder and 260 of lead, which is very effective up to 800yds., and possesses an exceedingly flat trajectory. It has obtained the reputation, in some quarters, of being the best cartridge for hunting deer, antelope, and the like, now on the market, and has frequently killed such game with one shot, the animal dropping dead in its tracks and the bullet going clear through the carcass.

As soon as the Marlin became known, the demand was such, it is said, that the factory for over two years could not furnish one gun where ten were ordered. In 1883, the capacity of production was increased three-fold, but still the orders were about three months ahead of the supply all through last fall and winter.

Its special claims are; first, that it has about one-half the number of pieces used in other magazine rifles; second, the solid bolt behind the cartridge, preventing any accident, no matter how effective the ammunition may be, as all strain comes against the former; the receiver is also one solid piece, no lock plates being used; third, the rifling which has obtained its great reputation in the Ballard; fourth, ease of manipulation and of loading; the cartridges can be inserted with the lock either open or closed, and all ten shots have repeatedly been fired in less than five seconds. Dr. Carver found that it was suitable for his rapid and accurate work, and for over a year, the markers assert, he has used no other.

For those who may want a heavier cartridge the .45-cal. is made also to take 80grs. of powder and 300grs. of lead, making in all three sizes, .40-60-260, .45-70-405, .45-80-300. There have been frequent calls for other sizes, but as yet the company cannot make any new ventures, owing to their inability to supply the present demand.

Besides these, a Marlin magazine shotgun is made of the same caliber as the .45 rifle. The shell used is 2¼in. in length, and will hold 40grs. powder and ¾oz. of shot. It holds the same number of cartridges as the rifle and is made in same styles and at same prices, which are as follows:

Octagon or half octagon barrels, 24in., $30; 26 and 28in., $32; 30in., $35, weighing respectively 9, 9¼, 9½, and 11lbs., the latter extra heavy. The sights used are the favorite Rocky Mountain rear and knife-edge front. Double set triggers are $5 additional; 28-in. barrel is the standard size, holding 9 cartridges in the magazine and can be loaded into the barrel, which latter is convenient for patched bullets to be used in target shooting. Half magazines can be furnished at same prices if preferred.

The Marlin, belonging to the sporting class of weapons, has no special target record. From various parts of the country reports have come which show it to have good holding qualities. C. Gove, of Denver, Col., on Jan. 11, 1881, shot a Marlin before a number of spectators. He shot fifty shots in nine minutes twenty seconds, and of this time four minutes were consumed in replenishing the magazine and passing a wet whisk through the barrel after each ten shots. The score at 200yds. off-hand was 220 in the possible 250.

This rifle was entered at the government trial, before a board for selecting a magazine gun in 1881, and was put through the regular tests. In the test for endurance there was an explosion of a cartridge in the magazine. The Board of Officers "were of opinion that the explosion was due to the jolting encountered in feeding down through the magazine and the repeated blow on the base of the cartridge from the column behind it, caused by the recoil of the piece at each shot, and possibly combined with an over-sensitive cartridge." Subsequently the arm fired 500 shots in good order. The dust test was passed in fine style, but the gun was not chosen by the board for provisional issue to the army.

The construction of the weapon may be studied from the cut Fig. 1 representing the completed arm in elevation.

Fig. 2, a cross section of the action closed. A represents the lever; B the bolt, C the extractor, D the carrier block, E the ejector, F the carrier block spring, G the hammer, H the trigger, I the firing pin.

Fig. 3 is the same with the open position. It will be seen that throwing forward the lever A withdraws the firing pin I, unlocks the bolt B, and causes it to recede, carrying with it the extractor C, which extracts the shell of the cartridge just fired, while the ejector E, attached to the lower section of the bolt, ejects the same from the receiver. By the same motion, the carrier block D is raised from its natural position, as in Fig. 1, brings the cartridge with it, and places the same in line with the chamber of the barrel, while the spring F firmly holds the cartridge in place. The hammer G is brought to full cock by the same motion, and held there by the action of the trigger H, entering its full cock notch. Bringing the lever back to its natural position causes the bolt to move forward, pushes the cartridge into the chamber, lowers the carrier block to receive a fresh cartridge, locks the breech mechanism, and leaves the arm ready to fire. The magazine is loaded through an opening in the side of the receiver, which opening is closed by a cover, as shown in Fig. 1.

The manipulative directions for taking the action apart are: First—Take out the lever pin screw, and drive out the lever pin, allowing the lever to be removed. Second—Take out the tang screw (this allows the stock to be removed), hammer screw, and front pin that goes through the trigger strap; now remove the trigger strap with the lock work attacked. Third—The bolt can now be slipped out.

To assemble the action, put the parts into the receiver in reverse order from that in which they were taken out.

RANGE AND GALLERY.

EXPLANATION WANTED.—Succasunna, N. J.—Referring to the two wonderfully good targets in a recent issue published by Mr. A. Armstrong and made by Mr. L. N. Walker, of Ilion, N. Y., will either of the gentlemen tell us how the thing is done? Did Mr. Walker make a six-tenths' inch (6-10in.) bullseye, put it up at 100yds. and fire only ten shots at it, or did he make a larger bullseye and after shooting scribe his 6-10in. circle around the shots? It was stated the weather was cloudy and light poor. How did he manage to see that small dot at that distance with the naked eye? I put that size bullseye at above distance and could but barely see it with both eyes open and not at all through sights. Was a telescope attached?—VAN.

PENNSYLVANIA STATE RIFLE ASSOCIATION.—The regular spring meeting will be held at the Stockton range May 10. The officers recently elected for the year are as follows:

Dr. E. O. Shakespeare, President; Major Joseph H. Burroughs, Vice-President; Henry C. Rushton, Secretary; J. L. Weatherly, Treasurer. The standing committees of the year as made up by the President comprise the following:

Executive Committee—Lancaster Thomas, chairman; Dr. M. Price, C. W. Zieber.

Range Committee—Dr. M. Price, chairman; W. De V. Foulke, J. L. Weatherly.

Prize Committee—Major Joseph H. Burroughs, chairman; C. W. Zieber, G. W. Miles, Dr. M. Price, H. C. Rushton.

Finance Committee—C. W. Zieber, chairman; Wallace Proctor, L. Thomas, J. H. Burroughs, G. W. Miles.

THOMASTON, Conn.—A year ago, a rifle club of about fifteen members was formed in this place. Their range is located about two miles from the village, near Reynold's Bridge, and is named Bridgemoor. Nearly all the members were new at rifle shooting, but some of them made very good scores in the course of the season, some of them making as high as 107 out of a possible 120. Massachusetts ring target. The first shoot of this season was on Good Friday, when the badge was won with a score of 98. The weekly shoots are held every Saturday, P. M., for a very pretty badge. We are fitting up a new range somewhat nearer the village, and more accessible to visiting riflemen. Many new members are now joining. Our shooting is off-hand, distance, 200yds.—FRED A. PERKINS.

BOSTON.—Following are the scores already made in the matches for April at the Mammoth Gallery:

Amateur Match.

A B Loring	46	47	47	45 — 231
B W Gardner	45	45	44	43 — 220
J J Munroe	45	43	43	43 — 218
J A Hills	43	43	42	42 — 216
J H Bird	44	43	43	43 — 216
A B Wilson	43	44	42	43 — 215
A W Johnson	43	43	43	42 — 214
J T Stetson	43	43	42	42 — 212
T Lyman	41	41	43	42 — 209
C H Hamilton	41	42	43	41 — 207

Beginners' Match.

C L Foster	41	41	41	43 — 209
T A Lynch	42	40	40	41 — 201

BOSTON, April 19.—The cold, raw wind prevented a large attendance at Walnut Hill to-day, and those who did attend were prevented by this same reason from making large scores. Following are the scores, all at 200yds.:

Creedmoor Practice Match.—J. A. Frye 46, C. B. Edwards 43, H. Cushing 45, M. R. Jafray 45, A. L. Brackett 43, F. Stetson 42, W. J. Meadows 42, F. C. Shepard (mil.) 41, W. H. Oler 41, B. A. Lappen 41, J. Paysen (mil.) 40, M. J. White 40, W. J. Look 39, A. Darling 38.

Creedmoor Prize Match.—J. P. Bates 45, re-entry 44, J. A. Cobb 42, re-entry 42, B. A. Lappen 41.

Decimal Match.—W. Charles (C.) 86, J. A. Frye (A.) 78, A. C. Adams (C.) 77, re-entry 75, M. J. White (A.) 72, B. A. Lappen (A.) 72, W. J. Look (C.) 70.

BULLSHEAD RIFLE CLUB.—April 10, 12-ring target, possible 120: M. Dorrler 119, A. Lober 119, C. Rein 115, G. Zimmermann 114, J. F. Campbell 111, S. Mehrbach 107, B. Walters 101, S. F. C. Weber 95, Louitzki 89.

PRIMROSE SOCIAL CLUB.—Series of matches at club range, Fourth and Market streets, Camden, N. J. Airgun, 10lbs., 45ft. range:

NAME.	Dec. 6	Dec. 20	Jan 16	Jan. 31	Feb. 14	Feb. 28	March 20	April 3	April 17	Total	Average
Wm. Stein, Jr.	23	19	18	17	15	16	21	17	11	167	18 5-9
Louis E. Stein	31	14	10	14	19	19	17	15	15	154	17 1-9
Chas. H. Stein	30	18	15	19	..	13	18	14	9	135	16⅞
A. Weber	23	..	..	11	..	..	13	..	18	65	16¼
C. E. Wenz	29	..	..	19	6	12	15	12	15	108	15 3-7
E. Austermuhl	21	19	17	15	14	11	12	17	15	141	15⅔
H Plum	19	9	..	18	14	21	15	15	11	122	15¼
E. C. Wenz	23	..	13	14	14	13	17	..	12	106	15 1-7
P. C. Bott	18	16	..	..	14	..	20	12	7	87	14½
C. Bogia, Jr.	24	18	11	..	..	12	..	18	13	97	13 6-7
S. Martin	26	19	6	15	7	..	12	7	14	106	13¼
J. S. Jacobs	28	11	16	8	9	17	6	14	8	117	13
P. C. Smith	24	12	13	15	12	14	7	6	13	116	12 8-9
W. Fahrion	12	11	..	15	..	..	16	16	7	77	12 5-6
F. Woolston	..	..	..	..	..	17	13	..	8	38	12⅔
H. Blackwell	..	10	15	4	..	..	18	..	..	47	12¼
W. Wible	22	8	..	8	..	3	7	13	19	80	11 3-7
J. Grossman	10	..	..	..	..	..	11	..	..	21	10½
T. Hall	24	14	2	14	3	12	10	10	7	96	10⅔
Dr. C. Hoell	..	..	..	..	..	..	1	13	17	31	10⅓
C. Preusch	21	..	..	..	7	..	2	..	11	41	10¼
G. Seybold	10	..	..	..	10	..	..	..	..	20	10
J. Hussong	..	4	..	7	13	13	11	9	12	69	9 6-7
J. Kelly	..	..	..	..	..	..	..	..	9	9	9
C. Hoell	..	..	..	..	..	9	..	6	10	25	8⅓
W. Thompson	..	..	8	..	6	..	..	..	..	14	7
J. Welden	..	..	8	5	3	..	..	8	24	6	
R. A. Outwater	..	..	..	..	..	6	4	1	7	18	4½
T. Altman	..	..	0	..	..	..	4	..	9	13	4⅓
A. B. Sparks	..	4	..	..	..	..	..	..	..	4	4
I. Altman	..	..	0	..	..	2	9	..	..	11	3⅔

WHEELING, W. Va., April 5.—The attendance at the 200yd. range to-day (on the appearance of W. Milton Farrow) was small. The club has not yet recovered from the effects of the flood. A permanent target, with butts for the marker, will soon be in position, when the scoring will be arranged for the Massachusetts target by the favorite watch-dial plan. At present the scoring is very primitive; the marker takes a 7x9in. slate and a piece of chalk, and after the shot is pasted up makes his figures on the slate, which is then held up to be read through a telescope at the firing point. Occasional mistakes are made by the shooters in deciphering the figures, but generally in the right direction; a check on such mistakes, however, is made by keeping the previous shot on the other side of the slate. Thirty shots each were fired, which are divided into strings of 15 shots for convenience. A combination target was used, but the score, to be intelligible to your readers, must be by Massachusetts or Creedmoor count, the former is appended. Mr. Farrow used a Bullard, Mr. Jaeger a Ballard and Mr. Cox a Sharps rifle:

Farrow	10 9 12 9 11 10 10 11 11 12 12 10 10 11 12—158 10 10 11 12 12 8 11 10 11 11 12 11 10 10 11—160	318
Jaeger	12 12 8 12 10 8 10 11 12 8 9 10 12 9 9—152 11 10 10 11 10 9 11 9 8 10 12 10 10 10 12—153	305
Cox	10 10 10 11 10 9 10 12 10 9 10 9 0 12 12—144 10 11 8 10 11 12 11 12 9 11 12 11 10 10 10—158	332

The club entertained the champion at a banquet in the evening, where all the talk was on rifles and bullets.

GARDNER, Mass., April 19.—At the Hackmatack Range yesterday the Gardner Rifle Club shot a match with the Brattleborough Club, exchanging shots by telegraph. Two scores to each on a Massachusetts target with a possible 120. The result was as follows:

Gardner.			Brattleborough.		
G F Ellsworth	109	109—218	Cobb	108	106—214
I N Dodge	110	106—216	Howe	102	109—211
G C Goodale	104	108—212	Nichols	105	103—208
A Mathews	106	103—209	Wood	103	100—203
S B Hildreth	99	109—207	Smith	105	98—203
C A Hinds	105	100—205	Reed	100	101—201
H C Knowlton	99	101—200	Knight	97	98—195
F H Knowlton	97	102—199	Taft	102	94—196
W C Loveland	86	97—183	Nichols	101	72—193
		2047	French	92	98—190
					2014

NEW YORK GALLERY SHOTS.—The All-Comers Match at the Grand Central Rifle Range, No. 5 Vanderbilt avenue, still continues to excite increased interest as it approaches its end. It has shown conclusively by its success that the interest in gallery practice has not altogether died out, and that it needs only the proper stimulus to develop an old time enthusiasm. There have been few changes in the scores of this week. The following are the best: J. H. Brown for record 333, P. G. Fanning 333, H. Oehl 325, G. Zimmerman 322, M. Dorrler 319, L. Bird 319, W. M. Farrow 317, J. Coppersmith 317, C. E. Keater 314, G. I. Seabury 313. W. Simpson 310. H. I. Howlett 308, H. Von Der Linder 307, Dr. Toal 306, W. Klein 303, C. Rein 300.

CUYAHOGA RIFLE CLUB.—At the annual meeting, held at Cleveland, O., April 15, officers were chosen for the year: W. R. Huntington, President; W. J. Akers, Vice-President; F. D. Bosworth, Secretary; P. F. Spenzer, Treasurer. The president appointed Messrs. Sobey, Luehrs and Brunner as Trustees.

DOVER, N. H.—On April 19 Geo. H. Wentworth, of Dover, N. H., while practicing at 200yds., off-hand, made a clean score of 50 points. Out of 15 shots fired, 14 were in the bullseye.

THE TRAP.

THE DUFFER CLUB.

YOUR correspondent has found the champion club of the country, and without malice will set down their doings of one day. Henry Bush is the secretary of the Sippo Gun Club, and with him I went to the shooting ground.

On the way, Hen. Bush explained to me that this was to be a match for the championship of the club, and they were to shoot from a rotating trap with a screen, their first venture at that sort of shooting.

Hen. furthermore stated that the S. G. C. had some thoughts of going to Chicago to participate in the clay-pigeon tournament at that place next May.

After setting the trap and adjusting the screen I held four small twigs in my hand to let the Sippo Club draw and determine the order of shooting. Hen. Bush held the shortest twig, and he immediately grasped his gun and walked up to the mark. Hank Greene, the treasurer of the club, managed the strings, and I was to keep tally. The secretary yelled "Pull," and threw his gun to his shoulder as Hank gave a terrible yank on the same string that he had been revolving the trap with. On seeing no ball fly up, the treasurer got confused and looked around at Hen. in a funny way; but that worthy never budged, but just kept his gun up and his eye along the sights. All at once Hank gave the other and right string a yank, and that ball came up over that screen like a streak of lightning and struck the secretary in the paunch with a dull thud. Hen. dropped, but immediately arose, and while rubbing his stomach managed to claim a foul as he did not see the ball, but he was politely informed that he had scored a miss, and so I tallied it.

Much discomfited Hen. retired and Hank Green next faced the trap, and when the ball flew up in the air, he shut both eyes and pulled the trigger, the ball falling to the ground all safe. When told of this the treasurer appeared dazed and remarked, "Gosh, I had a fine bead on her, but then I always told you that this gun was N. G."

Rad Skinner, the president, next toed the scratch and got a beautiful straight away shot, and after following up and half way down, he surprised us all and himself the most so by breaking the ball. Skinner stepped back with a smile hovering away around behind his ears, not doubting that he already had won the badge.

Tot. Bush, Hen.'s brother, and vice-president of the club, stood up to take his shot, and as he raised his gun a beautiful little drop came in toward him, and when it was almost in the gun, he pulled the trigger and the ball disappeared. On seeing this Skinner's jaw fell and he swore that the ball broke on the gun barrel.

When Hen. stood up for his second ball, he again raised his gun, and as he saw no ball in the air, he just pulled the trigger and jumped sideways.

But this last movement was unnecessary, as the ball, which was going the way of Hen.'s first one, was smashed into a thousand pieces, and in reply to the laughter which greeted his movement, Hen. remarked: "I had her down fine, and only stepped aside to see the pieces fly."

Hank walked up to the mark with blood in his eye and yelled "pull" in a loud tone, and on seeing the ball fly away to the right, he repeated his former movements as regards his eyes, and pulled the trigger. A thundering report was heard, and Hank, after several back somersaults, took a seat on a stump, while his gun writhed in agony on the ground. The poor fellow had pulled two triggers instead of one, but nevertheless he broke his ball.

When the president stood up for his second ball, he saw one go off to the left, and after it had rolled on the ground he sent a load of No. 10s flying after it, but it was too late and he was scored a cipher.

So the fun continued until the fourth round had passed, with all the members tied on one out of four.

Hen. appeared nervous when he faced the trap for his fifth ball, and when it sailed away from him, he banged away at it in a reckless manner and was consequently scored a miss.

Hank got his first incomer for his fifth shot, and it so confused him to see the ball shooting toward him that he dodged, but it was too late, and the ball smacked him on the cranium, and then I suppose cracked itself laughing at Hank's terrible grimace, for it fell to the ground in pieces. Hank retired and joined Hen., both looking downcast.

When Skinner's turn came he took extra precautions to win the medal, and just as he was about to pour in the shot into his gun he called out, "Ain't that a rabbit over there to the left," and as all eyes looked for the rabbit Rad. just let an extra charge of shot slip into the one barrel.

This load might win him the championship, and he was going to run no risks. No rabbit being in sight, the match was proceeded with, and the president stepped up to the scratch full of hope and success. He got a nice one to the left, and covered it in a very cool manner and pulled the trigger. The president's eyes and mouth opened when he was informed that the ball was safe, but when he lowered his gun his hair stood on end, for about 3 ounces of No. 10s rattled out of his gun's undischarged barrel, and piled up on the ground a terrible proof of the president's duplicity.

On seeing the rest of the club's eyes and mouths open, Rad. remarked, "Darned if I didn't forget to put a wad on that other load," and this seemed to satisfy the remainder of the "S. G. C."

Tot Bush now had only to hit his ball to win the medal, and he did it in grand style I must say, and to show us what he could do he emptied his other barrel at a large piece of the same ball, but as it was pretty close to the ground, and as the basket containing the safe balls was in range the entire load struck it, demolishing balls, basket and all. Nevertheless the vice-president dangles the championship medal on his manly breast, while Hen. curses the trap, Hank his gun and Rad. his luck. Following is the score in full:

Hen Bush	0	1	0	0	0—1
R Skinner	1	0	0	0	0—1
H Greene	0	1	0	0	0—1
T Bush	1	0	0	0	1—2

I was asked by Hen. what I thought their chances would be at Chicago, and I told him they would be "good;" but I added, "for the tail end," to myself. If they go I will promise the readers that they will again hear from SIPPO.

MASSILLON, Ohio.

GUN QUERIES.

Editor Forest and Stream:

I will be thankful if some of your readers who have practical knowledge of the subject, will give their views upon the following questions:

Will a 16 or 20-bore, with its proper charge, kill as far as a larger bore gun, both being bored in the same manner? Of course, the chances of hitting are less with small bores than with larger, because the air is not so full of shot, but provided the game is hit, will the killing power or penetration be as great at the same distance?

The second question is, Why are the small-bore barrels made shorter than the larger bores? The 16-bores as a rule are 28 inches, the 12-bore 30, and the 10-bores 30 to 32 inches. If a 16-bore 28-inch barrel will burn all the powder and give all the force, why will not the same length of barrel do the same with the larger bore? Or course, more powder is used in the larger bore, but there is also more space in the barrel for it to consume.

Third—Is there any advantage in having long barrels?

Fourth—Which is the most desirable in a 16 or 20-bore; to have one barrel cylinder and the other choked, or both choked, either full or modified? J. E. W.

VIRGINIA CITY, Nev.

BOSTON GUN CLUB TOURNAMENT.

WELLINGTON, Mass., April 16.—Below find results of the above shoot. A fine day made the meet one of the most successful held, the best shooters of the surrounding clubs being present in full strength. Between 3,000 and 4,000 birds were required to feed the voracious traps. The next two days' shoot, April 30 and May 1, will doubtless be a great day, particularly should weather conditions assist:

First shoot, 7 single birds, 18yds. rise:

T C Field	1100011—4	G C Reed	1111111—7
G A Sampson	0110111—5	C H Gerrish	1111100—5
C H DeRochmont	1111001—5	W S Perry	1110111—6
R F Schaefer	1101100—4	A Houghton	1101010—4
H W Eager	1001110—4	J Clark	1011111—6
W Parker	0011010—3	W J Braley	0100101—3
E T Smith	0011010—3	D Kirkwood	0111011—5
C F Stark	1110001—4	L E Johnson	1110111—6

Winners—Reed first, Clark and Johnson second, Kirkwood and DeRochmont third, Eager and Houghton fourth.

Second shoot, 3 pair doubles, 15yds. rise:

Stark	10 11 01—4	Clark	11 10 00—3
Parker	10 00 00—1	Braley	01 10 00—2
Smith	00 00 10—1	DeRochmont	11 10 10—4
Gerrish	00 10 11—3	Eager	10 11 11—5
Field	10 00 10—2	C F Steele	10 00 11—3
Perry	11 10 11—5	Houghton	11 11 11—6
Sampson	10 11 10—4	Reed	11 10 00—3
Schaefer	01 01 10—3	Kirkwood	00 10 11—3

Winners—Houghton first, Perry second, Stark and Sampson third and Kirkwood fourth.

Third shoot, 7 single, 18yds. rise:

Gerrish	0111101—5	Steele	0100000—1
Sampson	1100111—5	Braley	0010001—2
Kirkwood	1110110—5	Parker	1111011—6
De Rochmont	0101000—2	Perry	1111010—5
Stark	0110100—3	J S Snow	1000100—2
Eager	1111011—6	A T Decker	1101111—6
Clark	1000111—4	A F Cooper	1111110—6
Field	1010100—3	J W Getchell	1111110—6
Reed	0111111—6	E W Law	1110111—6
Schaefer	0111111—6	L E Johnson	1111101—6
Houghton	1110001—4	H White	1111101—6
Smith	0111111—6		

Winners—Decker and Law first, Gerrish second, Clark and Houghton third, Stark and Field fourth.

Fourth shoot, 3 pair doubles, 15yds. rise:

Gerrish	10 00 11—3	Houghton	01 11 11—5
Stark	11 10 10—4	Schaefer	01 11 11—5
Eager	11 11 10—5	Law	11 10 10—4
Perry	00 11 11—4	Decker	01 10 10—3
DeRochmont	00 10 11—3	Cooper	10 11 11—5
Clark	00 10 01—3	Field	00 00 01—1
Parker	01 11 10—4	E W Tinker	10 11 01—4
Kirkwood	11 10 00—3	White	01 10 11—4
Snow	10 00 11—3		

Winners—Eager and Schaefer first, Stark and Parker second, Gerrish, Snow and Kirkwood third, Warren and Field fourth.

Fifth shoot, 7 single birds, 18yds. rise:

Gerrish	1111111—7	Perry	1111111—7
Law	1011001—4	Eager	0111111—6
Schaefer	0101111—5	Smith	1110111—6
DeRochmont	1111111—7	G F Cutting	1111001—5
Reed	0001110—3	Stark	1101111—6
Parker	0011010—3	Houghton	1111001—5
Tinker	1111001—5	Snow	1111010—5
W D Gilman	1101101—5	Field	0111100—4
Warren	0110011—4	Williams	1010001—3
Decker	1110011—5	F Chester	0010101—3
Cooper	1101111—6	Kirkwood	1101111—6
White	0101011—4	Braley	1110101—5
Sampson	0111111—6	J Nichols	1110101—4
Clark	1111111—7	C B Holden	1011110—5

Winners—Perry and Gerrish first, Cooper, Stark and Kirkwood second, Decker, Snow and Holden third, Nichols fourth.

Sixth sweep, 5 single birds, from 5 traps, 18yds. rise:

Gerrish	11001—3	Eager	01111—4
DeRochmont	11010—3	Smith	00101—2
Tinker	00000—0	Decker	00011—2
Parker	11110—4	Perry	11111—5
Stark	11010—3	Sampson	11000—2
Gilman	00101—2	Cooper	11100—3
Snow	00111—3	Reed	11010—3
Schaefer	00110—2	Cutting	00000—0
Houghton	10111—4	Warren	10100—2
Clark	01111—4	Field	11001—3
Williams	10000—1	Braley	00110—2
Law	11001—3	Steele	10001—2
Johnson	01000—1	White	01111—4

Perry first, Houghton and Eager second, Law and DeRochmont third, Smith and Braley fourth.

Seventh shoot, 3-man team, badge match:

Massachusetts Rifle Association, First Team.

	5 Traps.	Doubles.	Single Trap.
DeRochmont	1 0 1 1 1	10 11 11	1111111111—19
Law	0 1 1 1 1	11 11 01	1111011110—17
Schaefer	1 1 0 1 1	10 01 11	1111110111—17—53

Worcester Sportsman's Club, First Team.

Eager	1 0 1 1 0	01 11 10	1011110111—15
Holden	1 1 0 1 1	11 11 11	0111111101—18
Perry	1 1 0 1 1	01 10 11	1111100111—16—49

Exeter Sportsman's Club.

Gerrish	1 1 1 1 0	11 11 10	1100101011—15
Stark	0 1 1 0 1	11 11 11	1000111111—16
Cooper	1 1 1 0 0	10 11 01	0111001011—13—44

Four teams additional shot, ranging from 44 to 35. Winners thus: Massachusetts Rifle Association first, Worcester second, Exeter team third.

Eighth shoot, 7 single birds, 18yds. rise:

Eager	0111111—6	DeRochmont	1111111—7
Gerrish	1111111—7	Law	1111110—6
Williams	0011101—4	Smith	0111110—5
Tinker	1001111—5	Schaefer	1001111—5
Clark	1100111—5	Cutting	0011110—4
Perry	1111011—6	Snow	1111010—5
Sampson	1101110—5	Houghton	0110110—4
Warren	1100101—4	Decker	1111111—7
White	1101110—5	Field	0011001—3
Stark	1101111—6	Parker	0010100—2
Cooper	1001110—4	Nichols	0010000—1
Reed	0010100—2	Holden	1010000—2

Winners—Gerrish, Decker and DeRochmont first, Eager second, Sampson and White third, Cooper and Houghton fourth.

Ninth shot, 5 single birds, 18yds. rise:

Kirkwood	10111—4	White	11111—5
Gerrish	10010—2	Clark	10111—4
W Prentiss	00111—3	DeRochmont	11111—5
Williams	11100—3	Decker	01101—3
Smith	11111—5	Snow	01011—3
Parker	11011—5	Schaefer	10111—4
Steele	11011—4	Braley	00110—2
Perry	01011—3	Cooper	11111—5
Reed	11011—4	Warren	11111—5
Sampson	11011—4	Cutting	11111—5
Stark	11111—5	Field	11111—5
Eager	10111—4	Law	11001—3
Tinker	01111—4		
Holden	11010—3		

Winners—Parker and White first, Steele and Eager second, Holden and Decker third, Gerrish and Braley fourth.

Tenth shoot, 3 pair doubles, 15yds. rise:

Perry	11 10 11—5	Snow	01 01 00—2
DeRochmont	11 11 10—5	Eager	11 11 01—5
Parker	01 11 11—5	Sampson	10 11 01—4
Cooper	11 01 10—4	Stark	11 11 11—5
Gerrish	10 11 01—4	Clark	00 11 01—3
Reed	10 00 10—2	Warren	11 00 11—4
Decker	00 11 01—3	Nichols	10 11 01—4
Law	01 01 10—3	White	11 10 00—3
Prentiss	01 01 11—4	Schaefer	11 10 00—3
Tinker	01 01 10—3		

Winners—DeRochmont first, Prentiss second, Decker and White third, Reed and Snow fourth.

Eleventh shoot, 5 single birds from five traps, 18yds. rise:

Decker	11111—5	Williams	01000—1
Sampson	11110—4	Warren	10110—3
Houghton	11100—3	Cooper	10110—3
Stark	11011—4	DeRochmont	10111—4
Kirkwood	11110—4	Reed	10100—2
Parker	10000—1	Law	11010—3
Steele	10000—1	Gerrish	11011—4
Eager	00010—1	J Lawson	00010—1
Snow	01000—1	Smith	11101—4
L S Bailey	00010—1	Cutting	01001—3
Perry	00111—3	Nichols	10111—4
Clark	11111—5	White	11011—4
Field	01011—3	Prentice	00010—1

Decker and Clark first, Sampson second, Perry third, Reed fourth.

Twelfth shoot, 3 pair doubles, 15yds. rise:

Eager	01 11 11—5	Warren	00 01 01—2
Parker	01 01 11—4	Bailey	10 00 11—3
Perry	11 10 11—5	Decker	10 11 00—3
DeRochmont	11 10 10—4	Stark	11 11 11—6
Law	11 01 01—4	Cooper	01 10 11—4
Prentiss	11 10 10—4	Field	10 11 10—4
Snow	00 11 01—3	Nichols	11 01 00—3
Gerrish	10 10 11—4	White	11 11 10—5

Stark first, Perry second, DeRochmont, Law and Prentiss third, Snow fourth.

Thirteenth shoot, 7 single birds, 18yds. rise:

Perry	1101100—4	White	1100001—3
Eager	0011111—5	Field	1010000—2
Stark	1101110—5	Reed	1001000—2
DeRochmont	1111111—7	Clark	1001111—5
Cooper	1111111—7	Houghton	1111111—7
Sampson	1111111—7	Warren	0001100—2
Kirkwood	1111001—5	Decker	1101111—6
Parker	1011101—5	Law	1011111—6
Gerrish	0101111—5		

Winners—DeRochmont, Cooper, Sampson and Houghton first, Decker and Law second, Stark and Clark third, Perry fourth.

Fourteenth shoot, 5 single birds, 18yds. rise:

Kirkwood	00110—2	Cooper	10111—4
Decker	11111—5	Field	01001—2
Law	01111—4	Parker	01010—2
Cutting	01100—2	Reed	10000—1
DeRochmont	01111—4	Clark	11011—4
Snow	10111—4	Nichols	00001—1
Stark	11011—4	Steele	11111—5
Eager	11101—4		

Decker and Steele first, Clark and Eager second, Parker third, Nichols fourth.

NEWTON, Mass., April 10.—Glass ball and clay-bird shoot. The Newton Rifle Association and Newton Center Gun Club enjoyed friendly matches, which resulted in victory for the Newtons in both. The scores follow:

Newton Rifle Association Team.

	Clay-Pigeons.	Glass Balls.
Pratt	0111101110—7	1111111111—10
Edmunds	1010111111—8	1101111111— 9
Linder	1111001000—4	1111110110— 8
Cole	0111100000—4	0111111100— 7
Hills	1110011111—8—32	1011110111— 8—42

Newton Center Club Team.

	Clay-Pigeons.	Glass Balls.
Brooks	1110111011—8	1110001111—7
Kidder	1100001100—5	1010111011—7
Gilmore	0000011001—3	0111111001—6
Steveps	0010000000—1	1111110101—8
Fowle	0111100000—4—21	1111101001—7—37

It is hoped a return match will be shot soon.—T. A.

PROVIDENCE, R. I., April 3.—At the regular weekly shoot of the Narragansett Gun Club, for the State Badge, the following scores were made out of a possible 25: W. H. Sheldon 22, E. W. Tinker 22, E. S. Luther 20, E. H. Roberts 20, C. B. Potter 18, H. D. Mathewson 18, G. W. Cary 18, H. L. Palmer 18, L. M. Eddy 16, F. O. Wehoskey 16, C. F. Baldwin 15, F. E. Tingley 13, C. M. Sheldon 13, C. C. Gray 12, G. F. Butts 12. Tie between Tinker and Sheldon: Tinker 5, Sheldon 5. Second tie: Tinker 4, Sheldon 4. Third tie: Tinker 1, Sheldon 2. W. H. Sheldon wins badge second time.

Regular shoot of Narragansett Gun Club for state badge, 25 clay-pigeons, 15yds., 5 traps: G. F. Butts 23, W. H. Sheldon 20, W. L. Palmer 20, E. W. Tinker 19, E. H. Roberts 18, C. C. Gray 14, E. S. Luther 22, F. E. Tingley 23, C. B. Potter 20, H. D. Mathewson 18, G. W. Cary 19. G. F. Butts wins badge first time. Sweepstakes same day: First sweep, W. H. Sheldon first, Luther and Roberts second, E. W. Tinker third and L. M. Eddy fourth. Second sweep, E. W. Tinker first, Palmer second, W. H. Sheldon third and Luther and Roberts fourth. —W. H. SHELDON.

WALLINGFORD, Conn., April 9.—Match for State club medal, teams of four men, 25 clay-pigeons each, or 100 each team: New Haven (No. 1), 69; New Haven (No. 2), 55; Wallingford, 66; Meriden, 65; Bridgeport, 60; Milford, 52. Match for individual medal, 50 clay-pigeons each: Goodrich (of Wallingford) 41, Folsom 39, Baker 39, Longdon 38, Nichols 35, Brogden 35, Ives 34, Spencer 33, Fowler 27, Talbot 27, Gard 24, Tousey, Armstrong and Smith withdrew. Next shoot for State medal, New Haven, second Wednesday in May.

CORNELL UNIVERSITY.—Ithaca, N. Y., April 15.—The Cornell University Gun Club is now in a flourishing condition. It was organized in the fall of 1883, and has now about twenty members, of whom several are very good shots. The grounds of the club are located on the lake shore, and we shoot over the water. At a meeting held April 10 the following officers were elected: President, F. G. Scofield, '84; Vice-President, H. C. Taylor, '86; Secretary and Treasurer, A. C. Cogswell, '87. At the regular shoot on Saturday following, the gold medal was won by A. S. White, 13 out of 14. We have a strong trap, with frequently a heavy breeze, but as yet the medal has never been won by a smaller score than 12 out of 15. The gun is becoming popular in other colleges now, and it would be pleasant to have a few intercollegiate contests.—A. C. C.

WELLINGTON, Mass., April 19.—About fifty shooters gathered at the Malden Gun Club's grounds this afternoon, and participated in the various events of the day, with the following results:

Cup match—Adams 7, Goodnow 7, Sawyer 6, Wemyss 5, Buffum 4, Hopkins 4.

First event, five birds—Scott first, Brown second.

Second event, five birds—Brown and Hopkins divided first, Scott and Steele divided second.

Third event, five birds—Pratt first, Chambers and Goodnow divided second. Sawyer and Steele divided third, Sanborn and Brown divided fourth.

Fourth event, five birds—Goodnow first, Hopkins second, Pratt and Adams divided third, Saunders and Scott divided fourth.

Fifth event, five birds—Chambers first, Pratt second, Sawyer and Goodnow divided third, Saunders and Harrold divided fourth.

Sixth event—Saunders first, Chambers second, Goodnow and Brown divided third.

Seventh event, five birds—Brown first, Hopkins second, Scott third.

Eighth event, five birds—Goodnow first, Sawyer second, Hopkins third.

Ninth event, five balls—Sawyer and Hopkins divided first, Hunter and Brown divided second, Pratt and Adams divided third.

Tenth event, five birds—Adams first, Brown and Goodnow divided second, Saunders third.

Eleventh event, five birds—Saunders first, Hopkins second, Brown third.

Twelfth event, five birds—Sawyer first, Hopkins and Brown second, Hunter third.

SOUTHBRIDGE, Mass., April 16—The Southbridge Rod and Gun Club have recently held their annual shoot, with the following results:

	Balls.	Pigeons.
Ellis	0111111110—8	1111100111—8
Campbell	1110001111—7	1110111011—8
Marble	1011011111—8	1111010110—7
Bradford	1101011010—6	1111100111—8
Pocci	0011011111—7	1100111101—7
Phillips	1011110111—8	1010010011—5
Howe	1110101000—5	0011101111—7
Williams	0111010011—6	1110110001—6
Harrington	1010110011—6	1011000110—5
Brown	1011000011—5	0100011010—4
Metcalf	0000011101—4	0011001101—5

The following is the result of the shooting to settle ties:

Campbell	1 1 1 0 0—3	0 1—1
Marble	0 1 1 0 1—3	1 1—2
Brown	0 0 0 1 1—2	1
Metcalf	1 0 1 0 0—2	0

Sweepstakes: First, 7 balls, Marble first, Howe second, Metcalf third, Phillips fourth. Second, 7 pigeons: Pocci first, Phillips and Ellis divide second, Brown third, Howe fourth. Third, 5 balls: Harrington first, Phillips and Bradford second, Howe third, Pocci fourth. Fourth, 2-men team, 5 balls per man: Howe and Harrington first, Williams and Phillips second.

WEBSTER, Mass., April 18.—The officers of the Rod and Gun Club for the ensuing year are: President, Henry J. Bates; Vice-President and Secretary, Alexander Graham; Treasurer, John F. Hinds. The club have a shoot on Memorial Day, arrangements to be completed next week.

CLAY-PIGEON PATENTS.—We have received from a Tennessee correspondent a communication in reference to the clay-pigeon patents. The writer assumes that the original patent does not cover the manufacture of the pigeon, as it is now made, and gives it as his opinion that an imitation of the device would not be held by the courts to be an infringement. We judge that the writer's examination of the Ligowsky patents has been incomplete; and a reference to the patents issued since the one he quotes will probably show that all the changes in the pigeon are covered. The numbers are (original patent) No. 231,919, No. 246,401, No. 256,227 (re-issue), No. 10,122, No. 248,302, and four more are pending. Those named relate to the target. No. 246,401 relates to the process by which the disc is made. This, we believe, the Ligowsky Company consider the most valuable of their patents, for by this process clay-pigeons (and other pottery) can be made cheaper than by any other method now in use. This has been tested by a Canadian firm, who some time ago began the manufacture of clay-pigeons, and found that even with their import duty of 25 per cent., they could buy of the American manufacturers cheaper than they could make the article themselves.

THE CLAY-PIGEON DIAMOND PIN, which is to be given at the Chicago tournament, is now on exhibition at the manufacturers', Messrs. Tiffany & Co., this city.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

MR. E. HOUGH will oblige us by sending his address to this office.

P. A. H., Paterson, N. J.—The open brook trout season in New Jersey is March 1—Oct. 1. No law on pickerel.

J. P. H., St. Martinsville, La.—You may procure a wire scratch brush from any one of the firms dealing in firearms in this city.

H. B. O., Minnesota.—The rifle will be described in the series of illustrated articles now in course of publication in our rifle columns.

W. E. H., Fort A. D. Russel, Wy.—1. The rubber dealers furnish a cement for repairing rubber goods. 2. To glue cloth to metal use stratena.

F. A. H., Westminster, Vt.—We do not know where the traps are made, but you can procure them by writing to any of the dealers in firearms.

J. H. B., Boston.—Is there any book or directory published which gives the names and addresses of all the rifle clubs in the country; also the officers of each club? Ans. No.

E. H. C., New Orleans.—How can I whiten the feathers of pigeons for mounting? Ans. Suspend the skins in a barrel, set bottom up, and burn some brimstone under it. Let them smoke for a day or two.

IDLEWILD, Newcastle, Del.—1. We know of no firm making a specialty of sporting pictures, except Currier & Ives, of New York. 2. Try the Lyman sight. 3. Apply to the National Rifle Association, New York.

B. W. S., Detroit, Mich.—The English setter generally arrives at maturity when about a year and a half old. Some of them develop earlier than this, and some are not full grown until two or two and a half years old.

READER.—Please state where I would be likely to find good bass fishing in New York State. Would I be likely to find good fishing and camping grounds on either Cayuga or Seneca Lake? Ans. The bass fishing on Hemlock Lake is probably as good as any in Western New York. You can find good camping grounds there. There are bass in Cayuga, and also other good fishing, but we do not think that Seneca Lake is as good. We should go to Hemlock, Honeoye, Canadice, or to Canandaigua Lake in preference to Seneca.

A. M. B.—Ordinary paint, mixed with linseed oil and turpentine, will answer for fresh water. For salt water there are a number of anti-fouling compositions to be had of ship chandlers in all seaport towns. They are all applied with an ordinary paint brush.

J. C. C., Charlotte Harbor, Fla.—Is there another name for the poisonous lizard called *Heloderma?* What is the length and color of the lizard, and where is it found? Ans. The *Heloderma suspectum*, or Gila monster. Sometimes four or five feet in length. Found in the Southwest.

W. H. K., Philadelphia.—There are deer and partridge in the Bushkill (Pa.) region, with many excellent trout streams, or streams that were formerly good for fishing. The inclosure to which you refer is probably that of the Blooming Grove Park, which is some distance from Bushkill.

PITTICUS.—Where can I go to fish near New York and return the same day, and what fish can I catch? Ans. Take ferry to Staten Island or go to Gravesend Bay and catch striped bass, weakfish, etc., in season. For fresh water try Lake Ronkonkoma for black bass, or go to Croton Lake.

REMUS, Rochester, N. Y.—I forward you a tree toad, which I have caught in this vicinity. Please give me some information about it. Will it develop into any other form? Ans. The specimen is one of the little "peepers" so often heard in early spring in wet places. It has attained its full development and will change no more. Your specimen appears to be *Chorophilus triseriatus*. It belongs to the family *Hylidæ*, or tree frogs.

W. A. W., Virginia.—The compilation entitled "Frank Forester's Fugitive Sporting Sketches" contains the following papers: "The Game of North America (Woodcock and Quail)," "Among the Mountains," "A Blaze at Barnegat," "The American Bittern," "The Death of the Stag," "The Red Fox," "A Trip to Chateau Reiher, or Snipe Shooting on the St. Lawrence," "Spring Snipe—a Rambling Paper," "Domestication of Game Birds."

M. H. P.—1. Where can we find good lines for a cruising sneakbox for a crew of two? 2. We have a light practice boat which we wish to provide with seats, rowlocks and oars; where can we obtain correct information as to the relative positions and dimensions of the same? Ans. 1. We will publish the lines later on. Do not know where you can find them. 2. In ordinary rowboats the thwarts are placed 7½in. below the gunwale, and the rowlocks about 9in. from after edge of thwart. The thwarts should be placed so that the boat will trim with one, two, or more in her, allowing sufficient room between them for the legs when extended.

Yachting.

FIXTURES.

May 18.—Eclipse Y. C., Opening Cruise.
May 24.—Oswego Y. C., Opening Cruise.
May 24.—Boston Y. C., Opening Cruise.
May 30.—Knickerbocker Y. C., Spring Matches.
May 30.—Atlantic Y. C., Opening Cruise.
May 30.—Newark Y. C., Spring Match.
May 30.—South Boston Y. C., Spring Match.
May 30.—City Point Mosquito Fleet, 18 and 15ft. boats.
May 30.—New Haven Y. C., Opening Cruise.
May 31.—Boston Y.C., First Match, Connor and Commodore's cups.
June 9.—Portland Y. C., Challenge Cup.
June 10.—Atlantic Y. C., Annual Match.
June 11.—Hudson River Y. C., Annual Match.
June 12.—New York Y. C., Annual Matches.
June 14.—Seawanhaka Corinthian Y. C., Annual Matches.
June 16.—East River Y. C., Annual Matches.
June 16.—Newark Y. C., Open Match.
June 19.—New Jersey Y. C., Annual Match.
June 21.—Hull Y. C., Pennant Match.
June 23.—Newark Y. C., Open Matches.
June 24.—New Haven Y. C., Spring Match.
June 28.—Boston Y. C., Ladies' Day.
June 30.—Manhattan Y. C., Annual Cruise.
June 30.—Eclipse Y. C., Spring Match.
July 4.—Larchmont Y. C., Annual Open Matches.
July 4.—Hull Y. C., Review and Cruise, five days.
July 9.—Beverly Y. C., Marblehead, First Championship.
July 12.—Boston Y. C., Second Club Match.
July 12.—Hull Y. C., First Club Match.
July 19.—Hull Y. C., Ladies' Day.
July 26.—Beverly Y. C., Nahant, Second Championship.
July 30.—Oswego Y. C., Open Matches.
Aug. 2.—Kingston, Ont., Open Matches.
Aug. 2.—Hull Y. C., First Championship Match.
Aug. 7.—Bay of Quinte Y. C., Open Matches.
Aug. 9.—Boston Y. C., Open Matches, all clubs.
Aug. 16.—Hull Y. C., Annual Open Matches.
Aug. 16.—Beverly Y. C., Swampscott, Third Championship.
Aug. 23.—Beverly Y. C., Marblehead, Open Matches.
Aug. 23.—Boston Y. C., Third Club Match.
Aug. 30.—Hull Y. C., Second Championship Match.
Sept. 6—Hull Y. C., Third Championship Match.
Sept. 6.—Beverly Y. C., Marblehead, Special Matches.
Sept. 13.—Boston Y. C., Second Ladies' Day.

THE HAND OF THE BOURBONS.

A MOTION was made and promptly sat down upon recently in one of the principal yacht clubs of New York to have the lines of winning yachts taken off and kept on file as club property to further interest and instruction. A similar rule is already enforced in another club, and the parent institution insists upon the deposit of every yacht's model in the club before granting permission to race. The reasons, if they can be dignified as such, why the motion in this particular club failed to pass, are as thoroughly stupid and benighted as other customs for which the Bourbon and retrograde element in yachting affairs is responsible. It was argued that builders spent a life time in perfecting their models, and their success should not be paraded for the profit of others. In other words, the less we know and the less chance we are given to find out, so much the better. Hide your light, little penny dips at that, under a thimble, lest some one might catch a stray ray from the feeble glim of bungling, blundering stumbling upon the truths a yacht club is supposed to organize to further in accord with the terms of its charter. The ridiculous aspect of this opposition from the Bourbons is truly laughable. Nine yachts out of every ten to be seen off Bay Ridge are more or less hideous, misshapen boxes and traps no knowing man would deign to look at twice, and the single exception in the ten is scarce equal to mediocrity in most cases. The builders and owners of those yachts could not reproduce the same vessels themselves if they tried. They are clumsily set up from rough, unfair whittled chunks not within many inches of the boats supposed to be copies of the elegant kindling wood furnished the owners to play with, and upon which are based the sapient opinions of people who have never been off soundings, who would not bet heavily upon the tack they are sailing, and to whom a grommet or an Irish splice are conundrums unfathomed, and accurate knowledge of the principles of construction in theory or practice as much of a mystery as the proper keyhole to a belated citizen among a row of tenement houses. To throw safeguards around the brains the majority of yachts represent, lest some deluded subject try to steal their horrible forms and execrable sail plans, is carrying the selfishness of "protection" to a preposterous exaggeration. The plans of the famous schooner America have been published broadcast the world over. How many copies of the America have been attempted in this country or in Europe during the quarter century those plans have been accessible to the public? And the same can be said of the Sappho, the Mischief, and countless other vessels. If these, with their international reputations, have never been filched or even approximated in a single case, what are the chances of any one's stealing the travesties and dugouts which concentrate about Bay Ridge? The mere vanity of the supposition is grotesque. Is there a man living who would copy the Grayling, the Comet, the Gracie, or such an arch trap as the Crocodile, needing only a breeze and inadvertence at the wheel to tumble over, fast as such boats have shown themselves to be in smooth water? Was not the notable Columbia radically altered upon recent rebuilding in spite of her record? Are we not all learning every day, that any one should care to perpetuate the mistakes and follies of the past? Does any one think of duplicating the Gleam, with near one hundred and fifty per cent. of her loadline squared in sail? Has the owner of the Crocodile, who built several yachts in succession, all fast in moderate weather, stuck to the same set of lines all through? Was any one known to build an exact reproduction of any yacht? Least of all, any of the great mass of tubs and machines which were once so highly adored and are now not quite so highly adored any longer? Protect the builders indeed! One would think most of those interested scarce displayed enough talent to go round in the shape of a little free advertising. The squelching of this motion is a measure of the Bourbons and little bits of suburban minds which can be stowed by the score in a peanut shell. Does a club which refuses to aid and promote knowledge in the matter of yacht building live up to the terms of its charter, or is it not a fit concern for the repeal of its corporate existence? A policy of suppression in these days is sure to be rewarded with internal dry rot in the future. It is on a par with the obstruction to reform in measurement rules, for fear the ancient ideas may have to strike colors to the new. It is a repetition of that perverse want of common sense which proclaims two feet of overhang useful only as a mainsheet outrigger and measuring a little more than a hatful, the equivalent of one foot of body with half a ton of displacement and three feet of freeboard. It is natural enough to find two such bits of choice Bourbon legislation sailing hand in hand under the same colors.

GREAT BATTLES PROSPECTIVE.

THE coming season gives promise of being the hottest on record. Innumerable cups are waiting to be captured and ocean races will form the feature in the many events announced. More than ever before will popular interest be riveted upon the great fight between cutter and sloop, for preparations are being made for contests which are destined to have a vast influence upon the course of the sport and yacht construction in the future. The stately Bedouin, who vanquished the redoubtable Gracie last fall, has been hauled out at Newburgh and has had her lead keel rounded down in the latest fashion. She is to come out with four feet more hoist and tackle her adversaries for once without the handicap of being under-rigged. She proved herself good company for the best last year. Who will say that, with a rig she can easily carry, her share of the mugs will not be lifted this summer from the light displacement of old? Wenonah, the most precious pearl of naval construction in America to-day, has had ten tons more lead bolted up below, so she can swing her big rig to best advantage, and as she is already known as a flyer of the first water, with four firsts out of five matches sailed last season, we look for a goodly string of winning flags from her masthead by the time the ice again drives her into winter quarters. These two clippers, with the new Ileen thrown in as a dark horsee, will make up a trio destined to "create revolutions" in our yacht-building history. It will be a queer day, indeed, when one of them does not do the piloting for the fleet.

Then there are great hopes for Oriva, in the hands of an adept Corinthian, after the splendid manner in which she settled Vixen, in the Seawanhaka match last fall. Maggie, the nobby little fighting cock of the East, has also been receiving attention in the way of more lead on the keel, and we learn is likewise to bend a bigger fit of dimity. This cutter is a notable pincher on a turn up, and was good enough for all hands last year, excepting the sloop Vixen. If the improvements turn out as well as hoped, she may yet be able to score from the fastest sloop ever launched or likely to be launched this side of the Atlantic. She failed to foot with Vixen, but with more rig she is certain to do better. How much of course remains to be seen. Then we have another dark horse in Isis, Mr. Canfield's new cutter, and we learn that two ten-ton clippers are to be shipped to this country from England in the spring. Recent letters from abroad likewise have it that common rumor about Liverpool has picked out a forty-ton cutter to pay us a visit of a friendly character, to try on our skimming dishes, such as are left of that dying tribe of smooth-water drifters. Add to this the début of the numerous small fleet of new cutters, the Merlin, the Rajah, the Rondina, the imported Daisy, and lots of smaller shavers, and it can easily be seen that the history of the season will pivot upon the performance of the cutters. That in view of the past, now that they will get something like a fair show, the records will wind up with the cutters well up to the top of the tree, we venture in prognostication of the fighting soon to be started, and that the winter ahead will see further additions to the ever growing family of cutters in our waters, we also consider as good as a foregone conclusion.

AN OLD HAND ON DECK.

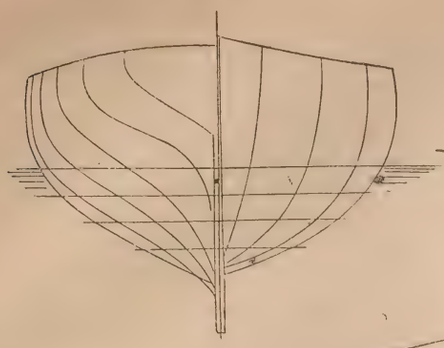
Editor Forest and Stream:

It is with great reluctance I write you upon the subject of yachts and yachting in this great country of ours. While I am to the manor born, an American, yet I cannot help but see some good in my fellow men in other parts of the world, I, for one at least, feel as if there was something yet to learn from them. I have had some experience, both as a close observer of the building as well as modeling of yachts, for a number of years, dating back to the time when Commodore Stevens proudly walked the deck of the then wonder of New York, the old sloop Maria, with her great hollow boom, and was also acquainted with that genius Steers, who first carried war into the British Lion's kingdom with the grand old America. Scarcely has there been a yacht of any note, but I have seen started from keel up until proudly floated upon the bosom of the waters, the admiration and hope of thousands. I have sat down in the ship yards and chatted both with builders, modellers and owners, and last but not least, have read with great interest the criticisms of our daily journals, until I arrive at this late day and for the first time in the history of yachting, find one journal which has the manliness to frankly tell us that we were going to sleep while the wagon wheel ran in the same old rut. All hail to FOREST AND STREAM, which first gave us some hints that we were behind the age. Until it sprang into life, we never saw a cutter drawing like those so well portrayed in your entertaining journal. Let us look at the past and then at the present, and see whether any great improvement has been made. It has long been asserted that the American yacht was a dish bottom. Now I hold to the contrary. There are men, and the writer was one of them, who have for the last thirty years argued in their private capacity against the shoal flat boat as a seagoing pleasure craft, and contended that beam without depth was faulty, and likewise depth without form. At this day I still so contend. The great trouble is, I think, first, that we are really infants in the business as yet; second, that nine out of ten who either buy or build know nothing at all, and do not realize the purpose they intend their yacht for. The first word to the builder is, "I want a yacht to go," and the next, "I do not want her to cost too much." And what is the natural result? A lot of slip-shod built craft, with a board fence for bulwarks and many other parts of the mechanical work in keeping. We want a vessel built. We first consult some of the so-called naval architects, and they make a lot of pretty lines upon paper, beautifully showing great qualities and ample room. Now for a builder, or more properly, contractor. He lumps the job for so much. Of course he must have his profits, and he has taken the work so low that he must sublet the getting out of the frame. The planking is also let out, as well as the ceiling and joiner work, and the fastening, boring, and treenailing, which are all sublet. Now how are you going to get a first-class job under such circumstances? Last, but not least, is the caulking. It is done by the job. Not that all builders do this, but the greater part, and it can be proven. The result is, as some of our wealthy yacht owners can testify, in one year the yacht must be hauled out in the winter, and we read in the papers that Mr. Jenkins has his yacht on Mr. Pinkey's ways undergoing extensive repairs for the next season—another bill of $5,000 or more; and so it goes, until Mr. Ignoramus is sick, and sells out and goes out of yachting. As the Frenchman would say, it is "one pig humbug." We look with pride upon our yachts upon a calm June regatta day as a sight to be proud of, yet how many do you find outside of those entered for the great cups who dare poke their noses outside of the Hook if it should happen to blow a single reef breeze? Look at the record of the regatta of '82, when the Montauk made her maiden and successful race. A nice full-sail breeze and only one schooner yacht at the lightship to see them turn, and large steam yachts making one dive to see how deep it was, and then turn back for the sheltered waters of the Horseshoe and call it yachting. Some of the large schooners had great trouble to get there with foresail stowed, and diving out of sight. Now, what is the trouble? There must be faulty construction and oversparring. Think of it, ye bold yachtsmen, a little 40ft. clam sloop, coming up the beach in the month of March, decks to, with perfect safety, and not a yacht of her size dare poke her nose outside for Hampton Roads. Yet we read and see continually of our cousins across the water cruising up the Mediterranean or up the coast of Norway in a boat of similar size. I am not going to condemn our yachts by any means as being all wrong. We have some good boats which it will be hard to beat, inside or out, but you can almost count them on your fingers' ends. Go on with your good work is my advice to FOREST AND STREAM. What we need are safe, able and comfortable boats, which, if it comes on to blow, can stay there, and not have to run for the first harbor that is close by.

As to model, at another time I will intrude upon your space, and have something to say. EZEKIEL.

OPINIONS AGAINST FACTS.

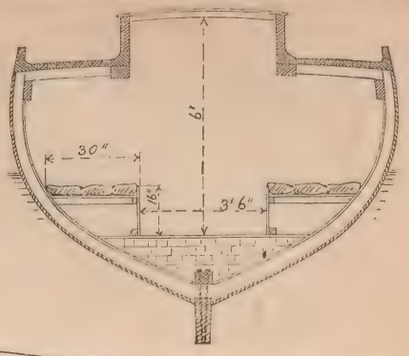
ADVICES from England inform us that during his recent visit to Liverpool Mr. Busk, owner of the Mischief, "ridiculed the idea of cutters ever becoming popular in America." There are in New York and Boston just three large racing sloops representing the extent to which such boats have become popular during the development of yachting since the war which closed twenty years ago. During the past three years only a like number of large cutters have been built, so that at this day they enjoy at least equal recognition from the public. When Mr. Busk sails East next season and looks about at any general meeting of the fleet he will discover cutters in every direction, more than he will be able to count. If Mr. Busk had read the papers he would also have known that over twenty cutters have been constructed this winter. If he were as well situated as we are to judge of the public pulse, he would know that hundreds of people

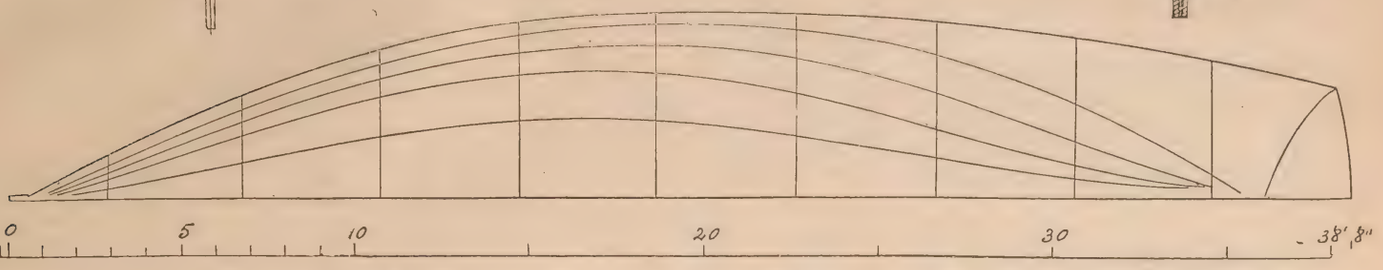


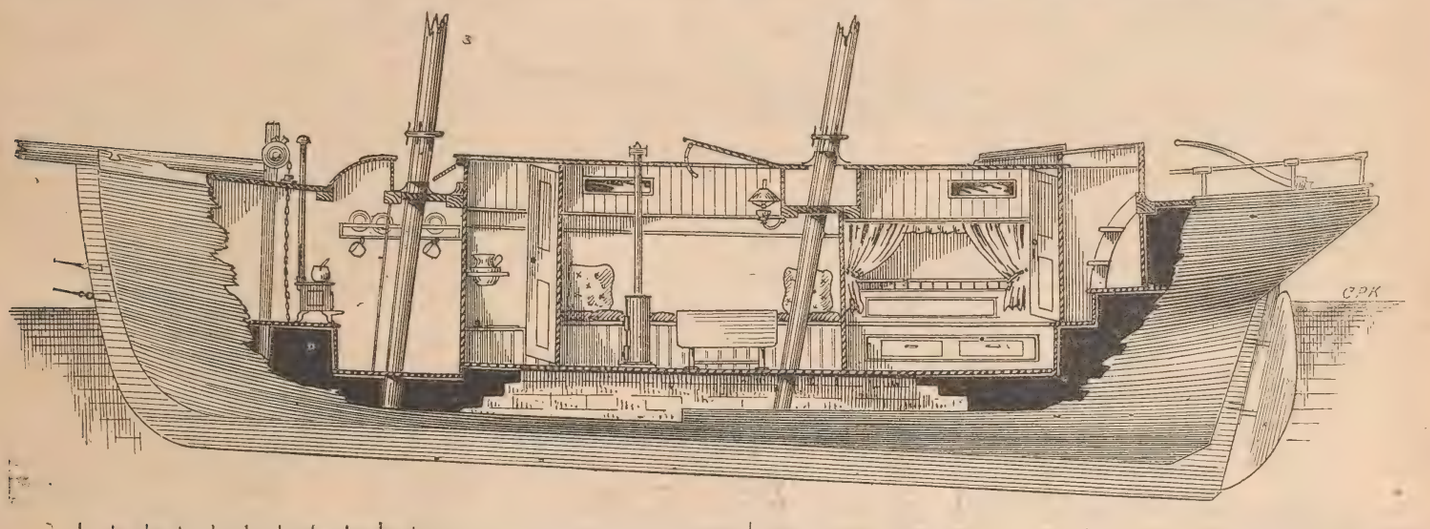
GAETINA

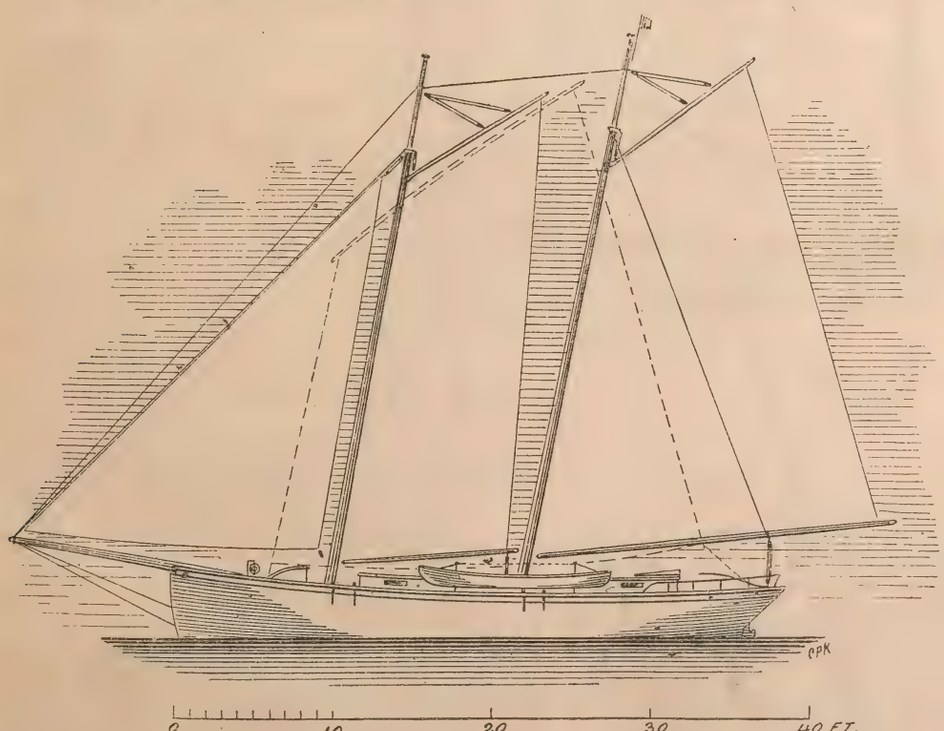
—SCHOONER YACHT—

35 FEET L.W.L.









A CRUISING SCHOONER.

LAST spring Mr. W. O'Sullivan Dimpfel, C. E., of Baltimore, built a small schooner on lines similar to those of the Penzance lugger for all-the-year cruising in Chesapeake Bay. After giving the yacht twelve months' trial her owner reports favorably concerning her behavior and general adaptability to his purpose. The Gaetina exhibits in her waterlines a close likeness to the Penzance fishing craft, but she was given 1ft. of extra depth to her benefit. She has been found quite fast in her own waters, very easy, dry and comfortable, with liberal arrangements below, as the illustrations indicate. With iron ballast stowed in blocks under the cabin floor and a pole mast rig she was also very economical in first cost. The sail plan shows a large lug on the fore in dotted lines. This sail the owner devised for light winds, and under this and jib she can be sailed with mainsail in the gaskets. The splicing of her rigging is "metallic" all through. For hard weather also a trysail and storm jib, which have both been brought into requisition in the lower half of the Chesapeake, which is more of a sea than a bay. The Gaetina is especially good in light winds and airs in spite of her draft and thirteen tons of displacement, much to the astonishment of local critics, who prophesied her failure on that account. Her owner often sails her singlehanded between Baltimore and his residence in the country, near the mouth of the Choptank, a distance of sixty miles.

While building, the old school critics foresaw the usual dire calamities. Could not sail because so deep. Would fall over. Slow in light winds "lugging" so much ballast, etc. She was something of a departure to Baltimore critics, though here we have got used to such depth long ago, and with the exception of the juvenile conceptions of some provencial lights, no one would take exception on the score of draft and weight. The accommodations include a small steerage with the companion aft, leading into an after state cabin 7ft. long with a berth on each side. The saloon is reached from this through doors, and is 9ft. long, with extra wide sofas of 30in., having 3ft. 6in. of floor between, and 6ft. under beams. Between cabin and forepeak are retiring room and panty. A hammock can be swung from foremast to the eyes for the paid hand, who has access to the deck by means of an iron ladder and quadrant hatch overhead. The chief elements are as follows:

Length over all	38ft. 8in.
Length on L.W.L.	35ft.
Beam extreme	11ft. 3in.
Draft at heel	6ft.
Least freeboard	2ft. 10in.
Displacement	13 short tons
Ballast	6 short tons
Area lower sails	950sq. ft.
Hoist of mainsail	25ft.
Hoist of foresail	24ft.
Mainboom	23ft.
Bowsprit outboard	10ft.

are anxious to own cutters as soon as an opportunity is presented to acquire such property. If he were to consult with builders or persons who keep posted he would learn that all the variations made upon the pristine sloop trap are in a direction which, step by step, is assimilating our fleet to the English cutters. If he were possessed of acute logical faculties he could draw the true conclusion that only time is required to pass through the period of transition and that there is a strong likelihood of the regular sloop disappearing altogether, and that, whether she be displaced by cutters of more beam than the latest English racers or whether in some instances we follow our cousins into the last inch of the extreme, is perfectly immaterial to the main issue on the question. Instead of its being "ridiculous" to look for popular approval of cutters in this country, it is extremely ridiculous for a gentleman like Mr. Busk to be ready with a sweeping opinion and at the same time perfectly oblivicus to plain facts. The cutter is already popular in America, witness the large fleet of such yachts built in three short years in spite of the most strenuous opposition from Bourbon sources. But, Mr. Busk owns a sloop, and his own little world and limited horizon is bounded by that sloop's rail, hence his mistaken notion that all the world is a counterpart of Mr. Busk. He is simply behind the times and chooses to ignore what is passing under his nose.

MOSQUITO Y. C.—Sailed first match last Saturday in Dorchester Bay. Wind from E.N.E., steady. Single gun, or rather whistle, start. Two classes, over and under 13ft. Judges, J. Winniatt, R. Wallace, John Page. Finish as under, Wizard, Lizzie, Clyde and Mascot were the winners:

FIRST CLASS.

	Length.	Actual.
Wizard, James Barton	13	4 21 15
Lizzie, H. McDonough	13.3	4 26 48
Vishnu, J. McIntyre	14	not taken.

SECOND CLASS.

Clyde, J. Page	12.9	4 23 5
Mascot, F. Whitman	12.2	4 25 4
Herald, C. Smith	12	4 27 28
Waif, R. B. Bibber	12.6	4 41 20
Egeria, W. Condon	11.9	not taken

SOUTH BOSTON Y. C.—Has issued circular governing the open races fixed for May 30. Start at 1:30 P. M. Classes 28 to 40ft., 22 to 28ft., 18 to 22ft., 15 to 18ft., and special keel class 15 to 22ft. Two prizes for boards and keels in first two classes, $25 and $10. Three prizes, $15, $10 and $5 in third and fourth, and $15 and $5 in special class. Two yachts to compete. Three for a second prize, four for a third prize. Courses, 14 miles first class, 9 miles second, third and special, and 6 miles for fourth class. No restrictions on sails. Measurement waterline plus one-third overhang. One hand per five feet length and fraction thereof. First and second will come into line between flags marked One. Third and special between flags marked Two. Fourth between flags marked Three. All start from single guns with no allowance for crossing. First and second class go at 2 P. M. gun. Third and special at gun 2:05 P. M., and fourth at 2:10 P. M. Entries to R. V. King, 43 Milk street, Boston, cloe 2 P. M., May 29. Regatta Committee, John Bertram, C. McKenna, H. J. McKee, F. G. Cooley, J. E. Chandler, R. V. King, S. A. Crowell. Judges, E. G. Robinson, W. Hutchinson, G. Conant, T. Christian, W. Morris.

REAL YACHTING.—Schooner Fortuna, from Hampton Roads last, has arrived in this harbor. Schooner Wanderer, Mr. Geo. W. Will, arrived off Hamilton, Bermuda, April 15, five days out from New Bedford. Had strong northwesterly weather, and was hove to twenty-five hours. Sailed April 17 for Norfolk.

"YACHT AND BOAT SAILING."

WE have received from Mr. Dixon Kemp the fourth edition of his popular and comprehensive work, "Yacht and Boat Sailing." Excellent as the third edition was, this new issue is a vast improvement even upon its predecessors. Not only has the book been materially enlarged, but the chapters added are of such an interesting nature that we reserve a more complete review till next week. It is enough at present to say that new topics have been introduced relating notably to small yachts and to steam yachting, while the branch of canoeing has likewise been more fully covered. Especially commendable are the numerous examples of the latest English practice in the designing of small craft from three to ten tons, and accommodation plans of steamers of various sizes. The book is not only of value to amateurs, but ought to be in the hands of all our builders and professional people, who can study its teeming pages with advantage to their interests. The book is excellent proof of the wide range of experiment and diversity with which English yachtsmen and constructors have made themselves familiar during recent years. There is scarcely a conceivable type of boat from one extreme to the other, keel or centerboard, which has not a fitting representation in this volume, which will be hailed by all hands as a prize precious to every yachting interest under the sun. Published by Horace Cox, *Field* office, London. Price in England, $5. To be ordered through newsdealers or news agents in this country.

SOME CORINTHIAN RULES.—The Cheshire Y. C., of England, has a rule prohibiting lead ballast to restrict the cost of small yachts. The club has 150 members devoted to small craft, the racing class being composed of 5-tonners. Six matches are arranged for the year, including a "Channel Race," distance 45 miles. Last year this big race was won by a 3½-ton yawl. That kind of thing looks like real business and not like the ten-mile smooth water play of our own small boats. Why should we not race yachts of 25 to 30ft. at sea just as well as large vessels? It would be ten times the sport and infinitely more instructive, useful and dignified in its results than the boyish make-believe in sheltered waters.

DETROIT NOTES.—Mr. E. B. Wendell has designed a new schooner for Mr. H. C. Hart to be used on the St. Clair flats. Length over all 68ft., on deck 66ft. 8in., on waterline 53ft., beam 20ft. 8in., draft 2ft. 10in. without board. Frame 5×7 at heel, and 5×5 at head. Keel 14×14, board 19ft. long, plank 2in. oak, sides tumble home 2½in. The same designer has also struck in a steam launch 35ft.×8ft. 6in., which is now in frame. A deep boat 18ft. long, sharp ends, has been added to the Detroit fleet. She is said to be very fast. The Jennie June will be lengthened and receive a 3-ton iron keel and hardwood cabin 13ft. long.

LAKE Y. R. A.—A gentleman writes that it was proposed to send a reply to the contemporary we took to task last week for its reflections upon the judgment of the Association in choosing sail area measurement, but that it was not deemed worth while to give that publication any attention, as it is without influence around the lakes. Before the Toronto meeting the subject of measurement had been thoroughly canvassed, and the Seawanhaka rule was found to be the fairest to all classes of boats; hence its adoption.

AMERICAN Y. C.—Has presented colors to the Arctic expedition vessels, Thetis and Bear, to be given up to club upon return. The following officers of the expedition have been elected honorary members: Commander W. S. Schley, Executive Lieutenant U. Sebree and Chief Engineer George W. Melville, of the Thetis; Lieutenant W. H. Emory and Executive Officer T. H. Crosby, of the Bear, and Commander S. W. Coffin and Executive Officer C. J. Badger, of the Alert.

BOSTON Y. C.—Has 200 members, 23 schooners, 20 sloops, 9 cutters, 12 cats, 12 steamers, 1 yawl. One of the schooners is Steers's old sloop Silvie, built in 1851, now belonging to Mr. C. C. Maubury. Silvie crossed to Cowes in the fifties, but was handily beaten by the old time cutters. Three cutters were added to the fleet this yaar, Saracen, Edna and Beetle, also Mr. Bryant's semi-cutter Thetis. Club owns property worth $15,000. Next meeting at club house April 30.

THE NEW HERA—Will spread 2,000sq. ft. in lower sails. Mast, 53ft. 6in., topmast 30ft., mainboom 38ft., maingaff said to be 27ft., bowsprit outboard 22ft. 6in., which is a whacking big rig on 36ft. loadline, but the boat is very powerful, and needs a lot to drive her.

SOUP ON THE TABLE.—At the last London Fisheries Exhibition, some crockery for yachts was displayed, having a rubber bead round the base to prevent slipping from the cabin table. This is a good idea where "swing tables" are not adopted.

SAN FRANCISCO Y. C.—Officers for the year: Commodore, C. H. Harrison, yawl Frolic; Vice-Commodore, W. Letts Oliver, yawl Emerald; Secretary, Chas. G. Yale; Measurer, Matthew Turner, shipbuilder; Treasurer, F. Bangs.

THE SAIL AREA RULE—Is steadily gaining ground abroad. The Royal Portsmouth Corinthian Y. C., the Corinthian Y. C. and the Junior Thames Y. C., will sail their amateur Channel matches under the new rule this season.

THE WHITE CAP.—Mr. Wesley Webber has finished a handsome and lifelike oil painting of the yawl White Cap, off Hull Gut, which Rear-Commodore David Hall Rice has presented to the Hull Y. C.

SARACEN.—Mr. Fowles's little cutter has been on a trial. Looks smart and sails well. Lawleys are putting up two steam launches, said to be for New York *Herald* shipping news service.

SOUTHWARK Y. C.—Officers for the year: Commodore, H. D. Baizley; Vice-Commodore, A. J. Fox; Rear-Commodore, J. Rutter; Secretary, Francis George; Treasurer, Isaac Sharp.

NEW CLUB.—Rockport, Cape Ann, is going to organize a new club. Seems to us consolidations among small clubs would be better policy. Little local enterprises never amount to much.

MOHEGAN.—Mr. Henry D. Burnham's new schooner was launched April 19, from Palmer's yard, Noank. Dimensions in our last issue. John Lyvere will skipper the new one.

FOR EXPORT.—Higgins & Gifford, of Gloucester, have turned out a batch of six deep sloops 31ft. long for the West Indies. They are 12ft. beam and 4½ft. depth of hold.

PETREL.—The lines of this cutter have been much admired by our English readers, but they object to the transom stern and would spin her out into an archboard finish.

SINGLEHANDERS IN FRANCE.—The Sport Nautique de l'Ouest has included in its programme some races for amateurs in singlehand yachts to be sailed in June.

CAPSIZED.—Friday last a sailboat was picked up in the Narrows bottom up. Three persons drowned: Samuel Hopkins, Stoddard Hopkins and Samuel West.

NEW CUTTER.—The 36ft. cutter built by the Lawleys during winter, has been bought by Mr. E. M. Tylor, Boston Y. C. and Hull Y. C.

NEW CUTTER.—The owner of the Hattie G., of Gloucester, is reported as intending to build a cutter, having sold his former boat.

THE NEW IDEA.—Sloop Vidette will rip out board and change to keel, with 600-pound iron shoe. She is 20ft. long.

IRON KEEL.—Miller, of City Point, has got out a keel sloop 26ft. 8in. long, with 1,000lbs. of iron on keel.

WANTED.—Address of Michael Horton, who is building a 25ft. cutter at East Boston.

NEW CUTTER.—Mr. A. P. Thayer, Hull Y. C., is building a 21ft. cutter in Boston.

Canoeing.

Secretaries of canoe clubs are requested to send to FOREST AND STREAM their addresses, with name, membership, signals, etc., of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to FOREST AND STREAM their addresses, with logs of cruises, maps, and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.

FIXTURES.

May 30 and 31.—Spring Meet at Newburg.
May 30 and 31.—Spring Meet on Connecticut River.

A NEW CANOE SAIL.

A SAIL has long been in demand which combines the short boom and reefing possibilities of the balance lug with the simplicity and short mast of the Lord Ross lateen. On any sail that could be

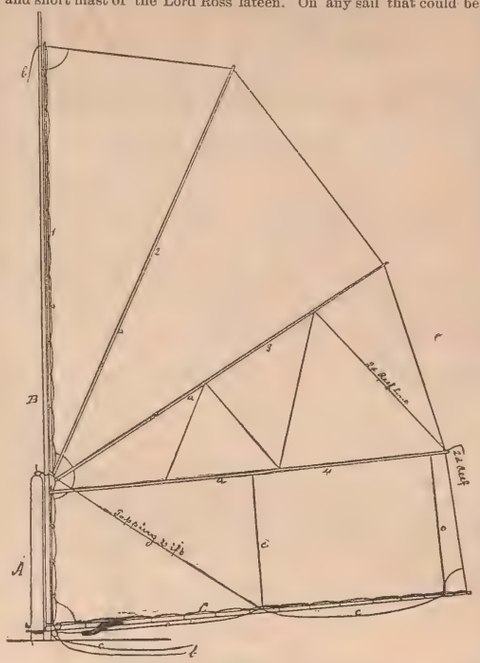


FIG. A.—"MOHICAN" SAIL.

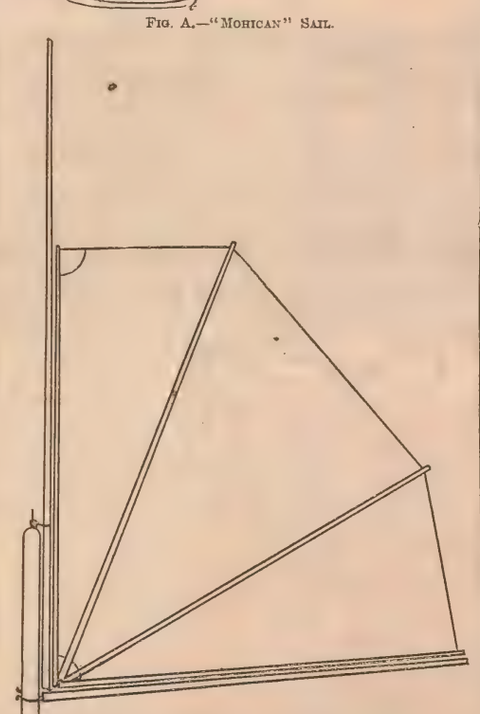


FIG. B.—SINGLE REEF.

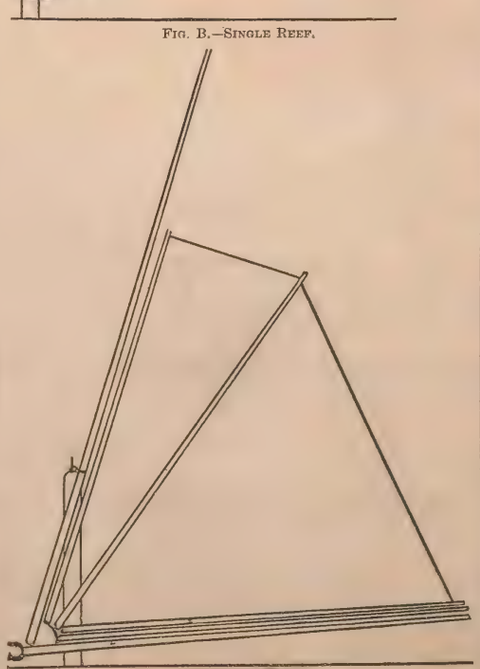


FIG. C.—DOUBLE REEF.

devised to lower or reef when the boom is out of reach of the hand, there must be, as a minimum, at least a halliard and reefing line to hand. Granting this point, I believe that the "Mohican" sail, submitted herewith, "fills the bill."

Fig. A represents the sail set. The short mast with pin, and the spars toggled together of the Ross lateen, are used with the addition of a jaw at the end of boom. The sail is set in the usual lateen manner, and the spar, B, becomes virtually a high mast and is treated as such. Four very light bamboo battens are put in the sail to increase the area, and the sail is attached to the spar, B, as far up as the ring, and from that point to a batten (*a*), and this batten is attached to B by halliard, *b*, which passes through block to foot and back to hand. The sail can be lowered by halliard (*b*) or taken off mast, A, in the usual manner of lateens.

The first reef is taken by letting go halliard and pulling in reef line (one being the continuation of the other) until batten touches boom. The Dot's reefing gear is used in this instance, and works admirably. The second reef is taken by unshipping boom C from mast A and hooking it again to A by the jaw. Batten No. 2 drops to No. 4, and the slack is taken up by reef line, as shown, and the sail becomes an ordinary lateen. The halliard and reef line may be made fast on boom, and should be so when sail is stowed away.

I claim that this sail can be unshipped and stowed exactly as the lateen, and with the same advantages. We always stow our sails on deck, made fast to side of coaming; that it has the reefing advantages of the balance lug, the short boom, and the heighth to catch light winds, with none of the disadvantages as to many ropes and high masts.

A is the jaw; B, the spar or topmast; C, the boom; E, block for reef line; F, block for halliard; G, hook for second reef.

Fig. B shows sail with one reef and Fig. C with two. First reef can be taken in before the wind; second reef cannot, unless first reef is repeated with a parallel batten.

In case leg o' mutton form of sail is used the area is much reduced, but all but No. 4 batten may be omitted, and the sail made fast to spar B by rings, and hoisted and lowered as in ordinary leg o' mutton sails. It has been tried both ways successfully.

ROBERT SHAW OLIVER, A. C. A.

THE LOG BOOK.

VII.—THE EAST COAST OF FLORIDA.—CRUISE OF THE ALLIGATOR.

ON Feb. 5, 1884, three of us, my wife, who is an honorary member of the A. C. A., and myself, in the sneakbox Alligator, and Mr. Hugh Willoughby, A. C. A., in the canoe Windward, left St. Augustine for a cruise down the eastern coast of Florida.

We had prepared for an early start, but as our course was due south, and as a strong wind with heavy sea came directly from that quarter all day, we delayed our departure until afternoon, hoping for a change of wind or a lull. As neither came, we finally decided to make a start, and at least establish a camp somewhere beyond the city limits. After four hours of hard work with oars and paddle we reached a point on Anastasia Island about five miles from the city, where we established Camp No. 1. There was no fresh water at this camp, but we had brought plenty with us, and no wood for a fire; but with our alcohol lamps we soon had supper prepared, and were comfortably fixed for the night.

On the second day a beam wind led us to hope for a good run, but our hopes were dashed by the centerboard of the Alligator which, swollen by water, refused to move into its box, and it as well as our hopes were frequently dashed in emphatic language. After making a few miles under oars, with the Windward sailing ahead and waiting by turns, we landed, unloaded the "box," turned her bottom side up, and spent three hours in planing the centerboard down with an axe.

Finally got under way again late in the evening and ran until after dark among marshes that afforded no camping ground, until we came to a bit of low beach raised but a few inches above the water on which we landed and made ourselves as comfortable as circumstances permitted.

The water was so shoal here and the flats so extended that an hour after we landed the falling tide had left us nearly half a mile inland. Our only chance of escape was to take advantage of the next high tide, which necessitated our starting before daylight in a dense cold fog next morning.

Soon after sunrise we landed on a wooded point, dried our tents and blankets and cooked breakfast, but were forced to make a hurried departure by the rapidly receding tide which threatened to leave us high and dry. At noon we passed the old Spanish ruins of Fort Matanzas and the Matanzas Inlet from the ocean, out on the bar of which we could see the great rollers combing in an unbroken line of foam. We made a pleasant camp that night in a grove of cedars near plenty of wood and water.

The following morning we entered the canal that is being cut to connect the Matanzas and Halifax rivers, and thus establish unbroken water communication along the entire coast, and about noon reached the dredge at the head of the cut. Here a carry of six miles confronted us, and as but one team could be obtained, Willoughby decided to retrace his route about five miles to another point, from which the carry could be made, although from there it would be much longer.

We separated, after appointing a rendezvous on the Halifax, and late that evening the Alligator and her crew were deposited beside "the basin" on the headwaters of Smith Creek, which flows sluggishly into the Halifax.

The following day being Sunday, we rested quietly in camp, and on Monday descended Smith Creek to its junction with Bulow Creek, below which the two streams are called Halifax Creek, in reality the head of Halifax River. This was where we were to have met the Windward; but instead we found only a roll of charts and a note from Willoughby, forwarded by special messenger, which stated that he had been taken ill after leaving us at the dredge, and had deemed it best to return to St. Augustine.

From here the Alligator cruised alone down the Halifax past Ormond, Holly Hill and Daytona, making a three days' stay at the last named place; past Mosquito Inlet, where a new lighthouse is in prospect of erection, into the Hillsboro River, past New Smyrna, where we found letters, and through the tortuous windings amid the beautiful mangrove islands of the Hillsboro into Mosquito Lagoon to Oak Hill. This is a sportsman's paradise, and here is the Atlantic House, the best kept and most popular sportsman's hotel in the State.

From Oak Hill a run of twelve miles before a brisk norther took us to the "Haulover," which is really a narrow and shallow canal about 300 yards long, connecting the waters of Mosquito Lagoon and the Indian River. A mile from the Indian River end of the Haulover is the Dummit orange grove, the most famous grove in Florida, and here we lingered so long picking, eating and filling every vacant space in our boat with the delicious fruit that it wanted but an hour of sundown before we started on the ten-mile run to Titusville, on the western bank of Indian River, which was our objective point for that night. The river at this point is between seven and eight miles wide, and is known as the Bay of Biscay.

The long-continued northers had raised a tremendous sea in the bay, and the heavily-laden Alligator had all she could do to hold her own amid the angry waters, although two reefs left but a small show of sail. Sunset found us still far from land, and the darkness which almost immediately followed, rendered the situation extremely unpleasant, not to say dangerous. After an hour of the most anxious sailing we reached the coast, and whirling around Sand Point, amid a smother of white water on its long bar, reached the comparatively quiet water beyond, and were soon comfortably housed in the Titusville Hotel.

For the next hundred and fifty miles we had a delightful run down the broad expanse of Indian River, taking advantage of favorable winds, and camping, sometimes for days at a time, and exploring the surrounding country, when they were ahead. On this run we stopped at Eau Gallie, Melbourne, Malabar, the St. Sebastian River, Fort Capron, and the mouth of St. Lucie, ever getting further from civilization, until at length the first of March found us camped near Jupiter Light, at the extreme southern end of the Indian River.

We were now in the land of cocoanuts, bananas and pineapples, where the mangrove attains tree-like proportions. Here perpetual summer reigns, and only the sensitive convolvuli showed trails of the slight frost that had been felt twice during the winter. At this point we were fired with the ambition to go still farther south and penetrate the beautiful but little known region of Lake Worth.

From Jupiter two routes lay open to us, the outside via Jupiter Inlet, through the breakers, and down the coast ten miles to Lake Worth Inlet, and the inside, through a series of the most bewildering creeks, penetrating the vast saw grass swamps that lie between the coast and Lake Okeechobee. With a breeze from the west or northwest the outside passage could be easily and safely made; but at this season the southeast trades that blow so steadily all summer had almost set in and it seemed impossible for the wind to blow from any other direction.

Another boat containing two men was about to attempt the labyrinthine passage of the saw grass, and we decided to accompany it. The distance was fifteen miles, and after three days of desperate work, and two nights spent in our boats, amid the wild solitudes of the saw grass, we accomplished it, and reached our goal, Lake Worth, the most beautiful spot in Florida.

Here the lightest frost, the faintest breath of winter, is unknown. Here the India rubber tree grows in stately luxuriance, cocoa nuts, pineapples, guavas, sapodillas, mangoes, and an infinity of tropical fruits, are among the ordinary products of the soil. The surrounding forests abound in game, the lake teems with the finest fish, among which the toothsome pompano is pre-eminent, and the ocean beach

s strewn with such a variety of tropical shells as would drive a conchologist wild with delight.

Here we camped and revelled in tropical surroundings for two weeks. Then we left the Alligator with our tent and all our camp outfit in readiness for next year's cruise, and on board the schooner that makes bi-weekly trips between Lake Worth and Jacksonville returned to our point of departure well satisfied with our winter's work.

A point definitely and satisfactorily settled by the crew of the Alligator on this cruise is that at least one honorary lady member of the A. C. A. enters into the pleasures and endures the hardships of genuine camping and small-boat cruising with as much zest, heartiness and pluck as her more masculine associates, and she makes solemn declaration that she will never be left at home again when a similar expedition is to be undertaken by her husband.

O. K. CHOBEE.

THE CHART LOCKER.

VI.—WINNIPISEOGEE AND MERRIMACK RIVERS.

"W. H. N." will find plenty of water in both of these rivers any time in June. But look out for logs, as the annual drive is due about that time. The Winnipiseogee is obstructed by innumerable dams, and the wise canoeist will transport his craft from Tilton four miles across country to Franklin, where the Pemigewasset and Winnipiseogee unite to form the Merrimack. Sewall's Falls, above Concord, easily run; Garvin's Falls, three miles below, are the worst on the river, half mile carry; short carry around Hooksett dam, then nine miles slack water to Manchester; look out for Amoskeag dam above bridge; carry through city; five miles of rapids to Goff's Falls; can be run, but care must be used; run Reed's and Cromwell's Falls; clear water Nashua to Lowell; canal through city, or better, carry around Pawtucket dam and rapids below; Hun'ts Falls, a half-mile series of easy rapids, below city; take canal through Lawrence; strong current, passing through Mitchell's Falls to Haverhill at the head of tide water, then broad and open water to the sea at Newburyport. The lower half of the Merrimack is the prettiest for cruising, and some of the choicest bits are found between Lowell and Lawrence, where it is proposed to hold a local meet for Eastern canoeists early in June. Don't miss it.

CLYTIE.

THE GALLEY FIRE.

CANOE AND CAMP COOKERY.

II.—SOUPS.

FOR the canoeist the canned soups are the handiest, and can be prepared in a very short time by following the directions printed on every can. But for the general camper, whose room for luggage is not limited to a boat 14x30, I submit a few instructions on soups that may be useful.

The time given for cooking soups in the recipes below may seem unnecessarily long, but if it is done in a less time, it is at a loss in the flavor. Fast boiling drives off considerable of the aroma of the ingredients used, the water evaporates fast and requires constant replenishing with boiling water, which compels the cook to have an additional vessel always on the fire. Constant skimming is necessary, and an occasional slight stirring will prevent any of the vegetables from burning on the pot where but little water is used. Campers do not commonly have fresh meat in camp, unless in a portion of the country where venison, buffalo or bear meat form a part of the larder. With any one of these, or with beef, we can make what I will call

Meat Soup.—Use one pound of lean meat to a quart of water. Put on the fire with the water cold, and let it heat gradually and simmer rather than boil, skimming it constantly and keeping the cover on the pot when this operation is not being performed. If any cooked meat or bones are to be added, this should be done after the soup has cooked three-quarters of an hour. From five and a half to six hours are necessary for the soup to cook. Just before it is done, season with salt and pepper. If made in an iron pot it should be transferred as soon as done to a tin or earthen vessel. In cold weather this soup may be kept fresh and sweet for a week, and "warmed over" as long as it lasts.

Vegetable Soup.—Onions, potatoes, carrots, turnips, beats, parsnips, cabbage, cauliflower, pumpkins, squash, etc., should be picked over, washed, pared, and cut into small pieces from a quarter to a half inch thick, put into a pan of cold water, rinsed and drained. Tomatoes should be scalded, peeled and sliced. Prepare a meat soup as above, and when it has cooked four hours put in all your vegetables except potatoes, which should be put in only about thirty minutes before the soup is done. Stir the soup occasionally to prevent the vegetables from scorching or sticking to the bottom of the pot, and skim frequently. When done take out the vegetables, mash and return them to the soup, boil one minute, season and serve. Canned corn or tomatoes may be used in this soup the same as fresh vegetables.

Deer's Head Soup.—Skin the head and split it in pieces, remove the eyes and brains and wash thoroughly in cold water. Then cook same as in meat soup. Squirels, rabbits, and small game generally can be cleaned and split and made into soup as above. When vegetables are added to soup made of small game, the latter should be removed and strained, and the good meat returned to the pot just before the vegetables are put in, leaving out all the bones, skin, gristle, etc.

Tomato Soup.—Mix one tablespoonful of flour and a piece of butter the size of an egg into a smooth paste, and chop one onion fine. Prepare three pounds of tomatoes as for vegetable soup (the same amount of canned tomatoes may be used) and put all the ingredients with a teaspoonful of salt into three pints of cold water. Boil gently for an hour, stirring frequently enough to dissolve the tomatoes and prevent burning, then stir in one pint of boiled milk, and let it come again to a boil, constantly stirring. Season and serve.

Rice Soup.—Make a meat soup, with the addition of one sliced onion. Prepare the rice (one-half pound to a gallon of water) by picking it over, washing and draining, and stir it into the soup half an hour before it is done, stirring frequently to prevent burning.

Bean Soup.—Pick over two quarts of beans, wash, and soak them over night in cold water. Scrape clean one pound of salt pork, and cut into thin slices. Drain the beans, put them into six quarts of cold water, with one tablespoonful of soda, and let them boil gently for half an hour, skimming constantly. Then drain off all the water and put in the same amount of fresh boiling water. Boil slowly for an hour and a half, stirring frequently; then put in the pork. When the beans have become tender enough to crack, take out the pork and mash the beans into a paste with a wooden masher or the bottom of a large bottle. Then put all back and boil slowly an hour longer. If no soda is used, longer boiling will be necessary. Bean soup will burn if not constantly stirred. Not much salt, but plenty of pepper should be used for seasoning.

Pea Soup.—Treat the peas exactly the same as the beans in the above recipe, except as to the preliminary boiling in water with soda. Make the same way as bean soup. Pea soup cools and thickens rapidly, therefore if squares of fried bread are thrown upon the surface before serving, it should be done quickly and while the bread is hot. Use more salt than with the bean soup for seasoning, and boil gently or it will surely burn.

Onion Soup.—Put three tablespoonfuls of butter in a frying-pan, cut six large onions in slices, and stir them into the butter over the fire till they begin to cook. Then cover tight and set them where they will simmer slowly for half an hour. Put a quart of milk with a tablespoonful of butter on to boil, and while this is doing stir into the onions a tablespoonful of flour while they are simmering. Turn the mixture into the boiling milk and cook quarter of an hour, seasoning with salt and pepper. If an old tin pan is handy that you can use for the purpose, the soup will be improved by knocking small holes in the bottom of the pan, thus making a colander, and straining the soup through it, afterward adding the well-beaten yolks of four eggs and cooking three minutes longer.

Oyster Soup.—Put a gallon of milk and half a pound of butter into the pot and heat gradually. When hot, stir in the strained liquor of two quarts of oysters, very gradually, to prevent the milk from curdling, then one pound of crushed crackers or bread crumbs. When it has come to a boil put in the oysters (two quarts), and let it cook till the edges of the oysters curl up, when it should be seasoned and served.

Clam Soup.—Exactly the same as above, using clams instead of oysters.

Mud Turtle Soup.—At Lake View Point, Onondaga Lake, I was once regaled with an excellent soup made of fresh-water tortoises, or "mud turtles." Unfortunately I did not obtain the recipe, but I have written to a friend who may be able to get it of the cook, "French Fred" Ganier, and if obtained, it will be given in a future paper.

Next week's discourse dietetic will be on the subject of "Fish."

SENECA.

THAT SNEAKBOX AGAIN.

Editor Forest and Stream:

If I can possibly have a 12×4 sneakbox in stock at the time of the A. C. A. meet in August, I will have it at the Thousand Islands, and give the "boys" a chance to compare it with the canoe if we get wind enough.

I have heard that they will live where nothing else can, and I know the canoe will live where much larger craft dare not venture. I have been under paddle in a 10½ft.×26in. canoe, where it troubled an 18ft.×4ft. Whitehall open boat to keep free from water.

Call Dr. Heighway as the next witness; he took a very rough sail down Lake Ontario in a 16ft.×31in. Princess two years ago, and I think found out just about how much wind and water such a canoe could live in.

J. H. RUSHTON.

CANTON, N. Y.

PELICAN C. C.—Twenty gentlemen met at Young's Hotel, Boston, on the 16th of April, and organized the Pelican C. C., owning ten canoes. The following officers were elected: Commodore, Wayne H. North, Boston; Vice-Commodore, C. C. Osgood, Georgetown, Mass.; Secretary, B. J. Bowen, Boston; Treasurer, C. E. Symms, Medford, Mass.; Directors, William P. McMullan, Biddeford, Me., Arthur Y. King, Boston; G. A. Holland, Medford, Mass. The club burgee adopted was white maltese cross on red ground, its size 11x20in. One of the most enjoyable features of the evening was a banquet, the center piece on the table being a small canoe of birch bark filled with beautiful flowers. This was floating on a miniature lake with banks of flowers. A canoe of ice was served resting on a sea of spun sugar, and was very palatable as well as artistic. Committees were appointed to lay out cruises, etc.

THE ROCHESTER C. C.—At the annual meeting, held April 8, elected the following officers for the ensuing year: Captain, Frank F. Andrews; Mate, Edwin M. Gilmore; Purser, Matt Angle; Executive Committee, Geo. H. Harris, Herbert J. Wilson, Fred W. Storms, The constitution was amended, abolishing the cumbersome titles of commodore, vice-commodore and secretary-treasurer, and substituting captain, mate and purser in their place. The new club house on Irondequoit Bay, a two-story structure, 16x34, will be occupied early in May. Several new canoes are being built for the fleet. It is the intention of the club to hold a regatta when warm weather sets in. Communications have passed between the Toronto Club and the Rochesters, looking toward a local meet.—MATT ANGLE.

N. Y. Y. C.—Mr. Stokes, in the Will o' the Wisp, in company with Mr. Taylor, in the Hiawatha, made the first trip of the season—a run around Staten Island—leaving the club house at 6 A. M. on Saturday and reaching West Brighton at 7:30 P. M., having sailed down the Bay and paddled against tide and wind up from Perth Amboy.

NEW YORK STILL AHEAD.—The secretary of the Knickerbocker C. C. writes under date of April 14: "Had the pleasure of lugging one of our men from the (semi) briny depth of the Hudson on Friday last, after the first upset of the season." The N. Y. C. C. had their first upset on Thursday, April 10. Try again, Knickerbockers.

CAPT. FARRAR'S NEW BOOK.—We are informed that Capt. Charles A. J. Farrar, well known to many of our readers, has a new book in press, entitled "Wild Woods Life; or, A Trip to Parmachenee," which will be published early in May by Lee & Shepard, Boston. The story is written in the same pleasant style that characterizes all of the Captain's works. The retail price of the book will be $1.50, and orders for it may be sent to this office, which will be filled as soon as the books are out of the bindery.

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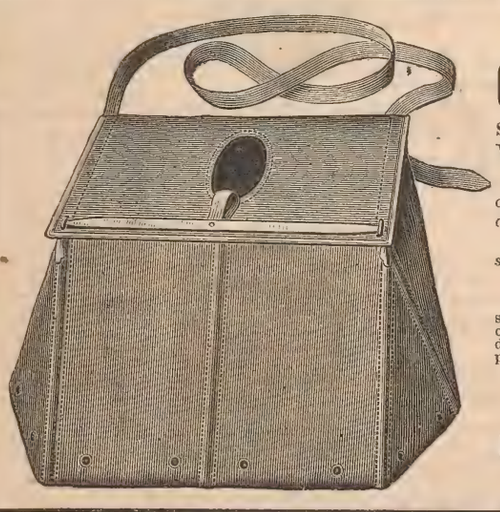
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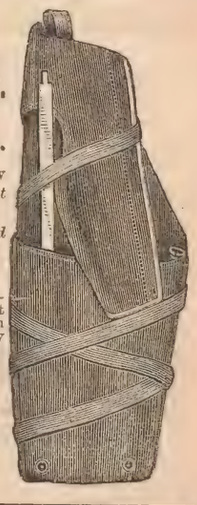


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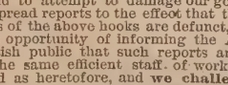
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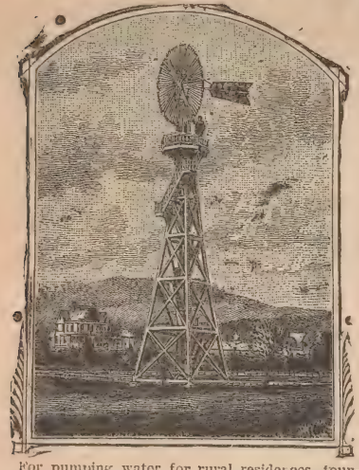
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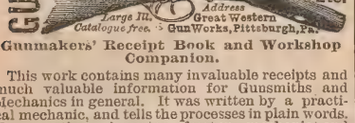
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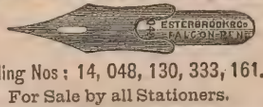
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YACHT MEASUREMENT IN THE EAST.

A CORRESPONDENT informs us that the sentiment among the representatives of the New England Y. R. A. was in favor of the Seawanhaka sail area and length rule for the measurement of large yachts. But the greater simplicity of gauging by plain length was considered inducement enough to apply that method to the small boats, which constitute the great majority of the racers in Eastern waters, where many of the entries still are "open boats." The association also realized the necessity of proposing a rule which would not cause dissension at the outset, hence the recommendation of the plan hitherto generally followed by the various local clubs in their individual capacity. This is well enough, perhaps, for the time being, though we had wished for reformatory legislation at the outset. As the average tonnage of racing yachts is destined to grow very fast all over the country, the association may in the future see fit to proclaim the sail area and length rule for the larger classes and confine simple length measurement to open boats, as it ought to. If this aspect of the matter is kept in view, the association may be trusted to introduce the desired modification when the proper time arrives in its opinion. The danger we foresee in such a course is the liability to crystallize a makeshift into a permanent custom, as even large yachts built under a plain length rule will be so big on their loadline and so heavily sparred that vested interests in the future may become too strong to be forced to a return of an equitable policy under which other styles shall receive justice, and that in effect racing yachts will become such expensive and unwieldy affairs as to steadily differentiate the huge racer from the economically-formed cruiser more and more every year, much to the detriment of the whole sport. When that time arrives, as it is sure to do, no one can blame us for not having clearly pointed out the drift events are bound to take in ample time to head off the consequences. Only one particular style of yacht can flourish under length measurement, and we question the policy of forcing experiment and custom into one narrow rut by prejudicial legislation.

DEFEAT OF THE NEW ENGLAND BILL.

THE defeat of the proposed game law by the Massachusetts House of Representatives is disgraceful from the position in which it puts that State with the rest of New England. A convention was held early in the season in Boston, and it was well attended by delegates representing the best fish and game protective interests of the other New England States. A code of game laws was decided upon as best fitting the wants of New England, and delegates agreed that if Massachusetts would lead off and adopt the new code, they would see that each of their own States did the same. The bill passed the Massachusetts Senate without opposition, and its chances were just as good in the House.

But the market interest in Boston predominates. The shrewd Yankees under Faneuil Hall and in and about Faneuil Hall Market, would willingly see the last quail, the last woodcock, the last partridge or deer that the woods were ever to bestow, brought to their doors, provided the chance appeared to make a dime or a dollar upon it. Indeed, these tradesmen are greatly disturbed because the game laws of Maine have stopped their selfish traffic from that direction. The proposed universal game law for New England—one of the best game bills ever drafted—frightened them. They tried dining and wining the members of the committee and of the Senate. Here they failed; but there were members of the House found to be more readily gullible. A good dinner, a theater ticket, a bunch of cigars or a glass of beer went a good ways in these members' notions. They came into the House and voted squarely against a game law designed to protect their own interests—their own property—to please fifty marketmen, whose only object is to make a dollar. But the question is not dead yet. There is a growing public sentiment, and Boston market as "the dumping ground" for the last relics of the fish and game of New England will yet be dammed up by some good, wholesome legislation.

DYNAMITE GUNS.

RECENT experiments in the neighborhood of this city seem to indicate that the use of dynamite introduced into missiles will soon become general. The difficulty heretofore has been, that the cartridge containing this powerful explosive at the front end, when fired with the ordinary gunpowder charge, was sure to compel the dynamite to explode simultaneously with the ignition of the powder. This, of course, was a vital objection, and in place of having the destructive effect a mile or more away, the tearing apart was upon the gun itself. Many devices were arranged to meet this difficulty, and a very fair result was obtained by the use of compressed air as a motor, in place of the ordinary black powder. The air was compressed in machines constructed for the purpose, and then introduced into the weapons behind the peculiarly devised cartridge, which carried a very destructive charge of dynamite at its head.

The results of many trials showed that the question of the use of the nitro-glycerine explosive has been answered in a certain manner. The gun used was, however, a very unwieldy contrivance, and there were other objections. To meet these came further inventive effort, and in a short time a company of experts were invited to witness the trial of a compound cartridge which was inserted in an ordinary Rodman gun and fired with a charge of ordinary gunnery powder, when away went the cartridge head with a two-pound charge of dynamite snugly tucked within it, off over the meadows to delve a great cellar pit in the earth a mile away. The method of so taking off the suddenness of the start, which had been the stumbling block in previous trials, was in the use of a rubber buffer wad. This seemed to answer every one of the demands of such a weapon, and so moderated the suddenness of the impact of the powder gas upon the dynamite-charged ball that they were enabled to fire repeated charges.

This simplification of the methods of using the dynamite, suggests at once the question of how soon this powerful agent of destruction may be adapted to the smaller class of arms, and the rifleman of the near future be prepared to use a bullet, beside which the express bullets of to-day will be comparatively harmless, against certain classes of game or wild animals where the important point is to kill surely and swiftly. To put into the body of a wolf a bullet which shall create a general destruction of the animal's interior will be an important point, and if this can be done with as much safety to the marksman as though he were using the present form of cartridge, there would doubtless be a large demand for such an article.

In warfare the use even of the larger form of dynamite cartridge will produce very marked results, and add one more to the other important changes brought about by the introduction of this modern agent. When the use extends to the small arms the change will be forced at a rapid gait. With two armies facing each other and each provided with weapons so surely destructive as these dynamite bullets may be made, war will become too certainly deadly for future pursuit and the dream of the peace disciples be brought to a reality by the very perfection of the weapons of destruction. If to the accuracy which already marks the small arm of to-day be added the terrible destructiveness which would come with the use of this new cartridge, to go to war would be little less than a deliberate suicide, and the determined bravery and gathered skill of the most hardy of veterans will be set at naught by the force of a mere mob in whose hands this new missile was placed.

The grimy black powder of the past centuries should make way for something which more exactly represents the knowledge of modern time in chemical and mechanical sciences. The day will come when a rifle magazine of the ordinary size will contain as many times more than the present supply of cartridges, and their destructive power will be increased in inverse ratio to the space saved. The possibilities of the future in the matter of changes in ammunition are very great, and the army of inventors now busy upon the problem of how best to apply the discoveries recently made to the demands of the hour, cannot be expected much longer to fail in their endeavors and aims. How far the methods of sportsmen will be affected is at present only an interesting speculation, but the time is rife for change, and the alterations will come in the near future.

AMERICAN ORNITHOLOGISTS will be interested in learning that Dr. Elliott Coues is about to visit England. It will be remembered that some years ago Dr. Coues received a memorial, signed by most of the leading scientific men of Great Britain, inviting him to visit Europe for the purpose of consulting foreign libraries in furtherance of his great work, the "Bibliography of Ornithology," and it will be a matter of congratulation among ornithologists everywhere that the author of this important undertaking is now able to avail himself of this invitation. The trip is undertaken ostensibly for health and recreation, but those who know the energy with which Dr. Coues works, will be slow to believe that this summer vacation will be spent in idleness. The use of trinomials in ornithological nomenclature has become pretty well established in America, and is now agitating the British mind; and Dr. Coues, as vice-president of the A. O. U., will no doubt give much attention to enlightening our English friends on this and kindred points. There are already signs that the "American idea" of trinomials is taking root in England, and it would not be surprising if a speedy alliance were brought about between the American and British schools of ornithology. The question is certainly of very great interest, and one upon which substantial agreement among English-speaking naturalists is greatly to be desired. Dr. Coues expects to sail May 24 on the Guion steamer Oregon.

A FUND FOR LONG ISLAND.—In another column appears a circular, of interest to Long Island sportsmen. That the game laws cannot be enforced without men or money is a proposition which meets general acceptance, and this appeal from Game Protector Whitaker deserves the careful consideration of those who visit Long Island to shoot or fish. The gentlemen named in the circular have consented to receive the money contributed and to supervise its expenditure, and the movement, if carried on with energy, cannot fail to be productive of good. We have consented, at the request of Mr. Whitaker, to receive subscriptions to this fund, which we will hand over to the committee as fast as received. Long Island, from its geographical position, offers an excellent field for this experiment, which, if successful here, may be extended to other regions.

RAINBOW TROUT.—We would call attention to the paragraph in our notice of the report of the New York Fish Commission concerning these fish. It is beginning to be learned that they are migratory, and do not remain in brooks. We have never been much in favor of this fish, because we have known, what is not popularly known, that the fish is strongly suspected to be a salmon. There is no difference that an ichthyologist can find between the *Salmo iridea* and the salmon known as "steelhead," "hardhead," and "salmon trout" on the Pacific coast, the *Salmo gairdneri*. Although this is the case, and the species *iridea* is a doubt-

ful one, yet it has been thought best not to combine them for the present. We have been waiting and watching the habits of this alleged trout with great interest in order to learn if its habits might not show it to be in some respect different from the steelhead. The evidence of the Commission tends to show that it is a migratory fish, and if so it may escape to sea and be lost, as the other California salmon was. We believe that Mr. Roosevelt has not seen the rainbows which he planted in streams emptying into Great South Bay, Long Island, since they were yearlings.

AN ELK HUNT.

MOST things are relative, they say,
Some put it in a stronger way;
But sure I am in 'Sixty-three,
When Meade and Hooker fought with Lee,
When for the rights of States or slaves
Brave thousands slept in bloody graves;
When by the dun Missouri's stream
Still flashed the Pawnee camp-fires' gleam,
And bison 'round the Rocky chain
Shook with their march the darkened plain,
The world was younger. I don't mean
Some twenty years. That's quickly seen.
Nor in a geologic sense,
Where dreary ages yawn immense,
But that the human race we'll say
Was twice as young as 'tis to-day.
I own I have a friend who winks
When I say this, and clearly thinks
That the world's age, by my account,
Tallies quite closely in amount
With my own wrinkles. Nay, declares
The youngest man the planet bears,
After a year of Kansas chills,
Can patronize the eternal hills.
But one fact surely's not in me,
For all observers must agree
That since the 'Sixties, noble game
Is much less plenty, and less tame;
Yet every hunter knows that ground,
Where over night great droves were found,
May be for months silent, forlorn,
Unvisited by hoof or horn.
This truth some prospectors once proved:
It seemed that all the game had moved,
Warned by the autumn winds that blow,
Loud threats of high-piled smothering snow;
Their cabin rose among the hills,
Where, gathering up a thousand rills,
With every streamlet gaining force,
The Yampa speeds its headlong course.
Hastes to the Green with eager leaps,
Joins with the Grand and onward sweeps,
Down through the deep-split, rock-walled gash,
Where Colorado's currents dash.
Their food was gone, and all around,
A wide, white waste. No living sound,
Save when on swirling wind-gusts float,
The yelpings of the far coyote.
But two brave comrades volunteer
To hunt once more some God-sent deer,
And so start out in swinging tramp,
To feed the starving, freezing camp.
The web-shoed wanderers plod along,
Feeble in limb, in purpose strong,
To the low foothills, spreading wide
Around a rugged mountain's side,
Channelled by storm, and seamed with scar,
Called, from the top that showed afar
Its steep black ridge's lowering frown,
"The mountain of the iron crown."

Warm from his bed the elk arose.
Though nested 'mid November snows,
His long, thick coat, and mighty heart
Defied the ice-king's sharpest dart.
He swelled his neck, sniffed the light breeze,
And starting downward through the trees,
With horns thrown backward to his haunch,
Sixfoot long points on either branch,
Struck out in reaching trot, where grow
The aspen thickets far below.
On fragrant twigs the dainty beast,
Still makes his aromatic feast,
When grass lies deep beneath the sheet
Of frozen drifts and crusted sleet.

The hunters spy the fresh-made track,
Their hearts beat fast, their strength comes back:
Panting, they strive, though stiff and lame,
To get to leeward of the game.
At last their caution gets its due,
And the great victim stands in view,
Feeding below them at his ease,
Among the leafless aspen trees.
A breathless pause; then, with firm rest
On an old log that topped the crest,
The hunters pull. The rifles crack,
And the bull throws his antlers back,
Jumps wildly to the dizzy edge
Of a steep boulder-breasted ledge,
Where wind-bared rocks showed sharp and brown,
Goes clattering, sliding, crashing down.
Far, far they traced the trail of blood,
Till in the depths of a dark wood,
Whose crowded pine boughs scarce let through
A glimpse of heaven's upper blue,
They found the great brown graceful form,
Amid the trampled snow, still warm,
While the gored wolf that lay beside,
Showed how in brave defense he died.

So fell the elk, and back again,
With meat to feed the hungry men,
The hunters toiled, and thought the road
Seemed shorter for the welcome load.
The mountain monarch's antlered head
Still guards the memory of the dead,
Showing, where glasses shine and clink,
Where thirsty miners crowd to drink,
And sodden vice and folly lurk,
The majesty of nature's work.

H. G. DULOG.

The Sportsman Tourist.

CHARLESTON TO CAPE ROMAN.

A BARREN mud flat, with standing pools of water, in and around which plover and curlew are standing and feeding. A solitary diver, softly whistling, a few rods off, high and dry, with a list to one side, a tug, on the deck of which, in various attitudes, is a group of men, sprawled out in sleep, while over and around all is a canopy of dense thick fog. At the stern, with his number eights, and about a foot of his legs projecting over the side, lying with a satchel for a pillow and the deck for a bed, was Deerslayer, dreaming of the manner in which he would seal up the ends of his legs, which he imagined were cut off, and hesitating between sealing wax and rosin as the remedy. On the port side, some six feet and a half off, humanity was stretching its length with a capacity for hominy and butter simply stupendous, and from its cavernous mouth came, ever and anon, gentle, tender murmurings, that made one think of purling rivulets in spring time, or some other time.

On the starboard side, with his genial face looking up to the skies, was our pilot and quondam host, owing to whose skill and guidance we were now tranquilly resting upon the oozy bosom of Palmetto Flat, in Bull's Bay, South Carolina, on a cold morning in mid-December, 1883.

In the boiler room was the engineer; curled up below deck in the bow was Jenkins, our colored boy, whom I would back to get into more trouble and do more things wrong in a given time than any one of his inches in the country.

Forward of the boiler and below decks, Ollie and Jack were lying spoon fashion, the first our Captain, the latter our shifting ballast, while wedged between the afterbitts and the house, with his head in a basket and his feet on the rails, was the writer. This comprised the party, and this would have been the scene presented could an observer have reached the spot on the morning of Dec. 20.

It may be wondered why we did not go into the pilot house or cabin to take our interviews with the dream god. Alas! her cabin was the hold and boiler room, her pilot house was but a sham, four feet wide by about the same in length.

No bulwarks protected her, and it were hazardous, indeed, for one to pass another on her decks without holding on to the rail that graced the house covering the boiler and engines.

She was no beauty, but well had served the purpose required of her, and had towed many hundred thousand feet of timber during the past year from its home on the Wando River down to the island where rest the bones of Osceola, whence it went to be hidden from human sight forever beneath the waves of the Atlantic that roll their surges over Charleston Bar.

It had been a long talked of and cherished plan with my partner and myself that when our works were completed we should take a trip by the inland route from Charleston up to Cape Roman and the South Santee on one of our tugs, but the larger ones drawing too much water for the passage we were compelled to fall back on the little Bull River, with the spacious accommodations described.

We had invited one of the county officers and a friend of his, who was to bring four hounds, to join us, but at 11 o'clock the night previous to our start we received word that business of importance would compel him to go to Columbia to represent his county's interests, and that neither his friend nor himself would be able to go.

We determined to go, however, and as the sun was beginning to rise over the distant sandhills, steamed away from our wharf, filled with brightest anticipations of the most glorious sport among the ducks and deer, but with a feeling of disappointment that our expected guests could not be with us.

As we entered the creek that wound its way tortuously among the marshes, we left behind us the beautiful harbor of Charleston, its forts, its beacons, and its historic and romantic interest.

Opposite the Catholic church on Sullivan Island we catch a glimpse of Fort Moultrie, under the shadow of whose walls lies a marble slab with the simple legend "Osceola, Patriot and Warrior," and next his grave a plain wooden railing incloses the spot where rest the bones of several sailors and soldiers who were sunk in their ships in the harbor during the war.

It was there that Marion, the Swamp-Fox, once held command, and there it was that General Sherman held his first commission, and on his hunting trips from that place gained such valuable knowledge of the country.

Game ahead!

Thoughts of generals, conquests, romance and beauty vanish.

The gun is seized, and, as a bunch of ducks go whizzing by, one is picked out, and with the report still goes whizzing on, leaving a very much astonished gunner; not astonished at the miss—used to that sort of thing too long—but the old gun, after years of steady use, had gone back on me and flew open. This was a cheerful prospect for my partner, who was not used to my Lefevre hammerless, and had elected to use my hammer gun, as more to his taste.

Rubber bands around the barrels failed to prevent the gun opening, so it became virtually a single barrel gun, as the second barrel was almost invariably useless. The fault was afterward discovered to be caused by the wearing of the bolt.

After making three consecutive misses, flinching every time, I changed guns, and then made a twenty-five cent "pot" on shots. My record was unimproved for some time, but at last I retrieved my reputation and stopped even.

Passing Long Island and Swinton's, we at length reached Deweese's Inlet, where on a pleasant day last May Deerslayer Ollie and I caught fifty-seven splendid sheepshead in about four hours, and as two of us, at least, were novices at landing the crafty bait-stealers, we felt very proud of our record.

Saluting old Mr. Jones, whose hospitality we had enjoyed on previous trips, with three blasts of the whistle, we passed back of the island, and there I succeeded in killing a loon with my Winchester, intending to use his breast as the cover to a chair bottom; but neglecting to skin it that day, the next saw it a subject for the buzzards, and an odor pervaded the air that might have even moved a New York City Board of Health officer.

As we steamed along we started up great flocks of cormorants, or as they are here called, "nigger geese," but they were very wild, and we did not succeed in stopping any with either shot or rifle, though I wanted one for my collection and did my best to secure a specimen.

Hearing a sigh from Deerslayer, and inquiring the cause, it seemed that his fingers were cut at every discharge of the gun, and were fast swelling out of shape, for as his avoirdupois is something over two hundred and eighty, with fingers in proportion, there was not a superabundance of room between guard and flesh.

With fingers lame and bleeding, and a gun that opened continually, poor Deerslayer was becoming rapidly discouraged, and as all the ducks we saw were so wild that they speedily put as much space between themselves and the tug as was possible, it began to dawn on us that our duck supper would be more a matter of fancy than reality.

After a discussion between the engineer and captain as to the proper channel to select of the many that opened to view, one was chosen which the captain had tried before and knew to have sufficient water, although the distance was greater than by one that was much less crooked, but in which, on a shrinking tide, we would be more than liable to be stranded on an oyster bank.

Trying an occasional shot with the rifle at great blue herons, or "Po' Joes," as the darkies call them, taking snap shots at helldivers as they ducked from sight, occasionally getting one as it rose from the water, watching the buzzards as they rose and circled above the distant land, and with a thorough enjoyment of our position, but not of our luck, we wound our way through the narrow channel, now and then meeting great lumbering-looking sloops, loaded almost to the guards with rice going to the Charleston market, the boats propelled along with poles when the wind was ahead and the course too narrow to tack.

After an hour more we reached the upper end of Capers Island, and on the wharf found Mr. Magwood, who had invited us to be his guests.

Dropping anchor in the stream we went ashore in one of our small boats and received a most hearty welcome.

Learning that we had brought no dogs, he dispatched one of his servants to the mainland to borrow two of Mr. Whiteside's hounds, in order that we might have a run on Capers the next morning.

The house where we were entertained was on an oyster reef with marsh land around it, the inlet from the sea on one side, and a deep creek separating it from Capers on the other, while a walk elevated on short piles led to the wharf.

The house itself consisted of two rooms with a half-loft overhead. In one room a table and some stools comprised the furniture, and a broad fire-place, in which fat pine knots were blazing, added a cheerful aspect to the whole. The other contained a bed and a stand.

This house was used by the men engaged in planting and watching the oyster beds belonging to Mr. Magwood.

After a hearty lunch, in which roast oysters, fresh from their beds, played the principal part, I crossed the inlet to Bulls Island with Mr. M.'s brother, who makes his home there and attends to the stock and superintends the business of getting out palmetto logs, making them into rafts and shipping them to Charleston, which destination they reach by poling and drifting with the tides, it sometimes taking ten days or more to make the trip.

I went to Bull's for a still-hunt, having been told that there were plenty of deer and that they were very seldom hunted. Having never been on the island before I knew nothing of the lay of the land, but first tried a hammock (a word whose spelling has been discussed in FOREST AND STREAM, I think). Although sign was plenty and the ground carefully gone over, nothing was started, and a ridge was explored with the result of starting up a wild sow with a litter of pigs, which ran off with grunts and squeals, but the old lady, with a bristling back and a regular whistle, charged with fire in her eye, and reminded me very much of a similar charge made on me by an old bear, whose cub I had killed, in the Adirondacks. The Magwood brothers have a large number of hogs that run semi-wild, and I was uncertain whether this was a wild one or one of theirs, so held my fire, mentally resolving that if the sow came any nearer than a sapling about twenty feet off, to let the Winchester talk, for both gentlemen had cautioned me not to let either boars or sows come too near, as they were often very dangerous when startled, and only the week before two men had been treed for over an hour by an enraged boar. As if warned by intuition, she stopped as her nose reached the sapling, just as my finger was pressing the trigger, and with a snort tore off through the bushes at a great rate, leaving me somewhat relieved, as I had come for venison, not pork.

A heavy wind springing up, and as the creeping vines, the brush and saw palmetto was almost impenetrable, I decided to return to Capers and hunt there with the dogs and reserve my still-hunt until I was more familiar with the island and could learn where one would be most liable to find the game.

A still-hunt in a Southern jungle is vastly different from one in our Adirondack forests, for the thickest cedar swamp cannot compare with the density of some of the thickets I tried and which were a perfect net work of perplexities, where sound would have to avail more than sight, but having been told that the deer resorted to them during the heat of the day, and that when "jumped" sought the more open land, or the sandhills, I resolved to get them out if there were any there.

After tumbles innumerable, hopeless tangles with vines and creepers, and having made more noise than a train of cars, and raised row enough to paralize any deer in his right senses, I made my way out and concluded that as a still-hunter in that sort of place, "Onondaga" was not a success.

Thanking Mr. Magwood for his proffered hospitality and bidding him adieu, a brisk walk of some four miles brought me to the inlet where a couple of shots from the rifle brought a boat from the other shore, where boiling coffee and steaming oysters awaited me.

After a short game of "draw" we all sought sleep, and some found it, as the rolling thunders of heavy rest proclaimed, that two at least, had ears unmoved by sound.

For medicinal purposes Deeslayer had placed in his satchel a bottle of gin, and before going to rest thought he would take a "wee sma' drop," but hard was the luck, for the cork had come out and his extra trousers held in solution a quart of the choicest Holland, and he was left the choice of chewing a piece of his breeches or sleeping without his toddy.

At early dawn the next day we were all assigned stands on Capers Island, by universal vote giving Deerslayer what was thought to be the best, for be it known that he had earned the illustrious title by five years' hunting, and as yet had never had a shot at a deer, but with a true hunter's patience said his turn must come in time.

The weather was cold and dry and but one hound was to be had, the other having slipped his collar and tried a lone hunt of his own on the mainland the night before.

Our drive was not a success, for after spending six hours without a deer being seen, we returned to the oyster house

and prepared for an early morning start for the South Santee River.

During the afternoon and early evening a few sheldrakes and divers were killed, but not a single good duck was killed. While sitting in a bateau and trying to drift within gunshot of a bunch of scaup ducks, a killdee plover lit on the seat of the boat within five feet of me, and without fear, after cocking his head and eyeing me as much as to say, "You look like a man, but you must be a stump," began to preen his feathers, but a wink of the eye or an involuntary move of the hand sent him circling round the boat, but even then he did not seem in the least frightened, and essayed to alight twice or three times afterward.

Leaving Capers Island, we steamed along without incident back of Bull's Island and out into Bull's Bay.

There was not a breath of air stirring, so we tried to take a short cut across the flats, as we had a good tide to give plenty of water under our keel.

All went well until we were within a mile of completing the crossing, when a sudden lurch to one side, a scraping below, and a sudden stop showed we were aground, and so hard and fast, too, that no amount of backing or kedging availed us, and we had no choice left but to wait for the next high tide, which would be at midnight.

To pass away the time the bateaux were rowed to the nearest islands and the decoys set out, but not a duck came near them, and a pair of curlew and three oyster catchers was the result of the afternoon's shooting.

A little after sunset Mr. Magwood filled his Jack with light wood knots, and stowing away a bag of the same in the bateau, invited me to try an hour or two graining for trout and bass, as Bull's Bay is fairly teeming with both. It was my first experience with the grains, but I was fairly successful, as but six or seven were missed of the thirty odd that I struck at. The smoke from the Jack made my eyes smart and run torrents of tears, until a faint breeze bore the smoke to leeward, but of the other effects it produced it is enough to say that when we reached Cape Roman light, having floated the tug off the flat at high water, the light-house keeper thought I was the negro servant, and ordered me to bring in an armful of wood for the fire. When I looked in the glass I was not surprised at his mistake, for a sootier-looking individual never walked than the one who had spent three hours behind a light-wood jack that night.

The keeper's apologies were profuse, but no offense could possibly have been taken, for the hue was Ethiopian.

We reached the lighthouse at about 1:30 A. M., and were most hospitably received by the second assistant keeper, Nelson, a Swede by birth, the other keepers being on watch or asleep. We were soon asleep in his quarters, but at 4:30 were roused up, and found a heaping dish of fried bass and trout, boiled potatoes and steaming coffee ready on the table.

Half an hour later we were all on the way to our blinds; McPherson, a tawny-haired Scot, as guide to Deerslayer and Jack, Magwood and Walker following them, while Nelson acted as my guide and adviser.

Landing in the mud and both boots remaining fast, the natural result was an overthrow, so Nelson packed me ashore on his back and then returned and pulled out the rubber boots which had remained behind, standing like forlorn sentinels amid a waste of ooze.

The weather was too fine and the ducks must have been in the rice fields, for the total bag of the whole party was one cormorant, four divers, two shelldrakes and a pair of avocets, the last falling to my lot.

The supply of wood being short, it was decided to return across Bull's Bay that night and hunt deer on Bull's Island next morning, so despite the warning of the keepers, we made a start at 10 o'clock that night, Mr. Magwood acting as pilot, for none of the party knew the course save him. Everything was lovely until high tide, and we were congratulating ourselves that the worst was over, when with a bump we stopped, and there we stuck. We backed, and we poled, and we kedged; we put Deerslayer and Jack on the bow, then they moved to the stern. All hands were put in the boats except the engineer and Ollie. It was no use. We were doomed to spend another twelve hours on the bank, and to cap the climax, a thick, heavy fog set in, and blotted out every landmark.

We made the best of the inevitable, and after drawing the fires, each sought a place for sleep. No watch was needed, for by the time the fires were drawn, the water was less than two feet deep alongside, and two hours more we knew would leave us high and dry, and high and dry we were; when, crawling from between the afterbitts at dawn, the scene presented itself to me that I have tried to describe at the opening of this article.

A few yells and whoops brought every one to a realizing sense of where they were. Deerslayer examined his legs and was immeasurably relieved to find they did not need sealing-wax. Steve, the engineer, ceased waging a war, in dreams, with bursting boilers and dire collisions.

Jack had no time to rake in the pot on the royal flush he held, nor was Ollie carried down with the mat he was sinking on the bar.

Walters moaned at the thought of the feast before him when the Onondaga cry tore him from his first juicy mouthful.

Magwood's dream must have been of making a double, for he first exclaimed, "I have 'em both!"

All were stiff and sore and damp, and as an invigorator we all took a good swallow of tomato catsup, there being nothing stronger on board except the above-mentioned pants of Deerslayer.

Breakfast was cooked over a fire made in the fishing jack, and then Mr. Magwood and I took a row off in the fog to get our bearings, while the engineer made steam to be all ready for a start when the tide would be high enough to float us.

By good luck Mr. Magwood found one of the stakes marking the channel, and with a pocket compass we got the direction of the tug and then returned, and three of the party amused themselves with penny ante poker until the tug had floated almost clear of the bottom, when the three heavy weights got in one of the boats, and after some backing and starting the Bull's River was once more headed in her proper course.

The delay in starting caused a fearful reduction in our supply of fuel, and we only reached Bull's Island by sacrificing every box, board and movable piece of wood on board, the bunker planks and even the stools being given up, and the three boats in tow were turned loose, each with an occupant, when half a mile from the landing, which was reached with barely steam enough to turn the screw over.

After a dinner at Mr. Magwood's house we were all given stands on the road, and two darkies and a dog were sent into the hammock to drive.

Mr. Magwood had the first shot, but did not kill, and then it was that Deerslayer covered himself with glory, killing a magnificent buck in splendid style with never a quake of buck fever, and although the deer was on a keen run he stopped dead in his tracks at over fifty yards.

I saw a large doe, but she was too far off for buckshot, and I had put the Winchester aside by request, as it was feared it might carry too far, and possibly wound a driver.

We all congratulated Deerslayer, of course, and as I had killed the most deer of any one in the party, to me was given the task of decorating him a "Knight of the Forest," in true Southern style, and an Indian in his war paint would have turned green with envy could he have seen his gory ornamentation after he had been duly sworn in.

A good wash, a hearty meal, a chat around the blazing fire and then what a glorious sleep we had in the first bed we had occupied in nearly a week.

The next morning a cart carried the deer to the inlet, which place we reached on foot and found the tug ready, with steam up, awaiting us, as she had preceded us to Capers Island the night before.

A hearty shake of the hand all around, a few coins of the bird of freedom to the drivers and darkies, and we were homeward bound, with only pleasant memories of the manner in which we had been entertained by the Messrs. Magwood, and the kind reception given us at Cape Roman Light by Chief Robinson and his two assistants, McLellan and Nelson, all of whom did everything in their power to add to our comfort and enjoyment.

We reached Sullivan's Island too late for me to catch the last boat to the city, so bidding good-bye to Deerslayer the trip was made in one of our yawls propelled by four lusty pair of arms, and as the negro melodies from the rowers' voices floated out over the waters under the starlight, so soothing was the music I dropped asleep.

When I awoke we were at the market wharf, and a few hours later I was speeding northward to receive my Christmas greeting beneath the snow-clad hills of ONONDAGA.

MAY PORT, Fla., February, 1884.

WHERE THE BUNG TREE GROWS.

[CONCLUDED FROM PAGE 243.]

"PROFESSOR, suppose we try the dam to-day?"

"No use; plenty of fish there, but you can't catch them."

I merely nodded and blew a wreath of smoke from my pipe, and rising from my chair, shortly returned with a book of flies. The Professor winked at our host, and watched me while I selected a half dozen or so.

"Now, John, jump into that buckboard with me, and if I don't show you a mess of trout to-night that will make you green with envy, I'll own up beat."

A ride of an hour brought us to the dam. The water was pouring over it to a depth of six inches. Rather high for good fishing, thought I, but we're in for it. The water falling on the immense apron of the dam, sent the spray rising in clouds, while the pool at the foot thereof looked so inviting we could not restrain an exclamation of delight. We found a party of English fishermen already on the ground before us, who were vigorously whipping the water, but on inquiry, discovered they had not caught anything; and upon presenting ourselves armed cap-a-pie for the fray, they withdrew to watch the Yankees "yank 'em out," by they didn't yank.

We found our companions at the dam a party of jolly good fellows, and passed a most delightful day in their company, but we, none of us, caught any fish. I say none, I must demur from that remark, all but myself had withdrawn in disgust, to a little country store near by, and were regaling themselves on crackers and cheese, while I sat on a large rock near the pool smoking. A small boy, the ubiquitous small boy, with pole to which the bark yet adhered, the proverbial small boy, with bare feet, one suspender, and a cotton line, crept along the slippery apron of the dam, crept along, with a fat grasshopper for bait, and looked exultingly across at me, and in less than a half minute he had a whopper upon the apron. The fish dropped off the hook just as he got him up, and then began a struggle on the slippery apron, pitch and toss; first the boy would have the best of it, then the trout, and finally, after a hard fight, the boy fell flat on his face, in a vain endeavor to crush his adversary, coming near going over the edge into the pool as he did so, but the trout was one too many for him, and shooting to one side escaped. The boy was wet, of course, from head to foot, and looked both disappointed and crestfallen as he met my gaze. I beckoned to him and he came around to where I sat, "'Twas too bad, bub, wasn't it?" I questioned him, while he examined my rod, line, and flies, in amazement. Finally, after preventing him with two or three flies and some hooks, he became very confidential, told me he had played "hookey" from school that day, and was afraid his "dad" would flog him if he went home, especially as he had no fish; "but," says he, "if you give me half what you ketch I'll show you where you can get—oh, lots."

I could eulogize that boy, but I won't. I could have hugged him then and there, but I didn't. I gave him a quarter, divided my lunch with him, and he let me into a secret. Let a boy alone for finding out where the big trout rendezvous. "Mister, do you see that alder bush over there 'tother side o' the dam, where the water is still and quiet like? Well, right in there is a spring hole, you can't see it now for it's all covered up by the water flowin' over the dam, but when the water is drawed down you kin; now you jest creep round there with me and I'll show 'em to you, more'n a bushel," and sure enough there they were, as I found upon investigation. While my companions were munching their crackers and cheese in the little grocery I amused myself and delighted the small boy by taking out from there about thirty of as handsome trout as I ever saw taken from one pool. The boy went on his way rejoicing over his luck and the prospect of appeasing the wrath of a stern parent, and I strolled up to the store to witness the discomfiture of my companions. I can't make the Professor believe but those fish were bought and *cached* expressly for this occasion.

The Professor made a discovery of a wonderful "fungus" growth encircling a tree in the forest; hear him:

"Yes, I was following up a small stream, which enters the main stream, just below the wash out, when above the noise of the water, I heard a peculiar sound—now pitched on a high treble, now in the middle octave, again basso profundo, what could it be? My cogitations as to its cause were soon brought to a termination, as I discovered the most wonderful growth of fungus on a tree over head. Stepping forward to more clearly observe this marvel of the wilderness, the noise before mentioned grew decidedly louder, and I could see immense numbers of flies buzzing around it; but, gentlemen, those were not flies, they were real old-fashioned bald hornets. I made tracks out of there, just about as fast as my legs could carry me—why if that swarm had taken after me I'd never reached home alive." And he wouldn't, for we afterward together inspected the hornets' nest at a safe distance, and it was a most wonderful curiosity, and big as a clothes hamper.

Berry's was some ten miles from where we were stopping, and consisted of a one-story cabin, weather-beaten and forlorn, like its owner; but he and his wife were good-hearted people, who lived in this isolated spot, eking out a scanty living for themselves. We knew the accommodations were very primitive and the capacity of the house such that we need not build our expectations too high. Still, we concluded to take things as we found them, and this is how we found them. On our arrival at the Berry mansion, we rapped on the small red front door for admission, but getting no response we concluded nobody was at home. Going back of the house, we found evidences of feminine occupancy in the shape of several Berry pies, which had but recently been placed outside, on a covered shelf, to cool, and whose warmth showed a recent proximity to the oven and a comparatively recent proximity of the cook. We still further investigated and discovered a can of milk in the spring, whose icy coldness had been communicated to it by a long immersion, and as they evidently expected company we thought we would register, so John made his mark on one of the pies and I followed suit; the milk helped wash it down. The pie was good and so was the milk, and when we stopped registering we had absorbed half a pie and a quart of milk.

Shortly a dog made his appearance; he approached us, scented around, acted in a familiar manner toward John's fish-basket, got a kick from the Professor, who don't like dogs, and finally made friends through the medium of a piece of imported bologna brought with us. We strolled around in front of the house where our horse was tied; we smoked, we whistled, told stories, sung songs, and suddenly the door opened and a frightened apparition in red calico appeared standing therein; she evidently came in through one of the rear windows, and had "fixed up" for the occasion.

"Good afternoon, mam, can you accommodate us over night?"

"Wall, yis, if you'll be civil."

"Well, mem, we'll try to be," and the Professor's face wore its most winning smile.

"Wall, then, if you kin put up with what we kin give you, you kin stay an' welcome."

Our room was furnished with a husk bed on which the few martyrs who visited that region might seek repose, and an hour-glass pillow. I designate it an hour-glass pillow because of its shape when in use, and because I counted the hours while using it. The bed had not been occupied since the last time the room was cleaned, and the two were evidently both accomplished at the same remote period.

The room was tenanted by wasps, they were there in colonies. Now if there is anything I do absolutely detest it is a wasp. Wasps! Horrors! I went to bed that night with such a crawling sense of nervousness as I never before experienced, and as I hope may never experience again. Cold chills crept up and down my back like a man with the ague, the Professor was snoring by my side, and I was waiting, waiting for what? Waiting for one of the varmints to drop from the ceiling on to my pillow. I had not long to wait, for a sharp tap on my pillow near my left ear, accompanied with an angry buzz, gave token that my cherished expectations were realized, and I waited in agony for the piercing of the epidermis, which I felt assured must speedily follow. The perspiration was oozing out from top to toe, and the tortures of suspense was only aggravated by the pertinacity of the Professor's attempts to sound double G. Each second was magnified into moments, and the attempts to reach the bottom of the sonorous gamut ended in a howl and a kick of the bed clothes which sent them flying over the footboard of the bed, and the Professor sprang on the floor, leaping clear of his bed fellow. While the Professor was executing a double shuffle, I lit the candle, and we began an onslaught on the wasps, burned them out, smoked them out, and we crushed them till we crushed them out.

A hearty meal the evening before retiring, of fried salt pork, had made my throat dry as a nutmeg grater, but I forgot my thirst in my dread of the wasps. Now the wasps having been exterminated, I began to feel a return of it, and I suddenly discovered that I wanted a drink. I had noticed a pail of water sitting on a chair near our bedroom door, just before retiring, and hanging on the wall just above it a tin dipper. I stood the intolerable thirst as long as I could, consideration for John kept me from rising for fear of disturbing him, but now I rose very quietly, creeping out of bed as softly as a mouse, refraining from lighting a match, lest I disturb the Berrys, whose sonorous breathing greeted my ear as I opened the door leading into their apartment. The pail of water sat on a chair to the right of the door, and of course I could put my hand right on it; passing through the door and turning to the right I groped along, 'twas pitch dark. Strange, surely the pail sat just about here, and the dipper hung right here. I placed my hands on the wall, as I thus soliloquized, and felt for the dipper. My hand came in contact with something of a metallic nature, and the next instant Mrs. Berry's big bread pan came thundering down. Rolling to the middle of the apartment it began the most infernal waltz; round and round, and round and round on the hard board flooring in the stillness of the night it spun, giving out a peculiar tinny roar, now soft, now loud, as it turned from edge to edge; round and round, as though some demon of the night was urging it on faster and faster apparently, until it began to wobble. A titter from a woman and loud guffaw from a man proceeded from some undistinguishable quarter from out the Cimmerian darkness, startled me, and caused me to realize the ludicrous position I was in, while the man's voice directed me to the left of the door for the drink I sought.

The fishing we had on the morrow made amends for all the tribulations of the night preceding, and we had such sport as I never had before, and took back a beautiful display of trout.

This ended our fishing, and our return to the land of civilization was uneventful. To all those ardent followers of the rod, who love sport for sport's sake, I cordially recommend a trip to the forests and streams of the land where the "bung" tree grows.

C. A. M.

KENTUCKY.—Mill Springs, April 21.—Birds wintered well, and a favorable nesting season is all that is necessary to an abundant crop of game next fall. Young squirrels are ready for the table.—KENTUCKIAN.

Natural History.

APPLICATION OF TRINOMIAL NOMENCLATURE TO ZOOLOGY.

BY DR. ELLIOTT COUES.

[Spoken before the National Academy of Sciences at the stated session held in Washington, April 15-18, 1884, and stenographically reported by C. D. Gedney of the U. S. Coast Survey.]

Mr. President and Gentlemen of the Academy:

I have no formal paper to present to-day* on the subject of the Application of Trinomial Nomenclature to Zoology; but speaking off-hand, I wish to offer a few remarks upon a subject at the present time attracting much attention—upon a matter which has come up within the last few years, and which bids fair to effect a very decided change in our system of naming objects in biology. In former years I have not thought it necessary to bring the matter to the notice of the National Academy of Sciences, because it had not then assumed a status or position which appeared to warrant such a course. Now, however, it seems probable that a decided innovation upon a system of nomenclature which has been in vogue for a century and a quarter is likely to be made, at least in one department of zoology. The question is, therefore, whether that innovation is desirable or not—whether the change is to be accepted or rejected; and, if accepted, how far it is likely to be applicable to other departments of zoology, as well as to ornithology.

As is well known to you all, since Linnæus established a binomial system of nomenclature in which each organism should be known by two terms, generic and specific—since 1758, when that system was first consistently and systematically applied to zoology, there has been until the last few years no formal or decided change in that Linnæan method; it has become ingrained in the study of biology, and is, in a sense, supposed to be essential to a methodic system of zoology. But it will be remembered that in the long period which has ensued since the time of which I speak, the idea of what constitutes a species in zoology, and, I may add, in botany, has radically and entirely changed. It seems probable, therefore, that a system of nomenclature perfectly adequate and applicable to a former status of zoological thought, may become, in the course of time, inapplicable to the later stage of science. And such appears to be the case. In former years, a species was supposed to be a more or less distinct creation. It was, moreover, supposed to be possible to say of a given organism whether it was or was not specifically distinct from another given organism. At the present day, largely through the influence of the Darwinian Theory of Evolution, which has become established within the last quarter of a century, we know that one animal may not be specifically distinct from another, and yet be sufficiently different to require recognition in some manner, which a system of nomenclature, to be valid and adequate, must provide for. The question is, therefore, how shall we recognize it? That is a subject which has long occupied the attention of zoologists, and they have been working up to the present state of trinomialism by virtue of what may be termed subterfuges. That is to say, a given organism not sufficiently distinct from another to receive a specific name, has been called a "variety," a "sub-species," a "con-species," a "geographical race," or a "climatic variation." Various terms of this sort have gradually crept into the nomenclature of zoology to indicate the still imperfectly differentiated, still incompletely segregated forms, but always with the intervention of some sign or other, as the sign "var.," or with the letters of the alphabet, "a," "b," "c," or with the abbreviation "subsp.," etc., intervening between the binomial name of the creature, and the varietal designation which follows; as *Turdus migratorius* for the robin, *Turdus migratorius* var. *propinquus* for its Western variety, and so on, whatever the given case may be.

This has long seemed to me an entirely unnecessary, superfluous, somewhat awkward and cumbersome method of dealing with the nomenclatural technique of our science, and it has recently come to pass that this needlessly intervening term or sign has been entirely done away with by the leading ornithologists of this country. The latest lists of our birds discard it altogether, and present a decided and radical innovation upon any binomial nomenclature, by employing the three terms consecutively without the intervention of any sign whatever, as, *Turdus migratorius propinquus*. This method, moreover, as used by competent ornithologists, has a meaning and significance of its own. It is not simply a question of recognizing any variation, any abnormality, any sport, as I may call it, any variety in the old sense of the word; for we proceed upon a perfectly definite, well-understood and recognized principle of variation, viz., variation according to conditions of physical environment, using this term in the largest sense, to cover all those exterior influences which exert a modifying influence upon animal organisms.

From our study of North American birds, which are perhaps better known than the same number of birds of any other portion of the world, we have so exactly traced their geographical variations, that we are enabled in some cases to positively foretell what will be the characteristics of a given bird in a given geographical area. In one case at least, within my knowledge, before any specimens were received, a given set of sub-specific characters were hypothetically assigned to a bird [*Junco connectens* Coues] from a particular region; and, upon receipt of specimens, the hypothetical characters of the presumed sub-species were confirmed.

Here is the definite principle and rule of action in the application of such trinomials: That the third term of the technical name is given to climatic or geographical races varying according to known conditions, as latitude, elevation, temperature, moisture and conditions of all sorts. The practice, therefore, has a logical basis, a consistent possibility of strict scientific application. It appears to me to be a simple, natural and easy way of disposing of a large number of intermediate forms which have not become specifically distinct from their respective nearest allies. It is quite true that the recognition of this result of climatic conditions is largely a matter of tact and judgment, and that it is not always possible to say whether a given organism is or is not "specifically" distinct from another.

There is in this use of trinomials, as you perceive, a principle of practicable application entirely different from the more arbitrary naming of varieties, such as sports and abnormalties. And the question is, what status is this principle likely to obtain in biology? The status that trinomialism has already acquired in ornithology is this: that it is likely in the near future to receive the sanction of the entire body of the American Ornithologists' Union, and is already in use by ornithologists almost without exception in this country. Likewise, in Europe, the trinomial system is beginning to be employed in the very stronghold of British conservatism, in the British Ornithologists' Union—one of the leading ornithologists in that country having recently published some monographs of birds, in which that system is applied. Trinomialism is known as the "American school" of ornithology, and the central idea is the "American idea" of ornithology. It is in general use in this country.

Under these circumstances, speaking as one who is largely responsible for the growth and spread of trinomial nomenclature, I have no hesitation in laying the matter before the Academy, for an expression of the views of members present, as to its applicability to other branches of biology, and to inquire whether it seems likely to become a permanent feature of biological science.

DISCUSSION.

In the discussion which followed upon this communication, Dr. Theo. Gill said that the question so well discussed by Dr. Coues was one of terminology, but not only one of terminology. It was well known to all how much these terminological appliances had accelerated and facilitated research. The views expressed were almost a necessary result of profound study of our bird fauna, and the logical application of the doctrine of evolution.

In a time when belief in the creation of animals was practically universal, the name given to any species indicated the condition of things under which an animal was supposed to have come into existence. Had the animals of this country alone been studied, we would ultimately have been led to believe in the doctrine of evolution. No one could take up the study of the birds or other animals of this country without seeing that between certain extremes, the differences are so radical that differentiation into species would be necessary. Such had been the history of ornithology. In early times we knew simply the birds of the Eastern slope. Then we named them as species with limited range of variation. Later, numbers of forms were obtained in the West, and these forms, although somewhat alike, were also differentiated as species, distinct from those found in the East, and were so named. But still later, large collections were gradually amassed from the intervening regions of the great interior, and these were elaborately studied (in collections sometimes of hundreds), and many were the Eastern and Western so-called species thereby connected. But then it became evident that something more should be done than merely lock together into one heterogeneous fold forms so different. Then it was that this trinomial system came into use as a very convenient tool for the distinction of the various intermediate forms. Ultimately a philosophy became the result of study and practice, so that now we can at once, by the inspection of a catalogue, approximately ascertain whether the forms are radically distinct, what variation existed between the extremes of form, and by the trinomial names, whether a given species was variable and whether it was manifest under a number of modifications.

In this trinomial system we have an example of a scheme by which we can become cognizant of the amount, to a certain extent, of variation in a given group. By this convenient means we are also enabled to differentiate the characters, and to give at once to the mind of the reader or student some idea of the range of characters that may be deemed to prevail in a certain group.

Turning to Dr. Coues's request for information with regard to other groups, Dr. Gill said that it was true that we have in other groups a similar applicability of these principles. A number of examples are afforded in the case of the fishes, insects and mollusks, where the naturalist is compelled to degrade some forms and admit them as simple variations and sub-species. This scheme would also come in as a convenient tool for the differentiation of recent from fossil forms, there being a number of extinct forms very much like those now existing, which are regarded by some as conspecific and by others as different, receiving different names.

Prof. Wm. H. Brewer remarked that, as a matter of convenience, this was about the only way that we could scientifically describe many varieties of cultivated plants and breeds of domesticated animals, which differ from one another much as species do, the differences, however, being less constant. Already some agricultural writers, who have knowledge of natural history, are beginning to adopt this method in the description of cultivated plants, both useful and ornamental.

Dr. Gill said in regard to this question: "We have had a condition of things which must appeal to the sense of the ludicrous. In former times there was an undivided belief in creation, and yet we had before us our domesticated animals and cultivated vegetables, exhibiting these excessive variations—so great, that if seen in nature, they would be differentiated not only into species, but different genera. Take the dog. We were told the dog was a species—by some said to be created for the use of man. What is the dog? It is not a species in any sense of the word; it is simply a conjugation of forms, derivatives from a number of wild species. The dog is not a species; it is the result under cultivation and domestication of the off-spring of half a dozen different species. It is a composite which itself shows the processes of development in a marked degree, so that we have in what is popularly known as the dog, a combination of species and even genera."

Dr. Coues said it gave him great pleasure to note the extent of the indorsement given to this system; but that he had expected that some one would have put forward the objections which might be raised. As none appeared to be forthcoming, he would venture to state some of them himself. The purpose of the trinomial system, the Doctor continued, is an obvious one, yet that system is so sharp a tool that without great care in handling, one is apt to cut his fingers with it. It is of such pliability and elasticity, and lends itself so readily to little things, that in naming forms, one is tempted to push discriminations beyond reasonable and due bounds. It gives one an opportunity—even a temptation—to enter into faunal catalogues and lists of animals an almost indefinite number of very slightly differentiated forms in any department of zoology—forms which perhaps only the eye trained in that special line is able to satisfactorily discriminate. We therefore have in our lists a number of so-called geographic and climatic races which no one but their discoverer or describer is able to recognize or appreciate. This is the real difficulty—the real objection to the system—its abuse in the hands of immature specialists. Dr. Coues said with some emphasis, that since he had ventured to bring the matter to the attention of the Academy, he would not conclude without adding the word of caution, that the trinomial system must not be pushed too far; otherwise, almost immediately, our catalogues would be insufferably overburdened with nominal sub-species, too slightly differentiated to require any formal recognition by name.

[NOTE.—In the business meeting of the Academy, which ensued after the public session, Dr. Coues introduced a resolution, which was referred to the Council, that a committee of five be appointed to investigate the subject of zoological nomenclature, with reference to the establishment of a more uniform system.]

*April 18.

DEER IN THE ADIRONDACKS.

BY C. H. MERRIAM, M.D.

[From advance sheets of the Transactions of the Linnean Society of New York.]

Cariacus Virginianus (Bodd.) Gray.

COMMON DEER; VIRGINIA DEER; RED DEER; WHITE-TAILED DEER.

Antlers.

THE branching and gracefully curved antlers which adorn the heads of the bucks, and contribute so largely to the elegant appearance of the animal, are shed and renewed every year. Their growth is so rapid that the full size is usually reached in about three months, and they fall off about four months afterward. They are first seen with us, as a rule, about the middle of May, appearing as soft, dark-colored and rapidly-elongating vascular excrescences. They harden from below upward, and by the time the growth is complete all but the tips is well ossified. The soft, skin-like material, called the velvet, with which they are covered, now begins to peel off in irregular strips and shreds, and by the early part or middle of September the horns are generally clean. The velvet does not come away of itself, but is rubbed and scraped off against shrubs and small trees, as if the antlers itched at the period of maturity. The Hon. Judge Caton, of Ottawa, Ill., whose facilities for observation in this field have rarely been equalled, makes the following statement, which will, by many, be received with surprise: "The evidence, derived from a very great multitude of observations, made through a course of years, is conclusive that nature prompts the animal to denude its antlers of their covering, at a certain period of its growth, while yet the blood has as free access to that covering as it ever had."*

Seasonal Changes in Pelage.

Descriptions of the pelages of our mammals do not fall within the scope of the present work; but the seasonal changes in the coat of the deer have so much to do with its life history that a brief glance at the distinctive features of these changes is necessary. Our deer shed their coats twice each year, in June and September; and, from the general appearance of the pelage, are said to be in the red coat in summer, and in the blue or gray coat during the rest of the year. The gray is merely the blue after it has become old and worn, for in maturing it loses the handsome blue appearance that characterizes the first few weeks of its growth. These seasonal changes are not confined to color alone, for there is an equally radical difference in the length and texture of the hair. In summer it is fine and short, and lacks the wavy look that is always noticeable at other times. In winter it is long and coarse, has a crinkled appearance, and the individual hairs are so large and light that the animal will float in water.†

Judge Caton, whose spacious deer parks and carefully recorded observations have contributed so largely to our knowledge of this species, has published the most accurate, detailed and complete account of the changes of pelage, that has ever appeared in print. From his extended remarks upon this subject I quote the following brief passages: "The change from the summer to the winter coat is gradual, the new displacing the old by dislodging the hairs promiscuously, till they become so thin that the new coat is seen through the old. This is not simultaneous over the whole animal, for the neck and shoulders may be clothed entirely with the new dress, while the old still prevails on the thighs and rump; or the winter coat may have replaced the old on the back, while the belly still shows only the summer pelage. When the winter has replaced the summer garb, the hairs are short, fine and soft; but they rapidly grow in length and diameter, and undergo the changes of color peculiar to the species. At first they lie down smoothly, but presently the diameter becomes so great that they force each other up to a more vertical position, or at right angles to the skin. As the diameters increase, the cavities within enlarge and become filled with a very light pith, and they become brittle and lose their elasticity, so that the integrity of the walls is destroyed when sharply bent, and they remain in the given position."‡

The exact period of shedding and of renewal of the coat varies somewhat from year to year; and it does not always take place at the same time in all the deer of the region, during the same season. It evidently depends in great measure, if not wholly, upon the condition of the animal at the time of the moult, and this is determined mainly by the way the deer wintered. After severe winters many are poor and ill-conditioned, and they do not put on the red coat till late in June, or even till the first of July—the blue being correspondingly delayed. If, on the other hand, the winter has been a mild one, and the supply of beechnuts large, the deer have probably wintered well, and come out fat and healthy in the spring. In this case they shed the old gray coats early, and the red may be seen covering a large part of the animal by the middle of June, or even earlier. These deer assume the blue coat very early, and the change may be well advanced by the last of August.

Deer rut in November, the season commonly extending from the latter part of October till the first week in December. As this period approaches, the necks of the bucks become enormously enlarged,‖ and their whole demeanor is changed. Instead of treading cautiously through the forest they now rush wildly about, tracking the does by the scent; and when two or more bucks meet, fierce conflicts ensue.

In these engagements their antlers sometimes become interlocked, so that the combatants cannot free themselves, and both most inevitably perish. My father has a set of locked horns that were found, with the carcasses attached, frozen in the ice on Pine Creek, in Lewis county, several winters

*The Antelope and Deer of America. By John Dean Caton, LL. D., 1877, p. 152.

†It must not be forgotten, however, that deer are commonly poor in summer and fat in autumn and early winter. Hence, the later in the season the more nearly will the specific gravity of the animal approach that of water. Consequently, a much smaller amount of buoyant material will suffice to float the animal in October and November than in July, August and September.

‡Antelope and Deer of America, pp. 129-7.

‖As early as the last week in October I measured the neck of a buck that was 30 inches (762mm.) in circumference, only 10 inches behind the ears. The maximum development is attained about the middle of November.

ago. The body of the larger buck was in fair condition, while that of the smaller was much emaciated, showing that the larger and more powerful had succeeded in forcing his adversary's head to one side so that he could browse a little.

Audubon and Bachman state that they once saw three pairs of horns thus interlocked. What a wretched trio this must have been, slowly starving in the midst of plenty!

At this season the bucks not only fight among themselves, but occasionally attack man, and more than one unfortunate person has been gored to death by them. In battle they make use of their horns and also of their forefect, whose sharp hoofs are capable of inflicting terrible wounds. I was once sitting quietly on a log in a deer park when a buck approached, and, making a sudden spring, dealt me such a powerful blow on the head, with the hoofs of his forefeet, as to render me unconscious. No sooner was I thrown upon the ground than the vicious beast sprang upon me, and would doubtless have killed me outright had it not been for the intervention of a man who rushed at him with a club and finally drove him off. Both my father and myself have been knocked flat upon the ground by being struck in the abdomen by the forefeet of a very harmless-looking doe.

As a rule, two fawns are born at a time, one being the exception. Most of them are brought forth in May, a few being dropped as early as the latter part of April, while others are postponed until the first week in June. They are at first spotted, the spots usually remaining about four months and disappearing in September, when both old and young change their coats. Before the moult takes place they may be fairly regarded as one of the most beautiful of North American mammals, and their graceful and sprightly movements cannot fail to elicit admiration.

The clear white spots are set in a ground of rich bay, and the contrast is heightened, to use the language of Judge Caton, by the animal's "exceedingly bright eye, erect attitude, elastic movement, and vivacious appearance. * * * The highest perfection of graceful motion is seen in the fawn of but a month or two old, after it has commenced following its mother through the grounds. It is naturally very timid, and is alarmed at the sight of man, and when it sees its dam go boldly up to him and take food from his hand it manifests both apprehension and surprise, and sometimes something akin to displeasure. I have seen one standing a few rods away, face me boldly and stamp his little foot, in a fierce and threatening way, as if he would say, 'If you hurt my mother I will avenge the insult on the spot.' Ordinarily it will stand with its head elevated to the utmost; its ears erect and projecting somewhat forward; its eyes flashing, and raise one forefoot and suspend it for a few moments, and then trot off and around at a safe distance with a measured pace, which is not flight, and with a grace and elasticity which must be seen to be appreciated, for it quite defies verbal description. A foot is raised from the ground so quickly that you hardly see it, it seems poised in the air for an instant and is then so quietly and even tenderly dropped and again so instantly raised, that you are in doubt whether it even touched the ground, and if it did, you are sure it would not crush the violet on which it fell."§

Fawns are readily tamed, in fact become tame of themselves, if much handled, in an astonishingly short time; and I have known one to follow its keeper, and even bleat for him, when out of sight, within three or four days after its capture. At this tender age they display neither judgment nor common sense in the selection of food, devouring almost anything that fails in their way which they are able to swallow. Bits of newspapers, old rags, and pieces of boots and shoes are seized and disposed of with as much apparent eagerness as bread and butter or lily-pads; and I once saw a fawn eat a box of chewing tobacco given it by an unprincipled visitor. It died next day.

The flesh of the deer is juicy, tender, and well flavored, and is the most easily digested of meats. Its good qualities are too well known to require further comment.

The hide is put to a variety of uses, the most important, with us, being the manufacture of gloves and moccasins.

Our deer are much larger than those of the South and Southwest, adult well-conditioned bucks averaging from 200 to 225 pounds avoirdupois in weight, and exceptionally large ones being much heavier. Hence the Adirondack deer is more than double the size and weight of the same species in Florida.

I have taken great pains to ascertain, approximately, the number of deer annually slain in this Wilderness, but with indifferent success. It is a low estimate to state that from five to eight hundred have been killed here yearly for the past ten years. How much longer their numbers can withstand this enormous drain, is an open question.

On the 3d of July, 1609, Samuel de Champlain ascended the river Richelieu, and entered the lake that now bears his name. In his narrative of this memorable journey, he speaks thus of the animals found upon the island at the foot of the lake: "Here are a number of beautiful, but low islands, filled with very fine woods and prairies, a quantity of game and wild animals, such as stags, deer, fawns, roebucks, bears, and other sorts of animals that come from the mainland to the said islands. We caught a quantity of them. There is also quite a number of beavers, as well in the river as in several other streams which fall into it. These parts, though agreeable, are not inhabited by any Indians, in consequence of their wars."

Pennant says, that 25,027 hides were exported from New York and Pennsylvania in the sale of 1764. (Arctic Zoology, Vol. I, 1792, p. 33).

[TO BE CONTINUED.]

§Antelope and Deer of America, p. 155.
¶Documentary History of New York, Vol. III., p. 5.

BIRD ARRIVALS AT CLEVELAND, OHIO.—We are having quite a cool spring, but the birds are coming at about their usual time. Following is a list of the arrivals thus far this spring: Bluebirds, Feb. 19; robins, Feb. 24; crows, March 1; purple grackle, March 20; meadow lark, March 20; red-winged blackbird, March 22; yellow-shafted flicker, March 24; cowbirds, March 25; Wilson's snipe, March 29; woodcock, March 29; green heron, March 29; chipping sparrow, April 1; mourning dove, April 7; grassfinch, April 11; wood pewee, April 12; brown creeper, April 13; barn swallow, April 19; kingfisher, April 21; yellow-bellied woodpecker, April 23.—SRI.

BRANCHING OUT.—Readers of this journal who are going abroad will be glad to know that we have just completed arrangements to have the paper placed for sale on all railroad newsstands of Great Britain. Readers who stay home are informed that a growing subscription list and steady advertising patronage (both on a cash basis) will enable us to continue to furnish the paper at $4 per year.

Game Bag and Gun.

THE WOODCOCK.

[A paper read before the New Hampshire Fish and Game League by Dr. Wm. Jarvis.]

IN the list of birds pursued with dog and gun there is one that has a lasting claim upon the affections of the sportsmen, both on account of its beauty and the mystery that surrounds its ways. A bird of nightly wanderings, and daily rest; a bird with eyes so dark and deep that the glories of an autumnal sky and landscape are reflected in miniature from their depths; a bird with the magic power to turn a sportsman from all other feathered game if he once hears the whistle of its wings or sees its form glide stealthily down the glade. Its plumage above is mottled with rufous, slate and black, while below upon its shapely breast, there is a tinge of pink that fades toward the tail to a paler hue. Its legs are of moderate length and almost flesh-colored, while the feet have a brownish cast. Its bill is dark in color and very long, and its eyes are set near the top of its head, that it may the more safely push its earthy investigations without injury to its eyesight. Its weight is from five to eight ounces, the latter found more generally among the females. Such is the woodcock, a bird once known never to be forgotten. It has, too, a claim upon the epicure, as well as sportsmen, and from those days when the Pontine marshes furnished woodcock in such numbers that the Romans feasted off their tongues, until the present time, this bird has been regarded as one of the daintiest morsels ever tasted by mortal man.

Of woodcock we have but one variety inhabiting Eastern North America, and breeding in various sections throughout the United States, called by ornithologists *Philohela minor*, to distinguish it in a learned and scientific manner from its cousin, the woodcock of Europe, a bird differing from ours in shape of wings, in being perhaps a third larger, and in general markings. However, it is not in my province to offer an elaborate or extended article upon this bird, but merely to bring forth a few notes concerning the tribe as I have found it in New England while wandering through our glens in the early season and in autumn months, "beating" the hillsides with dog and gun. And yet the woodcock is about the same sort of a bird wherever you find it, and woodcock shooting is much the same sport throughout the length and breadth of our land. Interspersed here and there can be found many a stream trickling from among the hills and winding through the lowlands of New England, upon whose banks of deep, rich loam, woodcock love to feed, and amid whose alder-covered environs they nest and rear their broods.

Their arrival in the northern latitude varies with the season; but it is not long after the bluebirds and robins have returned, and the loam along the brooksides has been softened by the sunny days. Soon after mating, for the male bird, unlike the ruffed grouse, is satisfied with a single love, they build upon the ground their nest of leaves and twigs, not very wonderful however as specimens of bird architecture. And then the female lays her eggs, four or five in number, quite round in form, of a dull, clay color, covered with brownish spots, and in size corresponding to the pigeon's. The male bird assists in incubation, and if all goes well, soon the little family of longbills are waddling about on their slender legs, the funniest little crowd one ever sees in all the woodland. They tumble about in their efforts at locomotion like a troop of tyro acrobats, and their bills seem to be always in the way. However, they grow apace, and in about four weeks are able to fly, though they are by no means easy in their flight.

The parent birds are very solicitous of their little ones, and when mankind encroaches upon their domain, endeavor, by all the arts known to birdland, to attract attention to themselves in order to give these downy chicks a chance to hide beneath leaf and twig. They sometimes even convey their young bodily through the air to a place of safety. There is no other bird family of all our fields and forests so peculiar in their ways, none of whose ways are so hard to study, consequently none so little understood; and the reason is very plain. The woodcock does not fly about during the day for either food or pleasure, scarcely ever taking wing unless disturbed, but keeps all the day long from vulgar eyes, and when the sun has set and most good birds retire to rest starts out for its feeding grounds. And often in the gloaming of summer evenings have I seen them dart across my path like spirits, noiseless and swift, in their journeys to favorite dells. They seem to know by intuition what loam contains the fattest, sweetest worms, what bog contains the choicest loam, and by their borings leave for us, otherwise unsophisticated in woodcock logic, indications of their feeding grounds. However, I must confess that they are not wholly birds of the night, neither are their deeds evil, that they do feed while the sun is shining, though not where it shines. I know of this, for I have caught them at their borings where a dark morass was clothed with pools margined with deep, rich loam, and the alders were so thick that the sunlight could not reach the earth beneath, where, low upon the earth, all was dark and still, save the hum of insect life and the purling of the brook; and once, one hot August day, while creeping through a meadow cornfield in my efforts at stalking an upland plover which was standing alert, just outside in a short patch of clover, I found a woodcock busy at his mid-day feast, probing the rich, moist soil beneath the shadows of the tall, thick corn. I watched him some time, until either suspicious of my presence or satiated with his feast, he walked from my sight with bobbing head. It was his last feast, as I soon flushed and shot him. I have often wondered if they act the same by night as day, and what could be their ways as they feed on stormy nights beneath the cover of overhanging tree-lined banks, if they are as solemn then as when feeding in the daytime. But I have no doubt they pass many a night in revelry by the margin of some favorite pool, whose mirrored surface reflects the starlit zenith, the moon high above them for their chandelier, the wind anthems through the treetops for their music. If they do not often pass the night in high carnival why are they such quiet birds by daylight? Why are they not found running about like the lordly grouse or the upland plover? It is only one of the many mysteries that surround a tribe whose complete history is not yet written. However, in my rambling lines I must not forget the love notes of the male bird, for to do that would be to do him rank injustice. It is a sweeter song by far than that of many a famous songster, and I have no doubt sounds as sweetly to his lady bird down in the ferns beneath as did ever song of troubadour to his lady love in "ye olden times." It is during the twilight that the woodcock utters his love notes. He gives a prelude to his song upon the ground, then circles up in flight through the treetops till lost to sight. You hear his murmuring high in air, and in his downward flight you catch the full melody of his love song as he approaches the place he started from, near which without doubt his female is awaiting him. This song of the woodcock may be new to many, but it is one once listened to you will not soon forget.

Woodcock are a riddle to the sportsman who knows them best, while to those without the pale of field sports they are known only as the name is seen upon some bill of fare, or as they are brought upon the table served with the highest culinary skill. To the rustic lad and farmer upon whose land amid the swamps and glades they breed, they are unseen, unknown, or if seen, known only as mudhens or by some other low-born title, and should you inquire for woodcock you would most likely be directed to the old trees in the orchard or upon the hillside, but not often, I'll warrant, to the alder-covered lowlands, for the farmer is not so familiar with these bird tenants of his freehold as with the ruffed grouse and several others of the feathered race. There was formerly much mystery in regard to the disappearance of woodcocks during August and early September, and various have been the ideas advanced, but to go into all these theories would take too long. That they do, to a certain extent, vanish, or at all events are not to be found in any great numbers in their breeding places is well known, yet there is no black art in all this. A few remain in their old haunts, some go to the cornfields, others to the hills; in short, they simply scatter. It is the time of breaking off their family ties, for it is their moulting period, and being not pleasant to look upon, or plump of body, or smooth and glossy of feather, they have a lady's pride, and so withdraw to some private, sylvan boudoir, there to nurse their strength till nature shall have worked her course, and they may once more present themselves in all their gorgeous beauty, the sportsman's pride and glory. Summer woodcock shooting ought to be abolished for the welfare of the tribe, not that they are any easier to bag then than later on, at least I have never found them so, but that they are not in so good form for either gun or table, and furthermore, it is disastrous to the ruffed grouse, for, as the law stands in New Hampshire, many a fledgling grouse helps to fill the bag during August days, when "shooting woodcock," by men who never shoot them later and have no dogs suitable for the sport, is an excuse for being in the covers with dog and gun. The law for both birds should be the same, then, my word upon it, there would be better shooting among the hills.

It is during the cool, moonlight nights of September, that golden month of the harvest moon, that woodcocks leave their hermit life and visit the southern hillsides, sunny glades and tinted brakes, there to linger till the colder frosts shall warn them to be on their journey ere the winter snows fly among the naked trees and cover the brown ferns and meadows. How the whistle of a flushed woodcock on an autumn morning stirs one's blood! What a thrill it sends dancing along one's nerves! No other in all the list can excel it; not even the ruffed grouse of our woodland as he cleaves the low grown treetops, nor the grouse of the Western plains as he rushes from the stubble, nor the quail as he whirs from the sedge and cornfield, nor yet the snipe as he twists away upon the wind. I have shot them all in season, so write from my own experience. The woodcock, too, is unlike them in the manner of its flight. When flushed they are up and away, you may be right sure of that, but the woodcock, with all its vagaries, is almost as likely to come into one's face as to go elsewhere, yet it is no dullard, but as great a rascal as ever flushed before a gun. In fact, you can place no dependence whatever upon its flight, and that very uncertainty is, perhaps, one of the magic links which bind us to its pursuit. It will often pitch headlong at the report of the gun down into a bunch of brakes or tuft of grass, even if caught on the open hillside, thereby giving to the uninitiated the idea that it is killed or badly wounded. It often, too, rises straight from before you as though impelled by some hidden spring, then, taking in its flight a ride over the alder tops, pitches just behind, not two rods from where you flushed it. Or, if you have no dog to catch the scent, it may wait till you have passed it by, then, when your back is turned, steal away like a thief, without even a note of warning. It is truly wonderful how the woodcock directs its flight, for no matter how thick the trees and branches to mar your aim, it skillfully avoids them in its flight, and leaves you wondering how in the name of flesh and blood it ever escaped their network.

Though September brings back woodcock from their moult, yet it is when October's scenes are full upon us, and their beauty reigns not elsewhere as it does here in New Hampshire, by the dashing streams, among the woodlands and along the furrowed hillsides, that the finest woodcock shooting is enjoyed throughout New England. And what, pray you, can excel an October day, when the morning is clear and fresh, and the frost of the night before, harbinger of the woodcock's flight, whitens the fence-tops and fallen trees, and hangs sparkling and dripping from the lichen-covered tree trunks, from every leaf and twig, and the rank herbage is a mass of fretted silver; or that when the mid-day sun casts over land and water that misty veil so peculiar to autumnal months, giving to the pine and hemlock a softer hue than at any other season, and to the swamp maple and the oak a deeper tinge, especially when in contact with the golden orange of the birch and beech? Or what can surpass the setter's work, the eager, swift, yet cautious pace, the quick turn on scent of game, the poise so staunch and true, as the odor comes in warm gusts to the sensitive nostrils; or what again the active roading of the cocker spaniel and his merry yelp when the bird is flushed? Truly these are glorious days, golden links between heated summer and cold winter, and never to be forgotten scenes.

Of all who love these days the woodcocks seem to love them most and are not loth to take advantage of them amid our sunny glades and hillsides as they wing their way to southern grounds. In their autumn flights some choose the slopes covered with brakes and sapling pines, some the knolls covered with birches, others the alder patch and willow covered interval. I have found them on the highest, dryest hills, and in the lowest covers, under hemlocks, near large woods, amid the rocks on a river's bank and among the briers in the open pasture. Verily, the woodcock is a bird of strange caprice, and I well remember the antics I caught one at one autumn day some thirteen years ago, when, with a friend, I was beating a high hilltop for ruffed grouse. Our setter came to a point toward a clump of pines and we expected to hear the rush of the startled grouse, but not a sound. We peered beneath the trees, and there, upon the carpet of pine needles, saw a woodcock strutting about like a turkey cock in miniature, with tail erect spread like a

fan, and drooping wings. He would nod his head in time to the movement of his feet, as though listening to music we could not hear. It was a scene droll, at the same time picturesque, the tall green pines above their carpeting of red brown needles, a red dog standing like a statue with outstretched neck, and glaring eye, a small, long-billed, dark-eyed, mottled bird, marching back and forth with all the pomp of a grenadier, and two sportsmen on their knees as silent spectators.

Woodcock, in their migrations south, are sure to give the best of sport, for though one shoots a favorite cover clean, two or three frosty nights will bring others to inhabit it again. But when the cold blasts of November whistle through the leafless trees, and the cold nights freeze the loam too hard for a woodcock's bill, then they bid adieu to our northern ken, and are off for a warmer clime, leaving the ruffed grouse the only game bird of our woodlands.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

Practical men in every branch of sport, are unanimously calling for an all-around type, be it a yacht, a canoe, or a rod. While excellency of special types has been, in late years, eagerly sought and fairly attained, the all-around types have been sadly neglected, almost unthought of. In firearms, for instance, we have the far-killing 10-gauge choke-bore for waterfowl, the 12 gauge modified choke for field birds, the wonderfully fast and effective rifle repeater for deer and grizzlies. But what has yet the inventive skill of gunsmiths done to put into the hands of the woodsman a suitable weapon to meet the daily emergencies of his adventurous journey through forests and streams?

The woodsman, for safety as well as for food, wants a weapon with which he can kill anything, either fur or feather, which chance may throw across his path. With a shotgun he cannot succeed in killing large game, while a rifle will not afford him any opportunity to bag birds. To this I hear the interested manufacturer reply: "Let him take both." When the woodsman, burdened with his canoe and supplies, is carrying over the mountainous range, creeping under the fallen tree, walking knee deep in the swampy path, his muscles strained, sweating and breathless, how comforting and refreshing it should be to throw another ten pounds on the weary man's back!

A combination of the rifle and shotgun in a single, safe, effective, compact, fast-shooting and light weapon is then a desideratum; and, from the intense interest this question has raised every time it was mentioned, the gunsmith who will furnish it, I am sure, will be handsomely repaid.

While it would be unfair not to acknowledge what has already been accomplished in this way by two very meritorious productions—Mr. Shelton's auxiliary rifle and Mr. Baker's three-barrel gun (whose success should induce competition)—it is, at the same time, only justice to say that neither weapon fills the bill in such a way that no further improvement should be looked for.

The auxiliary rifle cannot be so adjusted as to be perfectly accurate, and it is obvious why. The adjusting piece is a lead collar around the rifle barrel at its muzzle end, which has to be reduced to the gauge of the gun at the head of the chamber, through which it is shoved into the gun barrel; from the head of the chamber up to the choke the bore of the gun is gradually widening, so that when this centering collar has reached its resting point it fits loose, thus causing vibrations which seriously impair the accuracy of the shooting.

After much trouble and many trials, however, by getting solder put around the muzzle end of the foul-protector which screws on this rifle, to have it fit exactly the inside of my gun's muzzle, I have succeeded in partially remedying this defect. In a gunsmith's shop at Montreal, I was shown another auxiliary, left there by a friend of mine for the object of correcting the same fault. Whether he was successful or not I am not aware.

The three-barrel gun is a very accurate, powerful and well finished weapon, each barrel, shot and rifle, doing exactly what the maker claims; but a very serious drawback to it, as far as my own experience goes, is the complication resulting from the connection of the rifle and left gun locks. "To operate the rifle hammer, cock the left hand shotgun lock, and then push forward the thumb piece A of rifle hammer, which will cause the hook C to engage with the pin E, which is attached to the tumbler of the left hand lock; then by pulling the back trigger, the rifle hammer will be caused to strike the firing pin at B and stop, thus not allowing the left hand hammer to go quite far enough to reach its firing pin. After firing the rifle, cocking the left hand hammer throws the rifle lock out of gear, then the shotgun locks are entirely independent of the rifle lock." This extract from the maker's instructions how to use his gun shows that it is altogether too complicated to be really effective, on the ground, where nine times out of ten success depends on quick action. I have always wondered why the inventor has not adopted an independent self-cocking rifle lock, with a safety catch, as that used in the hammerless? This would undoubtedly add much value to his gun.

As to its selling price, I may say also that the manufacturer is making us pay rather too high for his patent. Of two guns exactly the same grade, the double barrel he sells for $45, the treble barrel $75, making for the rifle barrel and lock alone $30, the full price of the best repeaters on the market, representing three times the labor and material and surely no less ingenuity.

Both the auxiliary and the three-barrel, and this is my capital objection, are, like all breechloaders, too slow extracting, reloading and recocking to compare in effectiveness with the repeater. They are unquestionably worthy improvements on the general gun, yet not fully what is required.

My object in writing this paper is not to detract from the real merits of these two weapons, both of which I am glad to possess and use, as the best all-around guns yet produced, I insist on their defects and insufficiency only to show the urgency of improvements, and to induce inventors to search for something still better.

The woodsman's gun must be single barrel and repeater, capable of shooting both bullet and shot—in other words, a modification of the present repeating rifle. As for details, I will mention: Barrel, cylindrical smoothbore, about .65 rifle caliber or 18 gun gauge, 27 or 28 inches long, three distinct metal cartridges, round bullet, buck shot and fine shot, lever action, acting at will as repeater or singleloader, weight 8 pounds.

The repeater is indispensable, as rarely a single shot will finish large or dangerous game, and as more than one may be shot at. The half magazine, with 5 or 6 cartridges, is quite sufficient to meet any emergency; and to avoid complication in the action, it should be used to store only bullet cartridges, the repeating being hardly required with the shot, the shot cartridges might be used by operating the gun as singleloader, while the contents of the magazine would be held in reserve.

The caliber of the barrel, $\frac{65}{100}$ inch, is a sufficient compromise of the rifle and shotgun to secure efficiency in shooting both bullet and shot. The cylinder bore is necessary to make the bullet accurate, while small-gauged guns need no choking to give hard and close shot shooting.

The round or spherical bullet dispenses with the rifling, which would make the barrel unfit to shoot shot. And it must not be forgotten that the round ball, large caliber, is the most effective form in which the same weight of lead can be cast (Van Dyke, "Still Hunter," pp. 342, 345), also that the round ball will make seventy or eighty yards or more in half the time the other does, and therefore make much less of a curve (Idem, p. 347). In fact, up to 100 and 150 yards (which are about the longest ranges a practical hunter expects to kill) the round bullet has a flatter trajectory and a greater penetration and killing power than that of any other shape, while its comparative lightness requiring less powder lessens the recoil. It would also allow making a shorter and more compact cartridge. The Indians in this country never use in their hunting any other than the round bullet.

It is useless to add that this bullet must fit exactly the bore of the barrel. I would further suggest, to secure the full propelling power through the whole length of the barrel, the insertion in the shell of a thick concave felt wad, to nest the bullet in, over the powder, this shape preventing any upsetting of the wad by the force of explosion, and thereby loss of gases.

As to the action, that of any of the leading American magazine rifles would do, with but slight alterations in size, and some improvement, perhaps, to make the singleloading more handy and quicker, the Hotchkiss being, I believe, the most perfect on this point.

The weight of the projected weapon is also a matter of importance; so telling it is on the woodsman's shoulder in a day's tramp, that any unnecessary ounces of this item should be dispensed with. What is strictly consistent with strength and steadiness only should be allowed. Owing to the comparative lightness, both in lead and powder, of the cartridge, I should think eight pounds quite enough. The actual weight of repeating rifles on the market, ranges from 8½ to 11 pounds. As the thickness of their barrel goes a great way in that weight, why not build the barrel of this with same material as the shotgun, twist or Damascus, giving much more strength to same bulk?

The above covers about all the points claimed by me at the outset for the projected weapon. Not being a specialist, I don't assume, of course, to be strictly correct on all the details; but, feeling that the idea I am making myself the humble exponent of, is, in the whole, practical and useful to the craft, I repectfully invite discussion on it by more competent men than myself, confident it will more effectively bring out the all-around gun in the best shape it can be produced.

And I trust American makers, whose rare ingenuity has so wonderfully developed excellency of firearms in a variety of styles, will soon give us the suggested weapon, with the same degree of perfection attained in others.

SOREL, P. Q., April, 1884. J. B. BROUSSEAU.

Following is the table of charges for shotguns, drawn up by Maj. H. W. Merrill:

Gauge Numbers.	Diameters of Bores.	Areas of Bores.	Ratios of Areas.	Loads Powder Nearly.	Loads of Shot Nearly
4	1.08	9137	2.45	7½d	2 7-16oz.
5	.99	7693	2.06	6 1-5d	2 1-16oz.
6	.93	6782	1.82	5½d	1⅞oz.
7	.89	6277	1.67	5d	1 13-16oz.
8	.85	5052	1.51	4½d	1½oz.
9	.82	5275	1.41	4¼d	1 7-16oz.
10	.79	4398	1.31	4d	1 5-16oz.
11	.76	4521	1 21	3⅔d	1 3-16oz.
12	.73	4176	1.12	3½d	1⅛oz.
13	.71	3936	1.06	3 1-5d	1 1-16oz.
14	.69	3736	1.00	3d	1oz.
15	.67	3516	0.94	2 4-5d	.15-16oz.
16	.65	3328	0.86	2 3-5d	.14-16oz.

NOTE.—The unit of measure is three drams of powder and one ounce of shot for a No. 14 gun. Tatham's standard shot, No. 6.

MICHIGAN NOTES.

THE duck shooting has been excellent during the last two or three weeks. The early spring shooting, however, was a dead failure. Those who started to meet the first flights and shoot over air holes while the ice was solid, were woefully disappointed. One well-known shot, who made the arduous trip upon the ice from New Baltimore to the house of the Lake St. Clair Fishing and Shooting Club, averaged one-quarter of a duck a day. He was gone twelve days, and all told, in the twelve days, he killed three ducks. He believes firmly in the saying that spring duck shooting is indeed a lottery. Just now the shooting is at its best. Not many redheads have been killed, but the bluebills have been killed by the thousands. And they are hard to dispose of—the dead ones, I mean—for who likes spring ducks? Bah! I don't. Tough, thin, fishy, not any in mine, thank you, I'll wait till October.

The shooting at the St. Clair flats during the last ten days has been especially fine. So, also, it has been along the Lake Erie marshes. I can but think that the good results of prohibiting battery shooting are now being reaped in the increased numbers of ducks.

As yet snipe have been found in no great numbers, although bags of from eight to fifteen have been made just outside the city limits. Should we soon have a warm rain the birds will come in greater numbers.

Messrs. Harrington & Richardson are to be congratulated upon having secured the services of Mr. John E. Long, who now travels in the interests of their excellent gun. I know of no one better fitted to represent such a worthy arm. John E. (I hate to call a gentleman Johnny) has the enthusiasm we all like to see; a long experience in fire-arms such as few can boast of, and he is moreover as complete a sportsmen as ever trod a field of Michigan in quest of grouse, or quail, or snipe.

Quail wintered nicely notwithstanding a long, severe winter. I have heard of none that were frozen. An old farmer a few miles out tells me of a lively bevy that by some wonderful chance escaped the hordes of hunters who beat the fields about Detroit incessantly. May that bevy live long and prosper and multiply. DELTA.

DETROIT, Mich., April 26.

LIFE SAVING CREW GUNNERS.

Editor Forest and Stream:

It is generally supposed that the crews of the different life saving stations on our coast are not allowed to be out of hailing distance from their headquarters from the 1st of September until the 1st of May, the period for which their services are engaged by the United States Government. Indeed, if I am not mistaken, there is a special rule to this effect, yet many of the members of these crews, especially those on the New Jersey coast, spend almost the entire portion of the day at a great distance from the station houses behind their decoys, with their guns at same point or in some cove during the ducking season.

Some years ago $40 per month from the 1st of November until the 1st of April was the amount paid each member of the crew, while the captain drew more from the Government. The monthly salary paid them now has since been raised to $45 per month, and again to $50, and the commandant's $75. While many lives have been saved by this branch of the Government service, complaint has been raised this season that should a vessel run ashore during daylight it would be difficult at many points to get the crews quickly together in order to render prompt assistance; indeed one instance has lately occurred where a schooner, in broad daylight, in entering one of the important inlets of the New Jersey coast went aground owing to poor pilotage, not one of the life saving crew being on hand to do the work as was wanted. After running aground, baymen, not of the life saving crew, had to be employed to aid in getting the vessel off, the crew of the station being off in the bay shooting.

Again, while those not engaged at the stations are endeavoring to eke out a livelihood during the dull season of the year, with their guns, the stationmen, well paid by the Government, occupy the best points of the ducking grounds and greatly interfere with the amateur, who visits these sections seeking a day's enjoyment. I am writing in a general way but could be more specific in relating the complaints that have reached my ears. It would seem to me that the life saving crews should be compelled to obey the rules under which they were made members of this service, and not be allowed to carry on market shooting. Their pay is good, yet when a point is occupied by a city sportsmen and his bayman, and fowl are flying, these station men push directly in alongside of them, throw out their decoys, and claim a part of the shooting or else go somewhere directly to leeward and ruin the sport for both parties. ARTICHOKE.

CONCERNING ROBINS.

Editor Forest and Stream:

In your issue of March 13, "A. T. S." writes that he used the following language to a Floridian who had been guilty of shooting robins: "Fortunate for you, sir, that you live in the South; if you were seen in the North with that bag of song birds in your possession you would be lynched, and your carcass given to the crows." The indignation of "A. T. S." was just, but if it be true that those who shoot robins in the North are lynched, then a certain eminent man, a writer whose books most of us love, is in great danger. Mr. John Burroughs lives, I believe, on the banks of the Hudson, near New York City, and yet Mr. Burroughs, in a charming sketch published in *Scribner's Monthly* for December, 1880, unblushingly states that he hunted robins. Says Mr. Burroughs: "In the afternoon, remembering the robins, and that robins are game when one's larder is low, I set out alone for the pine bottoms, a mile or more distant." In literary matters Mr. Burroughs is quite an authority, and if we allow also that he is to be heard on the question of what is and what is not lawful game, and take for true his statement "that robins are game when one's larder is low," then we must certainly acquit the Floridian; for his reply to "A. T. S." "O, them's mighty fine eating," shows that he only shot them to eat and not for the mere sport of killing.

But it is likely that Mr. Burroughs, charming writer and learned critic that he is, is not yet an authority on questions of game and shooting, and that he and the Floridian are both in the wrong. It is evident to me that if Mr. Burroughs is a sportsman at all he is remarkable both for want of success and for strict truthfulness. In the sketch above mentioned, after stating that one of his companions was "an old ducker," he says of himself: "For my part I had never killed a duck—except with an ax—nor have I yet." Now would any sportsman kill a duck with an ax? Perhaps "his larder was low," but even then would any sportsman make the damaging confession against himself that he had never killed a duck in any other way? However, the object of this communication is not to settle the status of Mr. Burroughs as a sportsman, but to call the attention of "A. T. S." to the fact that, as you, Mr. Editor stated, the Floridians are not the only people guilty of the offense of which he complains. In the case of Mr. Burroughs the offense is somewhat aggravated by the fact that the robin has been to him a source of much inspiration, the title to one of his earliest books being "Wake Robin."

Let no one think that I wish any of the missionaries of whom "A. T. S." speaks, sent to correct Mr. Burroughs from his error of robin hunting, still less that I have called attention to this matter in order to have him lynched. In his favor it can be said that his hunting does but little hurt to game or birds of any kind, and I doubt if even the robins would wish it prohibited.

Unlike most sportsmen he does not measure the success of his hunting by the amount of animal life destroyed. Going to hunt robins and finding none, he comes back satisfied, because he had seen a wild turkey. "I found no robins," says he, "but went back satisfied with having seen the turkey, and having had an experience that I knew would stir up the envy and disgust of my companions." To show how little dependent upon the mere shooting is his enjoyment of the hunt, read the following from the same sketch:

"The ducks flew quite briskly that night; I could hear the whistle of their wings as I stood upon the shore indulging myself in listening. The ear loves a good field as well as the eye, and the night is the best time to listen, to put your ear to nature's keyhole and see what the whisperings and the preparations mean. I overheard some muskrats engage in a very gentle and affectionate jabber beneath a rude pier of brush and earth upon which I was standing. The old, old story was evidently being rehearsed under there, but the occasional splashing of the ice-cold water made it seem like very chilling business; still we all know it is not."

During a three days' stay they bagged but one duck, yet Mr. Burroughs seems to have counted it a successful hunt. "With our one duck, but with many pleasant remembrances we returned to Washington that afternoon."

Happy Mr. Burroughs! we could better lynch a better sportsman. J. E. RIDDICK.

GAINESVILLE, Ark., April 17.

LONG ISLAND GAME PROTECTION.

FROM Mr. George W. Whitaker, the game protector for the district of the Long Island counties, we have received a copy of the following circular, which is self-explanatory:

SOUTHAMPTON, April 18, 1884.

To the South Side Sportsmen's Club of Long Island, the Game and Fish Protective Association of Richmond County, the Staten Island Gun Club, the Fountain Gun Club, the Washington Gun Club, the Long Island Shooting Club, the Long Island Forester Club, the Prospect Gun Club, the Garden City Gun Club, the Coney Island Rod and Gun Club, and the Glenmore Rod and Gun Club:

I have, upon inquiry, been given the names of the above clubs, and I appeal to them to render me, the undersigned, State Game and Fish Protector of the First District, comprising Suffolk, Kings, Queens and Richmond counties, their assistance.

The district is too extensive for a Game Protector to personally act as a game keeper in any one locality, but he can supervise the whole district, which is what, I suppose, his appointment means.

What he requires is a detective. He can from time to time obtain and furnish such information to a detective as will enable him to obtain evidence sufficient for him to prosecute, whereas the Protector, being personally known, could not obtain such evidence.

The Brooklyn Gun Club has already voted a sum of $25 to be used for this purpose, and others have promised assistance.

What is desired is, that some persons be named to receive the money, not only from any club, but also from sportsmen generally who may wish to contribute for such a purpose, the receivers to have full power to employ and pay such a detective.

In such case it is confidently believed that such assistance rendered the Game Protector will enable him to put a stop to the snaring and trapping of quail and partridge, and other breaches of the law. I would suggest that Mr. Francis Endicott, the president of the Richmond Game and Fish Protective Association, and Mr. Gustave Walter, of the Brooklyn Gun Club, act as receivers of any such subscription, trusting that these gentlemen will consent to act as such receivers, and thereby render the community of sportsmen a further obligation by being the means of the further preservation of game.

I will at an early date personally see or communicate by letter with the officers of each club. I will also see Messrs. Walter and Endicott, and will insert an article in the FOREST AND STREAM, the result of my applications.

GEO. W. WHITAKER,
State Game Protector of Kings, Queens, Suffolk and Richmond Counties.

MAJOR JOSEPH VERITY.

SOME OF HIS SPORTING ADVENTURES, AS MODESTLY SET FORTH BY HIS OWN HAND.

Chapter IX.

I BELIEVE that I promised, long ago, to tell of a rather remarkable shot I once made, and I will not longer defer it. The shot was only remarkable because it was delivered at just the right instant, and that by it I secured more animals than I saw at this time, or intended to get. It happened in this wise:

I was still hunting on the first snow, which that season fell late for Adironda, it being then about the middle of September. I had tracked a fine buck, as I knew by the size of his footprints, only about twenty miles one morning, when I came upon him lying down to rest under a great hemlock. He was one of the largest I ever saw, and I stood a moment admiring his graceful pose and noble proportions before I should send the leaden messenger of death to lay him low, and must confess that I hesitated to speed it on its murderous errand. What sportsman worthy of the name has not at times, even in the ardor of the chase, had an almost overpowering softness of heart come upon him, a pity for the poor hunted object of his pursuit, a questioning of his conscience as to what right he has to take the life of a creature vastly his superior in innocence and harmlessness? Thus for a short space I stood, almost wishing that the buck were not so entirely at my mercy; but there were short commons in camp, and I had the butt of my rifle almost at my shoulder when somehow my attention was drawn to the great hemlock by a slight stir of a branch. Looking closer I saw an enormous panther crouching there, just ready for a spring upon the deer lying all unconscious of the two-fold danger lurking so near him. Now I saw the way out of my shedding the blood of the buck. How many of us are willing enough to see another commit, without lifting a hand to prevent, an act of cruelty we shrink from doing ourselves, and then holding ourselves conscience-free?

As the panther, assured of his aim, sprang out of the screen of evergreen branches in a great curve, I fired at his heart, and he fell upon the deer, crushing him beneath his weight, and rending the remaining life out of him in his terrible death-throes. I rushed forward to give the panther a finishing shot, but it was not needed, for the first had done its work completly, and the giant cat lay dead stretched upon his intended prey. As I stood looking with some pride upon my handsome morning's work, my attention was called to a violent commotion in the undergrowth a little beyond, and going to see the cause of it, I found it to be a fine doe, whose back had been broken by the same bullet which killed the panther. Dispatching her with my knife, and turning her over to disembowel her, I found a grouse that, having burrowed in the snow, had been killed by the doe in her floundcrings, and presently I stumbled over a hare that had been frightened to death by the noise, and the bloody scene which had been so suddenly enacted before him.

Now, of course all this, except the killing of the panther and the subsequent death of the buck, was purely fortuitous, and I claim no credit but for the well timed shot, yet I think it has seldom happened that one shot has brought one so much game, large and small, as did this.

This mention of deer reminds me that the salt lake of which I have told, is, or was, a great resort for these animals, its shores affording them an immense lick, and I have seen these shores so crowded by them that there was not room for another to stand, and many were pushed into the water, and would have been drowned (as there was no room for them to land), but for the extreme density of the saline fluid, upon which they were buoyed so lightly that no more than their legs and bellies were wet. Here were chances for such murderous pot-shots, as would delight the bowels of some who now resort to Adironda for what they call sport. But such a shot I was never guilty of, nor would I permit my companions to be, even were they so disposed.

A few words more concerning fishing. I was always satisfied that fish are not attracted to artificial flies by hunger or by mistaking them for any winged things which they ever feed upon, but only by curiosity or rage at beholding such palpable shams offered them. To further strengthen my conviction—which we are always fonder of fortifying than of weakening—once when the lake of the singing fishes was just frozen enough to bear my weight, and the ice was transparent as the limpid water, I tied a gaudy fly upon a length of gut without a hook, and going out upon the lake cast it with no great skill—for I never sought to acquire that art—not many yards from me. Then, bump! as I anticipated, came a great singing fish against the ice beneath with such force that he was quite stunned, and so remained till I chopped him out with my hatchet, which I had brought, expecting such use for it. I took many more so, and in so doing had sport which gratified then my experimental mood, and afterward my stomach, for these fish were excellent eating. Now and then where the ice was thinnest, and an uncommonly large and vigorous, curious or enraged fish dashed at the fly, he would burst quite through the film of congealed water and fall on top of it.

Now let me ask the intelligent reader if it is reasonable to suppose that any fish could be so silly as to expect to see any fly that he had ever been accustomed to feed upon, flitting over the frozen surface of his native waters, or be fooled by the cunningest imitation of such insects at this season?

As I threw my fish upon the ice till I had done fishing, the first caught were frozen stiff by that time. That night in camp I was almost shocked when I was awakened by sweet strains of music arising from the bucket of water in which the benumbed aquatic minstrels had been put to thaw preparatory to dressing. I was reminded of the fabulous death song of the swan, and I own that my feeling were painfully touched. But under the influence of the melody I soon fell asleep again, and in the morning the fish were all dead.

AIR RESISTANCE.

Editor Forest and Stream:

Had Mr. James Duane studied Bashforth's "On the Motion of Projectiles" as consentaneously as the importance of the subject demanded, he would not have fallen into the error he has, and discovered, apparently, a huge "mare's nest," as indicated by the following quotation from an article in your issue of August 9, "Muzzle vs. Breech": "Your correspondent 'P.' would seem to be a rifleman of great practical experience, and one whose opinions are entitled to much weight. Any error, therefore, committed by such a man is likely to do considerable harm if allowed to go unchallenged. In his interesting and otherwise instructive article of July 12, he says: 'Taking the element of velocity into account, the air resistance, proved from these experiments (the Bashforth experiments) to be the greatest between velocities from 1,100 f.s. to 1,350 f.s.'"

He then goes on to prove by Professor Bashforth himself what every casual student of that valuable work "On the Motion of Projectiles," will readily admit he does mean, and what will be admitted was my meaning, by the quotation above made, by any one reading over whatever has been written by myself on this subject. In my opinion there can be but one view of its proper construction by those well posted on the subject. In this quotation the same nomenclature has been used, as in numerous instances has been been adopted by the learned Professor himself; that is, using the term "resistance of the air" as synonymous with "co-efficients of air resistance," as will appear from the following references, among others from the above mentioned work. Page 31: "Does the resistance of the air vary as the cube of the velocity, for all practical velocities of the projectile?" etc. Page 69: "Inasmuch as the resistance of the air does not vary strictly as the cube of the velocity," etc. So also in "Reports of Experiments," etc., 1878–79, etc., page 4, he says: "If these values of K (the co-efficients of air resistance determined on) may be relied on, the resistance of the air varies as the square of the velocity for velocities 430 to 830 f.s., and as the cube of the velocity from 830 to 1,000 f.s." In his "Final Report of Experiments," 1878–80, page 4, he says: "The resistance of the air varied as the cube of the velocity for velocities between 1,000 f.s. and 830 f.s., and approximately as the square of the velocity for velocities below 830 f.s." So other quotations could be inserted were it necessary. So Major Sloden, who was his principal assistant and pupil during these experiments, in his "Principles of Gunnery," uses these terms as synonymous, page 63. So does Captain Mackinlay, in his later and equally as valuable work, "Text-Book of Gunnery, 1884," page 77.

I say in the above quotation, "The resistance of the air proved greatest," between certain velocities. Why? Evidently because between those velocities the resistance of the air varied as the cube of the velocity, whereas, at velocities above and below those velocities, it varied as the square of the velocity. As the cube of a quantity is greater than the square, my use of the term "greatest" in connection with the former term was correct. Any other construction, to me would seem absurd.

The subject of air resistance has been studied a great deal by the writer within the past few years, as the columns of the sportsmen's press bear witness; but there has been nothing written by me that, in the remotest manner, can bear the construction that a ball, for instance, at 1,000 f.s. has greater resistance in pounds avoirdupois than the same ball at 2,000 f.s., for it is very evident that, at the latter velocity, its actual resistance in pounds is eight times greater than at the former velocity.

I take it for granted Mr. James Duane has read some of the discussions, in which I have been engaged on this very subject, within the past two years, as it is observed in a late number of FOREST AND STREAM, he is now engaged in firing off at Mr T. S. Van Dyke some of the same ammunition that was used by myself within the past two years in combatting theories that appeared to me very impracticable.

"Air resistance" is irrespective of the weight of the projectile, and is expressed in pounds, avoirdupois, by the formula:

$$R = \frac{d2}{g} K \left(\frac{V}{1000}\right)^3$$

"Retardation" is very different, and varies inversely as the weight of the projectile, and is expressed in loss of velocity, in feet per second. "Retardation is negative acceleration; it is subject to the same laws, but is opposite in sign." It is expressed by the formula:

$$F = \frac{d2}{w} K \left(\frac{V}{1000}\right)^3$$

Take the 405-grain .45-caliber bullet—for 1,000 f.s. its air resistance is R=0.472lbs. avoirdupois; for 2,000 f.s. R=3.776lbs.

I am perfectly willing to leave to more competent philologists the question as to whether Prof. Bashforth and the other authorities quoted are technically right in using the term "resistance of the air" as synonymous with the "co-efficient of air resistance." His name is high in authority, whether in mathematics or literature. To him is justly due the high distinction of having first mastered the problem of "the resistance of the air to the motion of projectiles," that had occupied the study and thought of the most distinguished mathematicians and scientists of the world for nearly 200 years.

The most elaborate experiments had been made by some of the European governments with the ballistic pendulum, but without any practical result. The advent of the electric telegraph stimulated this channel of thought, and was followed by the invention of numerous chronographs, some of great merit, but none of these measured more than one interval of time. It was then that the Rev. Francis Bashforth, a clergyman of the Church of England, "chalked out" in his mind the solution of this intricate and much studied problem, and with that end in view invented his "clock chronograph," intended to measure the time of the passage of successive intervals of space by the same projectile. This was to be done by firing the projectile through a succession of wire screens placed at intervals of 25yds. and sometimes 50yds., and by having each screen connected by the electric wire with the main instrument, the exact time of the projectile passing each screen was accurately recorded upon a revolving cylinder. In this way the retardation in velocity at the time of passing each screen could be carefully and accurately ascertained. The constants thus determined, combined in the proper formula, gave numerical values for the co-efficients of air resistance, which, again combined in other formulæ, resulted in the formation of tables by which, with muzzle velocities and weight of bullets known, their flight through the air could be traced with remarkable accuracy. As with all important inventions, its introduction met with difficulties. Having been, however, once tested by the British Ordnance Department, its practical applicability to the design of the inventor was fully established, and the series of experiments, under his supervision, to determine the true theory of "the resistance of the air to the motion of projectiles" were commenced, which, with the necessary calculations and delays incident to a new invention, occupied a space of sixteen years—1865–1880. Every detail of these experiments, with the formulæ used, as also the calculations in detail, were published to the world, and the criticisms of mathematicians invited. As far as my information goes, there were no adverse criticisms, but the contrary, and to-day the co-efficients of air resistance, as determined by these experiments, as well as his methods and tables for their practical application for the determination of the flight of the ball, are of recognized high authority among the scientific men of the world.

Though these experiments were made both with the spherical and ogival-headed shells of from three to nine inches diameter, they were afterward found equally applicable to those of the small arms caliber; as will be seen by the extract following from a paper by Major McClintock, Royal Artillery, and assistant superintendent of the Royal Small Arms Factory, Enfield Dock, published in the *Field* (London) Sept. 8, 1883: "The accuracy of rifle bullet trajectories, calculated by means of Prof. Bashforth's tables, has been tested by firing a large number of rounds through paper screens, placed at different points along the range. The rifle used in the experiment was the Martini-Henry (.45-cal.), and the screens were erected at intervals along a 500yds. and 1,000yds. range. The results of the experiment was most satisfactory, the mean heights of the bullet holes in the screens agreeing closely with the heights found by calculation."

The writer was the first, as far as my information extends, to call attention in an American journal to the importance of the results of these experiments, some two years since, with an expression of belief, from his own experiments, of their applicability to the smaller calibers, conclusions proven conclusively by the above extract, which bears the impress of the British Ordnance Department.

It is, indeed, a matter of surprise that Her Britannic Majesty's government, usually so prompt to recognize distinction, whether in science, literature, the arts, arms, or the church, should not have rewarded such distinguished services ere this. The value of the results of these experiments, not only in the design and manufacture of artillery and small arms, but in the use of these arms against the public enemy, can scarcely be over-estimated. It is even intimated that this distinguished professor was very inadequately paid for his time and science during the experiments.

During the time these experiments were being made, Professor Helie, a distinguished mathematician in the service of the French government, was making experiments with a view to the same end by means of the Boulengé chronograph measuring, however, only one interval of time. The results of these experiments were consequently not so satisfactory, nor did they embrace a very extended range of velocities. His experiments embraced velocities between 1,100 f.s. and 1,500 f.s. it is understood that fairly coincided with the results of the Bashforth experiments, and which for practical purposes were embodied in the formula:

$$V' = \frac{V}{1+C\,V\,X}$$

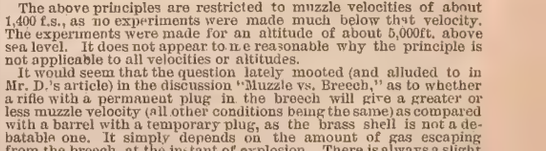
C is a constant, however, that was dependent for its value on another constant *b*, which had to be determined by experiment for each particular ball. This formula has been used a great deal by the officers of the U. S. Ordnance Department, the value of *b* having been determined for the service bullet by careful experiment. It is plain this formula is not of general application, on account of the constant *b*, being indeterminate, except by careful experiment, which few have the means of undertaking; whereas the Bashforth methods and tables are applicable for any diameter and weight of projectile and for all practical velocities, and whether for spherical or ogival-headed projectiles, and can be practically used by any one conversant with the ordinary principles of mathematics. As above related, their application has been practically tested by numerous experiments.

I was very glad to notice in the FOREST AND STREAM of Oct. 11, 1883, the report of some experiments by Mr. Duane for ascertaining rifle trajectories, and it is to be hoped, he and others will continue such experiments. It is, however, suggested that they be made over a 200yds. range; or, if a less range, that it should be some multiple of 25yds., so that the results can be compared with those that have been and may, hereafter, be made on each side of the ocean.

My object in alluding to them at this time, however, is to call his attention to a serious error, judging from my own experience, he has fallen into, as will more fully appear from the quotation following. Speaking of the target being 24ft. higher than the firing point, he says: "This will make the trajectory 2in. higher (theoretically) than for a level range, but as it would operate about equally on all bullets, it was not considered of much importance." He is in error, and it is hoped he will not consider me unnecessarily critical or a mere quibbler, in pointing it out, as it lies at the foundation of successful shooting in a mountainous country.

In hunting mountain sheep, there are times when, as was my experience last fall, the game may be 200 to 250yds. vertically, either above or below you, and in firing, the axis of the bore of the rifle may make an angle of 70°, with the horizontal plane passing through the muzzle. He, who in either case aims according to the direct distance to the game, will miss every time. So, proportionately, with smaller angles of elevation. On my first advent in mountain hunting, in 1876–77, my attention was first called to the subject, after wasting a good many excellent shots at game above and below me, and experiment, the best guide out of such difficulties, was resorted to for a solution of the difficulty. Ranges were measured on steep slopes of the mountains accessible, the vertical elevation having been measured carefully by a pocket level, and the horizontal distance with a tape line and plumb-line, the hypothenuse or direct distance having been calculated. The result was, for all practical purposes, satisfactory to myself, and appeared a correct solution of the problem. The conclusion arrived at was that in aiming at objects above or below you, be governed by the horizontal distance. For instance, if the object is 140yds. on the slope of the mountain, either above or beneath you, and 100yds. away on the horizontal, aim with the sight that will go to the spot on the level range of 100yds. In other words, the angle of elevation of the sight varies as the cosine of the angle of departure (the angle between the axis of the bore and the horizontal plane passing through the muzzle). In one of the issues of FOREST AND STREAM of the spring of 1878 will be found a short article from myself embodying this experience, accompanied by an explanatory diagram. It was headed "Problem in Mountain Hunting," but when published this was changed to "How to Aim." I have not the scrap book containing this piece, but the proper back number will contain it. Criticism was invited from those well up in the calculus, but no one appeared to have the courage to tackle a problem that combined so many elements of discord. Subsequent experiment at longer ranges and higher angles of departure, with further thought on the subject, so far confirmed me that the first solution arrived at was approximately correct (sufficiently so for the purpose of hunting) that a solution by means of the calculus has never been attempted by me.

To apply the foregoing principles to the quotation given above from Mr. Duane's article. It is understood he measured the range on the slope A C (see his diagram), and firing from A to C it is understood he means that the trajectory made by the ball above the line of sight is higher by 2in. than were the target placed 24ft. below C in the horizontal plane passing through A, and 204yds. from the latter point. He is in error there. Instead of the trajectory being higher by 2in., it will be flatter than were the range horizontal, the amount depending on the muzzle velocity and weight and caliber of bullet. In this example, however, there will be a very slight difference between the two trajectories, the co-sine of the angle of departure being very little less than the direct range, say 6in.



The above principles are restricted to muzzle velocities of about 1,400 f.s., as no experiments were made much below that velocity. The experiments were made for an altitude of about 5,000ft. above sea level. It does not appear to me reasonable why the principle is not applicable to all velocities or altitudes.

It would seem that the question lately mooted (and alluded to in Mr. D.'s article) in the discussion "Muzzle vs. Breech," as to whether a rifle with a permanent plug in the breech will give a greater or less muzzle velocity (all other conditions being the same) as compared with a barrel with a temporary plug, as the brass shell is not a debatable one. It simply depends on the amount of gas escaping from the breech, at the instant of explosion. There is always a slight escape of gas from the shell, under the most favorable circumstances. So there is always more or less escape of gas from the tube of the muzzleloaner by the raising of the hammer. Formerly each muzzle-loading rifle was provided with a small vent hole on the base of the tube to facilitate a slight escape of gas to reduce the strain on the breech. So that the relative muzzle velocities attainable by the two arms is dependent entirely on the foregoing conditions, which vary so little in each case as to make very little difference between them in this regard; like causes producing like effects.

I do not understand Major Merrill as contending that the muzzle-loader, *per se*, will give a flatter trajectory than the breechloader, but that on account of its adaptibility for increasing or decreasing the powder charge or weight of ball a flatter curve could be had when desirable for the longer ranges by increasing both the charge and ball, whereas in the breechloader you are limited to a certain amount of powder in the shell.

This discussion of the relative merits of the two systems has not been barren of results, as some seem to intimate. It has been the means of showing up some of the defects of the present American breechloader, and it is to be hoped that it will be kept up until these defects are corrected as far as is practicable. My understanding of Major Merrill's preference for the muzzleloader is that on account of certain advantages it possesses in certain details, its shooting is much steadier, the ball passing from its seat over the powder charge throughout the barrel without any obstruction, a condition that does not obtain with the breechloader, as every observant rifleman must admit. Were these, among other defects, corrected, his preferences would be for the breechloader on account of its rapidity of fire. It is to be hoped Major Merrill will continue to hammer away in the same direction until these defects are corrected, or the attempt made for their correction as far as is practicable. He will always have my hearty support and good wishes in the task.

P.

MARCH 24, 1884.

PATERSON, N. Y., April 25.—The Passaic County Fish and Game Protective Association held a regular meeting last night in the new hall in the Vandevoort Building. The first feature of interest was the announcement by the secretary that he had received a check for $100 from Mr. Jacob S. Rogers for the association. The principal feature of the organization which Mr. Rogers approved of was the intention of the association to protect song birds. The association will see to it that the State law is enforced relative to the shooting of songsters by persons who indulge in that practice principally out of sheer wantonness. The Board of Aldermen has been requested to pass an ordinance imposing a heavy fine for the killing of song birds within the city limits, and the ordinance will in all probability pass, as there is no opposition to it and a great deal may be said in its favor. Mr. Rogers's generous gift was accepted and he was tendered a vote of thanks. The constitution and by-laws of the association were then adopted and ordered printed, so that persons desiring to join the association may know its objects. In some way or other an impression has gone abroad that this association is nothing but a mere club, which will have rooms open every evening where the members can spend their evenings. Nothing is further from the intention of the association. It was formed for the purpose of protecting game, game fish and American song birds, and the by-laws provide regular machinery for the prosecution of all persons who offend against the laws. The association will hold monthly meetings and a committee was instructed to procure a room for that purpose. The counsel of the association, Senator Griggs, was requested to draw up a certificate of incorporation, which will be filed with the County Clerk and recorded, so that the association will enjoy all the privileges of incorporated bodies.

FROM A FARMER'S POINT OF VIEW.—"My Dear Sir: You are fortunate in having it in your power to go where game is. But few of us farmers can do so unless the game is near by, for we have not the means nor the time to make long and expensive trips in quest of sport. If we had the means, at the season when such a trip should be made, we have not the time to spare. A farmer's days of leisure fall in winter mostly. A day now and then in summer for fishing, and in fall for shooting, is about the extent of his pleasant weather play days. And so to no one more than the ordinary farmer, who loves field sports, is the preservation and protection of fish and game in his home streams and woods important and desirable. I, for one of them, am almost hopeless of any effective protection in my day. There is such apathy and such 'cussedness' and selfishness among those who should be most active and generous in the good work, that it is enough to dishearten the faithful few. And yet we must do what we can, and hope for the awakening of a better spirit in the masses."

THE ELASTIC HEEL-PLATE, described and illustrated in our issue of Aug. 23, 1883, has been put upon the market, and an advertisement of it will be found elsewhere. The purpose of the rubber is to serve as a recoil pad, and it does this very successfully. One of the veterans at the Parker gun works, the other day, after firing a heavily-loaded gun without and with the elastic heel-plate, compared the first recoil to the kick of a mule and the second to a blow with a soft boxing glove. The new heel-plate will add much to the pleasure of a day's shooting.

Sea and River Fishing.

OPENING OF THE MAINE SEASON.

THE opening of the season in Maine, May 1, will be propitious, though the snow still lingers on the mountains and in the woods, and the lakes and ponds are frozen over. But the rapid streams and lower rivers are clear of ice. They have been cleared earlier than usual by a great rise of water, which has been kept up by the copious rains and melting snow. Such a state of the streams is very favorable for trout. As soon as let out from their ice prison of the winter, a great abundance of food is washed within their reach, or they are permitted to visit parts of the shores in search of worms and insects where low water would never permit them to go, and hence by catching time they are well fed and fat after their winter fasting. Besides, their progress from winter quarters in the deep pools to the swift running rapids, where they delight to spend the sunny May and leafy June, is greatly facilitated by high waters. One of the best trouting spring seasons ever noted on the Richardson Lake, one of the Androscoggin chain, followed the late extra flowage of thirteen feet, put on by the Union Water Power Company, in the fall of 1881. Trout were caught near the shores where dry land existed only a year before, actually caught in the woods with their maws full of ants and wood worms.

The ice is not expected to move from the Androscoggin lakes before the 10th of May, possibly not till the 15th. Last year Richardson Lake cleared on the 12th, followed by Mooseluemaguntic the 13th, and Rangeley about the same time. Four parties of Boston merchants, six in each, will start for these lakes about as soon as the ice is out. The artists, Messrs. Griggs and Hollingsworth, will start for the Upper Dam as soon as the ice is out of Richardson Lake. At Lewiston, Maine, the usual early spring parties have their tackle all in order, and they will be followed by Portland sportsmen and parties from South Paris, Norway and Bethel. The spring trolling usually brings out some large fish—six, eight, and even ten-pound brook trout.

A strong pull is to be made for Sebago land-locked salmon this spring, in both Sebago Lake and Long Lake above. Commissioner Stanley will take his spring fishing trip to these waters this year, instead of to the Androscoggin lakes as usual. The finding of those enormous specimens of the land-locked salmon in Rodgers Brook, a tributary of Long Lake, last November, has convinced sportsmen that some noble fish exist in the Sebago waters, and a determined effort will be made to capture them with rod and reel this spring. Commissioner Stanley, who has been very successful with these fish, recommends that sportsmen give them a fair trial this year. He recommends casting the fly for them in the night as well as the daytime. It is altogether likely that success will be achieved by somebody with these beautiful fish at the end of the line. The specimen which was found stranded on the shores of Rodgers Brook last fall measured thirty eight inches in length by nine inches in depth, and weighed twenty-five pounds. The female land-locked salmon found in the same brook a few days previous, alive and on the spawning bed, was taken out and measured and returned to the water. She was exactly twice the length of a two-foot pocket rule. It will be remembered also that the detectives discovered in the cellar of a poacher, who lives on the shore of Songo River, in the fall of 1882, a land-locked salmon, which must have weighed thirty pounds. It, with several smaller specimens, had been pitched out of the Songo, the connecting river of Sebago and Long lakes, with a pitchfork. Protection, then begun in earnest, has now stopped such poaching, and hundreds of such noble fish are now alive in the Sebago waters, which had, previous to 1882, been pitched off from the spawning beds by the worthless poacher. It is believed that anglers in open season will begin to reap the benefits of such protection this spring. The Maine waters will doubtless be fished more than ever this season, but they have been better protected for the past two years, and there will be more fish for the honest angler. The non-transportation fish and game law has effectually stopped market fishing for trout and land-locked salmon in that State, and the fish are left for the angler, who is satisfied with a reasonable creel. SPECIAL.

BOSTON.

FOR NEW YORK ANGLERS.

A WORD ament some good trouting ground. At Henryville, Monroe county, Pa., on the Delaware, Lackawanna & Western Railroad, close to Stroudsburg and the Delaware Gap, are good fishing and excellent accommodations. I was there ten days ago and was surprised to see such fish. Although an invalid, unable to wade, I caught fair messes every day; but I saw catches that amazed me. Looked into one creel and saw a lot of *Salvelinus fontinalis* taken with a fly that were worth traveling to see. Weight eleven pounds; average less than four to the pound, with three fifteen-inch fish. Another mess, caught with bait, numbered sixty; weight sixteen and a half pounds. Twenty-five of the fish were over fifteen inches long. Parson Knight caught a fine mess with the fly. The place has a record of one four-and-a-half-pound trout and one four-pound trout.

The streams are the West Brodhead, the Big Brodhead, Paradise Creek, Saw Creek, the Big Bushkill and a dozen others, and are within eleven miles of the streams that flow off High Knob, at the point where Wayne, Pike and Monroe counties meet. West Brodhead and Paradise creeks have the purest spring water I ever saw. W. E. Henry, postmaster at Parkside, one-third of a mile from Henryville station, is the angler's "guide, philosopher and friend."

AMATEUR.

DOWELS AND REEL-SEATS.

Editor Forest and Stream:

I have read with much interest the discussions in your paper regarding dowel questions. I agree with Mr. Wells that dowels on a rod are not only useless but also weaken the rod. I have never built a rod with dowel pins where I have been allowed to use my own judgment, but if a customer insisted on having them I would put them on with the understanding that I did not consider the workmanship perfect and would not warrant the rod against breakage at the ferrule. If cylinder ferrules are used and fitted on over the wood without shoulder and are wrapped at the end of the ferrule with silk, there is little danger of breakage at this point.

I notice that some of your correspondents advocate swelled ferrules as preferable to cylinder ones, on account of the increased strength of the wood at the large end of the ferrule preventing the rod from breaking at this point. If some of the advocates of this principle will rise and explain, it will enlighten a rod maker, who is very much in the dark, and at present writing has no hope of ever seeing the light on this point. I claim that in order to make a fishing rod perfect it is necessary that the ferrule should be made perfectly waterproof. In order to do this a metal disc should be fastened in the inside center of outside ferrule, also metal cap on the end of the inside ferrule. I prefer to fasten them with soft solder, as it makes a perfect job, and if necessary can be removed without trouble; this prevents moisture from getting at the wood, and preserves the wood at the ferrules sound for all time.

I am very much in favor of banding the lip of the female ferrule, particularly when light ferrules are used, as it prevents the female ferrule from swaging open by careless jointing of the rod, and adds much to the finish of the ferrule.

I also think a rod should be mounted with a solid metal reel-plate, as it prevents the reel from getting stuck fast by the swelling of the wood, which is very liable to occur when reel-bands are used.

I also think that when manufacturers of rod mountings settle on some standard size of reel-seat, and reel makers make their reel bases to conform to the reel-seats, a step will be taken in the right direction. EDWARD SMITH.

PITTSFORD, Vt., April 21.

DRAINING THE ANDROSCOGGINS.

Editor Forest and Stream:

The future of the Rangeley Lakes, so far as trout fishing is concerned, is, from the present outlook, rather dubious. That remarkable species of the *Salmo* family, which has been the pride and making of the Rangeley region, is doomed to speedy extermination if the existing condition of affairs is allowed to continue. As the matter now stands it is the interests of a corporation against the fishing interests of the region; but that corporation is a wealthy one, and what can a few hotel keepers and guides accomplish against it? The habitués of this famous fishing locality are scattered throughout our broad Union, and to nearly all of them the FOREST AND STREAM comes laden with the news and doings at all the sporting localities of the known world, and to them this wail from the forests of Northern Maine should go.

The case stands about thus: A few years ago the Water Power Company, of Lewiston, on the Androscoggin River, bought or acquired the right to use the Umbagog, Welokenebacook, Molechunkamunk, Mooseluckmaguntic and Cupsuptic lakes for storage of water, and proceeded to raise the dams and overflow the banks of these lakes, spoiling the beauty of the shores by covering up the beautiful beaches and scenes of many a "noonday roast," sending the waters back into the woods and marring the view generally. This they probably had a right to do, and so far it was an offense against the eye only.

A year or two later they acquired the same rights in Rangeley Lake and raised the water as in the other lakes, but, that not sufficing, they, during the past winter, have gone to the other extreme and have drained the Rangeley Lake to such an extent as to lay bare the best spawning beds, thereby slaughtering spawn by wholesale. To accomplish this I understand they have dredged the stream at the outlet to the depth of about five feet. Yet this is not the extent of the enormity. Last summer, when the gates of Middle Dam were open and the stream below full of water and fish (a favorite resort), I am informed that the gates would be suddenly shut tight, stranding and destroying multitudes of fish at each operation.

This occurs in a State where one year ago the most stringent laws were enacted for the protection of fish, and the amount of fish each sportsman could take away was limited by law. Then, at great expense to the State, the Commissioners carry on their artificial propagation in these waters, turn their few handfuls of fry into the stream, and prosecute vigorously any offender to the extent of a fish or two, and stand idly by and witness this wholesale slaughter, without, so far as I have yet heard, any remonstrance.

Do they permit this enormity because they have not the will to stop it, or because they have not the power? If the latter, why keep up the farce of hatching houses, stringent laws, commissioners and fish wardens.

Can a water power company acquire the rights of absolute proprietorship in these lakes to the exclusion of all rights of the fishing public? is now the mooted question.

ALB. BOLEYN.

FLY-BOOKS.

Editor Forest and Stream:

Now that our pioneer, Mr. Wells, has cleared out the way, and called our attention to that "long felt want," a discussion through your columns of the advantages and disadvantages connected with our tools, I wish to direct the attention of some of our experts to the many miserable, useless fly-books, which are annually foisted on innocent novices, and which a great many who are not novices in the art of fly-fishing, are compelled perforce to use.

These abominations are of several kinds, the greatest of which is the parchment, or as it is generally made, paper book, with several thicknesses in the leaves, forming several—generally three—pockets on each page. These can only be used to carry the old style of flies, with the long, coiled snells, and were well enough in their day, when the long snells were used, and the angler was content to spend five minutes every time he changed his fly in straightening the snell. Now, however, all good flies are made with short snells, which can easily be carried at full length, in a book which will not be of inconvenient size. To keep up with the times, and provide some means of carrying the short pressed flies at full length, the manufacturers have devised a book with parchment pages, and a row of small hooks at one end, or (as some are made) at one end with a band, at the other end to slip the loop of the fly under.

These, however, do not meet the situation, for the reason that, if there are hooks at each end, the snells are of course not exactly of the right length and the flies will not stay on the hooks; and if the hooks are on one end and a band on the other, about the same difficulty is presented.

Another style which I have seen was a slight improvement on the last-named, inasmuch as three of the hooks on one end of each page were replaced by very small coil wire springs, about half an inch long, which kept the snells stretched out at full length.

As there were only about five pages in the book, however, this arrangement only allowed of fifteen flies being carried in this manner, and the modest price asked for this book was ten dollars. Now, it seems to me that a fly-book might be made which would combine cheapness with utility, and such an one I would make something as follows:

I would have the book contain about eight pages, made of some stiff material, for instance, leather stiffened with steel or brass bands along the end. Each page should have, say, six small coil wire springs on one end and a fixed hook for each spring at the other end.

This arrangement would accommodate six flies on each page, and hold them firmly in place at full length. The book would hold four dozen flies, and would also contain pockets for leaders and extra flies. This book need not be bulky, and would be about the thing in my opinion. Something of this sort may be now manufactured. If so I would like to know about it.

For my part I have adopted the plan of keeping my flies in envelopes and find it works very well. I use a book with eight compartments, and use small envelopes opening on the end, five inches long and two and one-half inches wide. These I label on the end conspicuously, putting one or two varieties in each envelope. As my flies all have short snells, they go in at full length and are always straight. This method is superior to any other in my estimation, but there are of course many who prefer to have the flies in sight, and it is for their possible benefit that I make these suggestions.

GOVERNOR.

SEATTLE, Washington Ter., April 5.

THE SIGN IS NOT RIGHT.—Mill Spring, Ky., April 21.—The oldest weather wizards have not stumbled on an adjective satisfactorily expressive of the unprecedented winter and spring of 1884 up to now, nor does the oldest manipulator of red worms recall so few opportunities to indulge deferment of a few chores to a half day's recuperation from spring fever. In fact, there have been but two or three days suggestive of an attack and the necessity of medication, and only the fortunate resident, convenient to the mouth of some of the larger tributaries to our rivers, has enjoyed a cast. Last year I began taking pike-perch the last day of February, and by this date had strung, with numerous others, six pike-perch and one pike, which aggregated fifty pounds by the scales, and without the addition of numerous odd ounces at each draft. Three times I have had a bucket of minnows caught for the next proper stage of water, and as often that proper stage was not. To-day was anxiously anticipated, as the dogwood is in bloom and the mercury soared into the 70s yesterday and the day before, but an infantile blizzard from the east last night is followed by an unceasing rain from that quarter to-day, and when the wind is from the east our ordinarily inspired weather prophets give it up. Our aquiferous apparatus has been unaccountably deranged since the snow. Some farmers have concluded that Mother Shipton's calculations should have figured out 1884.—KENTUCKIAN.

TROUTING IN WYOMING.—South Fork of Stinking Water, April 18.—Trout are very numerous in this beautiful mountain country, and yesterday I took twenty fine ones in an hour. Game is abundant also, and B. T. Rogers, better known as "Curley" Rogers, is preparing to furnish pack outfits and guide parties in the mountains. The trout average a good size and rise freely.—BILLINGS.

HENRY IRVING AS AN ANGLER.—The English *Fishing Gazette* says that Mr. Henry Irving, the actor, is an enthusiastic angler, and an accomplished artist with the fly-rod; and it is no secret that he owes much of his success on the stage to those quiet days on the trout stream, when the study of Shakespeare and the killing of trout alternately occupied his attention. Another great exponent of Shakespeare on the stage, the late Mr. Phelps, spent most of his spare time in fly-fishing for trout in the Darenth, at Farningham.

FISH PROTECTION IN NEW JERSEY.—The Governor has appointed Mr. Henry Keenan, of No. 140 Mill street, Paterson, N. J., the Fish Warden of Greenwood Lake, in place of Elias Sindle, whose term has expired. Mr. Keenan is also the Fish Warden of the Passaic County Fish and Game Protective Society, and is said to be an energetic man as well as an enthusiastic angler.

A HERMAPHRODITE SHAD.—Mr. E. G. Blackford reports that there was a shad in Fulton Market recently which was a true hermaphrodite, containing on one side an ovary and on the other a spermary, or roe and milt as they are called. The fish was sent to Professor Baird, who pronounces it to be a well-developed case of hermaphroditism.

NATIONAL ROD AND REEL ASSOCIATION.—There will be a meeting of the Association at the Metropolitan Hotel, on Tuesday, May 6, at 5 o'clock P. M. Arrangements for the next tournament will be discussed and the date fixed. Members may remit the annual dues ($3) to the secretary, Fred Mather, Cold Spring Harbor, New York.

STURGEON HOOKS.—Delaware City, Del., April 23.—*Editor Forest and Stream:* Will "Verax," or some other reader, please give exact size of hooks used for catching sturgeon with bait and line. I wish to try it on the Delaware, as no one has ever fished for them here with line and hooks.—C. VON CULIN.

Fishculture.

THE NEW YORK FISH COMMISSION.

WE have received the thirteenth report of the New York Fishery Commission, being a biennial report, transmitted to the Legislature Feb. 1, 1884. It is a very valuable one, in fact the best of the series, and shows that the Commission is an active and progressive one. It comprises 131 octavo pages, and is filled with readable matter and embellished with several new cuts. The frontispiece shows the new hatchery at Caledonia, which is a substantial building. The report covers so much ground and is so well written in every part that it is difficult to condense it or to select extracts.

Since the establishment of the Commission in 1869, there has been planted from the Caledonia station, 55,534,300 young shad, 12,519,000 lake trout, 6,909,200 brook trout, 4,499,000 rainbow trout, 45,300 hybrid trout, 2,000 Kennebeck salmon, 678,000 California salmon, 18,000 land-locked salmon, 2,480,000 whitefish, 900,000 frost fish, 34,920 black bass, 3,004 pike-perch, 2,655 yellow perch, 5,825 bullheads, 155,000 sturgeon, 93,000 eels, and 610 German carp.

From Cold Spring Harbor, in 1883, there was planted 62,000 brook trout, 600,000 whitefish, 26,200 rainbow trout, 85,000 land-locked salmon and 295,000 Penobscot salmon, the latter on account of the U. S. Fish Commission. In the work at Cold Spring Harbor the Commissioners have received valuable aid from the U. S. Commission, of which Commissioner Spencer F. Baird is the efficient head. Commissioner Baird has furnished this station with most of its spawn. He has also given it useful apparatus, and last year, during the hatching season, paid the salary of the superintendent. All the fish hatched at the station were deposited in New York waters.

The production of shad, owing to the total barring of the lower Hudson by nets, and thus preventing spawn-bearing fish from ascending to shoal water, has latterly much diminished. The Commission recommend that, in order to allow the fish to have a little show for their free passage up the river, a law be passed requiring that all nets be taken up each Saturday night, remaining up until Monday morning, which would in a measure increase the facilities for hatching this most valuable food fish. An interesting description of the hatching and work of the Commission is given under this head. Ten millions of fry should be floated yearly to keep up the market supply, and unless some means are taken by the Legislature whereby more fish may be secured for stripping, shad must cease to be an article of food for the many and take rank among those costly fish which are classed as luxuries.

Next in importance to the shad supply in the Hudson the Commission places the maintenance of the stock of salmon trout in the inland lakes. But for the stocking of the Commission during the past ten years, these waters would have been practically barren of this valuable fish, which for size and quality can claim rank next to the salmon. The salmon trout is a fish which has a fondness for deep, pure and cold water. Indeed, he will live in no other, and though his food is mainly fish, it is cleanly, and where it exists in abundance the growth is rapid. After the second year the progress is at a rate equaled by no other fresh-water fish of his quality. He is caught with sufficient facility by fair methods for reasonable market supply, bears transportation well and retains his quality, under proper conditions, a fair time after his capture. While the chief supply for the markets of the State come from the great Northwestern lakes, the liberal stocking of the lakes in New York will, in the absence of netting, soon provide an available stock from inland sources of a superior quality of fish. The supply of spawn this year is sufficient to enable the Commission to distribute double the amount of fry of previous years. A gratifying indication of the advance in public sentiment regarding fishculture is shown by the fact that, where a few years ago it was found difficult to place the fish, and the State was forced to bear the expense of transportation, now the only difficulty is to supply the demands. The efforts of the Commission to increase the supply of this fish have, in some of the larger waters, been retarded by violators of the law who, with spears or other greedy devices, destroy myriads of the salmon trout when rich with spawn and ready to contribute a thousandfold to the stock. Such action cannot be too greatly deprecated nor too severely punished. The Commission will hereafter refuse to stock any waters where the public sentiment is not honest or brave enough to protect the fish from these selfish and greedy murderers.

Of brook trout, the report says: "This peerless beauty, with his gold-flecked sides, his game qualities and his delicious flesh, ranks foremost among the fresh-water fish. This prince among the finny tribes deserves more than passing mention. Like all great luxuries, he is costly. He cannot be produced in overstock by nature, for he is the object of constant pursuit from the time he becomes a fingerling till he succumbs to the fisherman's line. Nor a prolific spawner like the hard-rayed fish, careless of his seed after it has been cast in the waters, and not scrupling to satisfy his appetite by the consumption of his own kind when other food is not at hand, the stock, in places accessible to his captors, cannot be kept up by natural means, and but for the art of pisciculture many waters in which he formerly existed in abundance would know him no longer. The process of hatching and rearing fish of the trout family is slower and more costly than that of other fishes. The stock fish must be kept and fed the year around in order to obtain the spawn. The fry, too, after hatching, must be fed, after the absorption of the yolk sac, till they are deposited in the waters they are thereafter to inhabit. The rearing of brook and salmon trout forms the larger share of the expenses of the Caledonia hatchery. The law granting the appropriation for hatching brook trout was passed in 1875, and an average of 1,000,000 fry have been hatched and distributed annually since. The result has been eminently successful."

By a clerical error the European brook trout received from Germany is spoken of as the saibling. The latter is a charr, *Salmo salvelinus*, inhabiting deep lakes only. The fish referred to were *Salmo fario*. With this correction we quote the report as follows: "Last year there were hatched at Caledonia and at Cold Spring a few thousand saibling—the brook trout of Germany. These are the same kind of fish known in England as the *Salmo fario*—a fish in its structure more nearly resembling the salmon than it does our brook trout. The scientists now call the latter charr, to distinguish it from its English and California rival. Some English writers hold that the *Salmo fario* is the better fish. Their judgment, however, is based upon comparison with American fish that have been placed in English waters, where, on account of the sluggish flow and the higher temperature, they could not reach their best development. If there is a better fish than the brook trout of the American Atlantic coast, in its native waters, it is yet to be found in depths to which the angler's hook has not penetrated. The quality of any fish is largely affected by the quality of the water it inhabits, and there is no water in the world that can excel in coolness and purity the pure crystal currents that flow oceanward from North American mountains.

The saibling at Caledonia have done well, but are not yet old enough to show of what service they may become in our waters. It is probable that the latter, being better than the water whence the stock came, the fish will be better than those in their native streams. Thus far they have shown a tendency to rapid and vigorous growth. Those at Cold Spring Harbor, from causes explained in the report of Superintendent Mather, have not done as well. The spawn were a complimentary gift to Mr. Mather from Mr. F. von Behr, of Berlin, whose writings in Europe, republished in English translations here, have been so valuable an addition to the literature of fishculture.

The rainbow trout have shown remarkable vitality and fecundity. At Caledonia, they grow more rapidly than our native brook trout in the same water. The stream that supplies this hatchery is strongly impregnated with lime. We have observed that at Cold Spring Harbor, where a few thousand were hatched last year, from spawn obtained at Caledonia, that the growth in the soft water of Long Island was much more rapid than in the hard water of Caledonia creek; the rate of growth in six months at Cold Spring being quite equal to one year's growth at Caledonia. There is a difference also in the growth of our native brook trout at the two places; the fish developing more rapidly in the soft water than in the hard; but the difference in the case of the brook trout is not as great as in the rainbow species. This tends to show that the latter will thrive much the best in soft water.

A good deal is to be learned yet respecting temperature and other local conditions affecting fish. Till the past year not enough had been done in stocking with rainbow trout to warrant a judgment of their ultimate success in waters on the Atlantic side. Their time of spawning occurring at a different season from that of the native brook trout, it would not seem to be policy to plant them in waters inhabited by that fish. The protective seasons would need to be different, and inhabiting the same waters one kind might be taken often when the other was fished for, and thus unintended violations would be liable to occur. An obstacle to their ready success in our waters presents itself in the circumstance that at the season the fry are ready to plant, all other fish are greedily feeding, and consequently a considerable share of the fry are liable to be nipped in the bud. This, however, may be avoided by providing places where the fry can be free from the presence of predatory enemies till they are able to look after their own safety.

From the circumstance that they have not been readily found always, in the second year, where the plants have been made, it has been surmised that they are a migratory fish—working their way, as soon as they attain any considerable growth, down stream toward the ocean. Their disappearance, however, may be accounted for by the other cause stated. Further experiments will be necessary to solve all the problems connected with their establishment in Eastern waters; but the promise continues to be that they will prove themselves a fish of great value in stocking large streams whose temperature is too high for brook trout. As to the quality of this fish, the Commissioners reiterate their judgment expressed in their last report, that under the same conditions of water and food, they will be found not inferior to the native brook trout.

The hybridizing of trout is much practiced at Caledonia and is claimed to produce good results. It is of doubtful utility, however, as it has been tried for years in Germany, and has not met with much favor. It will produce a larger fish than the brook trout by crossing it with the lake trout, but its habits are uncertain.

Land-locked salmon have done well in Adirondack waters, notably in Woodhull Lake, and the planting will be continued. The eggs come from the U. S. hatchery at Grand Lake Stream, Maine. This fish has been distributed with success by the Commission in Woodhull Lake, Blood River, South Lake, and in the waters of the Fulton chain. Of the first deposit in Woodhull Lake, the larger number, when their spawning season arrived, true to instinct, took advantage of the open gates to descend and spawn in the beds of the stream below. Of these a number went still further down the stream to a smaller lake several miles below, passing on their way through two intervening lakes and their connecting streams. It is thought that fish from this stock will eventually work through to Lake Ontario. The fish in Woodhull Lake in 1883 ranged from two to four pounds, a remarkable size for four years old. In the Fulton lakes they will thrive and eventually become very abundant.

No part of the work of the Commissioners has given more thoroughly satisfactory results than the distribution of black bass. This fish was originally unknown to waters other than those directly connected with the great lakes; now they are perhaps the most numerous and widely distributed of game fish. The Erie Canal was the first medium of communication between Lake Erie, the stock farm of the bass, to the interior streams. The business of increasing and multiplying their race has been attended to by the fish themselves. A dozen pairs of mature fish, protected from netting, is sufficient to lay the foundation of an imperishable colony. The "Western wide waters" at Rochester is the source of the State's supply. There are two distinct varieties of this prince of finny fellows, the small-mouth, who claims the lead in quality and who affects rock bottom, and the large-mouth, by whom a mucky or grassy bottom is preferred. To the skillful angler a rise to a fly by a black bass of any weight is not exceeded by any other sport.

The pike-perch, known to many as the wall-eyed perch, is, like the bass, a voracious but clean feeder. He takes his food alive, and consequently does not partake of tainted substances. He is a game fish, too, as many an angler knows who has had the pleasure of hooking him. As a table fish he is one of the best in fresh water. He is a rapid and hearty breeder, and needs no artificial help to sustain his stock.

The summary of work regarding the food and breeding seasons of some of the sea fishes and the artificial propagation of the oyster, by Prof. H. J. Rice, is an exceedingly valuable paper, and is illustrated with cuts of the apparatus devised by him in his experiments in breeding oysters in the Fulton Market laboratory. We would refer those interested to the report itself.

The salt-water work at Cold Spring Harbor promises to be of the greatest value, while much good work in the fresh-water department has been done, The superintendent, in his report to the Commissioners, says:

"I have a firm belief in the value of this station for any work at present done in fishculture, except shad, which requires river and not spring water, and as for the salt-water department the possibilities are beyond my calculation.

"The facilities for oyster breeding are exceptionally fine, and the place has been examined by Prof. H. J. Rice, whose valuable experiments in hatching oysters are well known, and he is of the opinion that the grounds are well adapted to oysture culture, should the Commission wish to undertake it. The oyster industry here is a large one and seed is scarce.

"There seems practically no limit to what may be done in the cultivation of salt-water fishes, except the supply of eggs. The water we have of proper density and very pure, in an unlimited quantity. Give us the eggs and we will turn out the fish."

The appendices contain encouraging letters to Supt. Green, of the Caledonia hatchery, and the record of distributions, which, if they were in the form of tables, would show to better advantage, the distribution of carp by the U. S. Fish Commission in the State, through State Commissioner Blackford, and an account of the salmon breeding establishment in Maine, followed by an article on salmon, by Walter M. Brackett.

We regard the report as not only the best one issued by this Commission, but as superior to that of any State report which we have yet seen. It shows advancement in every department and is instructive and therefore readable on every page.

AMERICAN FISHCULTURAL ASSOCIATOIN.

THE thirteenth annual meeting of the American Fishcultural Association will be held in the lecture hall of the National Museum, on Tuesday, Wednesday and Thursday, May 13, 14 and 15.

The Hon. Theodore Lyman of Massachusetts will deliver an address before the Association, and a number of important papers will be presented by prominent fishculturists and fishery experts. It is requested that members of the Association desirous of presenting communications will forward titles of their papers at once to R. Edward Earll, chairman of the Committee on Programme, Smithsonian Institution, in order that the full programme may be announced in advance.

At the time of the meeting the shad fisheries of the Potomac will be at their height, and the central station of the U. S. Fish Commission, in Washington, will be in full operation, exhibiting on a large scale the methods and apparatus now in use for hatching and distributing shad. The regents of the Smithsonian Institution have placed at the disposal of the Association the lecture hall of the National Museum, and Professor Baird has tendered the use of one of the Fish Commission steamers for an excursion to the large fishing shores of the Potomac. Those in attendance at the meeting will thus have an opportunity to observe the methods of collecting shad eggs, and transporting them to the hatching station.

The new fisheries section of the National Museum will be opened to the public during the progress of the meeting, and the Association will have the opportunity of examining the collections so successfully exhibited by our Government at the International Fisheries Exhibitions of Berlin and London.

The United States Commissioner of Fish and Fisheries has invited the Commissioners of the several States to meet in conference with him the day following the adjournment of the meeting.

This circular is sent to many persons not members of the Association, who are known to be interested in fishculture, in the hope that the occasion will induce them to attend the meeting and assist in advancing the great interests which the American Fishcultural Association was organized to promote.

The Local Executive Committee will esteem it a favor if you will at your earliest convenience inform them whether or not you will be able to attend.

MARSHALL MCDONALD,
Chairman of Local Executive Committee.

Programme.—First Day—Morning Session, 10 to 12:30.—Annual address by the president; secretary's report of last meeting; proposals for membership; reading and discussion of papers; recess. Afternoon session, 1:30 to 3:30—Election of officers for the ensuing year; reading and discussion of papers; visit so Government carp ponds. Evening session, 8—Address by the Hon. Theodore Lyman, of Massachusetts.

Second Day—Morning Session, 10 to 12:30.—Proposals for membership; reading and discussion of papers; election of members by acclamation; recess. Afternoon session, 1:30 to 3:30—Report of Treasurer of the Association; reading and discussion of papers; visit to Central Hatching Station of United States Fish Commission. In the evening, the Association will be invited to attend the formal opening of fisheries section of the United States National Museum.

Third Day—Morning Session, 10 to 12:30.—Reading and discussion of papers; adjournment. In the afternoon, the members of the Association will be invited to visit several of the larger fishing stations of the Potomac; one of the Fish Commission steamers being placed at their disposal for the purpose.

A circular has been issued to Commissioners of Fisheries, in which Prof. Spencer F. Baird says: "The Local Executive Committee is making a special effort to secure a very general attendance from all sections of the country on that occasion, and the meeting promises to be one of unusual interest. Since many of the State Fish Commissioners are members of the Association, this seems an opportune time to call a meeting of the Commissioners for the purpose of conference on matters connected with fishculture. It has been decided to hold this conference May 16, the day following the adjournment of the Fishcultural Association. Permit me to express the hope that you will find it convenient to attend the meeting."

FISHCULTURE IN COLORADO.

A FEW days ago I again visited the State fish hatchery, about eight miles down the Platte River from this city, and will report briefly to FOREST AND STREAM past progress and present condition of the establishment. The hatching house, water supply and situation have been before described, but it may be well to state briefly the work thus far accomplished. Dec. 28, 1881, the first trout spawn were received, 100,000, from Plymouth, Mass. About a week later there came another 100,000, and at the end of another week a third lot of the same number. Of these 300,000, 99¾ per cent. were successfully hatched. This result was determined by actual count of the spoiled eggs withdrawn, and is not guess work. About 285,000 of the young fry were, in the months of April, May and June, distributed to various streams of the State. In the fall of the same year specimens of them were frequently taken with the fly of from six to eight inches in length. The few thousands retained at the hatchery, having been well fed and cared for, were considerably larger, and many of them cast spawn in the ditches where confined.

The next year's spawn was not received until after the 1st of January, 1883, when 150,000 came from Plymouth, Mass. They were laid down and hatched about as well as the year before. Is is proper to state that all the spawn received from Plymouth was "eyed," had been carefully picked over before shipment, and was in first-class condition, which accounts

measurably for the exceptionally large percentage of the hatching. After the first shipment early in January, 1883, something happened to the Plymouth establishment which prevented getting any more spawn from there, and 175,000 eggs were then ordered from Cedar Rapids, Iowa, and they came, but in very bad order. The loss in hatching these was very great. Later 25,000 eggs were ordered from Caledonia Springs, New York, which came in good order and hatched well. As in the year before, most of the young fry were distributed to various streams throughout the State; only ten or twelve thousand being kept for breeding purposes.

On Nov. 15, 1883, Mr. Bogart, who has had charge of the hatchery from the beginning, began taking spawn from the fish hatched in January and February, 1882, then about twenty-one months old. He continued taking spawn from time to time up to Feb. 10, reaching about 500,000 in quantity, which, he says, might have been increased to 1,000,000. Of this spawn 50,000 were sold to a party on Gunnison River, whose hatchery failed to work. He then placed them in a spring brook, and lost them all. The other 450,000 were laid down in the hatchery from time to time, and turned out from eighty to eighty-five per cent. of fry from the gross product of spawn. They are all hatched now, and the young are in excellent condition.

The "two-year-olds" are now being marketed, and will all be killed, except a few for experiment and observation. Among them are many of two pounds weight each, and a greater number that will weigh one and a half pounds each. The great majority, however, range between half a pound and one pound in weight. These weights are not guessed at, but proved by the scales, and in the presence of myself and others. The pound and a half and two-pound fish are about twenty-two months old, and are New England brook trout. Mr. Bogart says, however, that he can pick out no less than four varieties of types among them. Next year's spawn will be taken from the fish that are now yearlings.

In the spring of 1882 there were also obtained 10,000 spawn of the California rainbow trout. They hatched well but have not grown as rapidly as the Eastern variety. The largest specimens, now a little under two years' old, probably do not exceed a pound and a quarter each. They are now spawning, and fighting viciously over their spawning beds in the common preserve of the "two-year-olds." If present care is maintained in the future, this hatchery and its preserves will furnish much valuable information relative to the growth of trout. Mr. Bogart says it is the most favorable place to hatch, and that the trout grow faster than in any other place he has ever known.

There are some carp at the hatchery in ponds provided for them, ranging up to six pounds weight, but the day being cloudy there was little chance to see them.

Half a mile further down the river is the farm of J. M. Broadwell. He has the same kind of water supply (from springs) as the State hatchery, and has entered somewhat into trout culture. He began some years ago with native brook trout, but suffered many disasters and much discouragement, chief of which was the destruction of his fish by muskrats. One spring they destroyed over 20,000 fry, and he finally killed one of the animals in the act of entering the hatching box. For some days before the droppings of muskrats had been found in the troughs along with dead fry and fragments of the same. Three or four hundred muskrats and a few minks have been killed about the State hatchery since its establishment, but the persistent use of traps and dogs prevent the pests from doing much harm. The last two years Mr. Broadwell has purchased fry from the hatchery. He is now marketing two-year-old trout at seventy-five cents per pound.

Gordon Land, a fishculturist of long experience, who has in the last few years started a number of private preserves for various parties in this State, some months ago pre-empted a small sheet of water high up on the eastern slope of the Blue River Mountains, in Summit county, this State, known as Cataract Lake. It was naturally well stocked with native trout. On the bank of the lake are springs supplying water very favorable for hatching purposes, and he has arranged properly for their use. Last season he took spawn from wild fish and in a letter recently received from him he says: "My young *S. fontinalis* have done exceedingly well; I will have a trifle over 225,000 to place in the lake as soon as it opens. There are quite a number of albinos, or white trout among them. I kept eleven young trout of last year's hatching in one of my vacant troughs where they could get no food except such minute particles as that afforded by a stream passing through a quarter inch augur hole, until they were a year old. Nine of the eleven survived, and were of perfect form; the largest one being 1⅝ inches and the smallest 1⅛ inches in length. I had at another place a few of the same age that had been regularly fed at least once each day during the same period, of which the largest weighed 7½ and the smallest a trifle over 4 ounces, actual weight, not fisherman's weight. From all of which I infer that an abundance of food has much to do with the size of trout. I can grow all the native trout in the summer that this lake will sustain and they are good enough."

W. N. B.

DENVER, Colorado, April 16.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

C. P. F., New York.—We suggest that you advertise the volumes of FOREST AND STREAM.

H. P. O., Boston, Mass.—It is not uncommon to see pure white puppies. As they grow older they will show other color.

J. H. M., Wooster, O.—Farrar's Rupert was by Shot (Bruce—La Reine) and out of Rhona (Ruben—Nell). Fan was by Dick and out of Fan.

SENEX, Troy, N. Y.—I have a silk fly-line which I had laid aside after oiling and has become stiff. How can I restore it to its former condition for use? Ans. We should soak it again in the same kind of oil, and then wipe it as dry as possible.

C. H., Sibley, Iowa.—I would be glad if you would inform me whether a pickerel may be correctly called a small pike? 2. Whether a pickerel is a pike? Ans. Yes, take the letter c from pickerel and you will see its derivation. 2. Yes, but in places where the "wall-eye" is called "pickerel," as in Canada, it is not. Pike is the old name for *Esox lucius*, called pickerel in New York and some other places. We are not sure whether you refer to the true pike or to the "wall-eye," or pike-perch, the names are so mixed in different localities.

WHAT THEY SAY ABOUT IT.

THE Philadelphia *Times* (April 26) says: "The average book on camping out and the rod and gun business is apt to be too enthusiastic or cranky for sober enjoyment or any real guide to the uninitiated; but a little pocket volume called 'Woodcraft,' by Nessmuk, issued by the Forest and Stream Publishing Company, New York, is as full of sense and snap and fresh air as it is of valuable and practical information. Unexperienced young men contemplating fishing or gunning excursions the coming season could not well do better than read 'Woodcraft' till the breezy spirit of the author and some of his well-told experiences had well fastened themselves in their minds.

The Boston *Courier* (April 27) recommends it as a book "to teach the traveler how to journey through the wilderness with ease."

The New York *Evening Post* says: "Those who are looking forward to an outing the coming season will find in 'Woodcraft' full directions by a veteran sportsman. It aims to reduce the annoyances of camp-life for the experienced to a minimum."

DESTITUTE FAMILIES are saddeningly plentiful; but they would be much fewer if the fathers while living had invested a few dollars in the life and accident policies of the Travelers, of Hartford, Conn.—*Adv.*

The Kennel.

FIXTURES.

BENCH SHOWS.

May 6, 7, 8 and 9.—The Westminster Kennel Club' s Eighth Annual Bench Show, Madison Square Garden. Entries close April 21. Chas. Lincoln, Superintendent. R. C. Cornell, Secretary, 54 William street, New York.

June 10, 11, 12 and 13.—The Second Annual International Bench Show, Chicago, Ill. Mr. Charles Lincoln, Superintendent.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1213.** Volume I., bound in cloth, sent postpaid, $1.50.

NON-SPORTING DOGS.

Editor Forest and Stream:

The idea proposed by the Clovernook Kennel of a non-sporting show to be held in New York this fall, meets with my most hearty concurrence. May we not hope that non-sporting fanciers will take the idea up at once and make it a grand success. As things are, our shows are all crowded in the spring, because the sporting dogs are engaged during other parts of the year, and a more miserable time than a lot of dogs have at a show in the raw weather of our springs is hard to imagine. Boston and Cleveland were capable of killing both dogs and owners by the weather they furnished at the last shows they had. Besides, with all deference to our setter and pointer friends, we are about tired of furnishing the interest that really draws the public to a show, and then have the cream go to them, leaving us the skim milk. How well both dogs and owners will enjoy a show in the bracing weather of October. I have written most of the non-sporting fanciers I know, and all are heartily in favor of the proposal.

W. WADE.

PITTSBURGH, Pa.

AMERICAN ENGLISH BEAGLE CLUB.

Editor Forest and Stream:

I wish to say to the members of our club through your paper that it is hoped as many of them will attend the Westminster bench show as possible, for we would like to meet all interested in our little hound. I would name Wednesday, May 7, for those who will not be able to spare more than one day. It may be possible that the judging will be done then, as it has been formerly (on that day). W. H. ASHBURNER.

Editor Forest and Stream:

In accordance with a request of the president, I take this means of informing the members of the American English Beagle Club that Mr. L. D. Sloan, who has been elected by this club as judge of the beagle classes at the coming New York bench show, has not been accepted as judge by the managers of the Westminster Kennel Club show, they already having appointed Mr. Mortimer for judge of these classes. But Mr. Sloan will be permitted to judge the beagles for the special prizes offered by the American English Beagle Club only.

A. C. KRUEGER, Sec'y and Treas.

WRIGHTSVILLE, Pa., April 25, 1884.

RETRIEVERS.

Editor Forest and Stream:

Among the many attractions that the Westminster Kennel Club will offer to the public at its coming bench show, by no means the least will be the presence of a pair of very fine English retrievers, entered by Capt. McMurdo.

The importation of fine specimens of this breed is very opportune, considering the interest which is now manifested in retrievers, as shown more especially by the demand for Chesapeake Bay dogs, and as a desirable strain to cross with them the brown-coated English retriever seems unequalled. As far as winter duck and goose shooting goes, our Chesapeakes cannot be surpassed, but when it comes to general shooting, a less bulky, lighter and more elegant dog might be more desirable. The most enthusiastic admirer of the Chesapeakes (and I am one of them), must acknowledge that they are not handsome, unless we accept the matter of fact definition of beauty, that a thing is beautiful in proportion to its adaptability for performing its function or end. I do not think there is any doubt but what the English retriever and the Chesapeake are, both of them, the result of breeding for a similar purpose, and that the means taken to accomplish this purpose were about the same in both cases, *i. e.*, a crossing of the setter or spaniel, to get nose, with the Newfoundland or Labrador dog, to get the adaptability to work in the water.

As might be expected, the Chesapeake gunner cared little or nothing for the beauty of his dog, breeding simply for working quality, while the English breeders, while not neglecting useful quality, kept the looks of their dogs in view. The large landed estates that are, in England, handed down from father to son, make possible the maintenance of kennels bred on certain rules; hence such kennels as the Castle Gordon, the Clumber and Blenheim spaniels, etc. That retrievers will ever come into general use with us, in upland shooting, I very much doubt, but it is not only with quail, woodcock and grouse, that a pleasant and healthy day's recreation and rest may be had, and certainly for duck shooting a good retriever is invaluable. Nobody who has not tried it can know how the monotony of sitting in a blind on a hot day in August, with decoys set out to call the flocks of waders and plover that pass down our seaboard, is alleviated by the companionship of an intelligent retriever, to chase the cripples and bring in the dead. With such an one at heel, even the bagging of a couple of dozen of fat peep and ringnecks along the beach, or on the salt marsh, gives an enjoyment beyond the anticipation of the savory pie into which they are to be consigned. The gray squirrel knocked off the top branches of a chestnut tree with a small-bore rifle, or the rabbit whose hind leg has been crippled, and who manages to scuttle into a thick briery swamp to die a lingering death if not retrieved, will be put into the game bag with all the more satisfaction from having been brought carefully to you by your sure-nosed retriever. Some setters will do this work, but they do it under protest. I never shall forget the first beach bird I sent my old Ned (a cross between a Gordon and a native) to retrieve. He was one of the best retrievers I ever saw, and were it not for the fact that I saw he would be crippled with rheumatism, I should not have asked for a better duck dog. He went for the dead bird, a yellow leg, I believe, smelt of it, poked it over with his nose, and then turned on his back and rolled on it, just as if it were carrion. After that he would retrieve anything, from a peep to a sicke bill curlew, but he invariably would curl up his upper lip as though saying, "how nasty."

There is one reason why it may be an important matter to pick out the best strain of blood to cross with our Chesapeakes, and that is that very few kennels were preserved in their purity through the general upsetting of that part of our country during the late civil war. In looking over the breeding of almost every Chesapeake to-day it will be seen that the blood of the kennels of Dr. Keener, Messrs. Jenkins, Bidwell, Foulkes, etc., is the source from which they sprung. I do not say that the time has come yet, but come it will as sure as fate, when the curse of inbreeding will begin to crop out, in the way of runts, blinkers and gun-shy puppies, and half of them going off with distemper. I individually shall, certainly for the present, breed straight; but I must confess that in spite of the old saw, handsome is as handsome does, I should like to have my reliable Ripple a little more elegant and high bred in appearance.

I am looking forward with great interest to seeing Capt. McMurdo's dogs, and think that we ought to feel grateful to him for going to the expense and trouble of bringing them on, especially, as there being no class for them, the only reward he can get will be the knowledge of the pleasure he has given the public in exhibiting them. They are mother and daughter, of the brown, curly-coated breed, and the mother has taken four prizes in England, among them being a second at the Crystal Palace. The daughter was imported in utero, and their breeding is from King Coffee who, I believe, has carried everything before him on the bench. If any field trials for retrievers can be arranged for next autumn, I think the Captain will be there with the young dog, and I only wish I could be there to see.

MIC MAC.

BOSTON, April 28.

'WARE THE BEAGLE!

IN a late issue of FOREST AND STREAM, "Sportsman" kindly referred to me as a champion of the beagle, and so I am, in a modest way, but I do not feel as if I ought to step to the fore, as if I were the only one to sound his praise, or to advance his interests. I do wish to see this fearless little hound take his proper place at bench shows and in the estimation of dog lovers, and under the fostering care of the American English Beagle Club; I am quite sure he will, and the better he is known the more will he be appreciated, both as a companion and pet, and for field use. As a member of the club I am heartily glad that the standard has been made so absolute as to the size of this hound, and I hope judges and breeders will "govern themselves accordingly." My thirteen months old dog Guy of Warwick (whose sire is my friend Elmore's Ringwood) is just within the limit of fifteen inches high, and is a fine specimen of his type, but my preference and pride is the diminutive "basket" beagle, and my advice to breeders and fanciers is to breed to this type, and to keep the strain pure. We do not want hairiers in our beagle kennels.

I hope that the English correspondent of FOREST AND STREAM, "Lillibulero," who writes so pleasantly of kennel matters in dear old England, will soon give us on this side of the water some "notes" upon the beagle, where he is native "and to the manner born." We need a little fresh blood here, so that it is blue enough. I hold the FOREST AND STREAM also to a long-standing promise to give an article on the beagle, and it is high time that we had some illustration of this breed in its pages.

I here repeat the suggestion I made last year, that as soon as practicable the A. E. B. C. promote the holding of a bench show limited to hounds, preference being given, of course, to its foster pet, the English beagle.

It is to be hoped that the exhibit of beagles at the approaching show in New York may be large and indicative of what we may expect in the future.

With hearty good will, I propose the health of the "coming" dog—the English beagle.

O. W. R.

THE NEW YORK DOG SHOW.

FOLLOWING is a list of the special prizes offered for the eighth annual bench show of the Westminster Kennel Club, to be held in Madison Square Garden next week:

The Eastern Field Trials Club offer a club medal, suitably engraved, for the best pointer dog, pointer bitch. English setter dog, English setter bitch, Irish setter dog, Irish setter bitch, and black and tan setter that have been placed at any of the field trials that have been held in America.

The Westminster Kennel Club offer a club medal, suitably engraved, for the best kennels of large-sized pointers, small-sized pointers, English setters, Irish setters and black and tan setters. Each kennel to consist of not less than five. Also to the best black English setter, best setter or pointer that retrieves in the most stylish and obedient manner, fastest greyhound, to be decided by heats, highest leaping greyhound, best Clumber spaniel, best basket beagle under 12 inches, best champion bull bitch, best three bulldogs and best trick dog, best collection of five pugs owned by one exhibitor, $10.

Members of the club offer for the best pointer dog the get of Sensation, $15; for the best bitch, $10; best five St. Bernards, rough or smooth coated, $25. Silver cup, value $100, for best fox-terrier, dog or bitch, in the show. Silver cup, value $100, for best pair of bulldogs. $10 cash or silver medal for best collie dog, sired by champion Robin Adair or Tweed II. $10 cash for best collie bitch, sired by champion Robin Adair or Tweed II. $25 cash for best-looking setter dog or bitch, placed in field trial in England or America, the Westminster Kennel Club to be allowed to compete. $25 cash for best-looking pointer, dog or bitch, placed in field trial in America or England, the Westminster Kennel Club to be allowed to compete. Large framed photograph from Mr. J. M. Tracy's picture, "The Eastern Field Trials," for best pair of pointers. Large framed photograph from Mr. J. M. Tracy's picture of "Dog Talk," for best brace of English setters. Silver medal for best brace of Irish setter puppies of same litter. For best English setter dog or bitch, over twelve and under eighteen months old, a valuable solid silver flask, suitably engraved. $20 cash for the best trained setter or pointer, which has been trained by the methods laid down in "Training vs. Breaking." $10 cash for the best fox-terrier got by the stud dogs or bred in the kennel of the Messrs. Rutherford. $10 cash for the best deerhound dog, $10 cash for the best deerhound bitch. Silver medal for the best pointer puppy, the get of Bang Bang. Silver medal for the best pointer dog under 12 months old, sired by Sensation. Silver medal for the best white poodle. $10, for the best cocker spaniel dog, to be judged by the standard of the American Cocker Spaniel Club, open to members only; $10 for the best cocker spaniel bitch, same conditions. Cup for the best kennel of greyhounds, three or more. Cup for the best stud pointer to be shown with one or more of his get. Cup for the second best beagle, owned by a member or the American English Beagle Club. Cup for the best pointer the get of Bow or Faust. Five dollars for the fastest greyhound. Five dollars for the highest leaping greyhound. Cup for the best pointer sired by Beaufort. Collar for the best Yorkshire terrier under 9 months old. Silver medal for the setter or pointer puppy best trained to retrieve. Cup for the best imported English setter under 12 months old.

The Medford Fancy Goods Company offer a double leash for the best brace of greyhounds, a collar and harness for the best pug dog, and suitable collars for the best pointer dog, pointer bitch, English setter, Irish setter, greyhound dog, greyhound bitch St. Bernard, mastiff, bulldog and collie.

The AmericanEnglish Beagle Club offer a silver medal, suitably engraved, for the best beagle hound, dog, bitch or puppy, and a silver cup for the best beagle, dog, bitch or puppy, owned by a member of the club.

SWEEPSTAKE PRIZES.

There will be a sweepstake for large pointer dogs, English setter dogs and Irish setter dogs, entry fee $10, all the money in each class to the winner, with a piece of plate added by the club. The winner to be known as the champion of America; the Westminster Kennel Club to be permitted to compete. Entries close at 12 o'clock noon, on Tuesday, May 6.

ENGLISH KENNEL NOTES.

THE pitiful union of "green pleasure and gray grief" was revealed with painful irony on the 28th of March, when the Prince of Wales stood on the course watching the Grand National Steeplechase, with the unopened telegram in his hand that announced his brother's death.

It was quite lately chronicled as a serious item of news that Her Majesty's favorite dog Noble was ill, and that Mr. Rotherham, the well-known veterinary surgeon, had been summoned to the palace to prescribe for his ailment, a serious one—old age.

Noble is a collie from Lord Charles Ennes-Ker's kennel. Her Majesty has also a pair of handsome Skye terriers and several other dogs.

When the Prince of Wales is at home a couple of collies frolic on the staircase of Marlborough House, and are watched with celestial disdain by the Princess's Chinese dog who, poking his head through the bannisters, "glowers, amazed and curious, as the mirth and fun grow fast and furious."

Because the Princess has one, Mrs. De Tomkyns, Smythe and Robinsonne are ransacking zoological collections for copies, but they are not good companions, like their infamous countrymen, their ways are "vain and peculiar," and they are snappish. In appearance they resemble a red Pomeranian, and have, like all Chinese dogs, black tongues.

The Prince has a valuable kennel of various breeds at Sandringham. The kennel is considered one of the sights of the place, and I was told by one of the Prince's guests that what interested him most was a litter of bassets, the offspring, he was told, of a couple given to his royal highness by Mr. Krehl, who I believe has a small pack of them for hare hunting.

I regret to record the death of a very promising young collie, Malcolm III., who won first prize at the last Birmingham show. He was exhibited at the Crystal Palace in January, but met a better class of dogs, and was also not in good condition. During the show he was missed from the bench, and his disappearance has never been satisfactorily explained. On his return home he showed signs of distemper, and eventually succumbed to its fatal course.

This fell disease is making such sad havoc in our kennels, and one is likely to become confused in the multitude of specifics advertised and recommended. I cannot believe that a panacea exists, though many treatments are heralded forth to the public with this pretension. Rockham's balls (of Norwich) are used by many breeders for their convenience; but even more handy is the powder sold in little bottles by the Duke of Rutland's huntsman, Frank Gillard. The bottle is sold with a small gilt spoon which holds a dose. You have only to open the dog's mouth and throw it in. Then there are Hedge's (of Dale End, Birmingham) distemper balls. These last are much in favor with some fanciers, who are never without them and promptly administer one on the slightest suspicion.

I could mention many similar patent medicines (Spratt's blue powders, Hind's pills, etc., etc.) each regarded as infallible by their believers, but I am assured on the authority of a very eminent breeder of several varieties that no one remedy can be of use for the multifarious forms of distemper. The last time I was down South an old-fashioned dealer gravely informed me that the proper cure for distemper was "keep the dog alive, when he gets weak pour beef tea into him, and arrowroot and port wine, brandy and eggs, but keep him alive. Give him also anything that will encourage the discharge, or as he phrased it, "Blow it out of his head." If he cough much, resort to opium, and when he is convalescent, quinine and cod liver oil, sunshine and happiness.

I find a note in my common-place book about cod liver oil capsules, this is a simple method of administering a dirty medicine. I will try to find out where they can be had.

On my book-shelf stand most of the published works on the dog, the oldest and newest, but the book that is the dirtiest, raggedest, must thumb-marked, and dog-eared, is Dalziels "Diseases of the Dog." That is my sheet anchor. It is a small one-shilling, one-volume affair treating all the ills that dog-flesh is heir to, in a plain, intelligible form, to be understood of the multitude, no erudite diagnoses nor complex remedies, no mystification of strange signs that only a chemist can unravel.

Instead of signs, I read grains, ounces, drams, teaspoons and dessert-spoonfuls so that I can take up my own set of kennel scales and weigh out the prescriptions myself. This is a great saving in a big kennel, because the ingredients cost nothing, it is the mixing the apothecary charges for. My advice is the reverse of that given in "Madame Favart," I "always mix" my own recipes.

Our M. F. H. tells me his huntsman always sews up the distemper patients in flannel, leaving the head, etc., free. He says the warmth and comfort this infuses are more than half the battle.

Here is a remedy given to me by a French sportsman: "Keep the dog warm, and plenty of black coffee; if there should be much discharge from eyes and nose, pass a seton, if, on the contrary, the illness falls on the lungs, clip the hair off on each side of the chest and rub gently with one drop of creton oil and seven drops of common oil. Give strengthening food, but above all, keep him warm." These are his own words, but I don't know whether the coffee is to be given internally or applied as a lotion, and creton oil is also outside my philosophy.

The Bulldog Club will hold their next show at the Crystal Palace in May. One of their own members has been selected to judge. As Mr. Jackson combines with a knowledge of the breed a phlegmatic disposition that will be proof against the audible asides of the æsthetic exhibitors from the Ratcliff Highway, the East End and St. Giles, I prophesy him a success on his debut in the ring.

Stolid coolness is a most desirable quality in a judge, and it is certain that Mr. Jackson will not be flattered into mistakes, and he owes it to the forgetfulness of nature that whatever may happen he will be six foot four above the snarls of the disappointed exhibitor.

I imagine it was by Mr. Jackson's assistance that the club secured the Crystal Palace for their show. The Palace is much to be preferred to the cowshed at the back of a public house in the East End, where the fixture last took place. The locality was regarded as a happy thought by the aristocratic members of the club, who thought that dogs would show up better in suitable surroundings, and though the "gate" was small and the freedom excessive, yet the company was high—as overhung venison.

The bulldog is our national breed, and I am glad to see no signs of its degenerating, but still I could wish that its admirers did not live up and dress up to their fancy quite so much. To take one's walk abroad with a bulldog there must be no middle course in your "get up," you must dress quietly and well, or you must don the attire of the stage rat catcher.

Smasher, who had such a phenomenally good time of it in the ring while the property of Mr. Vero Shaw, and such inexplicable ill-luck with his last owner, has joined the majority. He was a most gentlemanly bulldog. Mr. Benjamin is consoled for his loss by the possession of the hideously perfect Britomartis. This bitch is a near relation of the invincible Monarch, whose equal in head properties, bone and massiveness I have never seen.

The boarhound Jupiter, late Joubert, whose size, price and ownership have been persistently advertised of late, is dead. *De mortuis nil nisi bonum* is all very well when applied to men, but if you speak out plainly about the living dog, you must expect to be charged with interested motives, and be prepared to enjoy the lifelong malignity of the owner.

This is not a prelude to a disparagement of Jupiter, but I must confess that I never believed his published measurements. I liked not his light body nor the shape of his head. I do not pretend to be a connoisseur of these Danish dogs, and never owned nor wished to own one, but these parts were pointed out to me by a German gentleman who had seen the dog. I shall post myself up a bit in the breed, and give my readers the benefit of it in time. They have come to the fore with a rush, and the lucky dealers first in the field are gathering in the golden harvest that usually accompanies the latest fashion in caninity.

I do not see what we gain by their introduction, surely whoever likes a large dog of this shape could be content with our old English mastiff or the Scotch deerhound. Is not Crown Prince more massive and dignified, and Mr. Joplin's Chieftain more elegant and picturesque than a boarhound?

I think we might leave the Germans their boarhounds, they are not too rich in canine varieties. Warwick will open its show on the 16th, with the significant entry of 1,200. Fox-terriers have most, of course, and next to them come collies with 164. Newfoundlands number 34, which beats the Palace record. There are 18 Great Danes. I wish I could be there myself, but I hope to get a few notes from a friend who is going.

One of our actors, Mr. Clayton, has been getting into trouble with his St. Bernard. The dog attacked a man in the street, who went before the magistrate for redress, and received heavy compensation. Keep your guard on Rector, Mr. Emmet. The drama patronizes the saintly breed. Monsieur Marius, when on his provincial tour last year, was accompanied by a noble St. Bernard that he called Tiny. Mr. Wilson Barrett and Mr. John Hare have also been bitten with the holy "fancy."

Mr. Hare's beautiful self-colored dog is a son of Dr. Maurier's famous Chang, with whose majestic dimensions the readers of *Punch* have become familiar from his frequent presence in the artist's clever society sketches. LILLIBULERO.

APRIL 8, 1884.

ST. LOUIS DOG SHOW.

THE St. Louis bench show just over was called the First Grand International not because no dog show has preceded it, but in the fond hope that it will have successors. It may be considered that the exhibition holds out such promise, as though it cannot be termed a success either in point of number or over-generous attendance, it has at least taught the people here that it is not necessary to be a millionaire to be a dog breeder. The large sums sunk here in previous years in such purchases as those of Faust, Bow, Berkely or Erin led the bulk of dog lovers to blind themselves to the utility of breeding anything but pointers or setters, and secondly, to the theory that none but capitalists have any right to dabble in the latter. The show has the further benefit of teaching people that their own canine crows are not the blackest, that there is such a thing as a standard for judging each and every breed, and that it at least behooves an owner to ascertain that his dog somewhat resembles the standard of the class for which he enters him. This remark is rendered almost necessary by the extraordinary mistakes made in the toy classes. Charm a judge never so wisely, he could not persuade the fair owner of a silky-coated nondescript that it was not a Skye, and the number of pets, bred without respect to the obligations of caste, far exceeded those who could laugh at the insinuation of a bar sinister of their 'scutcheon.

Really fathered by the managers of the Natatorium as a profitable means of filling the hiatus between roller skating and swimming, the whole work of the show fell at first hand on Mr. J. W. Munson, who was lucky enough to secure an able assistant in Mr. Chas. Gardiner. It is no depreciation of the value of Chas. Lincoln's services to say that these two gentlemen got the show very well on without him, and hostile criticism of the arrangements is really difficult. There is no building in the United States better adapted for a dog show than is the St. Louis Natatorium. A first-class carpenter did the kennel work well, the water is from a natural spring, and the location of the building is the most central in the city. It cannot be said that the public of St. Louis did not look to the number of dogs as unattractive, for though 265 entries may be very few in other places, they mean a great stride in this, hitherto, generally, un-doggy city. The causes of but poor attendances have therefore to be looked for elsewhere. The show, which opened on Wednesday and closed on Friday last, was cursed with the most horrible weather for the first three days, and to add to this, the attraction of Cole's circus, just across the road, worked doubly to the disadvantage of the bench show. Many people who could afford but one outing, took in the greater, while many people wandered into Cole's by mistake, and came out wondering, "Where in blazes has he stuffed the dogs?" Others thought the affair a side show of the circus, for which Cole had no right to charge so exorbitantly as fifty cents.

To come to immediate business, a slap of a mild kind may be taken at Mr. Munson for the order of numbering the classes. Programmes ought by this time to be schemed out perfectly, and it seems ridiculous to draw up a premium list on the simple score of height, as is so generally done. It is no reason that because other shows do so, that St. Louis should begin with mastiffs and wade through the breeds highest at the withers down to sporting dogs, continuing the process down till toys are reached, for this principle not only gives trouble in handling the programme, but offends the eye as the dogs are being studied. Considering, also, that a suggestion has been strongly urged from here to at once come to a system of judging whereby a beaten champion will be forced to submit to the word ex being prefixed to his title, it might have been well to have introduced some champion of the champion class, which would have left not only a lasting halo on each dog so winning here, but also on St. Louis, as the place where a bench show decisively established such an innovation.

It is as well to admit, flat-foocted, that the show, as a show, was just saved, its saviours being pointers, Irish setters, English setters, and Irish water spaniels, in that order. A few of the fox-terriers were good, the beagles were a good, small, class, collies were fair and pugs were plenty; but without the breeds first named the whole affair would have been most stale and unprofitable. Here and there was to be found a dog which would do credit to his class anywhere, the most notable instance of such being the hard-haired Scotch terriers Heather and Tam Glen, shown by John H. Naylor, of Chicago, and which left for the New York show at the conclusion of that under notice.

The judging was satisfactory, fewer remarks being heard from disappointed owners than is generally the case. Kicks were, of course, made here and there, but were so exceptional as to be almost complimentary. The gentlemen weak enough to occupy these invidious distinctions were Major Taylor, of Lexington, Ky., for sporting dogs; R. Henry, J. A. Long, and Dr. Voerster, of St. Louis. The latter gentleman had, for his sins, accepted the task of judging the bull-terriers and ladies' dogs, and fell terribly into the bad books of the owners of both before he had got through. Dog fighters objected to the Doctor's strictures on any color but white, and to his penalizing for mutilation. This gathered on his awarding but a third prize to the class, which was really a very fair one, and the muttered discontent of the boxing fancy was rewarded by a re-opening of the issue by the management, when three prizes were awarded. The ladies also went for the Medico, who, in their view, should judge by the same number of standards as there were pets exhibited.

A decidedly moderate mastiff puppy was the sole entry in that class. The St. Bernards were a moderate and a well-mixed lot. One of them had the luck to die an hour after being kenneled, probably, as it was remarked, on the Ananias principle, at the mere idea of being called a St. Bernard. A Japanese spaniel, pig fat, and a cross-bred retriever also adorned this part of the show, and were classed as St. Bernards. The first premium went to W. A. Hobbs, of the *Post-Dispatch*, with Marco, a moderate dog, that would have no show East. Of the six Newfoundlands shown, D. O'Shea, of London, Canada, had decidedly the best in the yearling Nellie, although Miss Lillie Munson's Prince Albert is a pup that will grow into a very handsome animal. A great mistake was made in awarding first in the greyhound class to Bob, a local dog, who would never be near enough to wrench a hare turned to him by Lady Vinem, a bitch belonging to Dr. G. Irwin Royce, of Topeka, Kan. This bitch is unfashionably colored, white, with mouse markings, but is of rare quality, and should be looked after by California breeders. Of the Scotch deerhounds, the local dog had clearly greyhound strain, while Mr. Taylor's Dick, from Lexington, Ky., is a noble animal, of the Custer breed, which Col. C. L. Hunt was lucky enough to purchase before Major Taylor left the city.

Mr. W. J. Crawford, Memphis, Tenn., showed Gath; P. H. Bryson, Gladstone (for exhibition only) and W. H. Wells, Chatham, Ontario, Mingo for the champion English setter prize. After careful examination, the judge tacked the blue ribbon on to Gath, who was at the time the better dog of Gladstone or the others. The old dog shows no weakness, but the signs of age are coming over him, and though every one must wish him a green old age, his days of a "has been" are at hand and, like the rest of us, he will have to make way for his juniors. The Brysons showed Peep o' Day, Major Taylor, Lit (for exhibition only), and D. O'Shea Nellie May in the champion English setter bitch class, in which old Peep looked a class away from her company. Although she and all the Tennessee dogs show signs of late doings with the quail, it is doubtful whether this grand bitch ever was in better fettle than she was last week. Seventeen competed for the premiums for English setter dogs, the winners being Paul Gladstone, owned by William B. Gates, Memphis, Tenn., Bryson's Stanton second and John A McDonough, of St. Louis, obtained third with Count Glickstone, A. C. Waddell's Laverack Chief and W. B. Mallory's Pink B. were vhc. Will Davidson, Chatham, Ontario, was hc. with Rake, and F. H. Westmann, of St. Louis, scored a c. with Lady Pembroke's Boy.

Nineteen bitches paraded for the setter bitch prizes: J. M. Avent, Hickory Valley, Tenn., took first with Bessie A.; A. C. Waddell was second with Countess Blythe, and Richards & Fox, of Jerseyville, Ill., took third with Truth. John Drees, of Little Rock, Ark., was hc. with Princess Royal, J. B. Lucas, of St. Louis, with Countess Rake, Mart & Dorwart, Jacksonville, Ill., with Nettie D., and W. R. Faribault's Bonnie Dimple was c. Seven English setter puppies under 12 months are a most promising class, the winner of which was Gladstone's Image, owned by J. M. Avent, Hickory Valley, Tenn. P. B. Spence, Newport, Ky., was second with Dan Vorhees, and J. W. Murnan, Keeling, Tenn., took third with Sportsman. A. C. Waddell's Prince was vhc., and D. O'Shea's Dido hc.

No champion Gordons showed, and in the ordinary Gordon class Major Taylor made award of but a second prize among the three entered, the taker being Grouse, a bitch owned by John W. Umberline, of St. Louis. Were she judged by the Malcolm standard this bitch is up to the best form.

IRISH SETTERS.

Of the five entries for champion Irish setters, the best was judged to be Norwood, owned by Henry Overman, of Cincinnati. Fann, owned by W. H. Pierce, Glencho Kennels, Peekskill, N. Y., beat the Emporia Kennel's Irish Faith for the champion setter bitch prize, no others being entered. Although twelve put in appearance for the Irish setter dog prize, Major Taylor thought nothing good enough for first, second going to Dr. Chas. E. Michell's (St. Louis) Blarney, and third to Chas. H. Peck's Elcho. Jack, the property of R. E. Farris, St. Louis, and the Emporia Kennel's Irish Ranger were vhc. Of the nine Irish setter bitches, J. A. Sullivan's Effie took first to Cincinnati. Two St. Louis animals took second and third, these being Chas. Steismeier's Elsa and J. B. C. Lucas's Biddy II. Daisy Patti and Irish Maud were hc. In the Irish setter puppy class the Emporia Kennel were first and second with Irish Lilly and her sister, Irish Maud. L. A. Moffitt, of St. Louis, was third with Hallie.

POINTERS.

Nothing could be more interesting to the scientific dog breeder than the sight of Meteor and Faust, cheek by jowl to each other in adjoining kennels. Faust preserves wonderfully, and seems almost as limber and spry as ever, despite the grizzling of his mask. He was well honored at this show through his progeny, and looks healthy enough to keep on leaving his noble marks on the litters of many a day to come. He was, however, withdrawn from competition, and the moot point of supremacy between him and Meteor was, therefore, still left undecided. The latter is a grand dog that, with all the quality the strictest judges may insist on, has all the stoutness so desirable in a stud dog. It would be nearly as useful a job to set to work to gild gold as to try to pick holes in Meteor, who, with all the dogs in the Munson kennel, showed up in splendid order, thanks to the care bestowed on them by his English kennelman, Tom Lake. After Meteor had walked over as the champion dog, four sweet bitches mounted the platform to be studied over for the championship of their sex. The award was foregone after Munson's Vanity, imported, was seen. Munson's imported Maxim, litter brother to Meteor, was an easy first in the 55-pound pointer dog class, A. C. Waddell being second with Jim and third with Clipper. Munson's Bang, imported, was vhc., and Geo. A. Castleman's Blucher c. There were ten competitors. For the small pointer dog class of eight entries, but two awards were made, A. C. Waddell being first with Prince, and W. H. Stafford second with Major Croxteth. John W. Munson was first and second in the open pointer bitches with Spinaway and Flash III. Waddell's Fan II. was third. Munson's Modesty and Robert Labadie's (St Louis) Jessie were vhc. John Henderson's (Jacksonsonville, Ill.) Maggie V., Joe Mest's Patts and John Nolde's Flora hc., the two last being owned in St. Louis. The best of the six puppies under 12 months was judged to be Geo. J. Nook's Jake, owned in St. Louis and pedigree unknown. W. H. Stafford of Trenton, Tenn., took third with Bonnie Bang.

SPANIELS.

John D. Olcott, of Milwaukee, was first and second in a really excellent class of Irish water spaniels, with Barney and Fly. C. B. Rhodes, of Moberly, Mo., was third, with King Marsh. A. C. Waddell was awarded a second for Doctor, a black and tan, in the field spaniel class. D. O'Shea took first and second in the 28-pound class, with the blacks Rosey and Bene. Geo. W. Schenck, Burlington, Ia., was third, with the black, Bengal. D. O'Shea also captured the 23-pound cocker prize, with the black, Bessie, to whom Dr. E. C. Franklin's Flossie, liver and white, was second. Here it may be fair to ask why there is so strong a tendency to breed black cockers, when the great bulk of American sportsmen won't look at an English retriever, because, they claim, his black color scares wildfowl.

D. O'Shea took first and third in the foxhound class of six, with Ringwood and Forester II., of the English type, the second going to Fritz Thome, of St. Louis, with the black and tan Driver. Arthur Mittleberg's Queen was vhc. Nine really good beagles were headed, after judgment was passed, by D. O'Shea's Rattler and Music II., a very good couple of dwarf beagles. Wilson P. Hunt, of Normandy, Wis., showed three couple of the larger sort, imported, but failed to get nearer than third, which he landed with Fanny, his John being vhc., and his Warrior, Jr., and Maid hc. The only dachshund entered was the moderate Gertrude, to whom a second was given. Mrs. S. A. Kay's Tipsy, a neat imported bitch, took the champion fox-terrier prize. An excellent specimen, Sam Sam, belonging to the Emporia Kennel Club, being first in the open dog class, S. A. Kay's Sting II., second, and Col. C. L. Hunt's April Jim, third. The same owner's Rhadama took the bitch prize from one competitor. The two last mentioned dogs owe their names to the fact that the one has assumed

sentry duty over the race horse April Fool, while the other mounts guard over a two year old filly, named Rhadama, of the Colonel's. In the fox-terrier puppy class a new style of dog was seen in two white and brindled specimens, Alex and William Bennett, just imported. They are both good looking. Alex took the premium. The three collie prizes were won locally by Joseph Campbell's Scott, F. M. Anderson's Bruno and Ben. McColloch's Bruce. Rob Roy, a stud dog, owned by J. A. Long, of St. Louis, on exhibition only, was one of the handsomest dogs at the show. Of the seven bitches competing the winners were Thomas C. Johnson's Meg II., Joseph Campbell's Madge Wildfire and John K. Yore's Fannie. Searing Marsh's Daisy was vhc.—all are owned in St. Louis. No bulldog was shown, and the judge at first refused to award any prize but a third (to Tom Kelly's Paddy) to any of the seven bull-terriers. The close-cropped fraternity were, however, afterward made happy, Jim Busby's Billy, imported, a really excellent dog, being first. William A. Ross's (Fort Worth, Tex.) Napper second, and Tom Kelly, the ex-prize fighter, third with Paddy. Michael Rohan took a second with Flora in the over 7 pounds black and tans, and D. O'Shea was first and second with the Bedlingtons Sting II. and Wasp II. Not a prize was awarded to a Skye, though vhc. was given George Fehl's Frank and a c. to Harry Passmore's Boxer. There were five in the class. Heather Tam Glen, noted above, were the only hard-haired Scotch and terriers worth a second look. D. O'Shea was first and second with the Irish terriers Erin and Garryowen, and a solitary c. to Mrs. J. E. Rowland's Box was the only award a hard-hearted judge would make to a lot of (so-called) Yorkshire terriers. Mrs. George H. Hill, of Cincinnati, scored well with Joe as the champion pug. In the open pugs, whose kennels were got up in the most gorgeous way by their fair owners, a second was gained by Miss Emma Bailey's Punch, and third by Mrs. Isabelle Chapman's Fritz, both owned in St. Louis. Mrs. Samuel A. Gaylord's Sadie, a very beautiful 2¼ pound blue and silver little lady took first. Mrs. T. Joell's Tiney second, and G. Lamar Collins's Dude third in the indefinite terrier list, for which most of those in the other terrier classes might well have entered. Major Taylor gave a second to the well felt-coated but too light-colored Chesapeake Jumbo, owned by A. F. Shapleigh, C. de St. Aubyn's Diane being third. None contested with these local dogs. C. C. Carroll was alone in his glory with two coach or plum-pudding dogs Dash and Captain Jinks. In the miscellaneous class an immense Ulm dog, Jumbo, mouse-colored and horrible to look at, won first for Peter Zimmer, Joe Schiller coming next with a Russian retriever, Russ. Eleven Italian greyhounds composed the last class, the winner, Beppo, the property of Hon. P. Kirby, of Jacksonville, Ill., being a very handsome specimen. Mrs. E. P. Roberts, of Alton, Ill., who entered the balance, took second with Petkins, her dogs, though neat, being so finely in-bred that they have in the highest the shivering qualities which make this breed so objectionable to many.

SPECIAL PRIZES.

St. Louis did itself fairly proud in the special prize line. John Munson won a $150 dog collar, donated by J. B. McCullagh, editor of the *Globe-Democrat*, for the best pointer, with Meteor. Peep o' Day took a handsome bronze as the best setter. Munson's Vanity took a silver cup, given by Charles H. Mason, of New York, to Bang's best daughter. John Henderson took a prize donated by himself, for the best pointer bitch with pups. Henry Overman, of Cincinnati, won, with Norwood, the Ligowsky prize of a trap and clay-pigeons, for the best red Irish setter. Olcott's Barney and Fly took a pipe for the best brace of spaniels, the former also winning a wading suit. Bessie captured a silver cup, for cockers, and Miss Lillie Munson, a Smyrna rug, given for the best dog owned by a lady, with her Newfoundland pup Prince Albert. Joe took an umbrella and a silver cup given for that breed, while Miss Emma Dailey walks off with a Langtry bang, by help of her pug Punch. Madge Wildfire won a clock, for collies, and Meg II., silver goblets for that breed. W. A. Hobbs is plus a silk hat, thanks to his St. Bernard Marco. Tipsy II. took a box of cigars, and a case of claret goes to Emporia, Kas. through Irish Lilly. Miss Munson's Newfoundland further obtained her a basket of flowers, Peep o' Day got a dressing case for Mr. Bryson, W. B. Wells received $25 in cash for the excellence of his English setter Mingo, and D. O'Shea's Bedlington, Sting II., obtained him $15 as the best terrier from Canada.

Following is a full list of the

AWARDS.

Class 1. Mastiffs.—1st and 3d withheld; 2d, Dr. Henry Newland's Flora, yellow, 11mos.

Class 2. St. Bernards.—1st, W. A. Hobbs's Marco, fawn, 4yrs., imported; 2d, T. Ehrhardt's Bismarck, tan; 3d, T. Fleischer's Rox, black, 1½yrs. Very high com., A. Baron's Minca, tawny, 3yrs., imported.

Class 3. Newfoundlands.—1st, D. O'Shea's Belle, black, 1yr., Carlo—Fanny; 2d, Miss Lillie Munson's Prince Albert, black, 6mos., imported; 3d, J. C. Strauss's Kid, black, 8mos. Very high com., R. Wagner's Nero, black, 4yrs.

Class 4. Greyhounds.—1st, J. A. Pozzoni's Bob, fawn, 3½yrs., Punch—Judy; 2d, Dr. G. I. Royce's Lady Vinem, 22mos., Count Custer—Lady Rose; 3d, H. Piatt's Swift, blue, 15mos.

Class 5. Scotch Deerhounds.—1st, Mrs. J. M. Taylor's Dick, gray, 2½yrs.; 2d, Emmet McDonald's Gold Dust, light brown, 4yrs., Denver—Saturn.

Class 6. Champion English Setters, Dogs.—1st, W. J. Crawford's Gath, black, white and tan, 3yrs., Count Noble—Peep o' Day.

Class 7. Champion English Setters, Bitches.—1st, P. H. & D. Bryson's Peep o' Day, white, black and tan, 5yrs., Gladstone—Clip.

Class 8. English Setters, Dogs.—1st, Wm. B. Gates's Paul Gladstone, black, white and tan, 2mos., Gladstone—Lavalette; 2d, P. H. & D. Bryson's Stanton, black, white and tan, 2½yrs., Gladstone—Frost; 3d, John A. McDonough's Count Glickstone, black, white and tan, 2yrs. 11mos., Royal Blue—Modjeska. Very high com., W. B. Mallory's Pink B., black and white, 2yrs. 11mos., Gladstone—Countess Key, and A. C. Waddell's Laverack Chief, black, white and tan, 3½yrs., Pontiac—Fairy II. High com., Will Davidson's Rake, blue ticked, 19mos., Mark—Princess Bow Bell. Com., F. H. Westman's Lady Pembroke's Boy, black, white and tan, 1yr., Judge—Lady Pembroke.

Class 9. English Setters, Bitches.—1st, J. M. Avent's Bessie A., lemon and white, 3yrs., Dashing Lion—Armida; 2d, A. C. Waddell's Countess Blythe, black, white and tan, 2yrs., Prince—Diamond; 3d, Richard & Fox's Truth, black, white and tan, 15mos.. Erp—Kate. High com., John Drees's Princess Royal, white and black, Royal Blue—Florrie; J. B. C. Lucas's Countess Rake, white, black and tan, 2½yrs., Rake—Phyllis; M. A. Dowat's Nettie D., black, white and tan, 18mos., Tasso—Bird. Com., W. B. Faribault's Bonnie Dimple, white, black and tan, 1½yrs., Bracket—Dinkey.

Class 10. English Setters, Puppies.—1st, J. M. Avent's Gladstone's Image, black, white and tan, 6mos., Gladstone—Bessie A.; 2d, P. B. Spence's Dan Vortnees, black, white and tan, 11mos., Chief Justice—Nancy Lee; 3d, J. W. Murnan's Sportsman, black, white and tan, 8mos., Gladstone—Sue. Very high com., A. C. Waddell's Prince, black and white, 11mos., Laverack Chief—Lucky Deal. High com., D. O'Shea's Dido, black and white, 8mos., Princess Royal—Nettie.

Class 11. Champion Black-Tan or Gordon Setters.—Prize withheld.

Class 12. Black-Tan or Gordon Setters.—1st, withheld; 2d, John W. Umberline's Grouse, 3yrs., Dart— ——; 3d, withheld.

Class 13. Black-Tan or Gordon Setters, Puppies. No entries.

Class 14. Champion Irish Setters, Dogs.—1st, Henry Overman's Norwood, 3½yrs., Elcho—Rose.

Class 15. Champion Irish Setters, Bitches.—1st, W. H. Pierce's Faun, 1yr. 8mos., Elcho—Noreen.

Class 16. Irish Setters, Dogs.—1st, withheld; 2d, Dr. Charles E. Michel's Blarney, 4yrs., Erin—Biddy; 3d, Charles E. Peck, Jr.'s, Elcho, 1yr., Erin II.—Nuffie. Very high com., Emporia Kennel Club's Irish Ranger, 4yrs., Karl—Irish Kate, and R. E. Farris's Jack, 2mos.

Class 17. Irish Setters, Bitches.—1st, J. A. Sullivan's Effie, 2½yrs., Tollstone—Ruby II.; 2d, Chas. Steismeier's Elsa, 5yrs., Erin II.—Dora; 3d, J. B. C. Lucas's Biddy II., 3yrs., Erin II.—Whitford's Erin. Very high com., Emporia Kennel Club's Irish Maud, 5mos., Derby—Irish Duck. High com., Mrs. H. Steismeier's Daisy Patti, 2yrs., Chance—Elsa.

Class 18. Irish Setters, Puppies.—1st and 2d, Emporia Kennel Club's Irish Lilly and Irish Maud, 5mos., Derby—Irish Duck; 3d, L. A. Moffitt's Hallie, 3mos.

Class 19. Champion Pointers, Dogs.—1st, J. W. Munson's Meteor, liver and white, 3yrs., Garnet—Jilt.

Class 20. Champion Pointers, Bitches.—1st, J. W. Munson's Vanity, liver and white, 2yrs., champion Bang—Pride.

Class 21. Pointers, Dogs, over 55lbs.—1st, Col. W. E. Hughes's Maxim, liver and white, 3yrs., Garnet—Jilt; 2d and 3d, A. C. Waddell's Tim, orange and white, 2½yrs., Lake—Queen, and Clipper, liver and white, 3yrs., Faust—Clytie. Very high com., J. W. Munson's Bang, liver and white, 5yrs., champion Bang—Luna. Com., Geo. A. Castleman's Blucher, liver and white, 2yrs., Croxteth—Trinket.

Class 22. Pointers, Dogs, under 55lbs.—1st, A. C. Waddell's Prince, liver and white, 18mos., Clipper—Dove; 2d, W. B. Stafford's Major Croxteth, liver and white, 2yrs., Croxteth—Lass; 3d, withheld.

Class 23. Pointer Bitches.—1st and 2d, J. W. Munson's Spinaway, liver and white, 4yrs., Garnet—Keswick, and Flash III., liver and white, 2yrs., champion Bang—Pride; 3d, A. C. Waddell's Fan II., liver and white, 2½yrs., Bow—Fan. Very high com., J. W. Munson's Modesty, liver and white, 2yrs., Croxteth—Trinket, and Robert Labadie's Jessie, liver and white, 3yrs., Beau—Clara. High com., John Henderson's Maggie V., liver and white, 2yrs., Vandal—Maggie G., and John Nolde's Flora, 1¾yrs., Prince Royal II.—Fannie. Com., Joseph Mest's Patti, lemon and white, 3yrs., Little Ruffian—Flight.

Class 24. Pointer Puppies.—1st, George J. Mook's Jake, liver and white ticked, 10mos.; 2d, withheld; 3d, W. B. Stafford's Bonnie Bang, white, 9mos., Bang—Olivette.

Class 25. Irish Water Spaniels.—1st and 2d, John D. Olcott's Barney, 9yrs., Shamrock—Shaun, and Fly, 11mos., Mike—Lady; 3d, C. B. Rodes's King Marsh, 18mos., Pat—Tide.

Class 26. Field Spaniels, Any Color, over 28lbs.—1st and 3d, withheld; 2d, A. C. Waddell's Doctor, black and tan, 3yrs., Bow-Josie.

Class 27. Cocker Spaniels, Any Color, under 28lbs.—1st and 2d, D. O'Shea's Rosey, black, 18mos., Doctor—Polly, and Bene, black, 2yrs., Bob III.—Black Bess; 3d, Geo. W. Schenk's Bengal, black, 14mos., Tips—Toronto Jet.

Class 28. Cocker Spaniels, Any Color, under 23lbs., to be judged by I. C. S. Association Standard.—1st, D. O'Shea's Bessie, black, 15mos., Zulu—Sweep; 2d, Dr. E. C. Franklin's Flossie, liver and white, 3½yrs., Snipe—Idol.

Class 29. Foxhounds.—1st and 3d, D. O'Shea's Forester II., black, white and tan, 2yrs., Ringwood—Roxey, and Ringwood, black, white and tan, 4yrs., Forester—Lady; 2d, Fritz Thome's Driver, black and tan, 15mos. Very high com., Arthur Mittelberg's Queen, black and tan, 3yrs.

Class 30. Beagles.—1st and 2d, D. O'Shea's Rattler and Music II., black, white and tan, 2yrs., Rover—Music; 3d, very high com. and high com., (2) Wilson P. Hunt's Fanny, white, black and tan, 4yrs., Spot—Music; Jehu, white, black and tan, 3yrs., Spottie—Vic; Warrior, Jr. and Maid, white, black and tan, 1yr., Warrior—Fanny. Com., Edward Hogan's Leader, white, black and tan, 10mos., Rattler—Flora.

Class 31. Dachshunde.—1st and 3d withheld; 2d, Louis Melchoir's Gertrude, 13mos., Bergman—Gretchen.

Class 32. Champion Fox-Terriers.—1st, Mrs. S. A. Kaye's Tipsey II., 4yrs., Viper—Tipsey.

Class 33. Fox-Terriers, Dogs.—1st, Emporia Kennel Club's Sam-Sam, 1yr., Blister—Nell; 2d, Missouri Kennel's Sting II., 3yrs., Sting—Flirt; 3d, Chas. L. Hunt's April Jim, 1yr.

Class 34. Fox-Terriers, Bitches.—1st, Chas. L. Hunt's Rhadama, 1yr.

Class 35. Fox-Terriers, Puppies.—1st, H. S. Wiser's Alex, 5mos.

Class 36. Champion Collies.—No entries.

Class 37. Collies, Dogs.—1st, Joseph Campbell's Scott, black and tan, 9mos., Rex—Collie; 2d, F. M. Anderson's Bruno, black and white, 15mos., Tweed—Fly; 3d, Benjamin McColloch's Bruce, A.K.R. 325.

Class 38. Collies, Bitches.—1st, Thomas C. Johnson's Meg II., sable, 11mos., Champagne—Nellie; 2d, Joseph Campbell's Madge Wildfire, A.K.R. 887; 3d, John K. Yore's Fannie, black and tan, 20mos. Very high com., Searing Marsh's Daisy, black and tan, 2yrs., Scottie—Collie.

Classes 39 and 40, Bulls, Dogs and Bitches.—No entries.

Class 41. Bull-Terriers.—1st, J. Busby's Billy, brindle and white, 2yrs., Patti—Queen; 2d, W. A. Ross's Napper, white, 4yrs., Victor—Nell; Tom Kelly's Paddy, white, 9mos., Napper—Wasp.

Class 42. Black and Tan Terriers, over 7lbs.—1st, withheld; 2d, M. Rohan's Flora, 4yrs.

Class 43. Bedlington Terriers.—1st and 2d, D. O'Shea's Sting II. and Wasp II., 1yr., Sting—Wasp.

Class 44. Skye Terriers.—1st, 2d and 3d, withheld. Very high com., George Fehl's Frank, 5yrs. Com., Harry Passmore's Boxer, 5yrs., Rowdy—Beauty.

Class 45. Hard-Haired Scotch Terriers.—1st and 2d, John H. Naylor's Heather, 2yrs., and Tam Glen, 19mos., Wallace—Flora; 3d, withheld.

Class 46. Irish Terriers.—1st and 2d, D. O'Shea's Erin, 1½yrs., Rock—Norah, and Garryowen, 3yrs., Paddy II.—Erin.

Class 47. Yorkshire Terriers.—Prizes withheld. Com., Mrs. J. E. Rowland's Box, 5yrs.

Class 48. Champion Pugs.—1st, Mrs. Geo. H. Hill's Joe, 4yrs., Comedy—Clytie.

Class 49. Pugs.—1st, J. G. Baker's Lady Dufferin, 22mos.; 2d, Miss Emma Bailey's Punch, 3yrs., imported, 3d, Mrs. Isabelle Chapman's Fritz, 9mos., Punch— ——

Class 50. Toy-Terriers.—1st, Louis C. Billon's Sadie, blue, 13mos.; 2d, Mrs. T. Joell's Tiney, black and tan, 5yrs.; 3d, G. L. Collins's Dude, black and tan, 18mos.

Class 51. King Charles, Blenheim and Japanese Spaniels.—No entries.

Class 52. Chesapeake Bay Dogs.—1st withheld; 2d, A. F. Shapleigh's Jumbo, sedge, Seafoam—Wave; 3d, C. T. De St. Aubin's Diane, brown, 7yrs., Joe—Nellie.

Class 53. Coach Dogs.—1st and 2d, C. C. Carroll's Dash, 4yrs., Hero—Gipsey, and Captain Jinks, 8yrs., Dan—Queen.

Class 54. Miscellaneous.—Equal 1st, Jos. Schiller's Russ, black Russian retriever, 8yrs., and Peter Zimmer's Jumbo Ulmer, 9mos.

Class 55. Italian Greyhounds.—1st, E. P. Kirby's Beppo, fawn, 3yrs., Rex—Italia; 2d, Mrs. E. P. Roberts's Petkins, fawn, 3yrs., Pet—Dotty Dimple.

BREEDING FOR COLOR.—*Editor Forest and Stream:* For the benefit of your readers who breed dogs, and who desire certain markings and certain colored pups, the following may prove of some advantage to them. I have often read of breeders experimenting with bitches for sex in pups, but never heard of any one claiming to have the means to have whelps of any color they see fit to choose. A short time ago a laboring man from the Old Sod let out a secret which, he says, works with a certainty, and he says he has often seen it tried on both bitches and mares, and worked well every time. The secret and mode of operation is this: First, you procure a piece of sheet tin, about six inches long by four wide, and on this tin draw the image of a dog; then cut this out the exact shape as near as possible of the image, and paint this image the color you wish the pups to be; then place this tin image in the drinking cup immediately after the bitch has been lined, and the pups are sure to be of that color. Since I have not experimented or tried the above plan, I cannot say much about it either way; but I am positive my informant believes in it thoroughly. Since a number of breeders are trying for a black (all black) Llewellin pup, probably they would do well to give this plan a try, at least. I know a gentleman trying a number of experiments now with bitches, as regards the color of whelps, and he is pretty confident he can foretell their colors. If I can get him to publish them in FOREST AND STREAM I am certain they will be read with much interest by the dog men in general.—16-BORE.

EASTERN FIELD TRIALS CLUB.—There will be a quarterly meeting in conjunction with the regular Board of Governors' meeting, held at Delmonico's, Fifth avenue, corner of Twenty-sixth street, New York City, on Tuesday evening, May 6, 1884, at 8 P. M., for the discussion and promotion of subjects relative to the welfare of the future of trials and the club. Also, as a social reunion of all members and interchange of past experiences on the development and improvement of dogs and shooting afield. All members, resident and non-resident, who are in attendance on the dog show, are cordially requested to attend.—WASHINGTON A. COSTER, Secretary and Treasurer.

SETTER IMPORTATION.—Mr. Joseph Lewis, Cannonsburg, Pa., has received from the kennel of Dr. Walter Iliffe, Kendal, Eng., the English setter bitch Nellie Laverack. She is three years old, and is by Llewellin's Count Dan and out of Floss (Blue Prince—Flash). She is in whelp to champion Royal Rock.

THE CHICAGO DOG SHOW.—The second annual International Bench Show at Chicago, will be held at the armory of Battery D, on June 10, 11, 12 and 13. Major J. M. Taylor will judge the setters and pointers. The other judges will be announced at an early date. The premium list will be ready next week.

NEW YORK DOG SHOW.—*Editor Forest and Stream:* In case of any misunderstanding in regard to the sweepstake prizes, I desire to say that the managers decided a month ago that the judging could best be done jointly by the regular judges of Irish and English setters. For pointer and English setter sweepstakes, the regular judges in the setter classes. These gentlemen to select a third judge to act with them. The judges kindly agreed to this proposition, which was duly announced through the papers. Entries for these sweepstakes will close on Tuesday, May 6, at 12 M.—CHAS. LINCOLN, Supt.

THE LAVERACK MEMORIAL FUND.—New York, April 25.—*Editor Forest and Stream:* Nearly two years ago I contributed to the fund for the erection of a monument over the remains of the late Mr. Edward Laverack. Not having seen any account of the disposal of the fund, I write to know if you can throw any light upon the subject.—PONTO. [We are unable to give the desired information. Mr. E. A. Herzberg, who collected and forwarded the funds, may be able to do so.]

CLOVER BELLE.—The Clovernook Kennels have returned to the managers of the Cincinnati bench show the prize which was won by their fox-terrier puppy Clover Belle, and it has been awarded to Mr. H. G. Groesbek's Judge. An explanation of the mistake may be found in our issue of March 27.

GREYHOUND IMPORTATION.—Mr. H. W. Huntington, Brooklyn, N. Y., received on Friday last from Mr. William Graham, Belfast, Ireland, three very fine black greyhounds, Bouncing Boy, Begonia and School Girl. They will be exhibited at the show next week.

SETTERS FOR SALE.—Any one in want of a well-bred setter, will do well to correspond with Mr. Hatheway, whose advertisement will be found in another column. There is no better working blood in the country.

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, of breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Carolina Girl. By Mr. E. G. Atkinson, Madison, Ga., for liver and white pointer bitch, whelped Nov. 25, 1883, by Marshall Ney (Beaufort—Nymph) out of Sprite (Beaufort—Fannie Turner).

Wanda T. By Mr. Ernest F. Thomas, Hoboken, N. J., for cocker spaniel dog, whelped Nov. 17, 1883 (Don—Belle).

Actress. By Messrs. Vaiden & Houston, Uniontown, Ala., for liver and white ticked pointer bitch, whelped Feb. 4, 1884, by Mr. J. W. Munson's Bang (Bang—Luna) out of Spinaway (Garnet—Keswick).

NAMES CHANGED.

☞ *See instructions at head of this column.*

Harold to Carrots. Red Irish setter dog, whelped Sept. 6, 1883 (Elcho—Helda), owned by Mr. E. L. Fiske, Boston, Mass.

BRED.

☞ *See instructions at head of this column.*

Clara—Rush Gladstone. Mr. J. M. Avent's (Hickory Valley, Tenn.) English setter bitch Clara to his Rush Gladstone (Gladstone—Donna J.), Feb. 29.

Countess C.—Rush Gladstone.—Messrs. I. Yearsley, Jr., and J. M. Avent's English setter bitch Countess C. (Dashing Lion—Armida) to Rush Gladstone (Gladstone—Donna J.), March 2.

White Lilly—Ranger. Mr. S. B. Dilley's (Rosendale, Wis.) pointer bitch White Lilly (Dime—Queen) to his Ranger, April 21.

Fifine—Chief. Capt. L. S. Ward's (Governor's Island, N. Y.) red Irish setter bitch Fifine (Rory O'More—Quail III.) to Mr. Max Wenzel's Chief (A.K.R. 231), April 13.

Blue Belle—Zanzibar. Mr. E. M. Jester's (St. George's, Del.) English setter bitch Blue Belle (A.K.R. 99) to his Zanzibar (A.K.R. 1182), April 24.

Dashing Belle—Zanzibar. Mr. E. M. Jester's (St. George's, Del.) English setter bitch Dashing Belle (A.K.R. 914) to his Zanzibar (A.K.R. 1182), April 22.

Noreen II.—Chief. Mr. John F. Dwight's (Boston, Mass.) red Irish setter bitch Noreen II. (Elcho—Noreen) to Mr. Max Wenzel's Chief (A.K.R. 231), April 21.

Belle Brandon—Zanzibar. Mr. Geo. F. Clarke's English setter bitch Belle Brandon to Mr. E. M. Jester's Zanzibar (A.K.R. 1182), April 23.

Gipsey Queen—Ringwood. Mr. Chas. F. Kent's (Monticello, N. Y.) beagle bitch Gipsey Queen (Briar—Bush) to Mr. N. Elmore's imported Ringwood (Ranter—Beauty), April 18.

Mary—Ringwood. Mr. F. Wright's (Granby, Ct.) beagle bitch Mary (Flute—Lucy) to Mr. N. Elmore's imported Ringwood, April 26.

Victress—Flute. Mr. N. Elmore's (Granby, Ct.) beagle bitch Victress (Victor—Lucy) to his Flute (Rattler—True), April 25.

Lucy—Flute. Mr. N. Elmore's (Granby, Ct.) beagle bitch Lucy (Inno—Old Bess) to his Flute (Rattler—True), April 25.

Leigh Doane—Chief. Mr. I. H. Roberts's (Camden, N. J.) red Irish setter bitch Leigh Doane (A.K.R. 58) to Mr. Max Wenzel's Chief (A.K.R. 231), April 19.

WHELPS.

☞ *See instructions at head of this column.*

Flirt. Mr. Wm. S. Thurston's (Huntington, L. I.) pointer bitch Flirt (Glenmark—Girl), April 11, twelve (six dogs), by champion Sensation (A.K.R. 217).

Maud. Mr. Max Wenzel's (Hoboken, N. J.) red Irish setter bitch Maud (Larry—Gussie II.), April 8, twelve (six dogs), by his Chief (A.K.R. 231).

Novice. Mr. Fred. W. Rothera's (Simcoe, Ont.) imported rough-coated St. Bernard bitch Novice, April 25, four (one dog), by his champion Priam (A.K.R. 485).

Rue. Mr. Bayard Thayer's (Lancaster, Mass.) pointer bitch Rue (A.K.R. 401), April 22, eight (three dogs), by the Westminster Kennel Club's Bang Bang (A.K.R. 394); all orange and white.

Rhona. Mr. Bayard Thayer's (Lancaster, Mass.) pointer bitch Rhona (A.K.R. 399), April 24, nine (four dogs), by Mr. R. T. Vandevort's Don (A.K.R. 165).

Morning. The Ravenswood Kennel's (Boston, Mass.) English setter bitch Morning (A.K.R. 41), April 25, six (five dogs), by Mr. J. H. Goodsell's champion Plantagenet.

SALES.

☞ *See instructions at head of this column.*

Ranger. Brown and tan Gordon setter dog, 3yrs. old, pedigree unknown, by Mr. Chas. F. Kent, Monticello, N.Y., to Dr. John Kelley, Fairview, N. J.

Carolina Girl. Liver and white pointer bitch, whelped Nov. 25, 1883 (Marshall Ney—Sprite), by Mr. F. H. Hudson, El Paso, Tex., to Mr. E. G. Atkinson, Madison, Ga.

Bounce. Lemon and white English and Irish setter dog, 7yrs. old, by Victor (Dash—Creena) out of Kate (Thompson's Duke—Kingsland's Belle), by Mr. E. E. Hale, New York, to Mr. Lincoln Welles, Wyalusing, Pa.

Guido, Italian greyhound dog (A.K.R. 906), by the Strawberry Hill Kennel, Leicester, Mass., to Mr. C. W. Barnum, Lime Rock, Ct.

Lennox. Lemon and white pointer dog (A.K.R. 1045), by the Knickerbocker Kennel Club, Jersey City, N. J., to Mr. H. W. Smith, Worcester, Mass.

Rushton. Liver and white pointer dog (A.K.R. 215), by the Knickerbocker Kennel Club, Jersey City, N. J., to Mr. H. C. Miller, Hudson, N. Y.

Harold. Red Irish setter dog, whelped Sept. 6, 1883, by champion Elcho (A.K.R. 295) out of Helda (Ike—Nancy), by Mr. Jean Grosvenor, Boston, Mass., to Mr. E. L. Fiske, same place.

Killeena. Red Irish setter bitch, whelped Aug. 25, 1883 (A.K.R. 620), by the Ashmont Kennel, Boston, Mass., to Mr. E. F. Boyd, Attleboro, Mass.

Vero and Frazer. Greyhound dogs, whelped Jan. 13, 1883, by the Strawberry Hill Kennel, Leicester, Mass., to Mr. W. H. Cook, Saratoga Springs, N. Y.

EXCHANGED.

☞ *See instructions at head of this column.*

Blue Frisk for Dashing Money. Mr. J. M. Avent, Hickory Valley,

Tenn., has exchanged with Mr. I. Yearsley, Jr., Coatesville, Pa., the black, white and tan English setter bitch Blue Frisk, whelped Aug. 29, 1883, by Rush Gladstone (Gladstone—Donna J.) out of Clara (Penn—Pocahontas), for the lemon and white English setter dog Dashing Money, whelped May 18, 1883, by Dashing Monarch out of Armida (Leicester—Pocahontas).

DEATHS.

☞ *See instructions at head of this column.*

Dorothée. Black greyhound bitch (A.K.R. 72), owned by Mr. H. W. Huntington, Brooklyn, N. Y., April 22, from poison.

KENNEL MANAGEMENT.

☞ **No Notice Taken of Anonymous Correspondents.**

J. A. S., Berwick, Pa.—See answer to "D. H.," this week. Do not give calomel.

J. D. S., Rahway, N. J.—We have never tried Little's soluble phenyle. We have heard it highly spoken of by those who have used it.

C. S. J., Washingtonville.—The tail can be safely cut at the joint nearest the injury. We would not advise this unless it should prove to be unsightly after healing.

T. W. P., Providence, R. I.—Your dog probably has distemper. The best advice that we can give is to nurse him carefully, and keep him in a well ventilated dog kennel.

A. O. F., New Bedford, Mass.—Your description is too vague, the dog may have some foreign substance in his throat, or an abscess may be forming which may be determined by a careful examination.

G. A. B., Washington, D. C.—You neglect to state whether the canker of your dog's ear is external or internal. If the latter, use equal parts of bromo chloralum and laudanum diluted with six times their bulk of water, fill the ear and gently knead the base for a short time. One or two applications should effect a cure unless the case is of long standing.

D. H., Clinton, Conn.—Your puppy has chorea, which is often a sequence of distemper. The treatment of this disease is not satisfactory. Young dogs very often outgrow it if well cared for. The diet should be nutritious, with abundant out-door exercise. Would advise one grain sulphate of zinc and one grain extract of gentian twice a day for a week; also give a tablespoonful of cod liver oil once or twice a day.

Rifle and Trap Shooting.

FIXTURES.

May 6 and 7.—Fourth Tournament Southern Illinois Sportsmen's Association, Carbondale, Ill. C. P. Richards, Secretary.

May 20 to 23.—Knoxville Gun Club Second Annual Tournament, Knoxville, Tenn. C. C. Hebbard, Secretary.

May 26 to 31.—First International Clay-Pigeon Tournament, at Chicago, Ill. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

June 2 to 9.—Annual Tournament Louisville Sportsmen's Association, Louisville, Ky. J. O. Barbour, Secretary, 157 Third avenue, Louisville.

RANGE AND GALLERY.

GARDNER, Mass., April 23.—At Hackmatack Range to-day, the Gardner Rifle Club shot a match with the Saratoga, N. Y. Club, the score being exchanged by telegraph. There were two scores, with a possible 120, on Massachusetts target. The totals were as follows: Gardner team 2,978, Saratoga team 2,892. The detailed score of the Gardner team was as follows:

G C Goodale	106	107—213	G R Pratt	98	100—198
Chester Hinds	105	106—211	Frank Nichols	99	99—198
G F Ellsworth	106	105—211	W C Loveland	99	97—196
I N Dodge	105	104—209	L Walker	103	90—193
S B Hildreth	103	102—204	F H Knowlton	94	97—191
C O Bent	108	95—203	H C Knowlton	94	91—185
J Newton	99	102—201	C Shumway	79	86—165
A Matthews	100	100—200			

After the match there was shooting by members of the club on the American decimal target, distance 200yds., shooting off-hand, with a possible score of 100. The totals were as follows: G. F. Ellsworth 95, G. E. Fordyce 95, H. C. Knowlton 85, G. C. Goodale 85, A. Matthews 84, I. N. Dodge 83, Chester Hinds 83, S. B. Hildreth 81, L. Walker 80, W. C. Loveland 77, Fred H. Knowlton 72, G. R. Pratt 67.

BULL'S HEAD RIFLE CLUB, New York, April 17.—12-ring targets, possible 120: C. Rein 117, A. Lober 117, G. Zimmermann 116, H. Hackmann 116, M. Dorrier 115, J. Schrarder 113, J. F. Schneider 113, H. Gunther 112, W. Ross 112, S. F. C. Weber 108, J. Jordon 106, D. Holland 106, G. D. Johnson 105, G. Wendelken 104, J. F. Campbell 102, H. H. Wasmuth 101, H. Zubiller 98, D. Louitzki 97.

BOSTON, April 26.—The shooting men hereabout, and there is a very large battalion of them, had a very bad day of it, but the scoring went on as usual. There was a very slim attendance at Walnut Hill, and they were considerably bothered by the strong wind from the northeast. The records made are appended:

Creedmoor Practice Match.

W Charles	4	4	5	4	5	5	5	4	5	4—45
A S Brackett	4	4	4	4	4	4	4	4	5	4—41

Creedmoor Prize Match.

H Cushing	4	5	5	4	5	4	5	4	4	5—45

Rest Match.

C B Edwards	10	9	9	9	8	10	10	10	10	9—94
J B Fellows	8	9	8	8	10	10	9	10	10	9—91
A Lawrence	10	9	7	7	10	9	10	8	10	10—90

Victory Medal Match.

W Charles	10	9	6	9	9	9	6	10	9	9—86
Re-entry	10	5	10	10	8	8	9	10	9	7—86
J B Fellows	10	8	8	7	8	7	5	10	8	10—81
C Anderson	9	10	8	4	8	9	9	5	10	9—81
A E Rider	9	6	8	5	8	10	9	9	8	7—79
S W Lincoln	10	7	7	9	5	8	10	7	7	8—78
G F Maxwell	7	9	10	7	6	10	8	6	7	7—77

At the fifth and last competition by the members of the Harvard Shooting Club for the Walnut Hill cup, held on Friday, April 25, at Watertown, the cup was won for the third time by W. H. Slocum, '86, and therefore becomes his property. W. L. Allen, '86, and C. C. Foster, '87, had won it once each, and are tied for second place, for which a silver medal was offered. The tie will be shot off at the next match.

The East Boston Schuetzen Corps held its weekly shoot at Oak Island to-day, and some fine shooting was done, although the wind blew a gale from the northeast, and was hard to contend with. The corps will open a new match on the man target, which is new in this part of the country. The best scores of the day were as follows:

Creedmoor Practice Match—Capt. Garney 45, C. Gertze, 44, F. Gray 44, C. M. Gueth 43, M. Crist 43, C. Muller 43, G. H. Wilfert 40, J. Wissil 39.

Creedmoor Prize Match—Capt. Garney 45, F. Kline 44, C. Becker 44, N. Woods 37.

Rest Match—N. Woods 77, N. Woodbury 75, F. Kline 66.

THE ILION TARGETS.—Ilion, N. Y., April 26.—*Editor Forest and Stream:* "Van" calls for explanation in your paper of 24th inst. relative to my targets, shown in your paper of a previous issue. Target was 5½ or 6in. bullseye, first shot being taken for center of group and all subsequent shots being engineered for that purpose. No telescope was used, peep and open bead being the sights used.—L. N. WALKER.

CARLISLE, Pa.—The Cumberland Valley Rifle Association will open a grand shoot on its grounds May 20, and a prize list aggregating $850. Entry, $2, and re-entries $1. The rules of the match provide: Five shots shall constitute a score. Ties shall be shot off with 3 shots. No person will be allowed more than one original entry and five re-entries. No ticket-holder shall be entitled to more than one prize. Ticket-holders not desiring to shoot for themselves may select another to shoot for them. Persons shooting for two or more ticket-holders will not be allowed to know who they are shooting for when called upon the stand. The target used shall be a combined Creedmoor and ring target, 4in. bullseye with 2in. center, and the distance 100yds., off-hand. Any rifle and any sights (except rifles with hair triggers and telescope sights) may be used. Persons holding ties on more than one prize shall shoot off on the highest, and if successful their interest in the balance of the ties shall cease and determine. If, however, they are not successful, they shall shoot off their next highest tie; provided, however, that they cannot use the score made on a higher prize for their benefit on a lower one, and so on throughout the list of prizes. Ticket-holders cannot surrender their right to a higher score for the purpose of gaining advantage on a lower one. Ties shall be shot off by marksmen making the original score. The match shall commence at 9 o'clock A. M. and continue till 12 o'clock, noon; again at 1 o'clock P. M. and shall continue until dusk, and shall be continued from day to day until completed. The range will be open at 7 o'clock A. M., and marksmen will be allowed to test their rifles until 9 o'clock A. M.; also between the hours of 12 M. and 1 P. M. The range will be open to all marksmen for practice for two weeks before the match. The Range Committee, with the president of the association, shall have power to close the original entries at any time after the first day's shooting.

NEWARK, N. J., April 23.—The closing meeting of the Newark Rifle Association was held to-night, all clubs being represented. Prizes offered in the tournament were presented to the successful clubs in order as follows: Frelinghuysen, Essex, Celluloid and Domestic. The total number of points made by each during the six matches were: Frelinghuysen, 2,797; Essex, 2,780; Celluloid, 2,659; Domestic, 2,645; Warren, 2,557; Plymouth, 2,508. The individual positions of members connected with the several clubs in the tournament show following averages:

Six Matches.—Ed. Neil, 48 1-6; A. C. Neumann, 47 5-6; G. Williams, 47⅔; Wm. McLeod, 47½; Geo. Weigman, 47⅓; J. Coppersmith, 47⅓; J. Dainty, 47; A. Walters, 47; F. Brant, 47; Wm. Watts, 46⅔; R. Westerman, 36⅓; E. O. Chase, 46 1-6; Jefferys, 45 5-6; W. Coe, 45⅔; J. Bayer, 45⅓; S. Shackelford, 45 1-6; T. Miller, 45 1-6; Wm. Nunley, 45; C. H. Townsend, 44 5-6; T. L. Sommers, 44⅔; S. Simmonds, 44⅓; Vreeland, 44⅓; Wadams, 44 1-6; C. F. Jackson, 44; J. Velsor, 43 5-6; Willzey, 43 5-6; Babbit, 43⅓; A. Erhard, 43 1-6; Burns, 42 5-6; E. J. Pollard, 42 5-6; Puder, 42 1-6; G. M. Townsend, 42; Greire, 41⅔.

Five Matches.—Pahls, 47; Smelling, 46 2-5; Wm. Felts, 46 1-5; G. Zimmer, 46 1-5; Leibe, 46; J. L. Tobin, 46; J. K. Walsh, 45 4-5; Reynolds, 45; C. Waag, 44 3-5; Alexander, 44; P. L. Sommers, 43 3-5; E. Coe, 43 2-5; J. Wolf, 43 1-5; G. Freche, 43; Leibe, 40 1-5.

Four Matches.—J. McCullum, 45¼; Valentine, 43¼; J. McConnell, 42¼; McGunness, 42¼.

Three Matches.—B. Germayne, 46⅓; W. F. Lynn, 46; A. A. Baldwin, 45⅔; Keenan, 45⅔; S. M. Brade, 43⅔; Shafer, 42⅔; Millworth, 42⅔; Cheeseman, 39; Kinney, 37.

GALLEERY SHOOTING.—At the Grand Central Range on Vanderbilt avenue, the current match closed with scores as follows: Mr. L. V. Sone made during the last week of the match in practice 67, 67, 67, 67, 66, 334, while J. H. Brown made 67, 67, 67, 66, 66, 333. The scores stood:

P Fenning	68	67	67	66	65—333
A Oehl	68	65	65	64	63—325
G Zimmermann	65	65	65	64	61—323
H Vonder Linden	65	65	64	64	64—322
L Bird	67	64	64	63	63—321
J Coppersmith	66	64	64	63	63—320
M Dorrier	64	64	64	63	62—317
W M Farrow	66	63	63	64	62—317
G J Seabury	64	63	63	53	61—315
C E Keator	64	64	62	62	52—314
Dr Toal	75	65	63	60	59—312
A J Howlett	63	63	63	61	61—310
Wm Simpson	63	63	62	62	62—310
E Neil	63	61	61	61	69—306
G Snellen	63	63	62	59	58—305

JAMESTOWN, N. Y., April 26.—At our regular medal match yesterday, the following scores were made; 200yds., Creedmoor target; wind heavy from 10 to 2 o'clock:

H V Perry	4545554445—45	A. F. Warner	4445333444—39
R H Burns	4544455454—44	H D DeLisle	4444442344—37
J R Moore	4444434444—39	A F Ward	3050435445—38

THOMASTON, Conn., April 26.—At our weekly shoot Saturday, the 19th, F. Carr won the badge with a score of 90 out of a possible 120, Massachusetts ring target. The weather and light were unfavorable for high scores, the match being shot during an April shower. To-day the shoot was over the new range, though the range is incomplete as yet, it will be formally opened with an open to all shoot in May. W. Dunbar won the badge with a score of 107 with his new Ballard P. G. The other scores made were:

G Gilbert, Ballard .38-cal	100	F Carr, Remington .40-cal	88
G Canfield, Ballard .40-cal	98	C Alling, Ballard .38-cal	85
C F Williams, Ballard P. G	96	Fox, Winchester .44-cal	72
E Bennett, Ballard .40-cal	91		

On Thursday, the 24th, the B. B. Social Club met at Burns's gallery, the ladies to shoot for a prize (a bangle charm) using a Creedmoor target, the inner half of bull to count six each, to shoot two strings of four shots each:

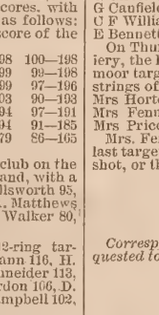
Mrs Horton	18	20—38	Mrs Reed 17 17—34
Mrs Fenner	16	19—37	Mrs Bush 17 17—34
Mrs Price	18	17—35	Mrs Fenton 18 14—32

Mrs. Fenton accidently discharged the gun the first shot on the last target, and the terms of the match did not allow her another shot, or the result might have been different.—R. H. BURNS.

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

CLAY-PIGEON BADGE.



HEREWITH is given an illustration of the beautiful diamond badge which is to be presented as a prize to the individual making the highest score at the coming Clay-Pigeon Tournament at Chicago in May. The Ligowsky Clay-Pigeon Company announced that the value of the badge would be $250, and we understand that the actual cost has slightly exceeded that sum. The execution of the design is by Tiffany & Co., of this city, at whose establishment the badge is now on exhibition. The prize will be awarded to the shooter whose score shall be the highest, irrespective of his belonging to the winning team. It will be his personal property. The question just now is, where will the badge go to after the tournament is over? We know of several clubs who think that they can give a very definite answer, but it is at best only conjecture.

BROOKLYN.—The regular monthly shoot of the Unknown Gun Club took place at Dexter's, on Thursday, April 24, for three regular and three extra prizes. Handicap rise, gun below the elbow, club rule, and classified with the following results:

Plate, 24yds	1111111—7	Layton, 21yds	1100110—4
Moller, 22yds	1111011—6	A Harned, 23yds	1011010—4
Vogelsang, 23yds	1011111—6	Stillwell, 23yds	0100111—4
Schroder, 25yds	1111101—6	Cahill, 21yds	0110110—4
Rathjen, 25yds	1111011—6	Detlifsen, 25yds	0111010—4
Van Staden, Sr., 23yds	1101101—5	W Harned, 23yds	1001010—3
Smith, 22yds	0011111—5	Doyle, 21yds	0000111—3
Pope, 24yds	1011011—5	Van Staden, Jr., 25yds	0010101—3
Knebel, 25yds	1111100—5	Muller, 24yds	0011010—3
Tomford, 25yds	0111110—5	Brandenberg, 21yds	0010000—1
Monsees, 24yds	0101110—4		

On account of scarcity of birds the ties divided; 7 first, 6 second and 5 third prize.

Of the extra prizes, counting two shoots out of three, Vogelsang, Plate, Rathjen, Knebel, Pope and Smith divided first, Van Staden, Sr., Tomford, Muller, Monsees, Detlifsen, Stillwell, Schroder, Layton and Muller second, Cahill, A. Harned, Van Staden, Jr., Doyle and W. Harned third.—H. K.

MAINE STATE TOURNAMENT.—Through J. E. Bloom, Esq., president Ligowsky Clay-Pigeon Company, the Willard Shooting Association of Portland, Me., was appointed trustee of a beautiful gold and silver badge emblematic of the championship of the State. April 17, Fast Day, was fixed upon as the tournament day, and teams of five men from six clubs arrived early on the grounds of the Willard Association, and competition commenced under the following conditions: Each man 10 single birds and 5 pair doubles, singles at 18yds. rise, doubles 15yds, trap set in fourth notch, a second barrel break to count one-half bird. All shooting from 5 traps set 3yds. apart. The weather was anything but pleasent, a strong and cold east wind blowing into the faces of the men, and frequently rain fel briskly. The Androscoggin Gun Club of Lewiston was proven the winner, and immediately received a challenge to shoot for the badge inside of fifteen days, from the Willard Shooting Club of Portland. The winning club is subjected to immediate challenge, the club winning the most times within one year from the tournament becoming permanent owner of the badge. The arrangements were perfect and satisfactory to all the shooters, and reflect credit upon the Willard Association, who were indefatigable in their endeavors to please. Geo H. Pierce, secretary of the Willard Club, was chosen referee, and Major Lovejoy, of Bethel, and Z. M. Cushman, of Kennebunk, as judges. Following are the scores in detail. Figure 2 indicates second barrel break:

Androscoggin Club, Lewiston.

Singles.		Doubles.			
Mason	0011111100—6	11	11	11	10	11—9—15
Donovan	1211111111—9½	11	10	11	00	11—7—16½
Shaw	1112022111—7½	10	11	10	11	10—7—14½
Whitney	1121101220—6½	00	11	01	11	11—7—13½
Pettengill	1120210111—7	01	11	11	10	11—8—15 —74½

Willard Shooting Association, Portland.

Willard	1010021211—6	11	11	01	00	11—7—13
Randall	1200101111—6½	11	11	00	00	11—6—12½
Todd	0012111121—7	10	11	01	11	01—7—14
Farrington	1112121101—8	11	10	11	10	11—8—16
Hall	1112121111—9	11	00	11	01	00—5—14 —69½

Bethel Club, Bethel.

Skillings	0111110101—7	10	11	10	11	00—6—13
Wormell	2112111111—9	00	11	00	11	10—5—14
Billings	1111012102—7	11	11	10	10	01—7—14
Clark	0120201111—6	01	01	11	10	00—5—11
Young	1111010010—6	01	01	11	01	11—7—13 —65

Riverside Club, Topsham.

Goud, A. Q	1102121220—6½	00	10	11	10	11—6—12½
Alexander	0111111111—9	11	10	10	11	10—7—16
Keyes	2111111101—8½	00	00	11	00	11—4—12½
Hall	2211210211—7	01	11	01	10	01—6—13
Goud, G. H	2011000010—3½	10	10	00	11	10—5— 8½—62½

Brunswick Club, Brunswick.

Knights	1102021011—6	00	00	01	01	01—3— 9
Toothaker	2200201000 —2½	00	01	01	10	01—4— 6½
Winslow	0100012010—3½	00	00	00	11	01—3— 6½
Stetson	0101110111—6	11	10	00	11	01—6—12
Perry	0001121111—6½	11	10	10	00	00—4—10½—44½

Rod and Gun Club, Kennebunk.

Saunders	0012012111—6	10	00	10	00	01—3— 9
Dowdy	1210121100—6	00	10	10	11	00—4—10
Stanley	0101200010—3½	01	00	00	10	10—3— 6½
Huston	0012101100—4½	01	10	10	00	01—4— 8½
Mason	0000001010—2	00	00	00	00	00—0— 2 —36

CLEVELAND, O., April 17.—Eleven men of the Cleveland and Kirtland clubs faced the traps for the contest for the Ballantyne badge this afternoon at the Cleveland Club's East End grounds. As usual, a keen contest came out of the meeting, Mr. C. E. Calhoun, of the Cleveland Gun Club, winning the trophy for the second time, with a clean score of 20 glass balls and 20 clay-pigeons. The trophy, when won by an individual for the third time, becomes his personal property, and is open free to any member of a gun club in Cuyahoga county. The shooting, under the badge rules, is at 20 glass balls thrown from one rotary trap, at 18yds. rise, and 20 clay-pigeons from one Ligowsky trap at 15yds. rise. There was a good attendance of sportsmen at the shoot, and the weather was fair. The individual scores of the eleven contestants were as follows:

	Balls.	Pigeons.	Total.
C E Calhoun	20	20	40
R E Sheldon	19	20	39
T A Closs	20	19	39
C F Wheal	19	19	38
O Alger	19	19	38
C M Roof	18	16	34
J J White	18	13	31
Dan C Powers	14	16	30
W H Millard	14	12	26
George Newberry	14	10	24
W Reynolds	12	8	20

The winners of the badge since its existence have been as follows: C. M. Roof, Kirtlands; C. E. Calhoun, Clevelands; R. E. Sheldon, Clevelands; C. M. Roof, Kirtlands; J. J. Wightman, Clevelands; C. E. Calhoun, Clevelands.

WALLINGFORD, Conn., Aug. 3.—Following is the score of those that shot for the individual State medal to-day, possible 50. It will be shot for again May 14, in New Haven, at the State shoot: H. Nichols 38, F. Smith 25, J. F. Ives 39, Talcott 26, Hall 36, A. Ives 37, Gurd 28, Goodrich, Folsom, Beers and Brogden withdrew.

NIAGARA, N. Y., April 24.—The fourth of the monthly contests for the championship of Niagara county, took place to-day at La Salle. A finer day for a shooting match could not be wished for. Smith won the medal for the second, and stands well to be final winner. The score was:

Smith	1100111111011111111111111—22
Gombart	1111111101111111111001111—22
Barker	1111111110111110101111111—22
Pierce	1111111111101011111110111—22
Jennings	0101011111100111111011111—19
Taylor	0101010011111101100010010—13
Philpott	0100010000100010111111100—10
Ripson	0101010101010101010010000—10

First Tie at ten Clay-Pigeons.—Smith 9, Gombert 9, Barker 8, Pierce 9.

Second Tie at ten Clay-Pigeons.—Smith 9, Gombert retired, Pierce retired.

Sweepstake shooting followed. First contest at 5 target balls: Gombert and Smith first, Jewett and Barker second, Ripson third.

Second at 10 Target Balls.—Smith first, Barker second, Pierce third, Bampfield fourth.

Third at 10 Clay-pigeons.—Smith 9, Jennings 9, Barker 9, Pierce 8, Jewett 7, Taylor 7, Bampfield 6, Gombert 5. First tie at 5 clay-pigeons. Smith 5, Jennings 5, Barker 5. Second tie at 5 clay-pigeons, Smith 5, Jennings retired, Barker 3.

SCHENEVUS, N. Y., April 26.—The club was out to-day, using the combination trap, fourth notch, at 18yds. The scores ran:

D Chamberlain	1110111011101010010—13
Peter Rickard	1111011110110 110110—14
John C Wilson	0010001111110001011— 11
C Brockway	0011100110010010110—10
Dr Parrish	0000111100000000010— 5
Chas Armstrong	1111000111111011111—15
L E Saxton	1110000011110011100—11
Ad Parsons	0110001100111110101—12

WORCESTER, Mass., April 24. This has been a field day at Cool Mine Range of the Worcester Sportsmen's Club. Among the guests were E. Brogg and B. Moses, of Springfield, George Tidsbury and J. H. Cole, of Ashland, and J. M. Frye, of Boston. The event of the day was a contest for the championship individual glass ball badge of the State Association, Mr. Charles DeRochmont, of Newburyport having challenged W. S. Perry, of this city. Mr. George Tidsbury was Judge, Gilbert J. Rugg, of this city, and J. A. Cole, referees. The score was as follows out of a possible 50:

Perry	1011111111110101011101111111111101011111111110111—43
DeRochmont	1101011011111111001111111111111001101111010111011—39

WELLINGTON, Mass.—The weekly meet of the Madison Gun Club at Wellington, was attended by a large showing of lovers of the sport, and a good number of birds were broken. In the gold medal match, the first class medal was taken by J. Buffum with a score of 17, the second class by C. I. Lewis with 14, and the third class by F. J. Scott with 13. The winners of the other events were as follows:

First event, five birds—Adams and Loring divided first, Powers and Saunders divided second, Scott third.

Second event, five birds.—Loring first, Scott second, Saunders and Adams divided third.

Third event, five birds—Loring first, Adams and Scott divided second, Lewis third.

Fourth event, five birds—Lewis first, Nichols and Saunders divided second, Loring and Adams divided third.

Fifth event, five birds—Lewis first, Hopkins, Nichols and Scott divided second, Goodnow and Shattuck divided third.

Sixth event, five birds—Goodnow first, Lewis and Nichols divided second, Shattuck third, Loring fourth.

Seventh event, three pair doubles—Scott first, Adams second, Short and Nichols divided third, Shattuck fourth.

Eighth event, five birds—Saunders and Hopkins divided first, Short second, Nichols third, Snow fourth.

Ninth event, five birds—Hopkins and Saunders divided first, Short second, Nichols third, Sanborn fourth.

Tenth event, three pair doubles—Short first, Hopkins second, Saunders third.

Eleventh event, five birds—Saunders, Scott and Hopkins divided first, Lewis and Adams divided second, Short and Brown divided third.

Twelfth event, three birds, 21yds.—Nichols first, Snow second.

Thirteenth event, three birds, 21yds.—Nichols and Sanborn divided first, Snow second, Adams and Douglas divided third.

Fourteenth event, three birds, 21yds.—Nichols first, Goodnow and Saunders divided second Snow third.

Yachting.

FIXTURES.

May 18.—Eclipse Y. C., Opening Cruise.
May 24.—Oswego Y. C., Opening Cruise.
May 24.—Boston Y. C., Opening Cruise.
May 23.—Quincy Y. C., First Match.
May 30.—Knickerbocker Y. C., Spring Matches.
May 30.—Atlantic Y. C., Opening Cruise.
May 30.—Newark Y. C., Spring Match.
May 30.—South Boston Y. C., Spring Match.
May 30.—City Point Mosquito Fleet, 18 and 15ft. boats.
May 30.—New Haven Y. C., Opening Cruise.
May 31.—Boston Y.C., First Match,Connor and Commodore's cups.
June 9.—Portland Y. C., Challenge Cup.
June 9.—Savannah Y. C., Opening Cruise.
June 10.—Atlantic Y. C., Annual Match.
June 11.—Hudson River Y. C., Annual Match.
June 12.—New York Y. C., Annual Matches.
June 14.—Seawanhaka Corinthian Y. C., Annual Matches.
June 16.—East River Y. C., Annual Matches.
June 18.—Newark Y. C., Open Match.
June 19.—New Jersey Y. C., Annual Match.
June 21.—Hull Y. C., Pennant Match.
June 23.—Newark Y. C., Open Matches.
June 24.—New Haven Y. C., Spring Match.

A FINE YACHT.

THE commodore's pennant of the New Haven Y. C. will this year fly from the masthead of a yacht in which all hands may take just pride. The nobby cutter Rajah, now nearly finished at Driscoll's yard, in Greenpoint, is a vessel one can look at twice. She is a thorough cutter, 32ft. loadline, 8½ft. beam and 6½ft. draft. Her lines were depicted in our issue for Jan. 24. She is of course flush deck, with 7.3 tons, practically all her ballast, on the keel. Built to exacting specifications, she has been put up in excellent shape, with a good deal of finish outside and in. The accommodations are something at which to wonder, and far in excess of those of any flat-iron of same length. When the New Haven investigator climbs over 30in. of freeboard at the quarter and proceeds below upon the commodore's invitation, he need not even douse his plug hat. The first thing at which he will express astonishment will be the delightful coolness and quiet light of the cabins, no matter how broiling the summer sun may be shining; and this wonder will be all the more pronounced if the visitor should happen to have pulled off from a sloop, where the heat down below has driven all hands out as intolerable.

Forward he will find a roomy forecastle with hatch and berth for the foremast hand. Next between two bulkheads a large pantry on one side and a w.c. on the other. Abaft of this in the mid body of the vessel he will admire a spacious main cabin with ample sofas and the companion ladder coming down at the after end. Surely this is all; but no, pass through a door and you face an after cabin or ladies' saloon with sofas each side, and then discover another bulkhead with a trap into a large a large sail and store room. Standing height with a hat on fore and aft. Over the after cabin is a skylight admitting more air than need be, and so much light that the rays have to be softened by colored glass sashes. The yacht is fit to cruise round the globe, so far as build, ability, rig and accommodations are concerned. She is absolutely non-capsizable and non-knockdownable into the bargain. For Sound sailing in summer her cool cabins and big displacement are specially adapted, as she is certain to go in light winds.

On deck she is pretty as a picture, and there is style and smartness in her long counter, in her rig, and in all her fittings. She will not be plastered over with lubberly lincrusta on the "ceiling," nor will she be lathed and plastered inside, but panelled neatly and with taste in pine in good ship-shape fashion. She is, in short, just what a good yacht ought to be. As for her speed, we venture no predictions. Her type is certainly not against fast sailing, as many races have already proven. If she is not fast it will be due to the shaping of her lines and not to her cardinal dimensions. But we see no reason why she should not perform satisfactorily, and be remarkably dry and buoyant in a sea, and work out to windward with reasonable comfort when the traps have to square away for the nearest shelter. The Rajah will make a host of converts this season, and no doubt be the cause of some sister vessels before another twelve months roll round. Her iron work was made to special patterns, and is commendable, with the exception of a clumsy windlass, for which the lack of good patterns among the trade is responsible.

NEW ENGLAND Y. R. A.

AT a meeting held April 23, at the Parker House, Boston, the final steps were taken in the organization of the association. Clubs represented were the Beverly, Boston, Dorchester, Hull, Jeffries, Lynn, Quincy, Salem Bay, South Boston, West Lynn and Yale. Any other club in New England having 50 members or 25 yachts over 16ft. is eligible at future sessions. A subscription of $10 per club was ordered to defray expenses. The following officers were chosen: President, W. Lloyd Jeffries, Beverly Y. C.; Vice-President, Louis M. Clark, Dorchester Y. C.; Secretary and Treasurer, Benjamin W. Rowell, West Lynn Y. C.; Executive Committee, with president and vice-president *ex-officii*—Commodore E. C. Neal, Lynn Y. C., Commodore C. A. Perkins, Hull Y. C., and Charles P. Pike, Jeffries Y. C.

The meeting, as a committee of the whole, adopted rules to govern races held under its supervision. It was decided to allow time by the Herreshoff table on a measurement of water line length. The question of measuring overhang was referred to a committee to report at next meeting. We have already pointed out the unfairness and tendencies of measurement by length, and in this matter the New England Y. R. A. ranges itself in opposition to the decision of experts all the world over. However, the association is perhaps too young to risk its existence by any precipitate reform movement, and open opposition to the length rule might have driven out some of the clubs given to sailing small boats. But as it is, should the committee not recommend including overhang, the rule of the association will be a vast improvement upon the "mean length," or "one-third overhang" rules, which interfere so seriously with a finished afterend, and impose such an unjust penalty upon any one with taste enough to spin his overhang out into a shim edge. It is at all events one step ahead, and when the association has acquired the strength and influence of age, further reforms may be hoped for.

It will not be long before many will rebel against the excessive cost and clumsiness of yachts built under a length rule and then the agitation for some modifying factor will begin by which size can be held accountable. The meeting likewise resolved to prohibit shifting ballast altogether in boats of any kind. A wiser and more enlightened move could not have been made. The custom of shifting ballast is so directly subversive of all earnest object in yachting, that the sport is to be congratulated upon the effective quietus the New England Y.R.A. has given to the carricaturing of the whole business in boats as well as in the men who sail the bag shifters. The penalty of infraction of the prohibitory rule, we are glad to find, has been made as heavy as it could be, as the offender will be expelled with his yacht from membership in all the clubs composing the association.

INTERNATIONAL AMATEUR CHANNEL MATCH.

WE have received the following conditions to govern the proposed Corinthian "cross seas" matches from the Thames to Ostend, Belgium, and from Ostend return to Portsmouth. The distance from the Medway to Ostend is 100 miles, and the match home to Portsmouth covers 200 miles, nearly all of which will be open sea work. These races are an innovation which all well-wishers of "real" yachting hail with delight, since they put vessels and crews to actual test without a trace of the hippodrome or greased pole exhibition with which our smooth-water racing still has too close connection. The crews are to be amateurs in the main, so that the profit will not merely be a cup won, but a grand lot of experience all round, of which the last boat partakes as much as the first. Of course, the sickly old hens in this country will be seized with holy horror at the idea of small craft from ten to twenty tons putting out to sea for a business-like proceeding which men can countenance instead of contenting themselves with horse play on a pond, but the 'longshore old maids have no say in English yachting and would be laughed out of countenance, so the races are certain to proceed despite the ludicrous misgivings of frightened old dish rags. We hope the example of our cousins may lead to similar attempts in our own waters, so that the poverty-stricken traps may be shown up in all their shortcomings. Hitherto the little ocean racing done in America has been confined to huge schooners, most of whom made a pretty poor showing as soon as the glue got wet. A race from Sandy Hook around Block Island and home in September or October, open to sloops under 50ft., would be something like the real thing, but how many of our toys and drifters would have the ability and courage to come to the scratch for what ought to be a very ordinary event?

CONDITIONS OF THE PROPOSED AMATEUR CHANNEL MATCHES, UNDER THE FLAGS OF THE CORINTHIAN Y. C. AND THE ROYAL PORTSMOUTH CORINTHIAN Y. C.:

First Race—To start from Port Victoria, at the entrance of the Medway, leaving the Shivering Sand Bell Buoy on the starboard hand, and finishing inside a markboat, to be moored outside the Stroom Bank, off Ostend Harbor. It is intended to start this race to arrive in time for the commencement of the Ostend Regatta, so that vessels intending to be present or take part in the regatta can avail themselves of this match in sailing to that port.

Second Race—To start from a markboat off Ostend Harbor, finishing off Southsea Pier, Portsmouth. No restrictions as to course. It is intended to start this race at the finish of the regatta at Ostend.

These matches are open to cruising yachts under 51 tons, Y. R. A. tonnage, belonging to any royal or recognized yacht club. The yachts will probably be divided into classes, viz., up to and including 20 tons, and over 20 tons, but this will depend entirely on the number of entries received.

Time allowance to be calculated on sail area and load water line; taking the distance of the first course to be 85 miles and of the second to be 170 miles.

Yachts to sail in cruising trim, under the rules of the Y. R. A., with the exceptions that every yacht must carry a boat, and that the clause in the rule relating to crews will be altered as follows: No restriction to the number of amateurs on board, but boats of 15 tons, Y. R. A. tonnage, and under, will be limited to one paid hand; boats over 15 and up to 40 tons, two paid hands; boats over 40 tons, three paid hands.

Only members of recognized yacht clubs to be allowed to touch the tiller, or in any way to assist in steering the vessels.

The committee reserve to themselves the power to refuse any entry, and to make any alterations they may think necessary.

Dates of closing entries and further particulars will be advertised later.

It is proposed to give two prizes for each race, and prizes to the amateur crew of the winning vessel in each class. The value of the prizes will altogether depend on the amount of the subscriptions received, which may be sent to the following gentlemen:

S. HARMAN STURGIS, Esq., Vice-Com. C. Y. C., 12 Copthall Court, London, E. C.
A. G. WILDY, Esq., Rear Com. J. T. Y. C., 13 Furnivals Inn., London, E. C.
CAPT. SUTTON, Vice-Com. R. P. C. Y. C., High street, Portsmouth.
H. CRAMPTON, Esq., R. P. C. Y. C., High street, Portsmouth.

Subscriptions Already Received.—Royal Portsmouth C. Y. C., £10 10s.; Corinthian Y. C., £10 10s.; Junior Thames Y. C., £10 10s.; Other subscriptions under £5, about £40.

APRIL 8, 1884.

A BIT OF REAL YACHTING.

THE following summary of the schooner Fortuna's recent cruise to the West Indies, we take from the *Herald*. It will give an insight into a bit of real yachting, and will, we hope, lead many others to follow suit, even though in a smaller way with smaller boats. It is certain that the day of the frightened old hens, who faint away at the suggestion of going to sea in a yacht, has about come to a close. The modern generation of Americans have pluck and ambition enough to follow the sport from the standpoint of men. So many yachts have passed successfully through the exceptionally severe weather this spring at sea, that a large fleet is certain to take to ocean cruising as a regular thing with the attainment of experience. In fact, it may be accepted that yachting in America is fast undergoing a change in its objects and methods of pursuit, which is but the natural transition from child's play in land-locked stretches, to the bolder and nobler attainments of genuine nautical life at sea. It has its counterpart in the expanding ambition of the youngster astride the wooden nag of the merry-go-round to mount a veritable saddle in the field. And who would dare insist the youngster should forever stick to the wooden counterfeit until his hairs grow gray, simply because the real saddle offers less chance for play, and urges riper dexterity, coupled with weightier responsibilities, and correspondingly greater realization in return.

It seemed like a wild prophesy some years ago to predict winter cruising down our coast even by a fleet of big schooners. Yet that prophesy has now been fulfilled. To the crustaceans and fossils of a past generation it may likewise seem wild to predict a swarm of little fellows dodging in and out from rockgirt Maine down to the sandy dunes of the Bahamas or the coral reefs of the Floridian shores. Yet that, and nothing short of it, is written in positive characters in the book of the future. Time will come when ten and twenty tonners will think no more of a run over to the Bermudas and a thrash home than they do now of a "pleasure excursion" to Greenport and home, and there are those who even at this day look forward to accomplishing the passage in a five-ton cutter as a venture fraught with spice, laurels and gratification, which many others will learn to appreciate in the near future. Yachting is dropping its swaddling clothes in America, and with the change in popular sentiment in favor of deep, safe boats with shipshape rigs, the sport is donning the breeches of men. None view this rapid expansion with more satisfaction than those who, like ourselves, have been brought up to the sea and know well the very gale there is between the feeble chaos of drifting up the Sound and the vigorous activity of body and mind in a fight which conquers the wild elements in sweet reward of a courageous undertaking.

The tide of affairs leading on to the ocean can no longer be stemmed by the relics of the old flat trap period, who play Sir Oracle, snugly ensconsed in the armchairs of some of the older organizations, nor yet by the stale, vapid washwomen, who curry their favor, and affront Americans of grit in some public prints with cowardice of spirit and bodily sloth. Out upon such lubbers and traducers of our national backbone, who defame us before the world as a nation of simpering, effeminate asses, with neither pride in the athletics of our bodies nor ambition in the direction of mental acquisition!

"The deep keel schooner Fortuna, Mr. Henry S. Hovey, of Boston, has arrived, after a five months' cruise, in the West Indies. In this time she experienced much bad weather, and soon after starting encountered a revolving hurricane which thoroughly tested the craft, but she passed through the ordeal with flying colors. At another time nineteen ugly squalls in twenty-four hours tried the patience of the yachtsmen, the ability of the sailing master, the strength of the crew and the staunchness of the yacht, but the men were equal to the occasion and the boat gave the greatest satisfaction to her owner. Bad weather lasted, with only short intervals of favorable sailing breezes and sunshine, for nearly two months, but the last ten or twelve weeks were delightful and more than compensated for the disagreeable nature of the early part of the voyage.

"The Fortuna yesterday looked as if she had been fitted out for the season's cruising, instead of recently returning from a long ocean trip. Her brasswork was polished, decks holystoned, sails with covers on, and a boat riding at the boom, while a stout, hardy looking crew forward, and a sun-browned, smiling sailing master aft made her indeed look the cruising vessel all over. In the cabin and owner's stateroom were found specimens of tropical plants and fish, together with a fine collection of quaint pottery, picked up at the many places touched in the long ocean ramble so happily finished.

"From the appearance of the seams, both inside and outside, this pleasure vessel passed through the unpleasant experience of hurricanes, squalls almost without number and continued bad weather, requiring most of the time double reefed sails, without the slightest injury. Nothing was washed overboard and nothing carried away, not even to the parting of a rope yarn. The winter and spring have made up a season of exceptionally bad weather at sea, as the many disasters chronicled fully attest; but there is no record of much worse weather than that through which the Fortuna passed. The hurricane was a very severe one. The wind at the nearest point of land, which was sixty miles away, registered seventy miles an hour, and Sir Thomas Brassey's sea cruising steam yacht Sunbeam, of 565 tons, having caught the last of the blow, reported that in their extended experience they had never met anything worse.

"The Fortuna left Gloucester, Mass., at half past 5 o'clock on the morning of Nov. 25, bound to Bermuda, with the owner and guests on board, the latter being Mr. C. A. Longfellow, Mr. William Stackpole and Mr. Joseph Fay. On the morning of the 26th at 5 o'clock, hardly twenty-four hours having elapsed, the yacht had put 264 miles astern—not a bad day's work, by the way—when a wicked blow from the southeast came on, and it continued to gather strength with such astonishing rapidity that Captain Newcombe made the necessary preparations and the yacht was hove to, in which condition she remained thirty hours before it was again prudent to make sail. About noon of Nov. 27 the wind hauled due north, and the yacht was scudded under single reef foresail the balance of that day and night and until 1 o'clock of the afternoon of the 28th, when the gale became so dangerous another reef was put in the foresail and said Captain Newcombe, 'we then let her go—and go she did, like a bullet, making splendid weather of it.' On the 29th an observation showed the yacht to be sixty miles due west of Bermuda, and all hands soon expected to see the friendly light of that island. Neptune, however, had another score to settle with them, as at midnight the revolving hurricane alluded to struck them with but meager warning, and for twenty-four hours the yacht wrestled with wind and waves, and conquered. A friendly nor'wester at last made them forget their trials, and on Saturday morning the lighthouse of Bermuda was sighted. The yacht remained at Hamilton and St. George until Dec. 10, the time being passed in an enjoyable manner, many of the Bermudan officers, citizens and ladies visiting the craft and inspecting it in Mr. Hovey's company.

"St. Kitts was next touched, where the yacht remained five days, and frequent excursions on shore by the party were made with evident pleasure and gratification. The island of Montserrat then engaged attention, but the stay there was brief. The island of Dominica was next visited, where two days were passed, and parties from on shore, including the English Consul and his family, came on board, being delighted with the chance given them to closely examine such a fine vessel. Guadaloupe was called at, and while the roads present a fair anchorage and the scenes on shore were very attractive, so much so as to keep the yacht there a week, Captain Newcombe sailor-like says, 'Well, I remember that place and won't forget it, as they charged us $80 in gold for a ton of ice.' Martinique was touched, and in the harbor of St. Pierre they stayed four days. The weather until now had been detestable, and the yacht was under double reef sails most of the time. From Martinique there was an agreeable change, and for nearly three months after the crew slept on deck. Barbados was the next island in order, where one week was passed in a most charming manner, the Governor, fort officers and officials coming on board at various times, and Mr. Hovey and his guests visiting them on shore. Port Spain, island of Trinidad, the southernmost of the Windward group, was next on the list, and here the Fortuna lay ten days. Many persons came on board the vessel, and the yachtsmen made excursions to the pitch lake, and spent many hours wandering about the large plantations. The rugged and picturesque island of Grenada next engaged the attention of the yachting party; then Tobago, 'where it's all rocks,' was the exclamation of the sailing master, after which the islands of St. Vincent and St. Lucia were visited.

"Fortuna then began to make her way back. Martinique and Guadaloupe were again touched, and then St. John's, island of Antigua. Here Mr. Fay reluctantly left the yachting party with a view of returning to Boston, where he was required on business. St. John's is a pleasant place and the harbor excellent. St. Thomas, St. Kitts, Santa Cruz and Porto Rico followed, and then Jamaica, where, in the harbor of Kingston, one week was passed, the yachtsmen having a glorious time, with fine weather. From Kingston to Havana and thence to Nassau was the programme, when the yacht crossed over to Fernandina, Fla., and glad indeed was the party to be once more on their own coast, although the cruise had been full of enjoyment. The yachtsmen went to St. Augustine, and upon their return Mr. Stackpole took steamer for New York. Ten days was passed at Fernandina. Then 'up the coast!' was the word, and Savannah, Charleston and Old Point were stopped at, the yacht remaining from four to six days at each of these ports.

"'The yacht is a magnificent vessel,' said Captain Newcombe. 'At no time were we completely shut up, and it was only about six hours during the revolving hurricane that the cook could not do his work, and only about the same time that the men did not go down forward, but came aft and passed through the cabin. The men could always do their work on deck and,' he concluded, 'the yacht works beautifully.'

"The Fortuna will go on the screw dock to-day for inspection, and on Monday she will leave for Boston with Mr. Hovey on board. Upon reaching the latter port she will again be fitted with her racing spars, and during the coming season will be found at the starting point in all the regattas in Eastern and New York waters. The Fortuna was built in Brooklyn, by Messrs. C. & R. Poillon, from designs by Mr. A. Cary Smith, and is 112ft. over all, 105ft. on water line, 22ft. 6in. beam, and draws 12ft. of water."

DEEP LAUNCHES.—Lawley & Son, South Boston, are building two seagoing launches for New York *Herald* shipping service from special designs of Mr. Beavor Webb. That is enough to say that the new craft will come up to expectations. They are deep, highsided, and have deadrise, which is a stride in advance of the swampy little traps hitherto accepted as all that could be asked from a steam launch in this country. The pair will be named Herald and Telegram. Length 57ft., on loadline 50ft., beam 9ft. 2in., depth moulded 7ft. 3in., draft 4¾ft. Supplied with the famous 3-cylinder compounds of Willans and Robinson make, Thames Ditton, Surrey, England. These engines have no link motion, and are entirely encased. They work up to high speed without noise or jar. Boilers will be built in this country, as imported generators cannot receive the United States Government stamp required by law.

ADELINA.—Mr. Bierck, of this city, has purchased the keel sloop Gracie M., in Boston, and has changed her name to Adelina. She has received an overhaul from Hutchings & Prior, and will clear for this port May 9 with Rufus A. Smith as skipper and the owner on board. The Adelina is of moderate beam and good depth, with an iron keel, built, we believe, in Marblehead. The demand for keel yachts is so great that the New York market is bare of such craft and Mr. Bierck was obliged to look elsewhere for a safe boat. The yacht agents inform us that they have few or no keel boats for sale, but any quantity of centerboards. Keels are now at such a premium that recent sales in this city brought near first cost for boats half through their natural term of life. Adelina will pick up moorings off Sea Cliff during summer.

SEABELLE.—This handsome cutter, recently imported from the East by Mr. Avery, has been bought by Mr. H. A. Seymour, of Washington, who will keep her off his summer residence at Sachem's Head, in the Sound, and in winter in Chesapeake waters. She is 31ft. L. W. L., and on the passage round logged 33 nautical miles in 3 hours, with 6 miles of tide in her favor, under double-reefed mainsail. This is at the rate of 9 knots an hour, or two knots more than Kemp's observations recorded in his "Yacht and Boat Sailing," and seems a very high rate. Yet we have the assurance from direct sources that the speed was made. Mr. Avery leaves for Japan for an absence of several years.

YACHTING IN GERMANY.—German yachting has been picking up of late, and sea cruising in the Baltic is becoming common; but so far the government has failed to relieve yachtsmen of burdensome and harrassing legislation, as all yachts are subject to the same rules and restrictions as merchant vessels, and have to clear every time upon leaving port for an hour's sail, and submit to customs inspection and a lot of red tape upon returning. A move is being made to seek relief. It is a wonder that a government so enlightened and so anxious to cultivate national sports as the Berlin Ministry should not long ere this have taken action in the matter.

ATLANTIC Y. C.—The rule compelling the deposit of model or lines before receiving a prize from the club, which has been enforced for several years, was repealed at the meeting of April 14, quite unexpectedly, at the instigation of a small clique. At the meeting held April 28, the more enlightened element of the club turned out in force, and by a vote of 33 to 4 re-established the rule in a stronger form than ever. It is to the credit of the club that it does not propose to countenance the petty selfishness of a few persons.

MUST GO.—"The tendency is to fixed ballast in both large and small yachts and the sandbagger must go," says the South Boston *Inquirer*, which is very true and very much to the interests of yachting on small tonnage. We note likewise with satisfaction the determined attitude of the New Jersey Y. C. to live up to its excellent tenets in instructing Mr. Dilworth to have nothing to do with any proposition for a combination race with the Oceanic Y.C., should the latter seek to make it a piece of sandbag tomfoolery.

FLUSH DECK.—Cockpits, even among the lounging class of yacht drifters, are fast going where the woodbine twineth. Schooner Columbia has come out as a flush-decker after recent alterations. Where is that "comfortable lee" and that "protection" so dear to the old hens? American yachtsmen are assuming a hardier complexion. The chewing-gum school must go. Columbia now is a vast improvement upon her former self. Four inches more freeboard, longer overhang and fined out forward.

FRENCH YACHTING.—The value of prizes won by French yachts last year was $23,000. The sport has made steady and rapid progress, many yachts being imported from England and others built after American ideas. In 1878, total value of prizes won was $10,000, so that in five years the amount has been doubled. In 1883 there were sailed 183 races, with an average value of prizes of $120. The number of winning yachts last year was 150.

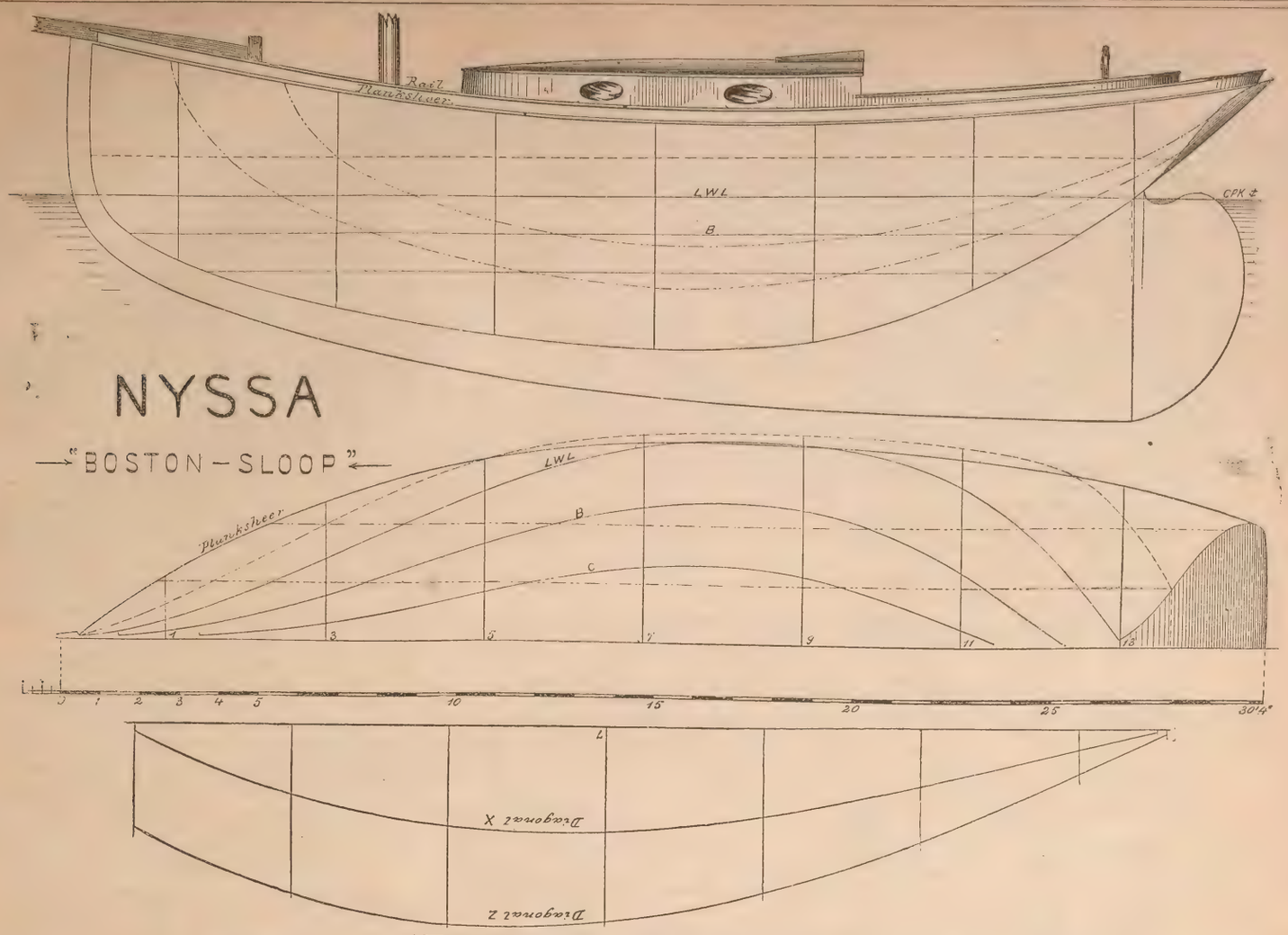
PROVINCETOWN Y. C.—At the first meeting of the season of the Provincetown Y. C., the following principal officers were chosen: Commodore, Thomas Lowe; Vice-Commodore, A. P. Hammond; Fleet Captain, Frank Allen; Measurer, Joseph S. Atwood; Secretary and Treasurer, H. A. Jennings. A list of the officers was ordered to be sent to FOREST AND STREAM, the Boston *Courier* and Cape Cod *Item*.

PROMOTING SPORT IN FRANCE.—The regatta society of Rochelle, France, receives a subsidy from the city of $200; from the department in which it is situated, $60; from the Minister of Marine, $80; from the Y. C. de France; the parent institution, $500; from Admiral Veron, Maritime Prefect, $40. The association has 202 members.

THUNDER BAY Y. C.—Officers for the year: Fred Jones, Commodore; H. K. Wickstead, Vice-Commodore; W. T. Clarke, Secretary and Treasurer; Committee of Management, W. F. Davidson, G. T. Marks and J. I. O'Connor. The Vice-Commodore has nearly finished a five beam cutter, but will probably rig her as a yawl.

NEW CUTTERS.—Mr. Brisben, of Philadelphia, is having a cutter built by Albertson Bros., of Kensington. She is similar in model to the Windward, illustrated in our issue for Feb. 7. The design for a second cutter 22ft. long has been sent to another gentleman in Philadelphia.

HARDWARE.—We receive inquiries from time to time from Canada for the address of a ship chandler dealing in yachts' hardware across the border. If such an establishment exists we would like to publish address for benefit of Canadian yachtsmen.



NYSSA.

THE Nyssa, built by Wood Brothers, of East Boston, and now the property of Mr. J. L. Wall, of the Seawanhaka Corinthian Y. C., serves as an excellent example of the modern Boston keel sloop. It will be seen that to good depth she also adds large beam, and requires a correspondingly liberal rig. Boats of this class are very stiff and powerful, with great ability in a sea, and, of course, uncapsizable, as they are supplied with plenty of outside ballast. In some recent specimens nearly all the weight is hung on the keel. The drag and deep heel is peculiar to the East Boston builders. Where there is enough water this deep heel is an advantage in steadying the boat, and doing away with long bowsprits, as the center of lateral resistance is found well aft.

The extent to which such boats can be modified with benefit by clipping some of the beam and filling below, making an easier form to drive, is indicated in the success of such yachts as Vayu, Beetle, Oriva, Mavis and many others. Such alterations would in no wise interfere with cabin floor, but add to its width and to the height below as well, so that even in boats of the Nyssa's length a flush deck is not impossible. The present popular tendency is in the direction mentioned. In other words, the typical Boston sloop, evolved since the introduction of keel ballast, is slowly approximating the regular cutter with three to four beams.

How far this gradual merging into the cutter will be carried in our waters is for the future to tell. Under length measurement boats must always remain very large on their loadline; hence we may look for all the depth, displacement and draft which experience will allow, and in addition such beam as is congenial to the other requisites. This tendency has received exemplification in the numerous new yachts built in Boston during last winter. It is a most wholesome prognostication for the future. As fast as the truth is vividly brought home to the public through the force of example that more satisfactory and practically useful results can be obtained through moderation in beam and corresponding expansion in depth proper and displacement, the sooner will we all arrive at a type which will become the ruling standard for the future, and the present period of sore transition, with its trials and tribulations, will come to an end. When a yacht becomes so deep as to afford head room under the beams, houses and encumbrances on deck will disappear of themselves, as in many new boats recently constructed; so that the assimilation of the Boston sloop to the cutter, step by step, is really a foregone conclusion to any one who draws logical inference from the influences at work. For the present, however, the Nyssa represents a large class of Eastern sloops which have deservedly become widely popular in the search for a reliable substitute to take the place of the old time light drafts and light displacements. But for the prevalence of these deep drafts with their outside weight, general cruising along the Eastern coast would be practically impossible, as it would be fraught with such risks and so many accidents, that few would care to expose themselves to the chances of going to Davy Jones's locker at an untimely age. Our columns in the past have recorded many instances of close escapes in Boston sloops, where disaster would have been a certainty in a light draft centerboard of the New York pattern.

The Nyssa was well built in the first place, and a year ago received a thorough overhauling, fresh rig and outfit, under the superintendence of Mr. John Harvey, of this city, so that she is to-day the most complete and best equipped sloop of her class in New York waters. The keel is 6in. sided, stem and post 4in., all of oak. The deadwood is 4in. thick. Timbers below the bilge are of oak 2½×2½, and of natural crook hackmatack from the bilge up, the floors 3-inch oak, and the frames double up to turn of bilge. The planking is yellow pine 1¼in. thick; the deck being 1¼in. white pine laid tapering with the sheer.

Length over all	30ft. 4in.
Length on loadline	26ft. 9in.
Beam moulded on L.W.L	9ft. 10in.
Depth, rabbet to planksheer on M.S.	5ft. 11in.
Draft at heel	5ft. 7in.
Least freeboard	1ft. 11in.
Displacement	10 short tons.
Ballast on keel	2500lbs.
Ballast inside	6577lbs.
Hoist of mainsail	24ft.
Mainboom over all	30ft.
Gaff, over all	20ft.
Jib on foot	30ft.
Bowsprit outboard	13ft.

The Nyssa has lead ballast, housing topmast, runners and backstays, and a most complete cabin and navigation inventory.

REQUISITES.—We have received an illustrated catalogue of yachting requisites from Norie & Wilson, 156 Minories, London, containing much that is interesting and novel as well as a long list of yachting books suitable to the cabin library.

NEW SHARPIE.—Mr. Clapham has an order for a new 65ft. sharpie, to sail on dew and of course beat all creation while she is building, though what she will actually accomplish is quite another affair

NEW JERSEY Y.C.—Has chartered the steamer John Lennox for the matches of June 19. The construction of a dock 170ft. long will afford the club anchorage excellent shelter.

BEETLE.—Mr. Hemmenway's smart cutter Beetle has received an extra ton lead outside, but may not appear this season, as her owner will be abroad. Sloops breathe free.

FAD.—This yawl is building for Mr. Goddard, of Boston, from his own designs, and not for Mr. Wellman, who has had the Sunshine cutter rigged by McManus & Son.

DORCHESTER Y. C.—The commodore will fly his pennant from his new acquisition, the Boston keel sloop Nirvana, known as a prize winner in many Eastern battles.

NEW CUTTER.—Mr. C. E. Brown, of Chicago, is having a cutter built by Eddy, of Marblehead, who has acquired Keating's former establishment at that place.

LILLIE.—This famous little Boston flyer is to try an iron keel, and if her rig is increased in proportion, some fresh trials with the Hera would be very interesting.

RARITAN Y. C.—This club, with headquarters at Perth Amboy, N. J., has issued a new book containing constitution and sailing rules.

THETIS.—This new semi-cutter, built for Mr. Bryant, by Smith of South Boston, was launched Saturday last.

ELLA MAY.—This is the name of the new 32ft. cutter bought from Lawley & Son by Mr. E. M. Tyler.

TRI.—Mr. Tudor's Boston sloop Tri will come out improved with two-ton iron keel this season.

MEASUREMENT IN THE EAST.—A few remarks will be found upon the editorial page.

QUINCY Y. C.—Fixtures are club races May 28, June 30, July 30, Aug. 28 and Sept. 11.

MONTAUK.—This schooner arrived at St. Augustine, Fla., April 24, from Havana.

SAY NOTHING.—The design for a large five-beam cutter is now underway.

MICHIGAN Y. C.—Has been organized at Detroit with a capital of $2,500.

BUNKER HILL Y. C.—Has 58 members and 37 boats.

BOOKS RECEIVED.

A Study, with critical and explanatory notes of Lord Tennyson's poem, "The Princess." By S. E. Dawson. Second edition. Montreal: Dawson Brothers. 1884.

Chinese Gordon; a Succinct Record of His Life. By Archibald Forbes. New York: George Routledge & Sons. 1884. Price, $1.

Canoeing.

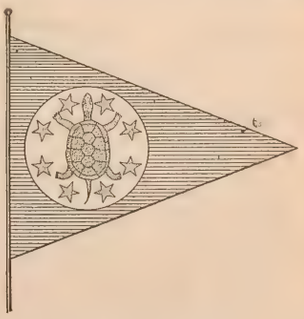
Secretaries of canoe clubs are requested to send to Forest Stream their addresses, with name, membership, signals, etc, their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to Forest and Stream their addresses, with logs of cruises, maps, and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.

FIXTURES.

May 30 and 31.—Spring Meet at Newburg.
May 30 and 31.—Spring Meet on Connecticut River.

MOHICAN C. C.

R. W. GIBSON, Snake, Captain; P. M. Wackerhagen, Thetis, Mate; B. I. Stanton, Black Hawk, Purser; B. Fernow, Fior da Lice, Secretary; E. S. Oliver, Marion, member of Executive Committee. The Mohican C. C., of Albany, N. Y., was organized in 1882, with five members and five canoes, an old Everson Nautilus, weighing 150lbs., more or less, and still occasionally taken out under the name of the



Tub, though leaking badly; a brass monster, the Curiosity, gone to the bow-wows in a mysterious way; a Racine St. Paul, the Henrietta, sold to an Amsterdam canoeist; a Rob Roy, the Isadora, whereabouts unknown, although her master is still a Mohican; and the Albani, American Traveling canoe, still in the club house. The present members number 21, with 14 canoes.

A LOCAL MEET AT LAKE GEORGE.

Editor Forest and Stream:

A meeting of the joint committees of the Lake George and Whitehall canoe clubs was held on the 9th of April, 1884.

Arrangements were made for a canoe meeting on Lake George on the 24th, 25th and 26th of July next. It will be a cruising meet, the canoeists congregating at the Canoe Islands and then cruising in company through Lake George, camping where night overtakes them.

The races will be under the control of the Programme Committee consisting of F. C. Cooke and E. A. Greenough, of the Whitehall C. C., and Will Ranger, of the L. G. C. C.

The date has been so arranged that canoeists on their way to the A. C. A. meet at the Thousand Islands may take part in this one. It is something new in the way of a canoe meeting, and it is hoped that it will be a success. For further information address

Whitehall, N. Y. W. W. Cooke, Jr.

AMERICAN CANOE ASSOCIATION.—Dr. Neidé is now sending to members a very neat certificate of membership, designed by Mr. Gibson, of Albany. The upper portion represents a fleet of canoes under sail and paddle, and the lower is decorated with paddles, rudders, anchors, etc., while on the left hand side are the A. C. A. flags and also blank flags, to be filled in with the owner's signals.

AMATEUR CANOE BUILDING.

Fourteenth Paper.

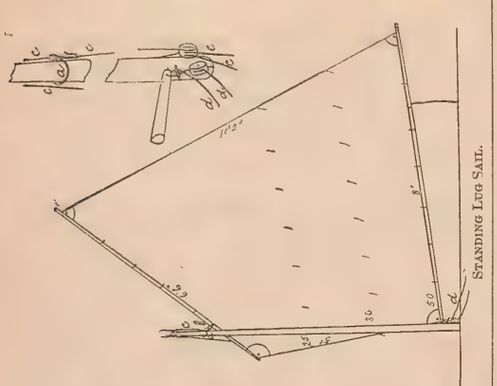
SAILS AND RIGGING—CONTINUED.

THE simplest rig for a canoe is the leg of mutton, or, as it is sometimes called, sharpie rig, consisting of two triangular sails, requiring only mast, boom, halliard and sheet, and on a narrow boat, where but a small area can be carried, they will answer very well, but where a large spread is needed, the spars must be so long as to be unmanageable; for instance, to spread 60 square feet, with an 8ft. boom, would require a mast 16ft. above the deck. Another disadvantage is the necessity of using rings on the mast, as they are liable to jam in hoisting and lowering.

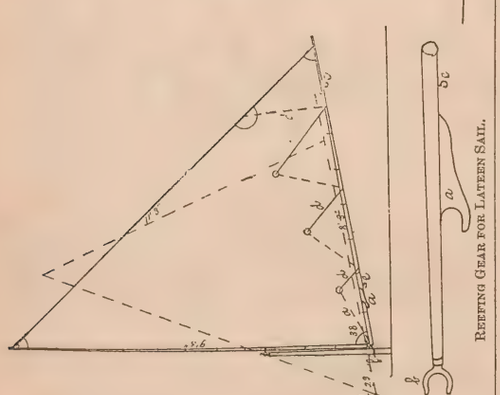
A simple sail, once used on canoes, is the spritsail, but it was abandoned on account of the difficulty of handling the sprit in so small a boat. The ordinary boom and gaff sail is also objectionable as it requires two halliards and the rings on the mast.

The lateen sail, as adapted by Lord Rosse, is much used on canoes, especially the smaller ones. It has the advantages of a short mast, low center of effort, and few lines; but the yard and boom must be very long, the sail cannot be furled or reefed when before the wind, and it is not suited for large areas. The lateens introduced by the Cincinnati C. C. are practically leg of mutton sails, the yard peaking up into the position of a topmast, as shown in the drawing. The ordinary lateen rig consists of a triangular sail laced to a yard and boom, both spars being jointed together at the tack, and a pole mast with a spike several inches long on top. A brass ring is lashed to the yard near its lower end, and a jaw (*a*) of wood or metal is fastened to the boom, a short distance from the forward end. In setting the sail, the yard is lifted until the ring can be hooked over the spike on the mast, then the boom is drawn back, lifting the yard, and the jaw is dropped in place around the mast, the operation being reversed in taking in sail.

The following method of reefing the lateen was devised by Gen. Oliver, of the Mohican C. C. The fore end of the



Standing Lug Sail.



Reefing Gear for Lateen Sail.

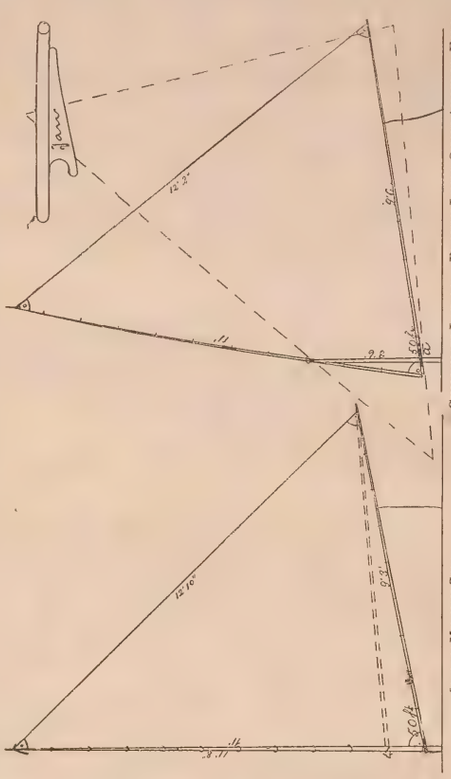
boom is fitted with a jaw (*b*) which encircles the mast when the sail is set, making a leg of mutton sail, while on the boom is a jaw (*a*). In reefing, the jaw (*b*) is removed from the mast, allowing the boom to come forward until *a* touches the mast, the slack of the sail being taken in by a reef line, *d d d*. One end of this line is made fast at the tack, it is then rove through grommets in the sail, and the other end made fast on the leach, the slack being taken in by hooking the cord over a screweye (*e*) on the boom forward, and another aft. Another similar plan dispenses with the jaw on the end of the boom, using instead a second jaw on the boom near the first, the shape of the sail being a little different, but the details of reefline, etc., the same.

The old sliding gunter is no longer used, as it was difficult either to hoist or lower the topmast with any pressure of wind on the sail. Several other varieties of gunter have been introduced at times, but they are inferior in simplicity and effectiveness to the lug.

On a canoe, the nearer the sails approach a square, the shorter boom and yard they require for any given area, and the easier they are to handle and stow. All things considered, there is no sail so easily set, reefed or furled as the simple standing lug. The head of the sail is laced to a yard on which a ring *b* is lashed, while the foot is laced to a boom, in the forward end of which an eye is spliced. On the mast is a brass traveler *a*, formed of a ring to which a hook is brazed. An eye is formed on the upper part of the hook in which the halliard *c* is spliced, while the downhaul *e* is spliced to the hook itself.

The halliard and downhaul are sometimes in one piece, the lead being from eye in traveler through block at masthead, thence through double block at foot of mast to cleat on side deck; thence through double block again and to hook of traveler, the latter part forming a downhaul. The tack *d* is an endless line rove through a single block on deck at the foot of the mast and a screweye near the well, and having a toggle spliced into it. To set sail it is taken from below, the eye in the end of boom toggled to the tack, hauled out and belayed, then the yard is lifted, the ring hooked on to the traveler, and the halliard hauled taut and belayed. The downhaul is led outside of the sail, the latter always being on the same side of the mast.

Where a large area is to be carried, as in racing, the best sail is, beyond all question, the balance lug, a modification of the sails long in use in China, which was introduced to canoeists some fifteen years ago. In this sail a portion projects forward of the mast, greatly lessening the outboard weight when running free, as well as the length of the boom. The sail is spread on a yard and boom, as the standing lug, but is so hung that a portion hangs forward of the mast,



Cincinnati Lateen. Broken Lines Show Another Form

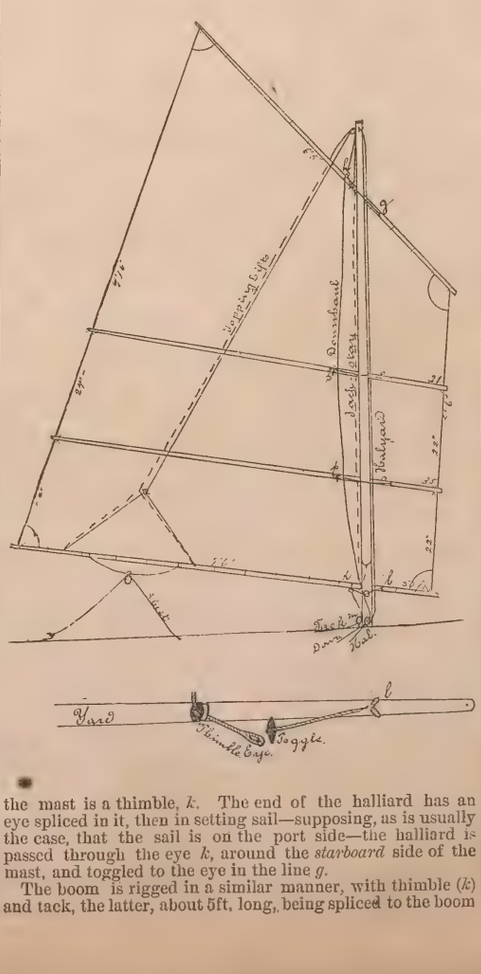
Leg of Mutton Sail.

about one-seventh to one-eighth of the boom being forward; thus, a sail of 7ft. on the foot will have no longer boom when running free than an ordinary sail of 6ft. on the foot.

To handle a large sail quickly and certainly a number of lines are needed, some of which may be dispensed with at the will of the skipper, but we will give all in the description.

One peculiarity of these sails, a feature also derived from the Chinese, is that they have a light batten sewn in a hem on the sail at every reef, keeping the sail very flat, and permitting the use of reefing gear instead of the ordinary reef-points.

The sail always remains on the same side of the mast, on either tack, being permanently hung there. On the yard just forward of the mast is a short piece of line (*g*), having an eye in one end, and a wooden toggle in the other, and abaft



the mast is a thimble, *k*. The end of the halliard has an eye spliced in it, then in setting sail—supposing, as is usually the case, that the sail is on the port side—the halliard is passed through the eye *k*, around the *starboard* side of the mast, and toggled to the eye in the line *g*.

The boom is rigged in a similar manner, with thimble (*k*) and tack, the latter, about 5ft. long, being spliced to the boom at *l*, and leading around starboard side of mast through *k* and block *m* on deck, to cleat; or the tack may be fast at *l*, lead through a thimble lashed at starboard side of mast, then through eye *k* and to cleat on boom. In these sails the luff must be set up very taut to keep them flat, so the tack and halliard gear must be strong.

On each batten a short line (*o*), called a parrel, is made fast just forward of the mast, fastening with a toggle to an eye (*p*) on the batten abaft the mast, allowing such play as is necessary in lowering sail or reefing. These parrels confine the sail to the mast, keeping it flatter, and distributing its weight more uniformly over the entire length of the mast, thus easing the strain on the masthead.

A topping lift is usually fitted, being in two parts, one on each side of the sail. The lower ends are "crowsfeet," as shown, the main lines leading through a block at the mast head, and uniting in one part, which leads through a block at the deck and to a cleat.

Another line, *t*, called a jackstay, is made fast to the masthead, leads down outside of the sail, and is made fast to the mast just above the boom, or it may be led through a thimble on the boom to a cleat. Its purpose is to hold up the fore end of the boom in reefing and lowering sail. A downhaul is also rigged to gather in the sail quickly, especially in case of an upset. It is made fast to the yard near the eye, *h*, and leads through a screweye or block on deck. The main sheet is made fast to a span, or for a large sail a single block travels on the span, and the sheet is rove through it, one end of the latter having an eye in it. When running free, the entire length of sheet is used, the eye bringing up in the block and preventing it unreeving, but when closehauled the eye is hooked over a cleat on the afterdeck, and the sheet is used double, giving a greater purchase and taking in the slack.

For racing with very large sails, backstays are sometimes necessary, leading from the masthead to the deck on each side, one being slacked off, and the other set up, in jibing. When not in use, the slack is taken up by a rubber band. In rigging the mizzen, the jackstay and backstay are omitted, and the topping lift is a standing one, made fast to masthead and boom, the sheet being single.

The following method of handling a balance lugsail, written by Mr. E. B. Tredwen, and published in the London *Field* some time since, refers both to the large racing sails, and to a cruising rig also: "The difficulty which is experienced by many canoeists, appears to arise from the needless labor of taking off the sail every time the canoe is housed. I have always found it best to keep a mast for each sail, a cruising mast and a racing mast, and the respective sails are never taken off their masts except for washing or repairing. Similarly the mast which has been last used on the canoe is always put away with the canoe, either unstepping it, and laying it on deck, or lowering it (if a lowering mast be used) and letting it lie with a lashing to keep it in place.

If, however, the canoe must be left in the open, it is necessary to remove the mast and sail, which is very easily done. Having finished sailing and come alongside the boat house, the topping lift is let go and the after end of the boom comes on deck; then the tack must be slacked, or if the tack is a fixture, the jackstay must be slacked a few inches. The reeflines should next be gathered together, and stowed into a fold of the sail, the halliard and hauling part of the topping lift, similarly stowed in a fold on the opposite side of the sail, and the main sheet cast three or four times around all.

All the lines leading to the masthead (topping lift, halliards, etc.) should then be gathered to the mast about two feet above deck and a tyer put around. The after end of the sail can now be brought up to the mast and tied there, and the whole let run into a long bag and stowed away in the boat house.

When next going out for a sail, the mast is stepped, the tie of the boom end to the mast let go, and the sail brought down to the deck, the mainsheet cleared from around the sail, the topping lift set up, and the reeflines allowed to lie in the fore end of the well. The jackstay being set up, sail may be hoisted at once. The trouble when under way of reeving two reeflines through two screweyes, and knotting the ends for the sake of keeping them in their places, appears to be a detail scarcely worth discussion.

If the mast and sail are not taken off the boat at the end of the sail, there is not even the trouble of untying the knots in the ends of the lines. When my canoe sails have not been put away by a stranger, I can always get under sail in five minutes.

In a cruising sail there is no necessity for the tack to lead along the deck, or even along the boom. I have always cruised with a fixed tack about 6in. long, made fast to the lug of a triple pulley on the mast for the reefing gear to lead through.

The only occasion on which the tack need be started is in racing, when the wind is very light and the canoe is sailing between high banks. The tack may then be eased up until the yard is hoisted chock ablock, so as to get the sail as high as possible; at all other times a standing tack will do without any part on deck."

THE LOG BOOK.

VIII.—CALOOSAHATCHEE RIVER AND LAKE OKEECHOBEE.

Editor Forest and Stream:

My last was written from Dredge No. 1, at the headwaters of the Caloosahatchee River, and I believe I promised you some items on arrival at Kissimee. I cannot keep my promise, for we did not go to Kissimee. But we did go to Okeechobee, and found it quite a pond, also that it would kick up the biggest sea on the least provocation of any pond we had ever seen.

On leaving Fort Thompson at the headwaters, we passed through a series of lakes connected by canals. First came Lake Flirt, quite a lake, but so filled with lily pads and grass as to look more like a meadow. Some seven or eight miles of canal and river alternately, and we came to Bonnet Lake—another meadow under water—more canal, and we ran into Hickopochee (Little Water). Hickopochee is nearly circular, and from three to four miles in diameter. Water quite deep. Bottom muddy. Caught some very fine black bass.

From Hickopochee a short canal takes us to Okeechobee (Great Water). Reached the lake at sunset on the 14th of March. Turned out on the 15th and found a well developed norther on hand. Concluded we did not care about going to sea, so amused ourselves shooting "'gators." Okeechobee and vicinity must be the home of the alligator. I think we saw thousands. Blew hard all day; 16th and 17th ditto, but on the 18th we got away and ran across to mouth of Kissimee. I heard of a canoeist once who could not find the mouth of the Kissimee. I don't wonder now.

After taking a good look at the mouth of the river, we decided to spend what time we had at our disposal on the lake, and return via Caloosahatchee. Sailed around the northern end of the lake as far as Chansey Bay, on the east shore. Stopped at the bay one day shooting 'gators, and then laid our course for Kissimee River again. Camped in the mouth of the river, and early next morning started on the back track, reaching Dredge No. 1 at 4 P. M., March 22. Left the next morning and reached Fort Myers on the 25th.

My companions left me at Myers, and I returned home alone, spending a few days in Charlotte Harbor. Okeechobee is Great Water. No doubt of that, but if any one contemplates going there for a sport-

ing trip, I would say, don't. Game is scarce, fish are scarcer, and any boat that can get into the lake would have a lively time with even a moderate breeze.

The Caloosahatchee, however, abounds in deer and turkey, and the scenery is delightful; banks are high, with generally a heavy growth of cabbage palmetto; in many instances the pines came to the river, and near the headwaters live oak are plenty. The fishing is nothing to brag of.

In Charlotte Harbor there are both shooting and fishing enough to satisfy the most fastidious, with fine oysters in abundance. Clear water, blue skies, beautiful green islands, and, in fact, everything to make a cruise enjoyable. TARPON.

THE CHART LOCKER.

VII.—WISCONSIN RIVERS.

G. H. G., Cleveland, asks for information as to Wisconsin rivers and maps of the same.

CANOEING IN BUFFALO.—In the small boat line we have the usual number of clinker boats being built, and one or two experiments. Among the latter are two lapstreak boats 15ft.×4ft., with centerboards and decks, built by Geo. Moon, who is anxious to build a boat that will "get away" from the 15ft.×38in. Joyner, owned here. A canvas canoe is on the stocks, being built from lines furnished by Capt. Kendall, and promises to be a flyer if lines and sail area count. She is 15ft.×36in., and will have iron on her keel, being intended for lake service. A Pearl is being talked of by one of our younger boating men, and we have a Racine St. Paul and a Rushton Stella Maris, so it begins to look as though we would muster a fair number of canoes this summer. We have no club, but soon as we get four or five active members we will organize. Of course there must be three officers, and we want a private to boss. With our waters we should have a large fleet of canoes, but the pioneer was put on the river last summer.—CABALLERO.

THE CHOCKSETT C. C.—This club was recently formed at West Sterling, Mass. with E. H. Coolidge as Commodore, E. W. Sawyer, Treasurer, and E. Coolidge, Secretary.

AFLOAT AGAIN.—"Nessmuk" writes us on April 18: "My new canoe, Bucktail, is here, and is simply the most perfect cedar canoe I have ever seen. Not very light, 24lbs., staunch, serviceable, capable; finished like an Elgin watch; intended for a river cruise down the Susquehanna River. She will be heard from."

PERSONAL.—Messrs. Longworth and Lucien Wulsin, of Cincinnati, were in New York last week, the former sailing for Europe. Mr. Gibson, of Albany, was also in New York for a few days.

THE NEWBURGH CAMP.—We have received from Mr. Smith some photographs of the camp ground, showing the beach and inside of the old earthworks.

LEAKS IN BIRCH BARK CANOES.—Can any of our readers inform us as to what is used to stop leaks in a birch bark, and how applied?

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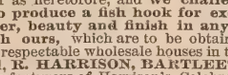
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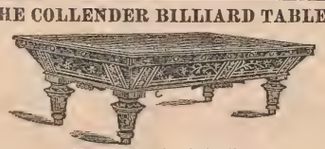
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BENCH SHOW JUDGING.

WE regret to see that the practice of holding dog shows extending over a period of four days still continues, as well as that of dragging the judging along over the whole time of the show. It is generally acknowledged that both of these practices are wrong in principle, that the dogs would suffer much less in a three-days' exhibition than when confined for four, because the accumulated strain of confinement, excitement and bad air increases in geometrical ratio, and the poor beasts by the fourth day are either frantic or utterly worn out. It was the place of the Westminster Kennel Club to have inaugurated a reform in these particulars. The strongest and best equipped bench show association should have had the courage to break its way out of the old rut. The time was when the dog show was kept open for four days, in order to pay expenses and to put a little balance into the pockets of those who took the risk of the expenses, but that time is past. A dog show in New York is now sure of liberal patronage, and it is no longer necessary to treat it as if it were a peep show, which must remain open as long as any one would visit it, and at which everything must be done to attract the public. This last is the reason for the long drawn out judging.

Mr. Charles Lincoln's utterly mistaken idea that the public desires to see the judging explains the survival of this ancient custom, which has long been obsolete in the country where dog shows were first held, and from which we have drawn most of our best dogs. No one but the exhibitors care a rap to see the judging. What the public care about is to know which are the best dogs, and to be able to examine and admire them. The judging should, therefore, be all done on the first day of the show, and the catalogues marked, in order that the public, whom it is desired to instruct, may have an opportunity of seeing what the best dogs are, and learning why they are the best. As it is at present, the winners in many classes are not announced until the last day of the show, and so are seen by only a small proportion of the visitors. Thus a great deal of the good that a dog show should do is lost.

There are other matters that will bear reforming, to which special allusion need not now be made, but we hope another year to see the necessary changes made.

INIQUITOUS MEASURES.

THE game law tinkers, who turn up annually at Albany, have devised certain amendments to the present statute which will effectually nullify any force the law may have now.

One amendment allows owners of land to trap birds on their own property—which means that the New York and Albany and Utica and Buffalo market stalls will be piled up with snared game.

Another permits the sale of woodcock in nine counties, including New York county, in July—which means that the market refrigerators will be stuffed full of woodcock, killed out of season in other parts of the State. This is something like the "refrigerator amendment" which Mr. Abel Crook tried to foist on the sportsmen of this State some years ago.

A third clause so hampers the investigation of suspected stores of contraband game that it practically puts beyond probability the detection of the offenders.

These three moves are all in the direct interest of the market dealer, and, we understand, are engineered by the same individual who has been so notoriously engaged in working for the New York game dealers for several years past.

The only salvation against the machinations of these selfish game law tinkers is a powerful State association of men who honestly desire the good of the sportsmen community and will work to secure it.

Is there any possibility of organizing such a society? It would have abundance of work to do. We have been shown to-day two snared quail from a wholesale poultry dealer's refrigerator in this city, and the man who brought them in said he would get thousands of the same sort, with woodcock and ruffed grouse in the bargain.

A BENCH SHOW ASSOCIATION.

FROM correspondence and private conversation which we have had with many breeders and exhibitors of dogs, it is apparent that there is a strong desire on the part of a number of them for centralization in dog matters. Complaint is made, and very justly too, that dog shows are at present carried on in an aimless fashion, the managers of the show being responsible to no one body of men, which represents the kennel interests of the whole country. There are several large and wealthy clubs representing certain sections, which have done good work with the sporting dogs, and the two special clubs which have recently sprung up are doing a great deal for the breeds which they have taken in charge. Any one who will inspect the beagle and spaniel classes at the show now in progress, will see how great is the increase in the interest taken in these breeds within the last two or three years. All this effort is well expended and has a good effect, but much is required, besides this special care for particular breeds, to put kennel matters in this country on the same firm basis that they now have in England. A radical change in the methods under which our bench shows are now held is imperative. The old-fashioned rules require extensive modifications and additions, and some court of last appeal is required, before which all questions of importance may be brought. It should not be possible for any irresponsible person or set of persons to hold bench shows, as has several times been done, for speculative purposes. There should be some recognized authority which should have the power to approve or disapprove any show. Many other matters would come before such an association.

It is evident that such a kennel club, covering the whole country and having on its membership roll the names of the recognized leaders among the exhibitors and breeders of the different varieties of dogs, would be a power in the land, and could work out the needed improvements in the methods at present followed. This seems to be the general sentiment. The question now is, how is such a kennel club to be formed? There are reasons enough why something should be done, but it is not our province to call upon exhibitors to carry out their own wishes; the project is one which is best left to develop itself in the hands of those most interested, until the columns of the FOREST AND STREAM are necessary for its more complete establishment.

We would point out, however, to those who have taken any part in the private correspondence which has been going on, that there is no better time to canvass the matter than during the present week, when every exhibitor of prominence is in attendance at the Westminster Kennel Club show.

It has been objected that this work would naturally fall within the province of the National American Kennel Club, and that this body was originally organized for the purpose of filling in America the place occupied in England by the E. K. Club. This was undoubtedly the case, but these purposes have been so modified that the N. A. K. Club is interested now only in pointers and setters, and, while holding each year successful field trials, gives no attention to the non-sporting classes, which now fill so large a proportion of the benches at our shows. It is but simple justice to state that the N. A. K. Club has done a great work for kennel matters in America, but it has so far modified its original purposes that it has become a field trials club, and what breeders and exhibitors are now calling for is a club to care for matters which do not fall within the province of a field trials club.

If the time is ripe for any decided action in this matter, it will no doubt be taken hold of energetically and carried through successfully.

MR. LUMBERMAN LITTLEJOHN.

THE Lansing bill in the New York Legislature, provides for the appointment of a forestry commission to undertake the intelligent care of the Adirondack forests. The bill, as it came from the Senate, is not all that an Adirondack measure should be, but is good so far as it goes. Now Mr. Littlejohn wants the Assembly to amend the bill in various ways, reducing the number of commissioners, and cutting down the appropriation. This move of Mr. Littlejohn is not for the benefit of the Adirondack forests; it is a deliberate, thereby disguised attempt to hamper legislation on the subject, and at this late day to prevent any measure at all from being enacted. It is, so far as the public can judge, a big scheme to ward off the day of judgment for the men who are wrecking the Adirondack woods. Mr. Littlejohn, in other words, is working in the interests of the lumbermen, of whom he is one. His purpose is to look out for his own pocket at the expense of the public weal. If the members of the Albany Legislature care anything about their constituents, they will repress the activity of Mr. Lumberman Littlejohn and pass the Lansing bill.

ALMOST A CATASTROPHE.

THE steam yacht Norma was launched last Saturday from Poillon's yard in Brooklyn and came near startling New York with a frightful accident, the lives of two hundred people having been risked in a manner which calls for condemnation. The steamer was sent off the ways with her spars on end and no ballast inside. She had no sooner slid clear of the ways when she toppled over and rolled from side to side up to her hatches. Everything that could possibly insure a catastrophe, was done, and neither the builders, nor the skipper, nor the "designer" foresaw the fearful risk they were taking. It was a miracle that the yacht did not capsize, and but for the fact that the righting arm of her stability couple reappeared, when the vessel was on her side, after vanishing at the outset, hundreds would have met a watery grave. Coming so soon on top of the Daphne disaster abroad, the incompetency or callousness exhibited in this case calls for the severest censure, in the hope that the insane advertising dodge of herding a crowd aboard a vessel about to be launched will be done away with in the future by law or the good sense of the people in charge. The Norma has already been described in these columns.

DYNAMITE MEASURES.—Mr. Nathan Curtis and a confrère "ned Freeman were pursuing the gentle art of angling with dynamite cartridges in Lake Champlain last Saturday, when one of the infernal engines of destruction went off prematurely, blew the boat sky high, and deprived Mr. Curtis of one of his arms. Thus it appears that a dynamite cartridge is more powerful than a game constable.

BOOKS AND PICTURES.—We are prepared to supply sportsmen's books of every description. Our facilities are such that we can promptly supply all orders for books. Our series of FOREST AND STREAM publications include "Woodcraft," "Training vs. Breaking," "Shore Birds," "Angling Talks," and the "List of Open Seasons." The portraits of canine celebrities have been received with great favor; we still have a limited number of sets on hand.

DEFECTS IN ARMY PRACTICE.

THE system of target practice in the regular army has been tried long enough to show that there are many grave defects in it. It was a good system when it was started and has done good work, but this was true simply because it came after a period when there was absolutely no provision for instructing the men of the regular forces in the handling and firing of the rifles provided for them. Bad as it is now found to be, the system was capable of making a vast improvement upon entire ignorance, and the army of 1884, judged from a marksman's standpoint, is an entirely different thing from the army of a dozen years ago.

What some of the faults are, which have been shown to exist in the present system, will be found set forth in the interesting letter of our correspondent "C. D." He writes from an army post and knows accurately the entire field of facts covered in his narrative. The present scheme, it would appear, is in danger of being submerged and rendered next to useless by a flood of red tape, so that when the officer has completed the elaborate system of returns and has filled up all the blanks which an active printing press turns out, there is little time left for him to devote to the instruction of his men.

The fundamental error seems to be that too much dependence is placed on mere emulation. This in itself is a capital thing. It seems to be inseparable from rifle practice, whether it be the civilian contest, or by men in the ranks. But in the army, with its great chain of scattered posts and companies, oftimes of the same regiment, located a thousand miles apart on garrison or frontier duty, a system of reports seems necessary. Each company is required to do a certain amount of ball practice, and as far as can be done by a rigid scale of rules, each man of the army is placed on exactly the same footing. Certain grades are established and certain percentages fixed to entitle the marker to particular grades in the order of rifle shooting merit, and just here comes in the inherent weakness of the system and a pretty exhibition made of the jugglery of which figures are capable. The company or post commander sets his wits to work in order to "beat the punch," as the railroader would say. There is an effort to make the best showing on paper, whether that showing really represents the doings and real merit of the men or not. There is no absolute dishonesty; but there are arrangement of the results which, cleverly done, is apt to bring out very misleading conclusions.

There needs to be, over and beyond these routine reports, some sort of supplementary examination of the men which should show their ability as shots in an entirely different manner from that conveyed through the present filling up of blanks. A sharp visiting inspector could, in a single afternoon, put a company through a course of individual, file and volley firing, and make a report thereon, which, in connection with the data afforded by the reports now made, would enable a very accurate estimate to be formed of the real shooting ability of the men, considered as skirmishers or line-of-battle men in actual warfare.

Another point upon which stress is properly placed is the seemingly absurd and wasteful system of having each man of the army go over each year the entire course of rifle instruction. The theory is, that on a certain date of each year the entire army is considered as a great squad of recruits and put through a certain order of scores. It matters not whether any particular man has shown exceptional skill as a marksman, and has for years held his place as a sharpshooter, he swings back to his place as a recruit, and, of course, easily passes through the routine of qualification. There should be some system of post-graduate marksmanship, by which any particular man in the ranks can go on to more difficult feats of shooting, in place of the present ever-slipping-backward method.

We are glad to witness a disposition in various parts of the country to have friendly bouts before the butts between regular army and militia teams, or between the army and plain civilian marksmen. Thus far the general practice has been for the men in blue to get points from those who shoot for pleasure. The outsiders have experimented for pleasure, have made improvements which have been adopted by the men under arms, and so a very steady progress has been kept up. With an army of so much leisure as ours, the inventive faculties of both officers and men should be stimulated to the utmost. There is abundant room for changes, and radical ones, too, in our whole scheme of small arms, but it will hardly come so long as the main effort is directed toward wriggling into a certain position on the annual roll of merit, and the men regarded as so many items in the account to be manipulated to the best advantage.

THE WIMBLEDON MEETING.—The English papers devoted to the art of rifle shooting come to us with the programme for the Wimbledon meeting of July next, given in its usual very complete shape. The list of matches is a long one and the range of prizes large. There are many modifications upon the programmes of previous years, but in the main the wants of the various classes of riflemen are well looked after, and there is a disposition to add prizes where the conditions of the match attract marksmen, and to take away competitions which seem to have outlived their usefulness. There is a gain of £1,200 in the aggregate prize list, and with its general attractiveness, there is no reason why a number of American marksmen should not be found among the list of entries and winners as well.

The Sportsman Tourist.

"MONTY."

WHAT combination of circumstances had led us, John and I, to take up our temporary abode in the deserted cabin on the southern slope of El Conquistador, it is not necessary, for the purposes of this sketch, to particularize. We had been there now about six weeks, and should probably remain that much longer. The trail from Argentum to San Rafael ran down the main valley some four miles below us, and, there being neither game nor "mineral" as yet discovered, on that side of the mountain, no wandering hunter nor peripatetic prospector intruded his unwelcome presence upon us. Once a week one or the other of us sauntered down to the trail below and met the mail carrier from Argentum, received our share of his precious freight of letters and papers, had a few moments free and easy chat while he smoked his half-way pipe, and then climbed leisurely back to our solitude. With this exception we had not seen, or cared to see, a human face since the day we had turned our backs upon the mining camp we called, for the moment, home. But it was for that reason we had come, and we rather dreaded the day when that gad-fly of American life, called "business," should sting us back to the smoke and the smelters, the riot and roar of Argentum. For the first time in many years John had leisure to indulge his vagabond instincts, to botanize and geologize, unharrassed by thoughts of sulphurets, gauge, pay dirt, dips or strikes; while I—well, those passages in my essay on "The Thingness of the Unconditioned, as differentiated from the Condition of Unthingness," and which have most touched and thrilled the great thinkers of the present day, owe the larger part, if not all, of their incisive analysis, psychological subtlety, and soul-stirring pathos to the hours spent on the grass in front of that old cabin at the head of the gulch on El Conquistador.

As to who erected this cabin, his purpose in so doing, or why he abandoned it I know no more than you. We had heard dim rumors of it, searched for it and found it, and incontinently took possession thereof. It was comfortable, it was picturesque, it was home-like. It fitted as happily into its surroundings as though it had resulted from a slow process of evolution, or had arisen by a happy consentaneous thought of the brown spruce boles, who had whispered to each other, "Go to; let us doff our green crowns and huddle ourselves together, that we may form a shelter for the wandering brother poet, who some day will come hither to learn the music of our songs." In front of the cabin, one huge spruce had thrown himself prone, as though to rest after long centuries of laborious uprightness, and it was there I first saw the subject of this sketch. John was in his favorite lair under a huge pine that overhung the stream, watching for the hundredth time the antics of a water ouzel, and I was stretched lazily on one of the bunks in the cabin, when, through the open door I caught sight of a stranger sitting at ease upon the log. He had not yet seen me, and I had time for a protracted study of him before his eyes met mine. He was in the prime of life, that is, neither old nor young, though his hair, brown in shade, showed in the sunlight faint siftings of gray. His eyes were the blackest and keenest I have ever seen, with a clear, straightforward gaze that somehow seemed to pierce all defenses of sham and custom, and read the inner man like an open book. His forehead was rather low and sloped downward to a shapely, slightly pointed nose, under which his black moustache curved backward over a mouth whose thin lips parted slightly over white teeth in a half-expectant, half-contemplative way. His form was lithe and muscular, giving one the impression that he would be a bitter antagonist in a personal conflict. He was dressed in a suit of some grayish-brown material, fitting closely and giving him a natty, jaunty appearance, contrasting strongly with the general baggy look of the ordinary San Juaner, clad in woollen shirt and canvas overalls.

As he sat, carelessly contemplating the cabin, he seemed so alert, fearless and keenly alive in every nerve and fiber, so interfused with the strength of the rocks, the vigor of the pine trees, the dash and sparkle of the running brook; so in keeping with all the surroundings, so much a part and parcel of this wild life, that it never occurred to me to be surprised at his sudden appearance, or to do him the impertinence of attempting to act as host in a place where he was evidently far more at home than I could ever hope to be. He was so different from anything I had yet seen among the biped inhabitants of that country that my heart instinctively warmed to him, and I think he read the feeling, as his eyes met mine, with a glance in which was neither surprise nor doubt, neither silly self-assertion nor loutish subserviency, but a clear, straightforward gaze of modest equality. This was the beginning of our acquaintance, which grew and strengthened every day. He was so much a resultant of the hills and rocks, such a true "montagnard" in every look and gesture, that I found myself unconsciously calling him by the half-playful, half-affectionate, diminutive "Monty," a freedom which he did not resent, accepting the name as calmly as though it were his proper appellative. What his real name was I never thought to ask him, and he never volunteered the information. In regard to his past history, or his present business in this remote mountain valley, he would furnish us no light whatever. To all our delicately-worded hints, as well as to more outspoken and direct questioning, he presented his buckler of impassive taciturnity, against which our interrogatory javelins were hurled in vain. So taciturn was he, that I do not think, in all the time of our acquaintance, I ever heard him speak a dozen consecutive words of English. When he did speak, it was generally in so low a tone that he could hardly be heard, and often in a language which, though I was familiar with most of the tongues of that polyglot country, I could not recognize as either English, French, German, Swede, Polish, Spanish, Navajo, Ute, Pi-Ute, or Stickareen. I thought once it sounded like Gypsy, but when I put the question flatly to him, "Can tuto rakker Romanes, miri pal?" though the twinkle in his eye left me still in doubt as to whether he understood me or not, I received no more satisfactory answer than when I addressed him in English. But with all his limitations as to conversation, there was a charm in his presence it was impossible to resist. His cheery simplicity, his shy confidence, a certain subdued gravity and compassionate air, as though he, so near to the very heart of nature, pitied those who, like ourselves, caught but fitfully the rustle of her robe, were all so—I had almost said unhuman, that I felt sometimes as though Praxiteles' Faun had come to life in these fastnesses of our western Sierras. But alas! one human failing he had, almost abnormally developed—that of curiosity; not manifested by asking questions, for, as I said before, he seemed to consider speech too valuable a commodity to be lightly used, but in making tactual and visual inspection of everything belonging to our "outfit." In less than a week after our first meeting there was not an article in our cabin which had not undergone a thorough scrutiny from him. A small clock, which John had insisted on bringing, especially excited his curiosity. He would sit for an hour at a time gravely watching the beat of its exposed pendulum, and listening to its sharp metallic "tick-tock, tick-tock." One peculiarity he had which assimilated him still more in my estimate to the wild life around him. The sense of smell, which in the rest of us had been atrophied into comparative uselessness, was in him as acute as that of sight or hearing. No investigation was complete until he had submitted the object to this last crucial test. He often dined with us, and it was curious to note how the nose instead of the palate was made the judge of any new dish submitted to him. But this sense was not developed at the expense of the others, for they were all normally keen. As John said, he had the eye of a hawk, the ear of a stag, the foot of a fox, the nose of a hound, and the nous of a wild turkey. His taste, in matters of food, was exceptionally plain—I had almost said dainty. He ate very little meat, contenting himself with vegetables and bread, and as to tobacco, whisky, tea or coffee, he literally abhorred them. His healthy natural taste revolted against them as coarse stimulants, unnecessary and repulsive to a palate unspoiled by artificial pungents.

He had an unconquerable aversion to dogs, and the first time that Swipes, our bull-terrier, appeared upon the scene, Monty left the cabin, and vanished up the gulch with a haste, which, if all his movements had not been so unstudiedly graceful, would have bordered upon the undignified; nor, after he had become more accustomed to our quadrupedal companion, did he ever seem to feel at ease in his presence. Friendship there never was between them, only a state of suspended hostility, and it generally took all our authority, backed by the persuasive force of kicks and cuffs, to prevent Swipes flying at our guest's throat, whenever they were together. There was a reserve, an impassive dignity about our friend, which prevented our asking impertinent questions as to his domestic affairs, and his habitat and place of abode were unknown to us, until accidentally, in one of our rambles up one of the ramifying gulches which radiated, like the fingers of a hand, from the main cañon in which we were, we stumbled upon his rustic home, hidden so cunningly in a thick cluster of pines, that only accident revealed its presence. Here, much to our surprise, we found his wife and family, the latter consisting of five ruddy youngsters, fac-similes in everything of their father. At least, for charity's sake, we will call her his wife, though from various circumstances, we were satisfied that no legal or religious ceremony, such as is deemed essential in more straight-laced communities, had ever thrown the ægis of its sanction over their companionship. A weak compliance with popular prejudices was not one of Monty's failings; though innately pure, according to his lights, he was a law unto himself; but, though neglecting, probably from an innocent ignorance, that such a thing was elsewhere demanded, the requirements of legalized matrimony, he was a faithful husband and a loving father. The home was well stocked with food, simple but healthful, and though the furniture generally was scanty and rude, we could but admire the softness and cleanness of the luxurious beds, made of the sweet-scented vernal grass, evidently gathered afresh every morning.

We did not make much headway in establishing friendly relations with the family, as Mrs. M. was generally too much occupied with household cares to have time for gossip, and the children, shy as wood rats, scuttled off at our approach and laid perdu behind the fallen pines till we had taken our departure. This was hardly to be wondered at, as we felt assured that we were the first strangers from the outer world whom they had ever seen. But Monty himself was more sociable, and a day rarely passed that he was not to be found in his favorite seat on the old log. Here he would sit while I talked to him, saying little or nothing himself, but listening with calm enjoyment and an air of placid receptivity, as though devoutly assenting to everything I said, though sometimes a subdued twinkle in his keen black eye would seem to cast a shade of derisive doubt on some of my statements. Whatever ideas I advanced—whether upon bread making or the telephone, "Shakespeare or the musical glasses"—he met them all with the same air of grave, respectful attention. I was often puzzled to decide whether my words flew as far above him as the wind that stirred the treetops over his head, and with as little meaning in their sound, or whether, on the other hand, he had not some familiar Socratic "dæmon," who had already revealed to him all this crude product of thought which I was laboriously spreading before him. Emotion of any kind rarely stirred the fine-graven lines of his Sphinx-like face; the art of self-repression had in him reached its highest development. Though utterly unconventional he was "high-toned" in the best sense of the word. I never knew him to do an ungentlemanly act or be swayed by a low impulse. His every movement was characterized by dignified courtesy and unembarrassed ease. He never lounged and he never hurried. His walk was smooth and gliding, yet full of a nervous grace that was the furthest possible removal from affectation or languor. In the care of his face and hands he was so dainty as to be almost finical. In a word, a thoroughbred gentleman from head to foot, with an innate delicacy and refinement that would have put to the blush many who had possessed a million-fold his advantages.

I find myself loath to approach the sad catastrophe, which brought to sudden end this friendship, so dear and so unique. Something had gone wrong at the smelter in Argentum, and an urgent message had been despatched to John, requiring his immediate attendance. When the bearer, Tom Lee, a burly miner, reached us, it was too late in the day to start on a return trip, so arrangements were made to leave early in the morning. We were sitting in the cabin, talking desultorily about business matters, when suddenly Lee's hand dropped to the butt of his revolver, and in a moment the long shining barrel was leveled at something outside the door. Turning quickly to see what the target might be, I caught sight of Monty in his accustomed place on the end of the log, with his head turned sideways looking at something which had attracted his attention up the gulch. Before I could speak or move the pistol cracked, and I saw for a moment the livid mark, square on the temple, where the bullet had done its cruel work.

"Good shot," said Lee, coolly, as he threw out the empty shell, and put in a fresh cartridge.

I was stunned for a moment at the suddenness of the atrocity, and then broke forth in execration of the brutal deed. The blood-stained ruffian listened stolidly for a moment, and then interrupted me with: "Seems to me you make a — of a fuss about a mountain rat!"

H. P. UFFORD.

MAJOR JOSEPH VERITY'S STEAM CAT.

"There, where the Garden of Irem lies,
Are the roots of the Tree of Paradise;
And happy are they who sit below,
When into this world of strife and death
The blossoms are shaken by Allah's breath."

IT recently happened that I found myself one evening in the luxuriously-furnished library of Mr. J. P. Squibob. We had dined, and the gas was lighted, and as we selected our cigars from the silver thingumbob upon the teapoy, I observed by its side a copy of FOREST AND STREAM, lying open at the last paper on the Bigosh. "Ah," said I, "it seems that you manage to find time for Mr. Mather's admirable sketches."

Replied then the Squibob: "With pleasure and profit have I devoted to these papers a portion of those moments of leisure which I sometimes contrive to reserve from the cares of State."

"What, then, think you, of the Bigosh? Is it a real stream, or a delightful figment of the imagination?"

Mr. Squibob leaned back in his fauteuil, with a far-off look in his eyes, and silently smoked, until the ashes from his cigar descended upon and obscured the lustre of the magnificent coprolite which blazed in the bosom of his shirt. Then he spoke: "The Bigosh is no myth. I know its waters well. It is a stream of many sources, and the finest fishes of all lands are there obtained. Its tributaries—I have traveled far and I have seen them oft. They rise in the grim shadows of Hood and Shasta, of Tahawus and Chocorua, of the Monck and the Aarhorn; of Snowdon and the Bens of Lorn, and their confluence may be found in the Garden of Irem, where stands the Tree of Paradise.

Mr. Squibob remained silent for a space, while I mused on the somewhat peculiar statement he had made; then he spoke again:

"I made the acquaintance of the Bigosh when a little boy. My first cane fishing-rod was in my hand, and I was happy. I stood on a small ledge of rock, with the bank rising abruptly behind me, and the foam of an eddy circling at my feet. Above, there was a dam, and a bridge on which stood other fishers. Across the river, the old mill clattered on; the sunbeams sifted gently through the branches of the ancient elm above, the dash of the water was in my ears, the golden oriole darted in and out of his pendent nest. I could have reached it with my rod, but I had come to fish, and had I not, in my own hands, and for almost the first time, the means of doing so?

"There was a new cane rod, and a good stout line, and a nice large hook, and a fine fat worm, and a good big hunk of lead, and the cork of a bottle, and—

"There was a tug and a strain, and—well! It is very fine, and all that, to hear those tarpon fishers tell of their petty exploits, with a few hundred yards of spare line to help them out of a tight place; but there was I, an urchin five or six years old, with line tied fast to the tip of the rod, and standing on a ledge like a window sill, no chance for retreat, the water foaming at my feet, and a good four-pounder doing his level best to pull me in.

"By dint of the most herculean efforts, born of despair and the necessities of the case, I managed to raise the fish, once only, half out of the water. That one look was enough. I set my teeth hard, and planted my heel more firmly and held on like grim death. How long the struggle might have lasted, and what its result, had I been left to my own devices, can never be known, for a young man, seeing my dire predicament, and fearing, from the gallant fight the fish and I were both making, that I might be pulled in and drowned, ran down and landed the prize. "Augustus," said I, as together we rode homeward from the mill with the "grist" for which we had come, and the fish I had taken at our feet in the wagon; "Augustus, if that fish had pulled me in, wouldn't you have saved the fish-pole?"

"But, Mr. Squibob," said I, "could you not contrive to communicate some definite information concerning the Bigosh?"

Again there came into the eyes of my friend that far-away look, but I brought him to a realizing sense of his duties to the guest within his hall by requesting a light for my cigar. Mr. Squibob struck with a sledge hammer, which hung at his side, a large tin pan, attached by an emerald clasp to a chain of rubies, pendent from the frescoed dome above, and ere the soft tones had died away in the dim recesses of the vaulted walls, appeared two gigantic blacks, habited, one in the costume of the Falklands and one in that of the Farallone Islands, and bearing flaming torches of the perfumed wood of the Oklawaha. When I had availed myself of their services, another stroke upon the melodious pan sent them through the floor, as I imagined; for so sudden was their exit that, but for the burning cigar and the sable wreaths of pitch pine smoke which floated among the silken folds of the portico, it was as if they had never been.

"You are well and promptly served," said I. "Aye," he answered. "Those fellows were formerly in the service of the Countess de Landsfeld-Heald. She trained 'em. But to return. The Bigosh flows through many lands, and is finally lost in Adironda, near the southeast corner of Major Joseph Verity's park." "Ah," said I, "this reminds me. Did you see, a few weeks since, in the FOREST AND STREAM, a communication from Major Joseph Verity, in which he relates an incident connected with the initial experiments with the combination bear-machinery?" "I did, sir. I remember it well, as I was much annoyed." "Then the statement was incorrect?" "I did not say that. The annoyance arose from the Major's having called me J. *B.* Squibob. My name is J. *P.* Squibob, and in schoolboy phrase, I do not like to be called out of my name. I infer that his memory fails. Besides, the original combination bear-gun was no invention of mine. It was conceived in the brain, and manufactured by the hand of Doctor Ebenezer Christopher Columbus Kellogg, Justice of the Peace and quorum." "And custalorum?" "Aye, and rotalorum, too, of Mancelona, Michigan. He is a man after Major Verity's own heart, and let him have due credit."

"But the Major's statement?" "Why, as to that, it seems odd that any one should remember such a trivial occurrence. Major Verity is a gentleman, firm of eye and calm of lip. There was a time when the mere slaying of a bear with a bowie, or the incidental slashing off of the seat of a gentleman's galligaskins, would have left his leathern visage undisturbed even by the faintest ripple of emotion. But I think that he retains some old-fashioned ideas concerning pistols and coffee, and has, besides, quarte and tierce at his fingers' ends. I shall not question his statements. The graves of those who have thus presumed, now dot the sward from Passamaquoddy to Alaska. I think that had it not been for a little circumstance connected with his old invention of the once celebrated 'Steam Cat,' he would scarcely have borne in mind the occurrence he has related." Then Mr. Squibob dreamed again, but roused himself, and said: "I was trying to call to mind the occasion on which I first met Major Verity. I think that it was in the charge of the Six Hundred, at Balaklava—or was it Solferino?—no—I have it. It was in the famous campaign against Kamaiakan, when together we 'wallowed in the Walla Walla,' and when, in the words of a historian of that day, the hardy pioneers, at the call of their country, casting aside the frivolous spade, the enervating pickaxe, and the trifling hoe, shouldered their $50 rifles, and springing into their $80 saddles, dashed their $300 steeds into the desolate plains of the Walla Walla, and there recklessly and fearlessly encamped. It was in this action that the Major won his spurs. They were purchased by subscription of the brigade, from Spiegel Eisen & Co., of 'Frisco, and cost at the rate of $1.90 a dozen, 15 per cent. off for cash in six months, and they were, I regret to say, a fraud. We all did know those spurs, and I remember the first time that the Major had them on. 'Twas on a summer evening, near his tent, and the rowels were hooked into the sinches of a bucking cayuse. They both gave way. The distance from the cayuse to the point where we picked the Major up, was stated in the report of the Government surveyors attached to the expedition, at sixty-seven feet and four inches, in a northwesterly direction."

"And what were the results of the expedition?"

"They were thus briefly summed up by the historian previously quoted: 'That great chief, Kamaiakan, now sits and gnaws the gambrel joint of a defunct Cayuga pony, little knowing on which side of his staff of life the oleaginous product of lactation is disseminated.'"

"But about the 'steam cat?'"

"Well, the Major and I drifted East after the war, and as he did not at that time own the immense diamond mines which he subsequently discovered in the Barkhamsted Lighthouse Territory of Connecticut, he was, I imagine, somewhat impecunious, and either invented or purchased the celebrated steam cat. Properly managed, there might have been a fortune in it. It was designed to overcome and do away with a leading cause of insomnia. Placed upon a roof in the heart of a great city, its dulcet caterwauls were absolutely irresistible, and the cats swarmed in like Bulwer-Lytton's ghosts, only to be torn in pieces by the steam cat's claws of steel. I think that it was first set going in Cleveland. Contracts from all the larger boarding houses were rapidly filled and money was flowing in, when, unfortunately, a large Persian cat, belonging to the wife of the Mayor, yielded to the seductions of our animal, and the Mayor's wife caused the passage of an ordinance prohibiting its further use in the city. The other lake towns were jealous because Cleveland had the first chance, and wouldn't allow it within their limits.

"The Major was discouraged, and got a new idea. He said: 'There's a big demand for kindling wood just now; let's take the cat into one of the tracts of dead pine, make kindling, and freight a fleet. There's millions in it.' The thing looked feasible, and in fact, the plan at the start proved successful. The cat clawed a forty-four inch pine into kindling stuff in nine minutes, and I began to think our fortunes were made. There was, however, one trouble. Our engineer was ill, and we hired McBallywhistle to take his place. You knew him—not Dunk McB. of Buctouche, but Donald, the son of old Mrs. McBallywhistle of Merigouische. He had been guiding parties, and used to leave a piece of Limburger cheese at the camp so that he could easily get back by a short cut, and not lose his way, but the party was attacked by what the doctors, I think, called 'acute nostalgia,' and he was thrown out of a job. Well, Mac didn't understand the cut-off or something, and the cat, under his management, became restive and dangerous, and would sometimes jump the wrong way.

"We had just set the machine at work at the foot of a huge pine, and Mac depressed the lever, when I saw in the steel-blue eye of the animal, a gleam which meant mischief. It was at that instant headed at the Major. ''Ware cat,' I shouted, and Verity sprang. The claws just missed his cuticle by the thirty-second part of an inch, but—this in your ear—there wasn't as much clothing left on the weather side of him as it would take to wad a combination bear gun."

G. WHILLIKENS.

ELK RAPIDS, Michigan.

Natural History.

DEER IN THE ADIRONDACKS.

BY C. H. MERRIAM, M.D.

[From advance sheets of the Transactions of the Linnean Society of New York.]

Cariacus Virginianus (Bodd.) Gray.

COMMON DEER; VIRGINIA DEER; RED DEER; WHITE-TAILED DEER.

Spike-Horn Bucks.

THE matter of "spike-horn bucks," though somewhat threadbare, deserves mention in this connection from the circumstance that the suppposed variety was first described from the Adirondacks. In a note in the *American Naturalist* for December, 1869 (Vol. III., No. 10, pp. 552-553), a writer observed that he had hunted in the Adirondacks for twenty-one years, and goes on to say: "About fourteen years ago, as nearly as I can remember, I first began to hear of spike-horn bucks. The stories about them multiplied, and they evidently became more and more common from year to year. About five years ago I shot one of these animals, a large buck with spike-horns, on Louis Lake. In September, 1867, I shot another, a three-year-old buck with spike-horns, on Cedar lakes. These spike-horn bucks are now frequently shot in all that portion of the Adirondacks south of Raquette Lake. I presume the same is true north of Raquette Lake, but of this latter region I cannot speak from personal observation, having visited it only once.

"The spike-horn differs greatly from the common antler of the *C. virginianus*. It consists of a single spike, more slender than the antler, and scarcely half so long, projecting forward from the brow, and terminating in a very sharp point. It gives a considerable advantage to its possessor over the common buck. Besides enabling him to run more swiftly through the thick woods and underbrush (every hunter knows that does and yearling bucks run much more rapidly than the large bucks when armed with their cumbrous antlers [!]), the spike-horn is a more effective weapon than the common antler. With this advantage the spike-horn-bucks are gaining upon the common bucks, and may, in time, entirely supersede them in the Adirondacks. Undoubtedly the first spike-horn buck was merely an accidental freak of nature. But his spike-horns gave him an advantage, and enabled him to propagate his peculiarity. His descendants, having a like advantage, have propagated the peculiarity in a constantly increasing ratio, till they are slowly crowding the antlered deer from the region they innhabit."*

The foregoing note contains several inaccuracies of statement, and the writer's deductions are wholly erroneous. It was very justly criticised by Mr. W. J. Hays in the *Naturalist* for May, 1870 (pp. 188–189). Further remarks and discussions may be found in the same journal, Vol. IV., pp. 442–443, 762–763, and Vol. V., pp. 250–251. The subject is now well understood, and the Hon. Judge Caton has presented the facts of the case with such accuracy and conciseness that I cannot do better than transcribe his own words:

"It has long been a prevalent opinion among hunters, and to some extent has been adopted by naturalists, that a race of common deer, the adults of which have antlers without branches, have established themselves in the no theastern part of the United States and in Canada, whence they are driving out the prong-antlered bucks.

"This is a matter of the greatest scientific importance, and I have taken pains to investigate it to my satisfaction, and am entirely convinced that it is a popular error, founded upon incomplete observations. The spike bucks found in the Adirondacks are all yearling bucks with their first antlers. The universal testimony, so far as I have been able to gather it, is that they are smaller than the average of the prong-antlered bucks, and that their spikes vary in length from eight inches, or ten inches at the very utmost, down to two or three inches in length. It is only the largest of these that any have claimed to be adults. It is very easy for a hunter to say, and even believe, that he has killed deer with spikes ten inches long, but did he actually measure them, and make a note of the fact, with time and place, describing its appearance, and take and note the measurements of the animal, or did he preserve the head, so that he could submit it to the examination of others? * * *

"Continued observations upon the young deer in my parks have enlightened me much on this subject. For several years I really persuaded myself that I had the true spike-antlered bucks, and set myself to carefully note their peculiarities, and fondly believed that I was about to add an important chapter to scientific knowledge. But these careful and continued observations soon undeceived and disappointed me. By marking the spike buck of one year, which was as large as one feeding by its side having two or three tines on each antler, I found the next year that his antlers were also branched, and my spike-antlered buck had become a fine specimen of the ordinary kind. And then the early fawn of the year before, dropped from a full adult vigorous doe, which had furnished him plenty of milk, had now grown to the size of a medium adult, and had fine spike-antlers, resembling in all things his older brother of the preceding year now bearing the pronged antlers. And so I anxiously pursued my observations for a number of years, ever looking in vain for a second antler without prongs. Without this certain means of knowledge, I should have believed that those large spike-antlered bucks were more than yearlings and nearly adult. It is true the dentition might have undeceived me, but this I could not acertain while the animal was alive, and this test has probably been rarely examined and carefully studied by those hunters who believe they have killed adult deer with spike antlers. I feel quite sure that they had not the means of accurately determining the true ages of the wild deer which they had killed; and what I have already stated may serve to show how very liable all are to be misled in relation to a point upon a certain knowledge of which the whole question depends."†

The only exception, that has come to my knowledge, to the rule that spike-horn bucks are always yearlings, is a case that fell under the observation of Mr. E. L. Sheppard: A very old buck, with much gray about his head, was killed in Queer Lake about ten years ago. In addition to its extreme age, it had but three legs and was consequently ill-conditioned, having been unable to procure sufficient food. It carried a pair of spike horns, which differed from those of yearling bucks in being much thicker at the base, rougher, more warty, and deeply wrinkled for some distance above the burr. This apparent exception is an illustration of two general laws (*a*) that in extreme age there is a tendency for certain parts to revert to a condition resembling that of early life; and (*b*) that ill-nourished bucks bear stunted and more or less imperfect horns. It is a well-known fact that the largest, handsomest, and most perfect antlers come from middle-aged deer that have wintered well, and are in fine condition; while the few-pronged and unsymmetrical ones are grown by young or very old animals, or by those that have been wounded or from other cause are poor and ill-conditioned.‡

All yearlings do not have true spike-horns, and if the term be made to include all unbranched antlers, I am strongly of the opinion that two-year-old bucks sometimes grow them. I have a pair of unbranched antlers that are curved both inward and forward, and are of exceptional length, the separate horns measuring respectively ten and a half and eleven inches (or 267 and 279mm.) over the curve, and seven and a half and eight inches (190 and 203mm.) in a straight line from the base of the burr to the tip. The longest horn presents a slight enlargement, three inches from the tip, along its upper and posterior border, the greatest thick-

*The above passage fell under the ever-searching eye of that eminent naturalist and indefatigable collector of facts, the late and much lamented Charles Darwin, whose massive intellect and exhaustive researches have revolutionized natural science and mark a new era in the progress of knowledge. Mr. Darwin, misled by this account, part of which he quotes in his masterly work on the "Descent of Man," remarks upon it as follows: "A critic has well objected to this account by asking, why, if the simple horns are now so advantageous, were the branched antlers of the parent-form ever developed? To this I can only answer by remarking, that a new mode of attack with new weapons might be a great advantage, as shown by the case of the *Ovis cycloceros*, who thus conquered a domestic ram famous for his fighting power. Though the branched antlers of a stag are well adapted for fighting with his rivals, and though it might be an advantage to the prong-horned variety slowly to acquire long and branched horns, if he had to fight only with others of the same kind, yet it by no means follows that branched horns would be the best fitted for conquering a foe differently armed." ("Descent of Man," New York, 1875, p. 513.)

†Antelope and Deer of America, p. 231–232.

‡Through the kindness of the well-known guide, Mr. E. L. Sheppard, I possess a specimen of unusual interest that well illustrates this point. The buck, which was an adult, was killed at Big Moose Lake, September 10, 1880, and its horns are imperfect, asymmetrical, and very scraggy. The animal was lank and thin, and was found to be a cripple. Its left humerus had once been broken and the fragments had united at a right angle, so that the fore leg was directed forward, and the shortening of the humerus was so great (its greatest length being less than six and a half inches, or exactly, 164mm.) that the foot could not be made to touch the ground.

ness of which is three-quarters of an inch (19mm.), thus indicating the point where a prong ought to have grown. I take it that these are the two horns of a two-year old, but have no means of determining this very important question. I also have two other pairs of horns from young deer that are smaller than those just described, and yet one horn of each pair is forked. Whether they came from yearlings or two-year olds I will not venture to decide.

In my opinion the term spike-horn should be limited to the straight and true spike that is known to be characteristic of the yearling buck.

Does sometimes, though rarely, have horns, and they are usually of the "spike" pattern, only more incurved than those of the bucks, and they are apt to be more or less imperfect and unsymmetrical. They are generally covered with the velvet, no matter at what season taken, in this respect resembling those of castrated bucks. Does that bear antlers do not commonly bear young, though they are not always barren. §

The Chase.

An account of the different ways of hunting the deer on the plains and prairies of the West, in the canebrakes and swamps of the South, and in other sections remote from the region under consideration, however interesting, does not fall within the scope of the present work; hence the methods practiced in the Adirondacks will alone be described.

There are three principal ways in which deer are hunted in this Wilderness, namely: By floating, by driving (hounding) and by still-hunting.

Floating consists in paddling up to a deer, at night, with a light called a jack fastened above the bow of the boat, and so arranged that it casts the whole light ahead, leaving the boat and contents in exaggerated darkness. The jack of our ancestors (used even within the brief period of my own recollection), was a very simple affair, constructed where occasion required. It consisted of a torch, or sometimes a tallow candle, fastened upon a piece of bark, and backed by a bark reflector. This rude illuminator was attached to a stick, three or four feet long, that stood upright in the bow. The stick, or standard of the primitive jack, still remains, and now supports a lantern which is closed in on three sides so that all the light shall be thrown in front. Some sort of a reflector is generally used to concentrate and project the rays to a greater distance. Sometimes the light is fastened to the hat.

Two people constitute a floating party, and the *modus operandi* is as follows: The sportsman sits on the front seat, with his legs tucked under the bow in a position that is, at the start, anything but agreeable, and becomes distressingly uncomfortable as hour after hour drags slowly on. He dare not move lest the noise thus made should alarm the deer. The guide sits in the stern and must be expert with the paddle, for it is his duty to propel the boat steadily and noiselessly within easy range of the wary deer.

The locality is usually selected in the daytime, and is generally some marsh-bordered bay, abounding in lily-pads, or a similar place along the banks of a sluggish stream. On nearing the feeding ground not a word is spoken, not even a whisper, and the hunters strain eye and ear to discover the whereabouts of the quarry. The light is turned in such a way that it covers the shore as the boat glides silently on, for the deer may be gazing at it from the bank, standing motionless and silent. Indeed, he is often seen, not more than a couple of boat lengths away, before any sound has forewarned them of his presence.

Bright moonlight nights are undesirable, because the animal can then detect the outline of the boat, and is apt to take to the woods without delay.

Let us note the course of events in an ordinary floating expedition, premising only that the sportsman is somewhat of a novice. Unless there is direct water communication between the camp and the place selected for the hunt, the party eat an early supper and set out at once in order to reach the spot before the gathering darkness obscures the way. The guide, placing the boat upon his sturdy shoulders, takes the lead, following some old trail or blazed line, or, if the spot be unfrequented, finds his way by certain features of mountain or valley that are familiar landmarks to his practiced eye. The sportsman follows, carrying the jack and gun, as well as a bottle of tar oil for protection against insects.

The start is well timed, for the outlines of near objects have already become indistinct, and the shades of dusk are fast blending the dim forms of the evergreens, transforming the coniferous forest into a uniform mass of darkness, when they emerge upon the open shore of a small and shallow lake and launch the canoe in its black but unruffled water. Night is upon them, and with it the flies and mosquitoes. Tar oil is applied freely to face and hands, the jack is lit and placed, and they step quietly into the boat and move noiselessly off, —the sportsman on the front seat, his overcoat buttoned up to his chin, and his feet crowded uncomfortably under the bow, one on each side of the jack-stick; the guide astern, silently plying his paddle.

The nearest marsh-bordered bay is soon reached; and as the light skims along the bank, falling in turn upon clumps of bushes, old logs and stumps, and the dark cone-like forms of the young spruce and balsams, the sportsman's expectation is at its highest pitch; he feels his heart beat faster and faster, and grasps his gun tighter and tighter, imagining that each fantastic shadow will show the white tail of a retreating buck. The suspense is of short duration, for this feeding-ground is passed without so much as the sound of a moving branch to indicate the presence of any animal larger than the flies that swarm about his head. Now comes a pull of half a mile before the next ground is reached, which would afford the sportsman ample time to compose himself, were it not for the armies of pestiferous flies and mosquitoes that demand, and receive, his undivided attention. The bottle of tar oil is produced, and a thorough smearing grants temporary respite. No sooner is this accomplished than the next favorable shore for deer is fast appearing over the port bow. Another ten minutes of breathless suspense and they turn again into the open lake. A close listener might have detected a half suppressed sigh of submission to the inevitable, from the fore part of the boat, but no other sound disturbs the unbroken silence of the night. The third swampy bay is reached and passed, with like result. A council ensues, in a low whisper, and it is decided to run up the inlet, a marshy stream averaging less than a boat's length in width. Having arrived at its mouth they proceed very slowly, for good feed abounds on both banks, and a deer may be surprised at any moment. Presently a noise is heard ahead; it is vague and indefinite, but evidently something moving. The boat comes nearer; the noise ceases; it is heard again. The sight is strained to penetrate the bushes along the shore, but nothing is discovered. Hark! something dripping in the water; the eyes are lowered, and there, on a log that projects into the stream, almost within reach from the bow, is seen the form of a large porcupine, lazily eating lily-pads and gazing stupidly at the light. The sportsman is tempted to fire, but controls his disgust and says nothing. A bend in the tortuous channel is passed, and another, and —*splash, splash, splash:* it is the unmistakable sound of a deer wading in the creek. Then all is still again. Is the animal standing in the water looking at the light, or has he stepped out upon the bank? The sportsman hears the faint ripple of water against the bow as the boat moves swiftly on; he is conscious that the hat is rising on his head; his heart beats louder and louder, and he feels it knocking violently against his ribs. The boat is slackened and the light made, in turn, to cover both shores. Moments seem like hours, and the flies are entirely forgotten. But what has become of the game? Inadvertently the gun rubs against the jack-stick when, simultaneously, is heard the sharp, shrill whistle of a startled buck, from behind a bush to the right, and the fading sound of crackling branches announce his disappearance in the forest.

The flies now seem worse than ever, and so they really are, for the boat is passing through their very headquarters, and the bright light attracts them to the spot. Continuing the course up the sluggish stream it is some time before anything occurs to divert the sportsman's attention from these tormenting insects, which constantly get into the eyes, nose and mouth, till, harrassed, exasperated, and well nigh distracted, he applies his only remedy, the tar oil, so freely that he soon feels it trickling slowly down his aching back. The cramped position of his legs and feet is actually painful, and his back "seems as if it would break." The hour is past midnight, his lids are heavy, and he has almost determined to request the guide to turn back when a loud plunge alongside the boat gives him a sudden start and elicits the involuntary exclamation: "what's that?" forgetting for the moment the necessity of silence. "Nothing but a muskrat," calmly replies the guide in a whisper. "Muskrat? hum!" he retorts in a tone of incredulity, but says no more.

Another hour passes wearily away. The inlet, which is here so narrow and shallow as scarcely to admit the boat, is crossed by a fallen tree that bars further progress. The return voyage becomes very monotonous, and finally even the flies fail to keep up the excitement. The drowsy hunter nods, his eyes close, and his head hangs heavily upon his breast. Suddenly an owl, on a low limb overhead, utters one of his loudest and most startling cries. The affrighted sportman cocks both barrels of his gun, expecting to detect the crouching form of a panther preparing for the fatal spring. On being assured of the harmless nature of his imaginary foe he cannot suppress a groan of mortification and disgust while he endeavors to regain his equanimity. Beads of cold sweat mingle with the oil upon his forehead as he solemnly and silently vows that floating is a diversion into which he will never again be beguiled. He feels chilly, and wonders if this is really a sample of Adirondack sport, or if his guide has been playing him a trick. While his mind is occupied with these meditations they have reached the lake, and the guide, anxious not to return empty-handed, has put the boat into a shallow bay and is working it slowly ahead among the lily-pads. The sportsman, now too cold to sleep, feels the boat slacken its headway and stop. He wonders if the guide has dropped off in a doze, is about to turn and investigate when the word "shoot," uttered in a low whisper, falls upon his ears. He doesn't see anything to shoot, but on looking more closely, discovers, partly hidden behind a bush, the form of a deer, as motionless as a statue, gazing inquiringly at the light. Raising the gun nervously to his shoulder he fires. A desperate leap, a wild plunge ahead, a heavy fall, and a noble buck lies dead upon the bank.

[TO BE CONTINUED.]

§ Alonzo Wood, Esq., one of the most experienced and competent guides in the Adirondacks, has kindly presented me with a very beautiful pair of spike antlers that were taken from a doe which was killed at Second Lake of North Branch about the first of September, 1876. They are deeply curved, symmetrical, and covered with a very dense coat of "velvet," the individual hairs of which are of unusual length. The measurements of these antlers are as follows:

From burr to tip, in a straight line	6in.	(152mm.)
From burr to tip, around curve	8¼in.	(210mm.)
Distance between tips	4¼in.	(108mm.)
Distance between antlers at curve	6¼in.	(159mm.)

UPLAND PLOVER IN MINNESOTA.

EVERYBODY who has paid the slightest attention to the subject knows that the bird commonly called the upland plover is no plover at all, but a sandpiper, and that its full appellation, as given by the authorities, is that of Bartram's sandpiper. Being of the race that it is, one would naturally look for it to make a strong show of aquatic proclivities. But in this connection it proves to be not a little of an anomaly; marhes, mud flats and the like being in no wise to its mind, whether as places of resort or sources of food supply. In fact, as its common name implies, it is exclusively a bird of the fast land, with a special penchant for spacious open tracts assuming the character of downs or plains; and where, in the stores of insects, grass seeds and berries incident to such localities, it finds wholly congenial fare. The geographical range of the species is noticeably extensive, including—so it is affirmed—a large portion of British North America, our own country east of the Rocky Mountains, and a considerable share of Mexico. Forced to look well to its ways in the matter of being provided with the sustenance adapted to its requirements, it is a migrant of the strictest type.

Throughout all the winter months it is a close sojourner in the southernmost divisions of its habitat, and in yielding in spring to the instinct to revisit the north it takes proper thought to lay up no sorrow for itself by giving rein to the prompting with undue precipitation. Its wariness and cunning are proverbial, being, indeed, quite of a piece with the similar endowments entering into the intellectual outfit of the crow or black duck. While not a pronounced beauty it is nevertheless strongly commended to the observer on the score of good looks, exhibiting a suit set off with noticeable taste with designs in white, black and buff, and also being enabled to boast of a figure distinguished to an eminent degree by the attribute of presence. Its capacities for flight, whether as to endurance or swiftness, are but little short of first-class, using the phrase in its exact sense. Even more can be said for the facitily with which it exercises its running gear, this being in sober truth highly phenomenal. Its ordinary note consists of a clear, sustained, and withal somewhat plaintive whistle, keyed to a single tone in the middle register. For the most part one hears this sound uttered by the bird as it takes to its wing in alarm. This, however, is not invariably the case, although it cannot fairly be affirmed for the time that it is invested with any significance of a noticeable broad nature. Concerning the qualifications of the biped for table uses nothing need be said; since it is notoriously a luminary of the leading order in the gastronomic firmament.

From the fact that in the eastern section of our country plain lands constitute a relatively meager geographical element of the region, the upland plover is nowhere a truly familiar avian figure here. It is far different in the West, however, since, with its greatly open character, this part of our national domain proves specially attractive to the creature, and at the right season the prairies of all the Western States and Territories which yet retain their primal features unchanged, are shown to be abundantly peopled by it. During a long residence in Minnesota it was the writer's good fortune to be afforded the opportunity of seeing much of the species, and the results of these observations, both as they relate to the creature's course of life thereabouts, and the usages best commended to the sportsmen of the section in engaging in its pursuit, it is his present purpose to lay as succinctly as he can before the reader.

The particular locality in Minnesota wherein my investigations in the line indicated were prosecuted comprised the prairie district in the vicinity of Minneapolis. Here the upland plover made its appearance by the middle of May, and almost simultaneously with their arrival the birds chose their mates. In their earlier stages these unions were marked by little passionate ardor, the parties thereto being content simply to rest or range about side by side. This condition of affairs continued for about two weeks, or till the first of June drew near. At this period the interest which the pair felt in each other suddenly became so intensified as to effectually sweep away all barriers of reserve between them, and they gave themselves over to the freest interchange of amorous dalliance. So far as the avian swain was concerned at least, this love climax proved also to be a factor which gave the note to much of his general demeanor. More especially he was observed to indulge in signally extravagant exercises on the wing at the time. These consisted for the most part of hovering bursts upward and on a due perpendicular line till the creature had reached a height of fifty or sixty feet, when the particular phase of feeling by which it was moved seemed to reach its term, and the bird descended on a pinion used quite after its normal fashion by a long slant to the earth. The direct meaning of these fantastic demonstrations was not apparent. It would naturally be inferred under the circumstances that they were performances which in part at least were intended to excite the admiration of the female. But if such was the case it was in no wise verifiable, since it was not definitely shown that his sweetheart even honored them with a glance.

Be this, however, as it may, it was soon to be seen that our feathered heroine was occupied with a wholly fresh set of relations. These, as the reader is doubtless ready to surmise, were of a maternal nature. The opening date of the term wherein she figured in this character, fell generally in the second week in June, and from this point of time for an interval of a month or six weeks, one encountered the bird only on the rarest occasions. The work of deciding upon the location of the family nest as well as rearing it was, it is hazarding but little to say, exclusively her own enterprise. The materials used in the edifice in question included the common forms of prairie grass, and in shape and general appearance it much resembled a larger edition of the red-shouldered blackbird's nest, with the difference, however, that it was of somewhat lighter construction. Its site was on the ground, and usually fixed in a portion of the prairie well removed from house or farm or routes of human travel, although occasionally it turned up in places which were not to be designated as noticeably sequestered. The eggs of which it became the repository were four in number, and of a pale clay color, dotted with amber spots. These also, like the eggs of most sandpipers, were so disproportionally large at one end that they diverged greatly from the conventional egg form, and were more nearly pear shaped. Their discovery was a piece of good fortune which the oologist could not often boast of, one or two sets of the treasures being at the utmost all that he would have to show as the result of a season's toil. This, however, as the initiated in the sphere of work in question will understand, was in a great measure ascribable to the nature of the field of search; oologizing on the prairie being a venture noticeably beset with crosses and hindrances peculiar to itself, and calling for the address of the Indian or trained prairie scout to make it more than the veriest venture.

The purpose of the female plover as she withdrew into retirement was, as will be guessed, no secret to her partner, and sharply on the heels of the event, he exhibited himself in an entirely fresh rôle—that of budding plover fatherhood. In due order the feelings which now dominated him were those of egregious self-satisfaction and family solicitude of the gushing stamp; and, as may be inferred, in giving vent to these sentiments his methods partook noticeably of the spirit of oddity, which at the time had so much to do in shaping the great run of the fashions in which his expressional functions were exercised. The arena selected by him for the portrayal of this new part mostly comprised the face of the prairie, where, so long as he was undisturbed, he strutted about throughout the entire day, visibly gloating over the honors and preferment that had been vouchsafed him. Being approached too closely, however, by observers or passengers over the prairie, he was fain to jump at the conclusion that the presence of these parties boded no good to his household peace; and he was, therefore, moved to take such steps as he conceived would effect their removal from the scene. In setting about this undertaking he took to his wings, and nearing the personages whom he would usher off the field to within the distance of seventy or eighty yards, he sailed about them with an air meant to counterfeit partial inanity, till he caught their full attention, when, with a still more emphasized show of decrepitude, he bore away toward the outskirts of the plain, clearly hoping to tempt pursuit.

If this stroke of strategy failed to succeed as he desired, he was commonly ready to supplement it with another device greatly out of course with a wader of his class, and which he doubtless believed to constitute a piece of finesse not to be transcended. This was to alight in a lame sprawling way, on a fence or dry limb of a bush, within eyeshot of the subjects of his oblique regards, and thus seek to lead them to conclude that he was in a state of literal helplessness, and that an immediate rush upon him would make him the prize of the party executing the measure to a dead certainty. These tactics he repeated as long as he persuaded himself that they were to be serviceably employed, and when he decided that they had answered their turn he was seen to betake himself straightway to his ecstatic peripatetics once more.

Ere long, however, another spirit came over the bird, as at the end of a couple of weeks or a little after he awoke to the right sense as to the line of conduct befitting his paternal condition, and rejoining his spouse, he divided with her in all soberness, the supervisionary care of their offspring, which even thus early in their lives had bade adieu to their nest. Doubtless for the reason that their young were virtually secure from the attacks of hawks therein, the places mostly frequented by the birds at this time were the more heavily grass-grown sections of the prairie, and as will be understood, in seeking these resorts they became very widely dispersed over the signally extensive expanse, and so far as the casual observer was concerned, at all events, quite eluded his eye.

But their stay in these deeper fastnesses was of comparatively short duration, since by the first of August the juvenile scions of the family had already attained a stage of bodily and mental vigor that enabled them to cope successfully with the main run of such dangers as were incident to their career, when with one accord, both old and young took their way to grounds of a totally fresh stamp. These embraced certain barren stretches of the prairie which were now populated by myriads of grasshoppers, spiders, crickets and other like insectivorous forms, drawn hither to the end of luxuriating in the entirely unimpeded downpour of the solar warmth. Here the birds took up their quarters by the hundred; and as I scarcely need say the day became one protracted feast with them. The etiquette of their gustatory observances at the time was seen to be of the usual family order, much eager bolting characterizing their disposition of their food when it was once laid hold of, and no small degree of tumultuous flying hither and thither being practiced by them in their endeavors or seize upon it. One was also led to remark that under these circumstances the bipeds were singularly silent, the juveniles of the tribe being wholly dumb, and their elders sounding their pipe only at greatly protracted intervals. That they should add to their avoirdupois during these days with almost porcine celerity was but after the proper order of things. But this pleasant process of larding themselves was in nowise permitted to conduce to the enslavement of the creatures, since, with the opening of the third week in August, they seemed to hear a call from the south which gave a wholly fresh turn to their thoughts and aspirations, and in conformity with which they set forth for the region indicated with precipitate speed.

While the plovers were massed together in the open parts of the prairie as above described, it was not unnaturally their fortune to signally fire the sporting element of the district and enlist its energies freely in the attempt to effect their capture.

In many instances in engaging in this undertaking the shooter was content to stake his chances for success on his skill as a stalker. But the outcome of dealing with the matter in this way was seldom conspicuously brilliant. So far as the older birds were concerned in any event, creeping upon them, waylaying them and the like, came to little or nothing. With the less matured members of the tribe arts of the sort succeeded better. Still, when all is said, the highest count of the bag even through an all day's campaign, wherein measures of the above nature constituted the strategic machinery, rarely exceeded ten or a dozen birds.

The method commended to the more painstaking gunner in addressing himself to the task in question was of a radically different character, inasmuch as he invoked the aid of a horse and buckboard and a coadjutor in the shape of a driver. Attempts to approach the birds in this manner turned out as a rule all that one could reasonably ask. The young birds anyway were to be neared as closely as was necessary, with little or no trouble, by this device. The trustfulness of their elders was of course less to be depended upon. But if the driver was genuinely competent they too were brought within fair striking distance by this means in goodly numbers. That the gunner needed to second the driver worthily here goes without saying. More particularly it was incumbent upon him to be up to the trick of making good his aim when both bird and buckboard were equally under free headway; or, in other words, it was specially desirable that he should be a strong snap shot. When this was really the case with him the enviable fortunes of the enterprise were assured beyond peradventure; the bag secured being—humanely speaking—merely limited by the scope of his ambition. W. L. TIFFANY.

MUSKRAT AS A FISH-EATER.—*Editor Forest and Stream:* In a recent number of the FOREST AND STREAM Dr. C. H. Merriam asks for more information regarding the fish-eating habits of the muskrat, and the following brief note is sent in for a slight aid in this direction. The muskrat is the most abundant mammal to be found in all the marshy parts of Alaska, south of the Arctic circle at least, and during my residence in that country I had frequent opportunity to learn of its fondness for fish. Often when skirting the border of a pool or following the edge of some sluggish stream in the evening or during the dim light of the Arctic nights in summer, I frightened the muskrats from the body of dead fish on the bank at the water's edge. The fish were usually small sluggish species and such as could have been easily caught by the animal itself although it feeds upon fish not killed by itself. That the muskrat will feed upon dead water fowl I have also had frequent occasion to notice, and like many other rodents, especially among the *Muridæ*, this animal is undoubtedly carnivorous whenever a favorable opportunity offers.—E. W. NELSON (Tucson, Arizona, April 22).

THE ARROW-HEAD IN THE SWAN.—*Editor Forest and Stream:* In a recent issue of your paper is a cut of an iron arrow-head taken from a swan killed in Chesapeake Bay. During my explorations in Alaska I secured several quivers of iron-tipped arrows, notched like the original of your cut, and the form being unusual. The region whence I secured my notched iron arrow-heads is probably the same whence the swan brought its unwelcome burden. My arrows of this character are all from the Upper Yukon River, about two hundred miles above Fort Yukon, and are from the Tutchóne-Kutchin tribe of the Chippeway Indians. I scarcely need add that swans are very abundant on the Upper Yukon. —E. W. NELSON (Tucson, Ariz., April 22).

RECENT ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDEN.—Received by purchase—Four flying squirrels, two gray ichneumons, two black apes (male and female), one white-nosed monkey (female), one bonnet macaque, one yellow baboon, one pig-tailed macaque, eight common macaques, one black bear (male), two chacma baboons (male and female), one ibex (male), one peccary (female), one roseate cockatoo (male), two slender-billed cockatoos, one Alexandrine parrakeet, two sandhill cranes (male and female), two South American parrakeets, two red-crested cardinals (females), two European swans, one Polish duck, one American bluejay, ten European widgeons, sixteen green-winged teal, one bar-headed goose (female), and two canvas-back ducks.

Game Bag and Gun.

AMERICAN AND IMPORTED GUNS.

Editor Forest and Stream:

I have carefully read a letter from "Wells" criticising Mr. Greener's book on the "Gun." Mr. Greener is an English gunmaker, and his book is a cheap way of advertising his work. Some allowance must therefore be made for his statements—statements, of course, to his own interest. The book contains a great many incorrect statements besides those on wing-shooting. The assertion that Damascus barrels are the weakest of all twist, and his laminated steel are the strongest, is one error, as also are his remarks on machine-made guns, which mean American guns. His reason why the Damascus barrel is the weaker is to a gunmaker quite absurd, however good it may appear to those who are not gunmakers. In the first place, he gives the methods of manufacture, and states that in twisting the iron the fibers are liable to be broken, and thus are rendered weaker than other twist barrels. Now gunmakers know that the same process which welds the bars will also weld any fiber which may be broken; and experience and common sense teach us that twisted fibers are stronger than those which are not. If the accidental breaking of the fibers of the iron in Damascus barrels make them weak, it would only prove his to be weaker, for while the Damascus might have one or two fibers broken by accident, his, in short, are broken by intent by the hundreds, being made up of small scraps and not of bar iron, which is sufficient in itself to show that Mr. Greener has the facility of stating things which are not so.

As I said, he has his business to advertise, and I am prepared to make an allowance for an English maker running down American work; but I cannot make the same allowance for "Wells" when he backs up Mr. Greener in depreciating American work. "Wells" may be capable of criticising Mr. Greener on wing-shooting, but when he attempts to criticise American work in comparison with foreign work, he undertakes that which his own statements prove he knows but very little of, when he says he cannot see over $150 worth of work on a gun, except in fancy work. If "Wells" were a judge of work he would be able to see where over $150 worth of work could be put on a gun; and facts show that some of the finest guns have the least fancy engraving on them. He states that the best English barrels may be had for $75. Granted. Now if the barrels cost $75, the locks to suit them will cost $75 more, for fine barrels and equally as fine locks cost the same. A piece of wood to match will cost from $12 to $15. Now, commence the frame and actions and the mountings, $75, and say nothing for work of fitting up, and here are figures amounting to $237. This, in itself, is sufficient to show that "Wells" is no judge of what constitutes a fine gun, and, therefore, has no right to come out in public print and condemn American work, for in doing so he is doing an injury to the country and American mechanics; for when any one makes what is supposed to be a disinterested statement, they are supposed to know what they are writing about, and they will go far to injure the reputation of American work, and in that way do an uncalled for injustice. "Wells" states that there is too much "cheap John" work about American goods. This may be; but from his statement about the $150, it seems to me that he is one of that sort who patronizes the "cheap John" classes; but he wants the foreign manufacture, they are so Henglish, you know.

I will state facts for the benefit of "Wells." There are thousands of English and Belgian guns imported to this country that are no more to be compared to Colt's or other American makers than a five cent nickel is to be compared to a gold dollar. Americans this day make the best gun for the money that any country produces. I am a gunmaker. I served my time with one of the best makers in Europe, and I claim to know what I am talking about. I am in no way interested in any make of gun; in fact the machine-made gun is an injury to me; for the more of them that are in use the less work I get. I repair a hundred English guns to the one American. The locks of the American gun are plain and of good material; the tumblers and sears are steel, while nine out of ten of the English guns imported have tumblers and sears of iron, not even case-hardened, with the names of respectable makers fraudulently put on them so as to swindle the purchasers, men like "Wells," who think that nothing good is produced in America. Some American dealers have no use for machine-made guns, for there is not that opportunity for fraud that there is in imported ones. If "Wells" were a judge he would soon find out that there is ten times more "cheap John" about the average imported guns than there is in the American. The American gun is plain and well fitted, with nothing of the "cheap John" about it.

Ten years back an American if he had $100 to spend on a watch, couldn't have been induced to buy an American watch; it was a machine-made thing; therefore most of the American watches were made on the cheap and medium class, if fine ones were made they could not be sold unless they had a foreign mark on them. This is what prevents the best class of goods from being manufactured in this country. To-day high-priced watches are manufactured in America and sold with the maker's name on them; but this has been only since the Swiss Commission reported that our cheap machinery-made watches were equal to their best; so you see the Americans had to be informed as to the good quality of our watches by foreigners before they were willing to admit it and pay a sufficient price for a fine piece of work—and just so with the guns. If Americans can make as difficult a piece of machinery as a watch by machine and have it rank among the first, why can they not make a gun as well? Simply this, because no foreign commissson has as yet proclaimed their superiority for the money. When this may be done then the amateur judge will pronounce them the best, and the American shoddy will not be ashamed to be seen shooting with an American gun. Some may think that I am severe in making such a statement, but I can assure my readers that I have good grounds.

Some years back I made a rifle, price $100. A well-known shot and would-be judge, examining it, made the remark that it could in no way compare with Purdy work. I answered, "Neither does the price; give me Purdy's price and you shall have Purdy's work." He laughed at the idea, and wanted to know if I would presume to set my work alongside of Purdy's. I was compelled for the time to submit to the jeer; but my time came, some time afterward, and in a way least expected. A Purdy gun, manufactured to order at a cost of $550, was brought to me to be cleaned. I saw the judge (?) coming down the street, and I remarked to a gentleman in the store, "Here comes Mr. Blank, and I mean to have some fun at his expense." I had just finished a gun for my own use, and taking the Purdy out of the case as he came in, I said, "How do you like this gun for an imitation Purdy?" He answered, "Pretty fair gun, but not to be compared to Purdy's work." Now he shot a Purdy gun himself, but it was an old pattern, while the one I was showing him was a new and later date. I then handed him my own gun, which I had made, and asked him how much difference he would give in preference of the imitation Purdy over mine. He examined both guns attentively and said he would not give my gun for two like the other. I then told him to examine it again, for although an imitation it was a very fine piece of work. He examined it again and made the same statement as at first. I then told him it was a genuine Purdy, but could not get him to believe it until he found out the owner. If ever you saw a crestfallen man that amateur judge of shotguns was one. He went away, and in about two hours returned, making me an offer of $250 for my gun with this condition, that I would remove my name and substitute Purdy's. His offer was rejected. So much for American work and American judges.

About the same time I received an order to make a gun for $175. As the gentleman wanted the gun by a certain time I proposed ordering one for him; this he would not consent to, so I began the work for him. Every day he visited me and saw the gun made by me, piece by piece, and I think I gave him more individual work than any maker in England would have done. I received the barrels in the tubes. I put them together, breeched, made the locks and mounting, stocked, finished and engraved the gun for him. I got his permission to exhibit it at a coming fair, which began three days after I had promised to deliver it to him, and together with a rifle I had also made, I placed it on exhibition. This was in 1869. I received first on both guns, a diploma on each for the best gun made in the State, and a silver cup on each for the best gun on exhibition open to the world. The judges stated that they had not thought such a gun could be manufactured in America. The owner afterward exhibited the same gun in Alabama, and took the premium for best gun on exhibition. Some years afterward I exhibited it against a gun costing $475. Two gunmakers were on the examining committee. Both guns were entirely stripped, and after close examination, I received first prize, a gold medal valued at $50, for the best double gun. The gun was worth more money than I got for it; for I did the work for exhibition and the owner benefited. He bought a common English gun to shoot from a boat to use for one trip. He paid $18 for it. It had Purdy's name stamped on the barrels. He brought it to me to examine and see if it was safe. I told him it was as far as the barrels were concerned, but that the locks were not safe, which is the case with all common English guns, but these he said he would risk. On his return he told me that he had played a good joke on a friend of his. They started on a hunt, and when the friend looked at the gun, which had been made to order by myself, he remarked, "Pretty nice gun," and when he saw the name on it, said, "Imported by —— of ——?" "No," said the owner, "he made the gun for me." "How much did he charge you for it?" was the next query. "$175," was the answer. "Phew!" he whistled, and said, "By thunder! he knows how to charge for his work." Nothing more was said that day on the subject. The following day they went on the river duck shooting, when the gentleman took his $18 gun with him. He handed that to his friend, and asked, "What do you think of this gun?" He looked at it and answered, "You have fine guns." "What do you think of $500 for this," inquired the gentleman. "Oh!" was the reply, "Purdy is a fine maker." "You don't whistle to-day," remarked the owner. "I don't understand," was the reply. "Why," said the gentleman, "You whistled when I told you my other gun cost $175." "But," was the answer, "you don't compare this gun with the one you had yesterday. Why, the maker of this is the finest in England." "Well," replied the owner, "I should not think I would compare them. This gun cost me $18, and the name on the barrel is a fraud, Purdy never saw the gun." Now, no doubt but this judge of work and prices would be just as willing to air his opinions on American work as "Wells" has been. Sometimes persons expose their ignorance when they least expect to. In the case just noticed, the man knew that Purdy was a fine maker only from reputation, and made himself a laughing stock.

It is amusing to see what blasted fools some men do make of themselves. They know but little and they think every one as stupid as they are. One of this sort brought a gun to me for repairs; it was a Belgian gun and had "Manton" stamped on it. He remarked to me when he handed it to me, "This is the finest gun you ever had in your store. My grandfather had it made to order by old Joe Manton, and it cost $500." I looked at him in astonishment. The gun was not five years old and the cost was about $16. I told him he must be mistaken. He immediately became very angry, and said I did not know a fine gun when I saw one. I took the barrels out of the stock and showed him the Belgian proof, when he snatched the gun out of my hands and left the store, and, although we were soldiers together and brother officers, he has never spoken to me since. This circumstance taught me a lesson; and now, if a man were to bring in a broomstick and say it was the finest gun I ever saw, I should not contradict him. I have had a number of similar cases since. One day a man brought me a gun to repair, with "W. Richards" on the barrels, and worth about $40. He said it had been made to order by Westley Richards at a cost of $300. I said not a word, only looked at him. A doctor who was present noticed my look, and when the young blood had gone he inquired what it meant. I told him my experience, and showed a "Westley Richards" and made comparisons. He laughed heartily, and said it reminded him of a circumstance which he knew of where just as great ignorance had been shown. A gentleman of his acquaintance had set himself up as a judge of fine paintings. He had all the names of the masters at his tongue's end, and, like the gun judges with Manton, Purdy, Richards, Greener, Dougall, Scott, Powell and Riley, he could discuss the merits of each quite fluently. So far did he carry this that whenever a new painting was purchased by a wealthy citizen, he was at once sent for to express his opinion. One day he and the Doctor stepped into a paint shop, and the judge's attention was immediately drawn to a painting which was hanging against the wall. He said, "Doctor, look at this piece of work, by one of the masters. Why, it is splendid. I know the author of that, but I now forget it; but he was one of the finest in his day." He inquired of the clerk, who said he thought it belonged to the "boss." "I wonder," said the judge,

"where he got it from. It is the finest piece of work I have examined for years." Soon after the painter came in. The judge asked him, "Mr. ——, is that picture yours?" The painter said it was. "Will you sell it?" "Yes." "How much will you take for it?" "Five dollars." He put his hand in his pocketbook and drew out a V, while the painter unhung the picture, and he whispered in the Doctor's ear, "Why, what a fool he is; it is worth a hundred." Then turning to the painter he inquired if he knew the history of the picture and who painted it. "Yes," said the painter, "I did." The V was returned to the pocket and the painter lost the sale, while the Doctor's opinion of his friend's judgment in matters of art, you may know, was considerably less. He had read but did not know anything of the old masters and their creations. So with the gun judges; with the coolest assurance they will say to you, "There is no use in your saying this or that to me, for I have handled a gun all my life." So had the gentleman above seen pictures all of his life, and so have I carried watches for thirty years; but I have better sense than to put my opinions against a watchmaker's, or to state in public print which country makes the best. I will leave that to men in the business who are judges, and I will not injure any country or individual through my ignorance.

Now, understand me, I do not mean to say that the best guns are manufactured in America. What I do say is that the best gun for the money is made in America. A $50, or $75, or $100 American gun will outwear any foreign gun of the same price, and in purchasing them there is no danger of ever being swindled, as you often are with those of foreign make. The reason why the finest guns are not manufactured here is that in nine cases out of ten, if an American is able to buy a $500 gun, he would not have it made here even if he knew it could be made better, and why? Because it is not fashionable, and would lack the name unless he could get one manufactured at half price and have an English maker's name stamped on it, like the chap who wanted me to erase my name for an English maker's. And, lest your readers may think I write this to advertise my business, you will have to excuse my name and accept my *nom de plume*, VITUS

SOUTHERN SHOOTING GROUNDS.

Editor Forest and Stream:

In pursuance of your idea of investigating new fields for sportsmen in the South, I took special notes by the way between St. Augustine and this city, coming by the Waycross and Pensacola & Atlantic Railroad from Jacksonville. Since the line has been opened between Waycross and Jacksonville, it is much easier to get into the rich hunting grounds of the Okefinokee Swamp than formerly. Now, those daring hunters who want to test their bravery and skill can do so by following bear, wildcat, panther, and other dangerous animals in the depths of that splendid field for game.

Going southwest from Waycross, there are numerous points in the neighborhood of which game of a most enticing character abounds. Within easy reach of Valdosta, Quitman, Thomasville, Bainbridge and Chattahoochee there are plenty of small birds, fox-squirrels, wild turkeys, pheasants, quail, deer, and occasionally bear and panther.

Among the knobs and numerous streams that abound west of Thomasville to the river, there is as wild country as a hunter ever trod, and it requires the quickest kind of eyes, quicker powder, and dead shot work to bag any kind of game in those jungles. Those sportsmen who have been haunting the section, report that the sport is lovely and exciting beyond anything that can be imagined. Much of the interest that attends a season of shooting in that section, lies in the spice of danger and adventures that occur daily to those who indulge in that kind of pleasure. There is a deal of jungle in the region, in the lairs of which it is very necessary to travel with eyes wide open and ready fingers to call on the trigger in sudden emergencies. This is in broad contrast with hunting in the pine forests in the eastern part of Georgia, where there is comparatively no undergrowth, and where a deer can be seen a mile away browsing on the low grass, and where they see the hunter and are smart enough to keep beyond long range.

Crossing the Chattahoochee River, we came by the new railway to Pensacola, and found the route one of the most delightful that we have ever traveled on in the South. The Louisville & Nashville Railroad Company owns the line, and have provided the trains with buffet and sleeping cars and every modern appliance necessary for the comfort of travelers. Finding that this new line will be popular with hunters and anglers, especially from the North, Superintendent Harahan has arranged matters so that sportsmen shall have every advantage they may desire to pursue their object in that quarter. Mr. Chipley, the superintendent of the line, has a fondness for dog, gun, rod and line, and consequently a kindred feeling for brethren of the craft. Hence, the order stands that dogs and guns must be well cared for on the P. & A. R. R., and those who hunt along the line will find royal treatment, kindly favor and attentions that will surely make the most exacting fall in love with the management that provides for their enjoyment.

With regard to the quality of sport and game ground within convenient reach, it is only necessary to state that the field is entirely new, has never been pot-hunted, and seldom invaded by professionals or parties of amateurs. Those who go would have to take camp equipage, but so little is required for shelter and cuisine that the equipment need not be anything more than each person can readily carry. Among the pines, there are no musquitoes or noxious insects to worry one, and the balsamic odors always pervading the atmosphere are simply charming. Pheasants abound in all portions of that region, and quail are plentiful in the vicinity of every old plantation throughout that section of South Alabama. There is plenty of big game also to the north and south of the line in the vicinity of Westville, Crestville, Marianna and Milton. Along the streams in this region, there are old plantations, in the surroundings of which game of the most attractive kind abounds.

In the vicinity of Milton, Escambia Bay and all of the broad and magnificent sheets of water that are in that region, there is more fine duck and snipe hunting than can be found in any other area of like size on this continent. This kind of game has seldom been disturbed in their haunts, and finding safety they have increased to astounding numbers. The hunters who have investigated this new field report extravagant results of their shooting, and what they say is t empting beyond all measure to an old hand who likes to try new and prolific ranges to test waning skill and work within the limits of our lessened powers of endurance and fatigue. Oh, it is very nice to hunt lazily and yet make bags in an hour that in other lands and years required a day of hard work to fill. In this land of soft sunshine and sleepiness, where even the fish and game take their siestas carelessly, it is charming to hunt without much labor, and snooze beneath the light of tropical starlit skies. With regard to fish, I do not think there is another such stretch of water on the globe for varied and delicious fish as that body of soft blue and green which lies to the east of Pensacola. Just think of pompano and kindred fish, the very name of which delight epicures beyond all that the eloquence of words can express, and to sail on those waters, drifting with the soft winds that blow odorous from isles where the tropical sun distils thousands of perfumes from myriads of richest flowers. There is nothing outside of heaven that one can imagine so delicious, so balmy, so elysian. I am in love with that glorious south coast, for in its sweet airs there came to me healing balsams, which drove the demon of fever from my blood. Its forests gave to me appetite for the tender and rich game with which they abound. Its waters have supplied delicious fish, and hence it is with the zest of a pleased taste and renewed health I write this record, that others may go there and do likewise. DR. I. E. NAGLE.

NEW ORLEANS, La.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

Two of your correspondents have spoken of using a pink-edge wad on powder. I think this a poor plan if shells remain weeks or months loaded, as the grease will certainly escape and affect the powder to a certain extent. Will some one please try the following, and report success through your columns: Over powder place one Baldwin wad, then two pink-edge wads or one felt, and then one Baldwin or cardboard wad; over shot, one Baldwin and cardboard. This last, over shot, is to prevent wads from starting, as two are more liable to keep in place than one. I use 3¼ drams powder for small game and 3⅝ drams for larger; 1⅛ ounces shot. My gun is a Parker 12-30, 8 pounds 5 ounces. It is certain death at 40 to 50 yards, and if I do miss, I blame the gunner and not the gun, and when I make an extraordinary shot I credit neither gun nor gunner, but attribute it to the god of chance. M. M.

GIRARD MANOR, Pa., April 10.

Editor Forest and Stream:

When I first commenced to collect, several years ago, I used a 12-bore double-barrel muzzleloader. I next bought a single-barrel gun, 12-bore, and with this small, light gun I did some very good work. The last gun, one I am now using, is a 14-bore double-barrel gun weighing 6 pounds 13 ounces. I have done some good shooting with this gun this winter, and have found it large enough for all kinds of birds and animals. The last deer I shot was a large, fine buck. I shot him 30 yards off, putting ten very large buckshot into his side, all of which went in back of the fore shoulder. The shell was loaded with 4 drams powder and 14 shot. Can many of the 12 and 10-bores beat this? I am well aware that for shooting at large bunches of birds a 10 or 12-bore gun will kill more birds than a 14-bore, as they can use more powder and shot in the large bores, but for single birds of any kind give me the small bores. I think the next gun I buy will be a 16-bore. CHESTER.

Editor Forest and Stream:

My own experience of some thirty years with the shotgun of various makes convinces me that if the best results are sought—close pattern and hard hitting, the shells should fit the gun chamber perfectly, being neither too long nor short; and there should be sufficient wadding over powder to prevent the escape of gas. My guns have never indicated that one wad would do it effectually, except it was a heavy felt wad.

A short time since I fired a few experimental shots from a 10-bore Parker, for the purpose of ascertaining difference, if any, in result between 2⅝-inch and 2¾-inch brass shells, gun being chambered for latter. The shells—four of each—were loaded with 4 drams Hazard FG powder and 1⅛ ounces (actual weight) Tatham's No. 4 chilled shot, with two pink-edge wads No. 8 over powder and one brown No. 8 over shot. I fired two shells from each barrel, then cleaned the gun thoroughly and fired the other lengths in like manner, distance 40 yards from muzzle of gun, at 30, 24, 18 and 12 inch rings, using same center for each. Average result of 2⅝-inch shells was: 30-inch ring, 112¾ pellets; 24-inch, 88⅝; 18-inch, 63½, and 12-inch, 35⅜. Of 2¾-inch shells: 30-inch ring, 123½ pellets; 24-inch, 104½; 18-inch, 77½, and 12-inch 44⅝. Not a shot but showed in favor of the long shells, the small-sized rings showing greater percentage of increase, that of 12-inch averaging some 35 per cent., 18-inch 22 per cent., 24-inch 18 per cent., and 30-inch 9½ per cent. over short shells. I had no means of determining penetration, but as most of the pellets went through a three-quarter-inch pine backing on which the targets were tacked, think either showed force enough. The rings were made after shots were fired, so as to get the center of pattern in each target. E. M. G.

NEW JERSEY.

Editor Forest and Stream:

My gun is a 12-30-8¼. I load for ducks 4 drams powder, 1 ounce No. 6 chilled shot, two pink-edge wads over powder, one over shot. For small game 3¼ drams powder, 1 ounce shot. I incline to chilled shot at all times, as it gives better penetration with the same amount of powder. I think coarse powder gives the best results in breechloaders, also the finer sizes of shot. I find no trouble in killing ducks with No. 6 chilled shot up to 50 yards, killing wood ducks often, when hunting snipe with No. 9 chilled shot. I generally fasten the top wad with a little mucilage, having no trouble with them starting. Another thing I notice, that most persons like a 30-inch barrel. I once owned a gun with a 28½-inch barrel that was a splendid shooter, and the gentleman I shoot with uses a 25-inch. H. E. H.

BRIDGEPORT, Conn.

Editor Forest and Stream:

Your correspondent "S. S. W.," in issue of April 10 says—speaking of my remarks in reference to 10 and 12-bore guns:—"Now if he will tie the 12-bore down to the proper charge for a 20-bore, the 12-bore will be in the same place as the 10." I reply, not quite. "S. S. W." is mistaken. A charge of 2½ drams of powder and 1 ounce of shot with a 12-bore, will give a closer pattern at 40 yards than can be got out of a larger charge of powder, with sufficient penetration to kill a duck at that distance and even ten yards further. I have killed a black duck sitting at fully 40 yards, with barely 1 dram powder and 1⅛ ounces of shot, "stone dead," too. For duck shooting with a 20-bore, the charge of powder should not be less than 2½ drams, and that of shot not less than 1 ounce. With this charge, and careful holding, a 12-bore gun, chokcd on the same principle as my hammerless, will give a good account of itself every time, up to 50 yards and even 60 yards when held straight. A 10-bore with heavy charges and consequently larger killing circle is better, I readily admit, for shooting at flocks—a little better only—but I cannot see the necessity of a weapon heavier than 7½ pounds and 12-bore, to kill a single bird at all ordinary ranges, ending, let us say for certainty, at 80 yards as the maximum. By this I do not mean to admit that a flock of ducks, either sitting or flying, would be quite safe in front of a 12 bore gun charged with either No. 1 or No. 3 shot.

From the drift of opinion as indicated by many articles in your journal, it seems to me that the day of unnecessarily heavy guns and wasteful shattering charges is rapidly drawing to a close. I have given a pretty fair trial to both the 10 and the 12, and I must confess to a preference for the latter, not because popular opinion is now largely in its favor, but on account of its being—taking it all in all—according to the tangible and practical results of my experience, the handier and the better gun. ALGONQUIN.

OTTAWA, April 14, 1884.

Editor Forest and Stream:

I have been not a little amused in reading the article by "Byrne" in your issue of April 24. I again assert the "truly wonderful fact, preposterous as it is," that a heavy charge of coarse, slow-burning powder, fired from a 26-inch barrel, will blow some of it out without being burnt. In regard to his lunar tube experiment, I think if he stayed here among his friends and would close the end of that tube with his hand, it would be torn to pieces by the grains of unburnt powder, "although gunpowder is notably sensitive to fire." I do not state this as "a fact, as my personal experience has not proven it." Now, about what "A." finds in the snow. I admit that "powder is a compound substance, made up of three very different things, with no two things exactly alike." I also admit that, with some gunners even their first shot in a day's hunt is from a foul gun, and the marks in the snow are from "the loosened powder scale left in his gun from former charges," but I again assert that a heavy charge of slow-burning powder, forced from a short gun barrel, will stain that snow with its unburnt grains. I have lived for many years in the anthracite region of this State and have had some experience in the mines, and on several occasions, when the miners have been injured by premature blasts, have picked from their flesh grains of powder that have been blown there by the force of the explosion. I invite "Byrne" to come over here among these Blue Ridge hills and hunt quail and pheasants with me. My guns, dogs and team are at his service. While we differ we can be friends.

SPICEWOOD.

CENTRALIA, Pa.

Editor Forest and Stream:

I have used shotguns for the past twenty-five years, often owning at some times two or more of different gauge, length of barrel and weight, some of them chokebore more or less, others cylinder, including muzzle and breechloaders, and have made many experiments in the matter of testing the shooting qualities of different gauges as shown by pattern and penetration on target, the only true test. Some of my experiments in loading will be found recorded in FOREST AND STREAM, issue of March 29, 1883, page 169, entitled "Hints About Loading." I believe, for the reason there stated, that better results can be obtained as to pattern, and especially penetration, by loading either breech or muzzle-loading guns substantially as described than by any other mode, viz.: Use about five parts coarse and two parts fine powder, always putting fine powder on top of the coarse; for wads, use one heavy cardboard wad one gauge smaller than bore of gun, then one good felt wad one or two gauges larger than bore, on this and next to shot put a firm leather wad of same gauge as cardboard wad, with a charge of shot properly proportioned to bore of gun and amount of powder used (and this must be ascertained by a series of experimental shooting with the individual gun), with a felt wad on shot. I recommend this mode of loading for both muzzle and breechloaders, unless paper shells are used, when the large felt wads might cause the shell to bulge. Of course, it takes a little more time to load, but it produces clean killing.

I do not believe there is any great difference as to the actual killing range as indicated by penetration of the several gauge guns in common use, while there is a great difference in the hitting circle or range in favor of an 8 gauge, loaded with 6 to 7 drams of powder and large amount of shot, over the 20-bore, with its light charge of powder and shot. One of the hardest hitters I have ever seen shot is a 16-bore, 23-inch barrel, single breechloading gun converted by a country gunsmith from an army carbine. Weight 6½ pounds. But little inferior to this gun is a semi-hammerless of 12-gauge, 30-inch barrel, and of not quite 6 pounds weight, made by the American Arms Company, of full choke, muzzle being contracted by swedging. It is a cheap twist gun, but the pattern and penetration is extra. Both of these guns are worthless for any shooting except sitting shots at long range. One of the best field guns I ever used had been a 32-inch barrel, 10-bore, of about 8 pounds weight, a muzzleloader, the muzzle of one barrel had been blown off through the carelessness of the user, who accidentally filled it with mud which was not removed until it was carried away with the muzzle attached. Previous to the accident the gun was nothing extra as a shooter. As an experiment, the barrels were reduced to 26 inches in length, nothing further being done to them. The right barrel proved to be extra, both for pattern and penetration, while the left lost nothing by the change in length.

My preference is for a full 12-bore, 28-inch gun, of 7½ pounds weight, right barrel cylinder, left modified chokebore. I chose such a gun after having tested several different gauges, length of barrels and weight of gun, on woodcock, grouse, rabbits and other game found in cover shooting in Central New York.

Will some one who has examined a Pieper "rifled choke" inform me through columns of FOREST AND STREAM what form of rifling or grooves is used, and how many are put into a 12-gauge gun; also state how broad and deep such grooves are.

I quite agree with "Green Wing" and "Vox" that there should not be a shoulder at inner end of shell chamber, especially if metal shells are to be used. There was none in the 16-bore I have mentioned, and but little in the semi-hammerless, and no gun of any gauge, either muzzle or breech-loading, will give better penetration.

Is the pistol grip in its several forms an improvement on

the old-fashioned, long, slim, easy grip, or does it not have a tendency to cause the butt of the gun to be raised too high in snap-shooting, with consequent under-shooting at the bird? Is it not a fact that the substitution of the rubber butt-plate in the form now used for the old-fashioned metal one hollowed out to fit the shoulder is detrimental to correct aiming in quick shooting? M. E. B.

WILLETT, N. Y.

TWO-EYED SHOOTING.

Editor Forest and Stream:

In response to your kind invitation to "contribute occasionally" to your valuable journal, I thought an explanation of how two-eyed shooting is practiced and its advantages over the almost universal method of sighting over the rib with one eye shut, would, to some of your readers, be interesting and instructive. What I mean by two-eyed shooting is keeping both eyes wide open and not sighting the gun. I know of no one (except myself) at the South, who shoots in this way. At the North, I understand it is not the rule but by no means unusual. To succeed at all in this kind of shooting, it is imperative that the gun must nearly fit the shooter. What I mean by "nearly" will be explained further on. What I mean by "fit" is, when the gun is thrown to the shoulder, it will point at the object to be shot at. There are two ways of determining the fit of a gun. One is to stand in front of a mirror and look at your reflection in the eyes intently; throw up the gun to your shoulder, keeping your eyes fixed on your reflection's eyes, and if the gun fits you will not see more than a half inch of the rib of your gun and the gun will be pointing directly at your eyes. If you see more of the rib your gun is too crooked or too much drop. If you don't see any portion of the rib your gun is too straight or not enough drop.

Now comes in the "nearly" referred to above. When you get a gun to fit, as per above rule, you will find that you will undershoot rising birds and birds at long distances; therefore it is advisable to get a gun that shoots a little high or "nearly a fit." Having selected your gun you have only, when going to shoot, to look at the object to be shot at intently, and until you fire, with both eyes wide open. Throw up gun, and from moment of throwing gun up to time of discharge, let there be an interval of about two seconds. (In throwing gun up or down, the muscular exertion forces the gun below or above the object, but almost instantly recovers and follows the eye.) A little practie will convince any one that it is the only correct way to aim a gun. The other way of determining if a gun fits, is to target with both eyes open. If it shoots high the stock is too straight, if below too crooked.

It will require some practice to change from the old ruts, but once out there will be no regret at the change. The advantage in this kind of shooting is apparent in pond duck-shooting, where ducks come into ponds so late of evening (to roost) that one cannot see the sights on his gun, and if one eye was shut he would not see his duck. Again, in snap shooting one needs both eyes to follow the quick turns of a bird in cover, and thirdly, distance cannot be estimated with one eye shut, with both eyes you can do much better.

SPORTSMAN.

COLUMBUS, Ga.

There is something of a discussion in the English papers upon the subject of using both eyes when aiming, and a recent writer in the London *Times* says:

"Two-eyed aiming is carried out similarly to one-eyed aiming, with this great difference—that the left eye is kept quite open and looking at the target with all its power. The aim is actually taken with the right eye, but instead of depending on it alone the shooter utilizes the other to help the aim; to tell him, as it were, that his aim is exact and not deviated from in pulling the trigger. If he use one eye only, even if his aim be exact in the first instance, there is nothing to assist him in maintaining that exactness until the gun be discharged, neither can he shoot with the same rapidity. All he has to insure accuracy is his more or less muscular power to hold the gun in the exact position he has given it on taking aim, or with one eye open, only there is a fractional but most critical moment when he must lose sight of the object aimed at, because that eye gets more or less behind the sights on the gun, which are actually intervening. To overcome this he must not only aim slowly, but do so over the top of the front sight, and this is called 'drawing a fine bead.' Virtually, when he uses both eyes, the sights become transparent, and interpose no obstacle to his clear view of the target, and this can be easily demonstrated in the following way:

"Let the reader of this cut a card of some few inches in length into the shape of the letter V, with the limbs over half an inch in breadth (I give these comparatively large dimensions to all the more severely test the question), but with these limbs meeting, just as a V does at an acute angle. Let him hold this card right in front of his face and look toward the top of a chimney or a house at some distance or any point of a pinnacle or other well-defined object just appearing between the limbs at the bottom of the open space in the V. Doing this with both eyes open, the solid card will disappear, but leave in its place a sufficiently distinct although transparent form, becoming the very ghost of its solid self, if the Society of Psychical Research will allow me to call it so, and the object looked at will be in no manner obscured from view. Let him then, keeping the card in this position, shut the left eye, and he will find that the right is doing the actual aiming, although he had taken no means to provide for this, and this fact is the sole mystery, at least to me. The card will then also become solid or opaque to the sight, but retaining its position in reference to the point or pinnacle. Let him, however, shut his right eye instead of the left, and he will find that, while the card also becomes opaque, it has apparently shifted its position very considerably—several inches—toward the right hand. He will now begin to see what the two-eyed system does. It clears away obstacles in the gun itself, it strengthens his vision, it increases his available light, and it lets him use his left eye, not to aim with, but to strengthen considerably by its what I may tautologically call "supervision," the aim which the other is taking. If he then continues to hold the card in the desired position, he will readily see how easily he loses exactness with one eye only, and how well he can maintain the exactness with both eyes open. The V is as the rear right of the rifle, and for exactness may be held at the same distance from the eye—that being some fifteen inches. The absence of the front sight in no way affects this illustration. The left eye, I may state at the risk of repetition, looks, as it were, round the sight on the gun, virtually obliterates it, and tells the right eye at once of any aberration it is making in its aim, thus acting as its faithful guide and supporter."

The *British Medical Journal* takes up the subject editorially, and says: "Two-eyed rifle shooting has recently been the subject of numerous letters in a prominent morning contemporary. It is perfectly clear from the there recorded testimony of such eminent authorities on shooting as Dougall, Hay, Lowe and Malet, that a person shooting with both eyes open has a considerable advantage over those firing in the ordinary way under circumstances of varying or defective illumination, or where rapidly changing objects form the target, and he will probably be at least their equal under ordinary circumstances. The question then arises as to the way in which this shooting is effected. In ordinary vision the eyes working together have certain incontestable advantages, even where the image of one eye is suppressed. This is well recognized by microscopists, as one of the correspondents has pointed out, and also by those in the habit of using the ophthalmoscope. The advantage thus gained is probably due to resting of the muscular apparatus, both external and internal, of the eye, as vision can continue longer under such circumstances without fatigue or aching. A state of rest of the eye must also favor accurate taking of aim in the ordinary way, though the image of the other eye must be suppressed, as in the case of the microscope and ophthalmoscope. But there is another method of taking aim, that in which the marksman does not look carefully along the barrel, or perhaps even fails to raise it to his shoulder, but judges the distance and direction of the object, and adapts his aim accordingly. It is on this principle that a stone is aimed by the hand or a pea is discharged from a pea-shooter. This method is said to be habitually employed by the Chinese, and in its essential points by the distinguished shots to whom reference has been made. Under such circumstances the image of the second eye, instead of being suppressed, becomes of great use; for not only is the vision of each eye rendered less uncertain, but the two together see somewhat more distinctly than either separately. Also, the distance can be judged far better and the aim taken more quickly, points of great practical importance when rapidly moving objects of unknown size and distance are to be aimed at, in circumstances very different from those of ordinary shooting at Wimbledon, and far more allied to those actually existing in the recent South African war. We cordially add our voice to those of the eminent shots who are desirous of impressing on the war office the merits of this method of shooting."

An officer of our own Regular Army commenting on this says:

"The difficulties which the British experienced in their operations against the Boers are the same as our troops have to contend with in their skirmishes with Indians. Firing at rapidly changing objects, especially when those objects assume the shape of an Indian, is most certainly quite different from firing at a 600-yard target at Creedmoor or Leavenworth. It is in such campaigns that two-eyed rifle shooting is of great advantage, since on rapidly judging the distance and quickly taking the aim not only depends the result of the shot, but only too often the life of the marksman or one of his comrades. It appears that a revised manual of rifle firing is in preparation, as stated by the Lieutenant-General of the Army in his report to the Secretary of War, dated Feb. 5, 1884, and the compilers of this manual, the instructors in rifle practice and our sharpshooters are invited to give this matter their consideration."

Recently in experimental firing at Strensall, England, Major General Cameron finally ordered a battalion to fire at a range of dummy soldiers, with both eyes open and as rapidly as possible, not looking along the barrel of the rifle, but keeping their eyes fixed on the enemy, who was supposed to be making a rush on the position defended by the volunteers. Eight rounds were so fired in sixty-seven seconds, and the result completely bore out recent arguments, no less than 38 per cent. of the shots having struck the dummy figures. Drawn up in line against an enemy in the same formation, 1,000 men would thus deliver 7,000 shots in about a minute, with some 2,660 hits.

A DAY WITH SNIPE.

SHORTLY after the formation of the Curlew Club, in 1876, I visited this locality in search of snipe, but it was an off year for the wary dodgers. I had the pleasure, instead, of meeting the members of the Curlew Club, who had constructed a handsome club house, fronting Ludlam's Bay. This club included on its roll Wm. P. Clyde, Dr. A. G. B. Hinkle, Wm. Shuster, Wm. Reckless, R. Walter Peterson, James Y. P. M. Young, James F. Wallace, Dr. Peltz and other enthusiastic sportsmen. The hospitality of these gentlemen was overwhelming, and I was urged to renew my visit at an early date. Time (which, as Byron says, makes all things equal) made sad havoc with the Curlew Club. The club reorganized as the Sedge Island Club, and increased the limit to thirty members, it having formerly been twenty, but dissensions arising among the members, the club disbanded.

These recollections of my early visit were recalled when, hearing that a flight of snipe was on, I made my second visit to Ocean View, and put up at the house of Capt. T. F. Shute, who had officiated for the Curlew Club. The snipe grounds here are the Littleworth Meadows—meadows that are famous for snipe and known to nine-tenths of our sportsmen. They were so named because they were of little worth to anybody, being regarded as so much useless land. The cedar swamp creek runs through the meadows, the tributary being the Tuckahoe River. Finer snipe ground, or a richer variety and extent of springs, it would be hard to find or imagine. The meadows are four miles in length on each side of the creek, and when snipe are on it is a good two days' work to cover them properly. The ground is made historical with the footprints of our eminent sportsmen. Here the world-renowned pigeon shot, Mr. Charles Macalester (accompanied often by his wife as a keen participator in the sport, or by his friends, or by his gunning man, Jake Sutton), has whiled away many hours, and hardly had Capt. Shute and your correspondent entered the meadows when, fastened near a small waterway, we saw a boat, and on the oars was branded "C. Macalester," of whom we had been speaking only a few minutes before. Our attention was then attracted to the dogs, Capt. Shute's setter dog, Ducket, and my pointer bitch, Lady B., having come to a stand. "Careful," said the Captain, and we advanced with anxious expectation. Up went two birds. I shot heedlessly and missed, but Capt. Shute laid his bird low, and Ducket retrieved nicely. It was a fine specimen, plump and as fat as butter.

"Where there is one there are two, and where there are two there are more," is the old paradox, and ridiculous as the saying is, it is, nevertheless, just as often quoted. We were delighted when the dogs again drew up, both having got points. Instead of the single birds expected, eight got up, and then the slaughter commenced. The Captain's first barrel killed two and his second another, while I nailed one with each. We then seemed to be right into the midst of them, for in twenty minutes more we had a total of forty-one birds, with Captain Shute leading your correspondent by one bird. As many of the birds had crossed the creek, we determined to imitate their tactics, and, getting into the roadway, did some lively walking for the lower bridge and entered the southern meadow. Hardly had we entered when several birds flushed wild, but settled ahead instead of recrossing, much to our satisfaction. Then we got on to a lovely bit of ground, and the first mishap occurred, a treacherous bog hole treating me to a dose of mud that was anything but pleasant. Captain Shute enjoyed a laugh, and said I held up my Greener hammerless as if it were a thing of sacred value. The dogs were again sent to work, and the finest sport of the day ensued, the birds flushing with a wildness that was refreshing.

When we had almost reached the end of the meadow, we called in the dogs, and returning to the road where our horse and wagon had been "cornered," we sat down to "count." "Thirty-four!" exclaimed Capt. Shute, with an expression that plainly said, "beat that, if you can." "Thirty-three," I said, and shook hands with the Captain. "You beat me one bird." But it was a better beat than that, as we had bet champagne (a bottle on each bird) that we would each kill a majority out of the last five birds; Capt. Shute got four out of the five, the birds quartering on his side. Satisfied we had had a grand day's sport, we returned to Capt. Shute's pleasant home to partake of a hot and palatable supper, and spent the evening, pipe in hand, talking over the various interesting points of the day. The Captain was proud of his victory, because he is proud of his Chas. Daly 10-bore, presented to him during 1879 by a number of friends and admirers.

My next try will be at the bay birds here, which are expected to be unusually numerous this season. I will write you a few lines if a chance occurs. B. B.

OCEAN VIEW, Cape May County, N. J., April 24.

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

Most of your correspondents seem to have a craze for repeating rifles, and a large number of them have considerable to say about the grizzly and buffalo. Now I would venture to say that two-thirds of these sportsmen, should they at any time happen to come across said grizzly or bull buffalo, would give either a wide berth, for I know from experience that the grizzly or buffalo of imagination differ materially from those in actual life, and this fact can never be fully realized until one comes in contact with them. I would suggest that a gun for this class of sportsman be of the Gatling species, or a sort of crank and funnel gun, one from which cartridges could be ground out *ad infinitum*, or perhaps the new dynamite gun that has a shooting radius of four miles would be better.

My experience with the rifle extends over a period of fifteen years on the Pacific from the Isthmus of Panama north to British Columbia. Have used all kinds of rifles, and have killed game from the smallest squirrel to bear, elk and deer.

I dislike the repeating rifles, first, on account of its peculiar construction, which renders it liable to get out of order at any time. Second, the rifle is never of the same weight, and at each discharge it becomes lighter. Third, the wasted ammunition of one becomes careless, and one would kill far more game than he kills, for if he misses the first shot he will continue to pump away as long as he can see anything.

To illustrate the above: I was on an elk hunt, in Southern Oregon, in the fall of '82, in company with two gentlemen who were armed with the Winchester repeating rifle. I used a Remington single-loader, .40-70. We tracked up and got into a band of fifteen elk. The moment we came in sight of the game my Winchester friends opened fire and fired thirty-two shots before I raised my rifle to my face. They killed one elk and wounded another, which I afterward killed with a single shot. I then got in position on a point of a hill and killed three more in three straight shots, making a total of four elk for me in four shots, while my Winchester friends got one in thirty-two shots. As a matter of course, I did not shoot at random and took no chances, but gave each dead shot behind the shoulder.

Now, without entering into details with regard to the particular merits of the different kinds of rifles, I say that with a singleloader Remington 30-inch barrel, double trigger, .40-70, I can kill anything that walks in the shape of game, and were I going into an Indian country, where one's hair is liable to be lifted at any time, I would want no better gun.

E. T. D.

POUGHKEEPSIE, N. Y.

WHITE ELEPHANT SHOOTING IN NEW YORK.—A white elephant—the only one left in New York, a creature of wickerwork and cotton, fifteen inches taller than Jumbo, owned by the roller skating rink people, and used like the other white elephants for advertising purposes—halted in Printing House square at half past 5 last evening, to give the Siamese high priest in ultra-Oriental toggery a chance to figure on the walking match scores and see how he was likely to come out. It was the hour when many are starting home from their work, and the bulletins from the Garden and the presence of the elephant had attracted a crowd. In the throng was a vague and elusive small boy who had read of elephants slain in Africa by Stanley with his elephant rifle. The boy did not happen to have such a thing as an elephant rifle about him, but he carried a cap pistol in the after pocket of his knickerbockers. This he drew, and fancying that the elephant might be vulnerable in his off hind heel, let him have it. The shot took effect and the boy took his departure. The persons standing on the City Hall Park sidewalk saw a small flame creeping up the hollow hind leg of the artificial pachyderm as flames creep up the elevator wells in fireproof apartment houses. With great rapidity the blaze spread to every part of the elephant save his trunk. It broke through his back and flamed up as high as the wires on the tall telegraph poles. The high priest's attention was attracted from the walkers' scores. He jumped from the truck on which the elephant stood, and, catching the burning creature by the trunk, endeavored to persuade him to come off. The driver leaped down and unhitched the four heavy dapple-gray horses from the truck. Policeman Hawkins rang an alarm from the fire box in front of French's Hotel. The

colossal figure of Franklin stood within a few yards of the blaze, with one hand extended, in the attitude taken by Mr. Barnum when he gestures toward his sacred elephant and says: "Gentlemen, behold! behold!" Hook and Ladder 1 was the first to answer the alarm, and came up with sound of gongs and rattle of wheels. Engine 7 was only a few seconds behind, filling the square with denser smoke than that from the blazing white elephant. Engines 12 and 29 thundered up, and Hook and Ladder 10 arrived. The insurance patrol was on hand, and last of all the water tower came rumbling into the square. The chiefs of the First and Second battalions rattled up in their little red wagons. The firemen seemed astounded. One of Engine 7's men was the first to attack the flames. This he did with a small chemical extinguisher just as High Priest Slee, Principal Keeper Hall and volunteers from the crowd succeeded in toppling the blackened frame of the elephant off the truck. It was a noteworthy spectacle—Three fire engine companies, with machines belching black smoke, two hook and ladder companies, the water tower, hose carts, chiefs' wagons, the patrol, a great crowd surging around, an array of policemen in the midst of it, and one fireman playing a half-inch stream out of a tin can on the charred wreck of the elephant's framework. He soon got the conflagration under control. The high priest said he thought he would know the small boy if he should see his again. Odds of two to one were freely offered that he wouldn't see him.—*New York Sun, April* 30.

Mr. Henry C. Squires, who has lately removed from Cortlandt street to his new and more commodious quarters at No. 178 Broadway, has just issued a voluminous catalogue of sportsmen's tools and luxuries. The primary purpose of the publication is presumably to produce polypragmaty in Mr. Squires's store; but apart from this the compilation is valuable as a compendious and useful book of information about the thousand and one things that the gunner of the day needs, or thinks he needs. The illustrations are numerous and lucid. Mr. Squires, we infer, does a cash business, for he gives no credit for the gems of sentiment mined from the Forest and Stream, which flash out to illuminate his prosaic price lists.

New York Game Districts.—Three new districts have been formed under the law for the protection of fish and game, and protectors will be appointed within a few days. One district includes Jefferson and Oswego counties, one is in the heart of the Adirondacks, and the third includes a strip of territory extending from south of the Mohawk River to the State line. The protector of this district is also to be a protector of the State at large, and is to be under the direction of Gen. R. U. Sherman, of the Board of Commissioners. Gen. Sherman has taken a great interest in this matter, and has given much earnest thought to it.

Olean Sportsman's Club.—At the annual election at Olean, April 25, the following officers were elected for the year: Fred. R. Eaton, President; E. M. Johnson, Vice-President; W. R. Page, Secretary; A. P. Pope, Treasurer. Executive Committee—A. P. Pope, C. B. O'Donnell, F. H. Oakleaf, H. W. Curtis, W. H. Simpson.—Y.

Home-Made Hunting Suit.—A suit of the proper color (for ducks) can be made of cheap material from coffee sacks, which are just the right color. I think the poor success of some duck hunters is undue movement on the approach of a flock, and too small time allowance ahead, for cross shots and over, for ducks rising from the water.—H. E. H.

Mountain Quail.—Lowell Hill, California, April 19.—Mountain quail are whistling in all directions. Thousands of them are coming up from the valleys and are pairing off. They will follow up the Sierras to their very summits as fast as the snow disappears.—J. W. B.

Sea and River Fishing.

CONCERNING BLACK BASS.

BY A. N. CHENEY.

[Read before the Anglers' Association of the St. Lawrence River.]

Mr. President and Gentlemen of the Anglers' Association of the St. Lawrence River:

While your worthy corresponding secretary could have asked many anglers far more competent to "prepare a paper in regard to the habits of the black bass, the various means of catching them by angling, the baits used, and the places where they are to be found at different seasons of the year," he could not have asked one who is a greater admirer of the good and game qualities of this fish, which is destined to stand in the not far away future, if it does not already, at the head of the list of game fishes that are to be found in the greater area of the waters of our State. Long may the glorious *Salvelinus fontinalis* be spared to us by the exertions of anglers' associations, like your own, to enforce just laws, and a liberal State government to provide the fry by artificial means.

But the black bass has even now, in many sections, invaded the haunts of this patrician beauty, and he is energetically and constantly seeking new fields. He is the embodiment of independence, and wherever he finds a home he locates to stay, provided the murderous netter and the worse spawning-bed thief, leaves him unmolested, for he fears no fish that swims, and is the only one of our so-called game fish that guards and cares for its young. In this year of grace, 1884, the black bass is pre-eminently the game fish of the people. The trout streams—greatly diminished in volume—still run or trickle through the farm lands of our sires or grandsires, but the trout took their departure soon after the "wood lot" was cleared, or remain only in story. Trout and progress are, in a measure, incompatible. Naturally secluded in their habits, the constant hacking of the lumberman's axe and the screech of the locomotive whistle jar upon their sensitive nerves, and they retreat before civilization, and the modern savage—he of the net and spear—and are now only found, or mostly found, in places that are inaccessible to the mass of the people, either by reason of the distance to the favored location, or the expense necessary for comfortable sojourn in these remote haunts, or lack of knowledge of the comparatively few profitable fishing waters, or want of time for an extended journey, or all combined.

The black bass, on the contrary, fears only the net and spear, for he is progressive himself, and the steamers and sailing craft on our lakes and rivers are his familiars, and he is on good terms with the mule-propelled vessels in the great ditches, yclept canals. He is a thorough Yankee and proud of every acre of this great "land of freedom" that gave him birth, and he is a game fish, whether found in the great lakes and rivers or small ponds and streams, for he is equally at home in the still waters of one and the rapid current of the other. The latter, however, heightens his game qualities, so that therein he is seen at his very best. But a species of fish that produces young in still water that will, when two and one-quarter inches long, impale themselves on the hooks of a trolling spoon in their efforts to swallow it, requires very little heightening of game qualities.

I have thus far spoken of the black bass without other distinguishing descriptions, but as there are two species of this dusky fish, it may be well to separate them. I trust the veteran anglers of this association will bear with me while I briefly note a few of the marked differences between the small-mouthed black bass—the *Micropterus dolomieu*—and the large-mouthed black bass—the *Micropterus salmoides*—the adjective in each case fitly describes the mouth. In the former the maxillary bone or mouth does not extend back to a vertical line drawn through the posterior part of the eye; while in the latter it reaches to and passes such a vertical line. The small-mouth has also smaller scales, there being eleven rows of scales between the lateral line and the dorsal fin, while the large-mouth has but eight rows of scales between the same points. The former again has seventy-five to eighty scales along the median line, and the latter sixty-five to seventy. The scales of the small-mouth are much smaller on the opercle, breast and back of neck than on the sides of the fish, and on the cheeks they are minute. The scales of the large-mouth are little, if any, smaller on the breast, back of neck and gill covers than on the sides of the body. The notch between the spinus and soft-rayed dorsal is deeper in the large-mouth than in the small-mouth.

As to the game qualities of the two species there is a difference of opinion. Some anglers hold that pound for pound there is no difference in their activity when on the hook. Others contend that the large-mouth is not for a moment to be compared to the small-mouth as a game fish. Of those who hold the latter view are two members of the medical profession, well known as angling writers, each having an experience with rod and line of more than half a century. One says, in a personal letter: "The big-mouth smells and tastes of the muck, and we do not fish for them." The other writes: "I do not bother with the big-mouth, for they will not fight. When hooked they give a flirt, open their mouths and come in like a log of wood." The author of "The Book of the Black Bass" champions the cause of the big-mouth, and considers him the peer of the small-mouth. Some years ago a prominent fishculturist, in writing me about the black bass of certain waters, said it was barely possible that they were a cross between the large and small mouth, but I have never been able to gather any evidence that the two fish would cross; on the contrary, there is every reason to believe they will not, even when the two varieties are confined in circumscribed waters.

The record of the experiments in black bass propagation by Major Isaac Arnold, Jr., U. S. Army, is very interesting, and I quote the following from it: "The black bass—both species confined together in a small pond—hatched out by the thousand, and I think there will be more in a few days. The young fish are all healthy, but they eat each other. Yesterday my foreman, in less than fifteen minutes, saw nine of the young fry swallowed by fish of apparently the same size. The large-mouths seem to do the greater part of this work. Each day the number of this year's fry grows less as the strong ones destroy the weaker. The first hatchings are now nearly three-quarters of an inch in length, and can probably protect themselves." From the dates given, I judge that the small fish referred to were about three weeks old.

The large-mouth thrives in waters with mud bottom, wherein are rushes, reeds and flags; but the small-mouth delights in clear, cold water, with a bottom of rocks, gravel and clean sand, or resorts, during the heat of August, to the long, fine grass in deep water. The large-mouth, if surrounded by as favorable conditions as to habitat as the small-mouth, might be a more vigorous fighter than he is by many supposed to be, but I shall hereafter speak only of the small-mouth.

In coloring, the black bass varies from a pale green to almost black, growing lighter from the dark back to the dusky white belly, and they are spotted, mottled and barred, transversely or longitudinally. I have also seen them when they appeared almost white in the sun as they leaped from the water. Color, however, is a very fallacious guide. If a number of black bass of various colors, or shades of color, are confined together alive, they will all become, in a short time, of the same hue, and the color will be like that of their surroundings. This change takes place evidently at the will of the fish, and it is part of a wise provision of nature that enables them to thus cloak themselves by assuming a line in harmony with their abode for the time being.

They spawn in running water earlier than in the still waters of a lake. In rivers they generally spawn in May or early in June; but in lakes or ponds they are on or near their nests with their young far into July; and last season I saw them with their fry early in August, and heard of them on their beds as late as the 21st of the same month. But last season they were, for some unknown reason, unusually dilatory in attending to their domestic duties. The spawn of the black bass is surrounded by a gelatinous fluid that causes it to adhere to the stones or gravel of the spawning beds in ribbon-like strings; and for this reason the bass cannot be spawned with profit artificially, and there is no necessity for attempting it. They only require to be left unmolested at the breeding season to thrive and multiply. At this season they refuse all food, but they keep their beds swept and dusted, and quickly remove any foreign substance that may fall upon them. The pot-fisher avails himself of his knowledge of their cleanly habits and drops a bare hook or hooks into the nest; at once the bass takes it into its mouth to carry it from the bed and is ruthlessly snatched out of the water. It is this nefarious practice that does more to destroy our black bass than any other means used by those who have no fear before their eyes of the law or an hereafter. Thousands of fish are destroyed, while a few mature bass, unfit for food, are thus cruelly killed. I have always to curb my pen when writing of this vile murder and those who do it. A fish that affords such grand sport will be allowed by all honorable men a bare month, or such a matter of time, in which to produce their young in peace.

The spawning of a pair of black bass extends over two or three days, and the parent fish remain with their young until they are ten days or two weeks old, and the fry prey upon each other until they are two or three weeks old. Their cannibalistic proclivities cease when they have gained a little discretion, but their pugnacious qualities grow with their growth. A black bass will vanquish a pike of a much larger size than himself by swimming swiftly under the enemy and cutting him across the belly with a rigidly erect dorsal fin. The black bass grows rapidly under favorable conditions of water and food, and reaches maturity at three years of age. Only a few years ago a black bass of six pounds was considered to have attained the maximum weight, but more recently small-mouthed bass have been caught of eight pounds in weight for a single fish. Parenthetically, let me say that we have it on good authority that the big-mouth has been taken in Florida waters weighing eighteen pounds. The larger fish—small-mouth—are so extremely fat, however, that they do not display the activity of a two and one-half or three pound fish. These weights are, as a general thing, the size of fish that gives the angler the most sport when on the rod.

Judging from personal experience, the largest bass are caught at an early hour in the morning—the earlier the hour, if it be daylight, the better the fishing or catching. When the black bass have spawned in the shallow of a river, they move seemingly in a body to swift water on the foot of a fall, if such there be, and are there caught in numbers in the down pour or boil of the rapids. After a few days in this rough water, which perhaps reinvigorates them, after the exhaustion attendant upon spawning, they fall back and disperse, to be found just at the foot of the rapids, behind some boulder in mid-stream that forms a little eddy, and along the shores, just in the edge of deep water. When the season advances and the water becomes warmer, they rest in deep pools and eddies, and with the approach of winter, they retire to broken rocks or submerged logs in deep, still water, there to become torpid and hibernate, until released by the warm sun of spring. After severe cold weather in the fall, a few days of warm sun will awaken them so that they will take the hook, if it is let down upon their winter quarters. During the fishing season they lie in wait for small fish just off the rocky shores, or near a weedy or sand points, where the water deepens rapidly, or near a weedy shoal shore that harbors bait fish. They make a rush into the shoal shore water or weeds, and grasp their prey and return to deep water only to repeat the operation as often as hunger demands.

Rocky shoals in midwater are also favorite places for black bass in June and early July, and there they may be found nearly the whole day, as the water is comparatively shallow. These are the places and this is the time for fly-fishing in lakes and deep rivers. Nevertheless, the bass will come on to the shoals to get food at morning and evening during the entire summer, so that a little fly-fishing may be had at feeding time, although one must be prepared for many disappointments. In September and October the bass are moving about in an aimless sort of a fashion, and may be on the shoals, shores, off the sand points, or in deep water, or in all of these places. This is the time to catch the largest fish, and they are in prime condition. Let one catch a black bass in a cold, clear lake, and he thinks it about the most vigorous fish to be found in fresh water, but when he catches one of the same fish in the current of a rapid river, he discovers his mistake, for river bass afford the finer sport. This is owing, in a measure, to the fact that the swift water, sunken boulders and possible snags add to the chances of the bass to escape. Therefore, the angler's satisfaction is greater if he succeeds in saving his fish after a closely contested fight in which the chances are nearly equal. A pound bass may afford more pleasure in the catching than one of twice the weight. To quote my own words, used when writing of the black bass on another occasion:

"It is the play that the fish affords that warms the cockles of an angler's heart, not the fish itself; and as one looks back over other days, it is the gamy, hard-fighting fish that rise up in one's memory like mile stones along a pathway. Greater fish there may be between, but they live only like so many pounds and ounces, and occasion no thrill, no tremor of the muscles, no increased beating of the heart, no particular joy or exhilaration at the retrospect, except that they may have beaten some other fellow's fish. If the mere pounds and ounces lived, there can be no thrill of pleasure at the remembrance, for there never was one; nothing—but pounds and ounces."

I have had excellent sport catching black bass in the autumn when the water was covered at an early hour in the morning with a dense fog, and in no single instance has such a morning failed of good results. But one has to choose, I am informed by a female member of my family, between the danger of malaria and a good score. I can say that to date I have not suffered from malaria because of exposure in fishing.

At the season when the bass are roving I have had splendid returns from baiting certain fishing places. For instance, I save all crayfish that die on the hook during an afternoon's fishing; and just before leaving the lake or river, I throw them into the water at the best fishing places; the next morning I fish these points and again bait them for evening. The baits used for bass are many, including the artificial fly for casting and for trolling, the trolling spoon or spinning bait, the minnow gangs, with live minnow, and the artificial trolling minnow; the live bait, including all small fish which are classified as minnows, and small perch which are best of all, particularly for large bass; the grasshopper and cricket, live frogs, crawfish or crayfish, dobsons or helgramite, in both the black and white state, and the common earth worm. In still-fishing, a dead bait is useless, and the sooner it is taken from the hook, and a fresh, lively bait substituted, the better. Dobsons and crayfish, both excellent bait when native to bass waters, are indifferent or worthless in waters where the bass are not accustomed to feeding on them. In two large lakes in this State is good bass fishing. In one, the grasshopper is a prime bait, and the cricket is of second importance; and in the other the reverse is the case. Around the first lake 'hoppers are more plenty than crickets, and around the second crickets are more plenty than 'hoppers.

I think the greatest pleasure is derived from casting the artificial fly, and perhaps the next best mode is casting the minnow. Trolling or still-fishing is much, if not most, generally practiced. In trolling with artificial flies, two, three or four flies of a large, gaudy pattern, are used on a single leader that terminates in a small fluted trolling spoon or a small minnow gang, baited with a minnow. Black bass are very capricious, in some waters taking a certain bait with avidity one day, and refusing it utterly the next. Of live baits, the minnow is the standard for the season through, although at times in the autumn the crayfish or frog is better. In trolling with flies it is necessary to weight the leader and sink the flies when the bass are in deep water

in August. By deep water I mean thirty or forty feet, for bass are rarely found in water of greater depth. The largest bass I ever caught in a lake where I have fished more or less for twenty-five years, I took on a pike gang that was trolling in forty feet of water, with an eight-ounce sinker, for pike —*E. Lucius.*

One great wrong to the bass fishing is the trolling of the shores of lakes and rivers for pike with gangs at a time when the bass are either on or leaving their beds, and are still about the shores with their fry. Many bass are thus caught and the gang injures the fish, so that if they are returned to the water but few can recover. The truth is, the bass are not often returned to the water when so taken; the fisherman argues that the bass will die anyway, and he may as well keep them. Another wrong is done in retaining small bass. The law says that it is unlawful to catch black bass of one-half pound or under, but the limit should be a pound, for bass are so voracious that little ones of an ounce or two will bite a hook, and many of less than half a pound are necessarily injured in taking them from the hook, and in hundreds of cases there is no pretense of returning undersized bass to the water. If the limit in weight was one pound, there would be less excuse for a person to keep a two-ounce bass, thinking it weighed eight ounces. Many anglers now refuse to basket black bass that weigh less than sixteen ounces. The example is good, but the trouble is that these gentlemen do not fish with the people who keep the fingerlings.

The province of the Anglers' Association is to educate the people in the way of all legitimate means of angling, as well as to enforce existing laws that foster our game fish; and a striking proof of the great good that can be done by an association like your own, is the letter in a recent impression of the Utica *Observer* to your president from a fish dealer, suggesting co-operation in this grand work of reforming existing evils. The letter of the gentleman referred to touches one of the great roots of the matter, and the accomplishment of the suggestions therein will be a grand work in itself, for which the angling brotherhood will rise up and call you blessed.

FLY-BOOKS.

Editor Forest and Stream:

"Governor's" communication in your last issue but re-echoes a complaint common to the whole angling fraternity. Fly-books, as usually made, are justly open to his criticism. They are an excellent thing to "putter" over in the winter, but sometimes exceedingly awkward to use on the stream.

In seasons past I have tied all my large flies with loops only, and quite small loops at that. When fishing in Maine, where a boat is almost invariably used, I have found no fly-book so convenient as a shallow cigar box.

This spring, unable to see why this should not work well on small flies, I tied up a number of midges with small loops. Though as yet only tried in two days' fishing, it seems to be an improvement.

Where the loops pertaining to the leader and tail-fly join, is very conspicuous in the water, since these seem to catch and imprison the air, thus giving rise to brilliant reflections of light. This, if true, is all the more objectionable since the short snells for flies have come into general use.

Therefore to such as are disgusted with fly-books they may happen to have, this is suggested:

1. That all flies be tied with small loops.

2. That the loop on the fly-end of the leader be omitted, and the tail-fly simply tied on with the same knot by which the leader is ordinarily secured to the line—a knot we all know will never slip, yet will infallibly loose with ease.

3. That separate short pieces of gut for the drop-flies be attached to the leader in any of the usual ways, and the drop-flies secured thereto in the same manner as the tail-fly. Thus, when a drop-fly is to be changed, the fly will be merely unfastened from the gut, the latter remaining attached to the leader.

Three advantages at least appear to be secured by this method:

1. Every fly may be used indifferently as a tail or drop-fly.

2. The visibility of the connection between the leader and flies is reduced to the minimum, since the knot is so close to the head of the fly as really to form part of it.

3. An ordinary tin chewing tobacco box becomes a most convenient fly-book, in which every fly may be seen and that desired selected at a glance. The usual fly-book then becomes a mere repository for material for repairs, leaders, strands of gut for droppers, and perhaps the reserve stock of flies in paper envelopes; and resort to it while actually fishing would rarely be required.

Of course like other reforms, if this may be entitled to be so considered, the change should be gradually made, since it would be folly at once to discard a good stock of snelled flies, merely for this purpose. Nor have I used this method long enough to justify me in asking that the foregoing be considered as other than a suggestion, on the strength of which radical action would be unwise.

NEW YORK, May 5, 1884. HENRY P. WELLS.

PHILADELPHIA NOTES.

THE trout fishing season in our State has been good thus far. Harrisburg, Pa., anglers state that it has not been better for years past. Many good fish have been taken from Newville Creek, Pa., and good catches have been made by Alderman Fager, Mr. Horace Lutz, Mr. W. L. Powell, Mr. Charles Greek, Mr. Lerne Lemer and Dr. Vallorchamp, of our capital. Mr. W. P. Seiler, of Harrisburg, accompanied by his friend, Rev. John R. Paxton, of New York, have taken some fine fish from Silver Springs, Pa. Your correspondent had good success with the fly on two Pennsylvania trout streams, and I fancy the growlers who state that Pennsylvania trout fishing is not worth seeking on account of the small size of the fish, would have altered their tone if they could have seen my creel. Not a wonderful display for numbers, I will confess, but a lot of average and good-sized trout, taken from a stream well worn on both sides by paths made by anglers. Perhaps I was lucky in just striking the day, but I warrant the fish were educated, and appeared to remember the spring of 1883 when they were smaller.

Fly-fishing for bass is regularly practiced here with success by two or three gentlemen living in our immediate vicinity as soon as the season opens; and I am told they have been very successful, especially during the month of June, just below the rifts in Perkiomen Creek, and in the swift water below the dam on the Schuylkill River, above Conshohocken. The report comes to me from such reliable sources I shall make an effort to test the matter and report to you. There were some rainbow trout placed in the Upper Perkiomen Creek by the Anglers' Association of Eastern Pennsylvania about a year since. Now that it is said that the rainbow trout is nothing but the young of the California salmon (this I am not yet satisfied to accept), it will be interesting to look for the outcome of the planting. I have my fears, however, be these fish what they may, the bass of the Perkiomen Creek will prevent a satisfactory solution of the question.

HOMO.

FISHING AFOOT.

Editor Forest and Stream:

It is not every one in whom the love of true sport is as surely planted as was in Izaak Walton himself, that can take a month to visit the lakes and rivers of Canada, the trout lakes of Maine, or even some noted river or creek in his own State, to enjoy to the full the fascinating sport. Many have to be content with whatever fishing they may find in their immediate vicinity. Car fares, board bills, and time lost is often too great an expense to be met, and the enjoyment of watching the cunningness of the fish with fisherman's wisdom has to be given up. But three boys of the Keystone State were not to be cheated of the pleasures of spending a week in this sport by a lack of filthy lucre. "We can easily walk to Uncle George's, and after we are there we can very soon trot up to the woods," says George, the oldest of the brothers. Frank and Peter agree with him on this point, and they make preparations to start.

Saturday morning bright and early the trio could have been seen by early risers striding briskly along the public road leading toward Jefferson county, Pa. George and Frank are tall and move over the ground like amateur go-as-you-pleasers, but Peter is so very small that he usually keeps upon a slow trot to keep from falling behind. He is fourteen years old and weighs about sixty-five pounds, but is as tough as whalebone and as spry as a weasel. Frank and George say they will "run him down" before they reach Worthville. Peter only laughs and tells them to "light out" then, as he can keep up his present pace all day, which would cover much more than the twenty-five miles of road lying between their home and Worthville. But they soon forget this little rivalry and make the most of seeing all that is to be seen through the country along their course. Reaching the top of Mahoning Hill they have a splendid view of all the country south of them. The sun is just rising over the hills to their left, three miles away, and Mahoning Creek looks like a stream of molten silver where the sun strikes it between the hills. Beneath the high ridges running north and south the fog lies dense and motionless like a sea of light snow. The air is hollow and carries the sound of the Stewartson furnace steam engine plainly to them. They cannot see the Allegheny River, but the winding line of heavy mist rising above the hills very plainly shows the course of the stream for a dozen miles or more. As the sun rises higher and dispels the fog, the furnace with its scattered houses and gas-well derrick grows into view. Beyond the furnace and on the highest hill in the country near by the two oddly-shaped cucumber trees known as the king and queen can be plainly seen. They see all this and much more while walking steadily forward. They have eyes and know how to use them. They have not lived in the country all their lives for nothing. Now the road winds along the sandy top of a long ridge, and there is little of interest to be seen. They notice a golden-shafted woodpecker's nest, and see why they are sometimes called high-holes. This nest is at least fifty or sixty feet above the ground in the smooth and limbless trunk of a dead chestnut, or what appears to be a chestnut from the road. This pair will be safe from any prowling oölogists at least. Passing a field thickly overgrown with briers and scrub oaks, George tells the boys to look out for a chat, and sure enough they see one of these skulking birds gliding along beneath the thickest brush. Only for an instant they see it, and then it is as effectually out of view as if no such bird existed.

Oakland, ten miles from their point, they reach at 8 o'clock. Crackers and cheese are bought, a few questions asked and answered, and they are again on the road. Red Bank Creek is soon in view, and a train of cars is seen entering the tunnel four miles up the creek, and coming out on the other side of the narrow hill, and twisting itself in and out along the creek's tortuous course, until it rumbles behind a hill and is lost to view. 'Tis seven miles around by the creek, while the tunnel is but two or three hundred feet in length. The dealer in general merchandise in Oakland told the boys that there was good bass fishing in the creek near this bend, and had the hill been less precipitous and their road less long, they would have been tempted to prove the truth or falsity of this information.

It is the second of June, and as they pass a "city of the dead" they see the fresh wreaths lying on a half-hundred mounds, speaking volumes of the patriotism of the brave men who once fell. They have left half of the road behind them, and it is not yet 10 o'clock, so they open the unlocked gate and pass along the graves, reading the names and epitaphs at the foot of each. A mile or so further on they meat a bushy-haired teamster driving a very scrawny span of bays, tugging away at a ton and a half of iron ore, who greets them with, "Are you gentlemen from Mahoning?"

"We're from near that place," George answers.

"See anything of Lize Williams down there?" This, looking over the side of the wagon with a grin on his face.

"Have not the honor of the lady's acquaintance," Frank says with mock politeness.

"Oh! I thought may be you'd seen her," and he drives slowly on, while the boys go ahead briskly to overtake Peter who has not stopped. They wonder who "Lize" is, and why the bushy teamster is interested in her whereabouts. Peter supposes that she is the teamster's wife and has taken French leave for the benefit of her eyes, which might have been, and thus they dropped it.

Twenty-five miles is no little walk to legs and feet that are habitually doubled up in a Keystone iron ore mine. Peter says it takes sixty-five thousand steps to traverse the distance. But even this appalling number will at length be finished, and as the sun crosses the meridian the country loses its familiar look, and the boys know they have passed the limits of their native county, and entered the pine and hemlock-covered hills of Jefferson. Rocks—hard, flinty, gray sandstones—are seen on every side, and the soil looks anything but fertile. Little Sandy is seen below them with its laurel and rock-lined banks. The hill on either side is a weary waste, showing nothing but rocks, rocks, rocks, and the blackened and lifeless trunks of ten thousand pines. Many years ago a cyclone swept up the creek, devastating all in its course. The livid fire in the midst of the circling winds instantly destroyed every tree in its course, and now the place is a famous berry field, where, amid the rocks and rattlesnakes, the hardy and undaunted berry pickers fill great pails and baskets with whortle and blackberries in their respective seasons.

The boys have reached their uncle's house, and are resting themselves in his cool best room. Uncle George is in Worthville, and his good wife entertained her nephews. They have soon dispatched a substantial meal, and are looking at the sows and pigs, the chickens and garden, the young corn and potatoes, and asking questions about every thing when their uncle returns. He is pleased to see his dead brother's sons, brings out his two rifles and a revolving pistol, and invites them to shoot with him. Shooting is Uncle George's favorite pastime, when he has not time to go to the creek, a couple of miles distant. They shoot a while, and then, the sun yet being a couple of hours high, they tramp over the two hills to the creek at Worthville, to "try their luck" on sunfish and chubs. There is a sawmill here and a "bracket" dam, and just under the "apron" of the dam the sunfish are generally quite plenty. But for some unknown reason the fish would not bite, and the fishers leaving the dam, went back of the little village and fished in the creek, but with no better success. At dusk they retraced their steps, wearily enough now, and reach the house disgusted with "chub" fishing, and boasting of what they will do on the coming Monday, when they propose to go to the Middle Branch, to fish for trout.

Monday morning Uncle George complains of not feeling well, and as there is an appearance of rain, all reluctantly agree that they had better wait until the next day before starting to the trout streams. But they will try Little Sandy again for chub and sunfish. A lot of angle worms are spaded up, hooks and lines are arranged, and they start for the creek. The chubs bite savagely to-day, and before noon they have caught over sixty. They are not very large, but what they lack in size they more than make up in quality.

"Let us catch the even hundred," says Uncle George.

"All right," Frank answers. "We lack only thirty-four."

"I'll catch twenty if you boys catch the other fourteen," Uncle George proposes.

"Agreed!" they chorus, and the race is begun, but strange as it may appear, Uncle George had caught his twenty ere the boys had landed six. But they were all tired and hungry, and started homeward with their ninety-two chubs. At a little bend in the creek there lay an old log, partly submerged. George threw in near the log and instantly hooked a large sunfish. Then they all crowded along the bank and dropped in their carefully baited hooks. Five more sunfish and two suckers were caught, making their hundred, and then folding their lines, and throwing away their rods, they started homeward. After dinner, they cleaned their fish, and what a time they had of it! George was covered with fish scales from head to foot, but he only laughed, and said he would be scalier yet before he was through fishing. Aunt Ellen, who never did like fish, says she can't see why any person would fish a half day in the scorching sun for the likes of their fish. They all laugh and tell her they are only "getting their hand in," preparatory to the real "fishing scrape," as Uncle George calls it.

But if Uncle George felt ill in the morning, he was really sick in the evening, and even the next morning yet felt too bad to go far from home. Consequently Tuesday was spent in looking about the woods near by for nests of hawks. But it was too late for broad-winged hawks and no other variety were seen. Uncle George showed the boys where he had once killed a deer—a fine doe—with a little shotgun while hunting pigeons. Unfortunately she ran a quarter mile after being shot, and was not found until unfit for food. They looked for the bones, but could find none. Doubtless foxes or dogs had long since carried them away, as it was twenty-three years since the deer was slain. Peter shot a couple of chipmunks off the fence with a little revolver, and George took a couple of long-range shots at crows with one of the rifles. Some snowbirds were seen in a cool pine-shrouded ravine, but after a careful search, the hope of finding a nest was given up. A hawk's nest was visited that had been razed a month before by some of the farmers near. George ascended to the nest, but got nothing but a few broken shells, much discolored by the action of the sun and rain. Thus the day was spent, all impatient to be off to the woods of which Uncle and George talked so enthusiastically They had fished in the streams before, and pictured in glowing colors the size of the trees, the density and coolness of the whole forest, and the probability of their seeing a deer or fawn before their return.

Wednesday morning, just as the sun looks over the hill with a ominously red eye, the party of four start up the lane *en route* for Middle Branch. Aunt Ellen tells them that it will rain before ten o'clock and that they had better wait another day. But they were too anxious to be off, and said the sky would soon clear off or the rain would all go 'round.

"Call Ned, Peter," Uncle George says, as they reach the head of the lane. "We want a dog to watch while we are sleeping."

Ned is standing in the lane near the house. Aunt Ellen bids him come back, but Peter only laughs and calls the louder. Ned would like to go with the fishers, but he hears Aunt Ellen calling him back.

"Fire your revolver," said Uncle George. Bang! bang! into the fence, as if at a chipmunk, and Ned comes bounding up the lane, yelping with delight. He is a pretty, pug-shaped dog, always accustomed to being petted and spending most of his time in the house. He was a year and a half old, but had been in the woods but a couple of times. Aunt Ellen said he could not stand the fatigue of tramping a couple of days through the woods and water. The party carried a huge basket containing doughnuts, light cakes, lard, butter, knives, pans and salt, everything needed for their comfort for their intended two days' stay in the forest. There is nothing of special interest in the walk up the creek. They take over hills and through forests for four miles; then along the creek past McKinsters, a brisk little village lying in a pleasant bend of the creek; then over a farm to save a long walk around by the creek, and they are on the outskirts of the wilderness. The road plunges into a mass of tall hemlocks and threads its way dimly up the creek. How tall and slender these useful trees are. Their tops weave themselves together in a thin canopy nearly a hundred feet above the fishers' heads.

"Isn't it quiet in here?" Peter says, looking away through the forest until the view is shut out by the blending of all the tree trunks into one solid dark wall.

"Yes," replies George, "and when you once reach the real forest it will be quieter yet. Isn't this a treat to us who at home cannot remember a single moment of such solitude?"

As the party pass Sparr's, the last human inhabitants, they see old man Sparr busily churning on his porch, while the women are working in the garden and driving their cows to a distant pasture near the hilltop.

"Only one more deserted farm to pass and we will be in the woods," said Uncle George.

"What farm, and why did the owners leave it?" Frank asks.

"It was a rented farm, and after the farmer had spent twenty years of hard work, clearing, chopping and grubbing upon it he grew tired and left it," Uncle George explains. "There is a good place for deer in the fall. Right up there behind those fields among the laurel they can always be started."

"Where do they go when started?" Pete inquired.

"They run across the Galehouse farm, cross Indian Camp Run, over the Miller farm, cross Middle Branch, over Sugar Ridge and Burnt Ridge, and on eastward through the wilderness into Forest county," replies Uncle George, who has hunted for deer in these woods more than once and knows most of the "crossings."

At the old bridge where the clear sparkling Indian Camp Run joins Middle Branch they arrange their fishing tackle. There are plenty of big chubs under the bridge and just above it. George stands on the bridge and pulls out a half dozen, vainly hoping to hook a trout. The big dam just below the bridge a few hundred yards is a good place for these big and exceedingly wary old trout. Occasionally a lucky angler lands a two or three pounder, and is the hero for a season or so until some one else captures one a little longer or heavier. George hopes that some of the big trout from the old dam may be about this quiet nook, the bridge, but he is disappointed. They soon pack up their luggage, equally divided among the four according to size and strength, and plunge through the underbrush up the creek. Indian Camp Run does not look favorable for trout, although well supplied with chubs, so they don't lose much time on it, but strike up Big Sandy, as the stream is called here; further up it is called Middle Branch, although how the extreme right hand stream of the three could be called the central one George could not understand. Three years before when George and Uncle George were fishing, the former caught the first trout, and while the other members of the party were eagerly striving for a bite, he coolly hauls out a six-inch trout. But soon all have caught one or more fish, and they are full of the excitement of this rare sport.

The Branch is a rapid, brawling stream, with numerous eddies and riffles. Hundreds of immense hemlocks in different stages of decomposition are lying across the stream, forming bridges for the wildcat and raccoon, and such fishermen who prefer scrambling over than to wading the riffles. Here is a miniature dam formed by the breaking of just such a log in its center and lodging of driftwood and leaves against it. There are sure to be a couple of fine trout in this hole, and there are hundreds and thousands of such dams on this stream. A line dropped in too close to this barrier may become fastened among the twigs of some limb or the roots of the old beech upon the bank, as no one can tell where or how the water whirls and twists before it escapes in a foaming fall on the other side. But who would not risk a hook and line too that he may hook one of these bright-colored beauties hiding somewhere among the branches or roots in the gurgling water.

At 10 o'clock they lunch, resting on a fallen beach and then move on up the creek. The clouds have been threatening all morning and soon the rain is falling in a steady melancholy way that gives token of long continuance. The fishers are soon damp and then wet, but they care little for this and press eagerly on along the creek. Each little eddy and dam holds two or three good trout for them if they are but skillful enough to capture them.

By a roaring fire, on which is cooking a pan of fish, the little party are seated. A wide spreading hemlock, centuries old, keeps the steadily falling rain off, and they vote it a splendid place for camping. The chubs nicely browned, a pan of trout are cooked in plenty of lard and butter, a table is made of a bed of moss, and Frank announces dinner. Uncle George comes up from the creek, where he has been cleaning fish, and his oldest nephew comes through the woods with an armful of dry beech limbs for the fire. He piles up the fire and seats himself before the table, declaring that he is as hungry as a bear. They attack their dinner in a manner that makes the outlook for the next day look gloomy enough unless they can live on a diet composed solely of fish and frog legs. What a keen relish for food the stimulating air of the pine woods give. What a wonderful appetite does tramping through the creek and the exciting sport give. They praise the doughnuts and dispatch the well-buttered light cakes with hearty zeal. The chubs are eaten first and then the trout, when one and all declare that much as they have been praised no words yet penned have ever fully described their many excellencies. Ned is fed and Uncle George enjoys a smoke while the boys fix up their provisions so that they may not be damaged by the rain.

Frank and Peter are loath to leave the cheerful fire and go out again in the rain, which feels strangely cold and uncomfortable now. But George and his uncle are already trying to make a raise in the good pools ahead, and, covering up the fire so that it will keep until night, they, too, start out again. The afternoon is as disagreeable as it well can be, and long before evening all the boys are heartily sick of the fishing, and wish themselves in their uncle's house snug and dry. Ned, too, is thoroughly disgusted with the whole business and walks along with a sullen air, with his tail turned downward instead of upward as is his wont. At length the party get together and hold a consultation as to what they had be ter do.

"It's too wet and disagreeable to camp out now, sure," George says, "and it looks like rain now. I believe we had better pull for home."

"Yes, I guess we had. I would like to stay, but the weather is too bad," his uncle replies. "Wrap up the lines, I want to try this good place here a minute, and I'll catch up with you."

Then down the creek Frank and Peter run, splashing through the creek in wild delight, glad that they are started homeward. George and his uncle come on behind, trying to raise a few trout, as the down-stream fishing is always the best for brook trout. They wonder why they cannot hook any until they see the boys plunging through the creek. They have them go down the bank, and Uncle George is soon dropping out the speckled beauties. George says he had seen some rapid fishing, but had never seen a man galloping and catching a dozen trout, as his uncle did, in a ten-minutes' run down the creek. The low, blowing clouds that all afternoon had been threatening more than a common shower, now broke over the forest in torrents of rain. The fishers sought shelter beneath a wide-spreading hemlock. They were soon thoroughly soaked with the deluging water, and, leaving the tree, they walk rapidly down the creek. There is a sudden cessation of rain, and in its place they hear a low sighing in the treetops. Soon the dim crowns of the mighty hemlocks begin swishing softly like a troubled river. The low sighing grows to an audible murmur, and the clouds, dark and circling, blow swiftly over the treetops. From a low hum the storm soon springs into a roar, terrible in its fierceness.

"Run for the creek!" cries George, as the appalling snap of an immense hemlock just before them warns them, "'tis madness to push on while the trees are swaying on every side, threatening every moment to fall."

Into the creek they plunge like mad, and down its shallow bed they struggle and under a strong log lying across the high banks. "We're safe here," they cry, as they shrink under the log close to the bank. Across the creek Ned stands, yelping so shrilly that George thinks it is his uncle or one of the boys whistling for him to come under the log.

Ah! it is something to awe the stoutest heart when the storm-king reigns with a furious hand amid the tottering giants of the forest! When no sound can be heard save the deafening and unceasing thunder of the rushing winds in the slashing treetops! When the unnatural darkening of the sky is only lightened by the vivid and constant flashes of lightening! And seated under their protecting log, the fishers look out on this scene of awe with feelings indescribable.

Half way home another storm comes on, and the fishers are compelled to seek refuge in Bobbie Neal's barn. Here Ned again causes trouble by not being able to get into the barnyard. He yelps as shrilly as at the Branch. Uncle George runs out into the storm to get his dog, fearing lest Mr. Neal's big dog will be roused up, which would necessitate their staying in the barn all night, which wouldn't be the pleasantest thing in the world. But the eventful day is at length ended. The sixty-one trout are salted and placed in a cool place. The boys will take fifty of them home for their friends and a sick grandmother. They all eat a hearty supper in spite of their having eaten about all of their two days' rations since starting away in the morning, to Aunt Ellen's great consternation. She tells them that they have thrown it away, as Uncle George did the rifle when the last thunderstorm overtook them. But this buxom aunt's good humor soon returns, and she shakes with mirth as she scans the half-drowned and much-fatigued fishing party. Peter, with his uncle's long thrown-away pigeon-tailed coat, which floated back like streamers when coming down the creek, is an object of much merriment. They have all worn some clothes which fit in a ludicrous manner. They are, indeed, a laughable looking set, but full of good humor now that they have reached home again. A half hour later all is quiet in slumber.

After resting and drying up a day the boys leave for home, highly pleased with their trip, and promising to try it again in the coming spring if all goes well. On the return trip they reach home at noon, and think, as we (one of them) do, that fishing is fun if but afoot. Geo. Enty.

Templeton, Pa.

NEW ENGLAND SALMON AND TROUT.

[A paper read before the New Hampshire Fish and Game League by S. Garman.]

THE New England salmon and trout in the Agassiz Museum were obtained in all parts of the section, and among them are probably representatives of all the species and varieties belonging to it. A study of the collection, made in accordance with the wishes of the Fish Commissioners, has resulted in conclusions partially indicated below. Of New England salmon there are but two, the common salmon of our coasts (*Salmo salar*) and the land-locked (*Salmo sebago*). The latter is hardly to be distinguished from the former in its small stages, but being confined to the fresh water it does not go through the same changes in coloration. The shape of fins and number of rays and scales are about the same in each. In a line from head to tail, a little above the middle of the side, there are from 120 to 135, and in a row across the side from the dorsal to the fins just in front of the vent there are from 38 to 48 scales.

Of the trout there are five forms which can be distinguished with more or less readiness. Two of them are commonly called lake trout; the togue (*Salmo namaycush*) and the blueback (*Salmo oquassa*).

The togue is found in most of the lakes; it has from 195 to 215 scales in the row from head to tail, and across the flank there are from 56 to 62. In this species the tail is most deeply notched and the ends have the deepest points. The upper jaw or maxillary extends back much further than the eye.

The little blueback seems to belong only to the Rangeley Lakes and their tributaries. It has from 210 to 235 scales in a row along the flank, and from 64 to 76 across it between dorsal and ventral. The upper jaw does not extend as far back as the hinder edge of the eye, and the hinder margin of the tail is more waved, while the notch is not so deep as in the togue. The short upper jaw (maxillary) and the notch in the tail serve to distinguish the blueback from small togue.

The brook trout is represented by several closely allied forms. The rows of scales are greater in number than in any of the preceding. Between dorsal and ventral and the side there are from 78 to 86 rows. The more southern form has a less number of rows from head to tail than either of its allies. Its number varies from 195 to 210. This is the *Salmo fontinalis* of Mitchell. A form occurring in Lake Monadnock, for specimens of which I am indebted to Col. E. B. Hodge and others, differs from Mitchell's form in having a greater number of scales from head to tail—215 to 240—and in this respect it agrees better with the brook trout of the tributaries of the great lakes and also with the spotted variety from Northern New England. The brook trout as commonly known has a great many bars, blotches and vermiculations of brown and light on the back and retains these markings in large specimens. The brook trout of the great lake region resembles the togue more in the markings, but has a shallower notch in the tail than the latter, though slightly deeper than the *fontinalis*. The trout of Lake Monadnock is closely allied to the brook trout of the lake region further west, but differs considerably in coloration. Small specimens of seven to eight inches are clouded and have indistinct bands on the upper part of the flank, with spots along the side. Later in life they assume the shape of the ciscowet (*Salmo siscowet*), but become whitish or bleached and silvery. This trout contrasts greatly with the spotted variety of brook trout of Eastern New England; it has about the same specific character and the difference is mainly in coloration. By means of this it is readily separated from the *siscowet* of the great lakes. The notch in the tail is deeper and the number of scales greater in each of the more northern varieties of the brook trout.

New England thus possesses two salmon, two lake trout and three brook trout.

Sturgeon Fishing.—Petaluma, Cal.—Here in California the Chinamen and some white fishermen have a rather odd way of taking these fish. They have a long stout line, ranging from a few hundred yards up to several miles in length. At short distances apart are placed other smaller and shorter lines and at the end of each is suspended a strong barbless hook without bait. The main line is stretched across streams, or along their beds, close to the bottom, and the fisherman usually visits his line a couple of times a day. The fish in swimming over the line hooks himself and in threshing around becomes entangled with other hooks, and it is a wonder if he escapes. It is not unusual to find a heavy fish with eight or a dozen hooks fast in him. A line of this description was recently stretched along the channel of Petaluma Creek, for a distance of over six miles, and with its thousands of barbless, unbaited hooks the catch was enormous. The sturgeon caught ranged from two feet to nearly ten feet.—W. F. S.

Large Pompano.—For the past four years there have been occasional large specimens of pompano caught on our coast, and as the ordinary fish is considered large at two pounds, these monsters of fifteen or more pounds attracted much attention. They came in singly, and were considered to be stray specimens from the west coast of Africa, the *Trachynotus goreensis*, instead of our own *T. carolinensis*. Latterly, however, our fish has been suspected to be only the young of the former. On Monday last, Mr. Blackford had ten specimens which weighed 170 pounds, the largest one weighing twenty-one pounds. This is the first time that the large fish have appeared here in more than single specimens. They came from North Carolina.

Meacham Lake, April 29.—Our long winter is ended, and the lake once more clear of ice. The trout fishing began the 28th, with a catch of fifty, by F. P. Dennison, of Syracuse, but Frank says they have been frozen so long they come out of the water like a stick. As soon as we get a little warm weather, we expect a lively time "among the fishes." My eggs of the land-locked salmon are all hatched and doing nicely. I will turn them into the lake about June 1. Everything indicates a good fishing season.—A. R. Fuller.

"For New York Anglers."—*Editor Forest and Stream:* In the item "For New York Anglers," I said, in speaking of the sixty fish caught with bait, that twenty-five were over ten inches long, and three of them over fifteen inches long, not "twenty-five over fifteen inches long" as you have it, and which would make the catch very much more than sixteen and a half pounds.—Amateur.

The National Rod and Reel Association, at a meeting last Tuesday, decided to hold the next annual tournament Oct. 7 and 8.

Fishculture.

FISHWAYS IN SCOTLAND.

THE Secretary of the Board of Salmon Fisheries for the Tay District, Scotland, writes that the McDonald fishway has been chosen as the form which will be erected on the Falls of the Tummel. Col. McDonald will go to Scotland in June to superintend the erection of the structure.

The Edinburgh *Scotsman*, of March 6, has an article on fishways from which we extract the following:

"There are at present in Scotland more than 500 miles of rivers and locks barred against the ascent of salmon by impassable waterfalls. The Falls of Tummel shut out between 100 and 200 miles of water; the Falls of Monnessie, on the Spean, 40 miles; the Falls of the Conon, 22 miles; the Falls of Rogie, 15 miles; the Falls of the Kirkaig, 20; and the Falls on the Polly, in Ross-shire, several miles of river and eleven lochs. Besides these, there are a number of other falls which prevent the access of salmon to a great extent of good spawning ground. Hitherto, the difficulty and expense of overcoming these natural obstructions by means of salmon-ladders or passes has prevented much being done to open them up; it having been found by experience that no salmon-ladder with a steeper gradient than 1 in 8 or 1 in 9 will enable fish to ascend. That is to say, if a water-fall be 20 feet high, the length of the ladder must be from 160 to 180 feet; and in the most efficient salmon-ladder in Scotland—that at Deanston, on the Teith—the gradient is much flatter—namely, 1 in 27. It is obvious that the steeper the gradient by which the fish can be enabled to surmount an obstruction, the shorter and cheaper will be the salmon-ladder, and that in proportion as the gradient gets flatter, the longer and more expensive will it be. The McDonald fishway, therefore, which was exhibited in the United States department of the International Fisheries Exhibition in London, and for which it is claimed that it enables fish to ascend easily and certainly a gradient as steep as 1 in 3 or 1 in 4, is a great improvement on anything of the kind that has been constructed in this country. A company has been formed to work it, and it has been patented in the United States, in Canada, and in Great Britian and Ireland. The cost of fishways constructed on this principle is stated to have varied from £2 to £5 per running foot, and Col. McDonald writes that the price of constructing a fishway, with a gradient of 1 in 4, on the Falls of Tummel, which are 16 feet high, would vary from £100 to £250, depending upon the difficulties of the site, the strength of construction required, and the cost of the substructure or foundations. Reasoning from the data thus furnished, it would seem that a fishway on the Falls of Monnessie, on the Spean, which are 22 feet high, would cost about a third more; and that one on the Falls of the Conon, a little below the outlet of Loch Luichart, which are 28 feet in height, and where the site presents peculiar difficulties, would probably cost nearly double the estimate for the fishway on the Falls of Tummel. Yet these sums, considerable though they are, are very much less than what would be the cost of an efficient salmon-ladder on any system known or practiced in this country. For example, almost the only attempt as yet made in Scotland to enable salmon to surmount an impassable waterfall has been made, within the last few years, at the Falls of the river Moriston, which rises in Loch Clunie, and, after a course of twenty-five miles, falls into Loch Ness. The falls are situated a short distance above the junction of the river and the loch, and being upward of 20 feet in height, they entirely prevented the ascent of salmon into the river until the construction of the present ladder, which was completed in 1880. It is 240 feet long, and has cost £1,800; whereas had it been constructed on the McDonald principle, it would have been only 80 feet long, and would have cost only from £160 to £400."

THE NEW YORK FISH COMMISSION.—The Governor has appointed Mr. William H. Bowman, of Rochester, to be a Commissioner of Fisheries to fill the vacancy caused by the death of Edward M. Smith.

Over Ten Million Dollars has been paid to its policy holders by the Travelers, of Hartford, Conn., since its organization. Present payments are over a million a year.—*Adv.*

The Kennel.

FIXTURES.

BENCH SHOWS.

May 6, 7, 8 and 9.—The Westminster Kennel Club' Eighth Annual Bench Show, Madison Square Garden. Entries close April 21. Chas. Lincoln, Superintendent. R. C. Cornell, Secretary, 54 William street, New York.

June 10, 11, 12 and 13.—The Second Annual International Bench Show Chicago, Ill. Mr. Charles Lincoln, Superintendent.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1213.** Volume I., bound in cloth, sent postpaid, $1.50.

EASTERN FIELD TRIALS DERBY.

FOLLOWING are the entries for the Eastern Field Trials Derby, to be run next November at High Point, N. C. All were whelped in 1883:

ENGLISH SETTERS.

PENDRAGON.—T. S. Dumont, New York City, black, white and tan dog, June 11 (Count Noble—Floy).

LORD SUFFERN.—J. Otto Donner, New York City, orange and white dog, Aug. 2 (champion Thunder—Donner's Bessie).

LADY SUFFERN.—J. Otto Donner, New York City, blue belton bitch, Aug. 2 (champion Thunder—Donner's Bessie).

MATADORE.—J. Otto Donner, New York City, black, white and tan dog, Dec. 25 (Mate—Madge D.).

CLIFFORD.—J. Otto Donner, New York City, black, white and tan dog, July 22 (Emperor Fred—Fairy Belle).

COUNT ROBERT.—F. R. Hitchcock, New York City, black, white and tan dog, Nov. 15 (Count Noble—Spark).

BLUE LILLY.—Chas. Heath, Newark, N. J., blue belton bitch, June 21 (Blue Drake—Gypsy Queen).

NOBLEMAN.—Dalliba & Munhall, Cleveland, O., black, white and tan dog, June 11 (Count Noble—Floy).

CROWN.—F. E. Perkins, Providence, R. I., dog, April 7 (Dash III.—imported Blanche).

PRINCE.—F. E. Perkins, Providence, R. I., dog, April 7 (Dash III.—imported Blanche).

PAUL.—F. E. Perkins, Providence, R. I., dog, April 7 (Dash III.—imported Blanche).

NOT NAMED.—H. J. Rice, New York City, July 29, Goodsell's Prince—owner's Pebble).

PEGMATITE.—N. Rowe, Chicago, Ill., black, white and tan dog, April 11 (Cambridge—Marchioness Peg).

PEGOMANCY.—N. Rowe, Chicago, Ill., blue belton bitch, April 11 (Cambridge—Marchioness Peg).

WINDERMERE.—Dr. S. Fleet Speir, Brooklyn, N. Y., lemon belton dog, June 17 (champion Druid—Countess Louise).

CLYDE T.—L. Shuster, Jr., Philadelphia, Pa., lemon and white dog, May 24 (champion Thunder—Cornelia).

THORN.—Jos. M. Sturges, Philadelphia, Pa., lemon and white dog, March 15 (Buckellew—Sally).

JACK W.—Col. A. G. Sloo, Vincennes, Ind., orange and white dog, April 22 (Sergeant—Eva).

KING DICK.—T. W. Stoutenburg, Collinsville, Ill., orange and white dog, April 3 (Bracket—Nannie).

THUNDERBOLT.—Jesse M. Whaite, Chester, S. C., black, white and tan dog, May 7 (Rex—Dot).

BONNIE G.—Jesse M. Whaite, Chester, S. C., black, white and tan bitch, May 7 (Rex—Dot).

GLADSTONE'S BOY.—Dr. G. G. Ware, Stanton Depot, Tenn., black, white and tan dog, Jan. 10 (Gladstone—Sue).

GLOSTER.—Edward Dexter, Boston, Mass., lemon and white dog, June 3 (Dashing Rover—Belle).

BELLE OF PIEDMONT.—Edward Dexter, Boston, Mass., bitch (Dashing Rover—Ranie).

FAUST.—A. W. Foster, Atlanta, Ga., black and white dog, June 1883 (Prince Charlie—Anne Boleyn).

JENNIE III.—W. Tallman, Pawtucket, R. I., black, white and tan bitch, Oct. 29 (Foreman—Jennie).

COUNT RANGER.—H. D. Towner, Nyack, N. Y., black, white and tan dog, Aug. 12 (Count Noble—Gertrude).

DAISY BELTON.—J. R. Hendrick's, Pittsburgh, Pa., black and white bitch, Jan. 3 (Belton III.—Countess).

RICHMOND.—E. M. Usher, Vincennes, Ind., orange and white dog, April 22 (Sergeant—Eva).

SURREY.—W. B. Mallory, Memphis, Tenn., black, white and tan dog, June 10 (Gath—Juno II.).

LADY LEE.—W. B. Mallory, Memphis, Tenn., black, white and tan bitch, June 10 (Gath—Juno II.).

COLONEL COOL.—W. B. Gates, Memphis, Tenn., black, white and tan dog, June 30 (Gath—Lit).

DORA.—W. B. Gates, Memphis, Tenn., black, white and tan bitch, July 22 (Gladstone—Carrie J.).

RODERIGO.—Gates & Merriman, Memphis, Tenn., black, white and tan dog, April 11 (Count Noble—Twin Maud).

HAYDEE.—Gates & Merriman, Memphis, Tenn., black, white and tan bitch, April 11 (Count Noble—Twin Maud).

LEXINGTON.—W. J. Crawford, Memphis, Tenn., black, white and tan dog, June 10 (Gath—Juno II.).

BILLY GATES.—Dr. A. F. McKinney, Forest Hill, Tenn., dog, Aug. 21 (Count Rapier—Kate B.).

LILLIAN.—J. H. & D. Bryson, Memphis, Tenn., black, white and tan bitch, Aug. 21 (Gladstone—Sue).

GLAD ROY.—Whyte Bedford, Horn Lake, Miss., black, white and tan dog, June 28 (Gladstone—Donna J.).

GLIDELIA.—C. Spahr, M.D., Bridgeville, Pa., black, white and tan bitch, Aug. 12 (Count Noble—Gertrude).

BLACKEY.—Benj. Machaneer, Treverton, Pa., black and white dog, June 22 (Sig—Bessie).

FANNIE.—Benj. Machaneer, Treverton, Pa., black and white bitch, June 22 (Sig—Bessie).

INDEX.—J. M. Avent, Hickory Valley, Tenn., blue belton and tan dog, July 10 (Gladstone—Countess Druid).

JESSIE WINFIELD.—J. M. Avent, Hickory Valley, Tenn., black, white and tan bitch, Oct. 5 (Gladstone—Bessie A.)

GLADSTONE'S IMAGE.—J. M. Avent, Hickory Valley, Tenn., black, white and tan dog, Oct. 5 (Gladstone—Bessie A.).

GLAD-MOON.—J. M. Avent, Hickory Valley, Tenn., black, white and tan dog, Oct. 5 (Gladstone—Bessie A.).

ANNIE MORGAN.—J. M. Avent, Hickory Valley, Tenn., lemon and white bitch, Oct. 5 (Gladstone—Bessie A.)

LADY BESS.—J. M. Avent, Hickory Valley, Tenn., lemon and white bitch, Oct. 5 (Gladstone—Bessie A.).

IRISH SETTER.

ROSE OF KILLARNEY.—Luke White, Bridgeport, Conn., red bitch, Aug. 25 (Killarney—Lill III.).

GORDON SETTER.

PILOTAGE.—Dr. S. Fleet Speir, Brooklyn, N. Y., black and tan dog, June 1 (Pilot—Fan).

POINTERS.

SAM.—G. W. Amory, Boston, Mass., liver and white dog, May 1 (Sensation—imported Sal).

SCOUT.—G. W. Amory, Boston, Mass., liver and white dog, May 1 (Sensation—imported Sal).

DIRK.—Edward Dexter, Boston, Mass., liver and white dog, August (Croxteth—Chic).

PRINCE OF ORANGE.—R. C. Cornell, New York City, lemon and white dog, Sept. 11 (Sensation—Seitner's Lass).

LUCKY STONE.—Westminster Kennel Club, Babylon, L. I., liver and white bitch, Aug. 24 (Tory—Moonstone).

MADSTONE.—Westminster Kennel Club, Babylon, L. I., liver and white bitch, Aug. 24 (Tory—Moonstone).

DUKE OF ORANGE.—Westminster Kennel Club, Babylon, L.I., lemon and white dog, Sept. 11 (Sensation—Seitner's Lass).

RICHMOND.—John E. Gill, Franklin, Pa., lemon and white dog, July 27 (Vandevort's Don—Beulah).

WILD BRIAR.—John E. I. Granger, New York City, liver and white dog, Aug. 14 (Croxteth—Dolly).

PRINCE HAMLET.—F. R. Hitchcock, New York City, lemon and white dog, Sept. 11 (Sensation—Seitner's Lass).

TAMMANY.—F. R. Hitchcock, New York City, liver and white dog, Aug. 24 (Tory—Moonstone).

FLASH R.—H. E. Hamilton, New York City, liver and white ticked bitch, March 28 (Dilley's Ranger—Dilley's White Lilly).

MARS.—Otto Plock, Guymard, N. Y., liver and white dog, March 24 (Croxteth—Seitner's Lass).

ROMP.—Neversink Kennels, Guymard, N. Y., liver and white bitch, March 24 (Croxteth—Seitner's Lass).

QUEEN FAUST.—T. W. Stoutenburg, Collinsville, Ill., lemon and white bitch, Oct. 15 (Faust—Rose II.).

NABOB.—E. F. Stoddard, Dayton, Ohio, liver and white dog, Feb. 17 (Croxteth—Trinket).

FRESCO.—Grant & Smith, New York City, black and white dog, September (Bang-Bang—Daisy).

POCAHONTAS.—Luke White, Bridgeport, Conn., lemon and white bitch, Aug. 19 (Tramp—owner's Grace).

VIRGINIA.—L. White, Bridgeport, Conn., lemon and white bitch, Aug. 19 (Tramp—owner's Grace).

DRAB.—A. R. Heyward, Rock Hill, S. C., lemon and white bitch, March 31 (Dan—Arrow).

MIDGET.—J. C. Vail, Warwick, N. Y., liver and white ticked bitch, July 14 (Match—Belle).

THE WARWICK DOG SHOW.

[From our special correspondent.]

THE second exhibition of sporting and non-sporting dogs at Warwick, England, was held on April 16, 17 and 18. The total number of entries amounting to 1,204, and taken together with the quality of the animals exhibited, it must rank as one of the best exhibitions ever held. The dogs were benched in a new building erected by the society, and the situation was one of the best. There were plenty of grounds outside the building for exercising the dogs, and large roomy tents erected for judging, and as the weather was fine, there were several rings out in the open and the judging was got through pretty well. In some cases the awards were not very favorably received, but on the whole things seemed to give general satisfaction.

The first on the list was as usual, bloodhounds. Nestor winning first, having almost a walk over from Lawyer. In champion bitches, Dido, the only entry, won. She was looking well and is no doubt a good specimen of the bloodhound. In open dogs, Mr. Nichols's young dog Triumph, who made his first appearance on the show bench last January at the Crystal Palace, won again here, first and special cup. He is rather dark in color, which we think is improving since we saw him before, and no doubt will continue to improve with age; otherwise he is one of the best—if not the best—bloodhound ever exhibited. His ears are something extraordinary. We consider he stood well ahead in his class, which was in all respects a good one, all of the noticed dogs being quite fit to win at an ordinary show. In open bitch class, Witch I. is a very good animal. We prefer the hc. Patti to the second prize bitch Daisy, the latter being rather small.

In champion St. Bernard dogs there was no competition. In champion bitches first went to Elfrida. She is very large, with light orange markings on head and a white body. She is a good bitch but was rather out of coat. In the open class for dogs, Prince Arthur, hc., is of good color and coat, but rather fine of face and large of ear. Faust, second prize, is well known. He is a grand dog, were it not that his condition is always against him. Musgrave, vhc., is rather fine in muzzle and short on his legs, otherwise a good dog, with good color and markings and good coat. Valor, vhc. and reserve, is rather curly in coat. Ethelbert, third, is a fine large dog, with orange markings on head, body white; he resembles his sister Elfrida very much. Valentine, the winner, shown in good form, and has the best head of anything in the class, good feet and legs, and a well-marked head; his faults being color of body and want of dew claws. In the bitch class, Minna II., a grand bitch, curly of coat, and Countess of Beaufort, both vhc., is well made, with good markings on head and face, white body and orange markings, a good coat, and altogether a very nice bitch. Khiva, vhc. and reserve, is a very good bitch, but out of coat. She is of good color and markings. Dacia, second, has good color and markings, but is too fine before the eyes. Crevasse II., third, is also weak in head. La Mascotte, first, a well-marked black brindle, has plenty of coat, which is rather curly. In dogs and bitches, smooth-coated, Silvia, second prize, is a fairly good specimen, with a well-marked head and white body. Bruce, the winner, is short of leg. In dog puppies, Guy, vhc., smooth, is rather long of face. Plinlimmon, first, is a very large upstanding puppy, of good color and coat. We consider him leggy, quite too long of face and large of ear. Brennus, second, is good in color. In bitch puppies, first went to Thisbe, the best in the class. The St. Bernards, taken altogether, were nothing more than a moderate collection.

In champion mastiffs there were four to face the judge, who awarded first to Pontiff, a decision we could not agree with. He was the smallest dog of the lot, and had the smallest skull, and is rather weak in his quarters. We would have given the honor to Cardinal, who was looking his very best; he has a grand head, good quarters, feet and legs, and is the largest dog. Orlando is very good in skull and body, but he is very low before and straight behind, and is quite a cripple when moving. Crown Prince is not so large in skull as Orlando, but is better in wrinkle; we never liked his liver-colored face and bad quarters. In champion bitches first went to Rosalind, a really grand bitch, larger than her opponent, Crown Princess, nevertheless we like the latter best, being more full of quality and better in coat and muzzle, with the best quarters we ever saw on a mastiff. In open dogs, third went to Montgomery, a very nice dog, of the correct type, but with not so much bone as some. We thought this dog should have been second, as the second prize dog, Moses, is flat-ribbed, out at elbows and weak in his pasterns. The Prince, placed first, well deserved his position; he is good on his feet, with a grand skull, good muzzle and wrinkle; we would prefer him with better quarters. In bitches Olga, who was third, is a very nice bitch; she might be shorter in face. Ilford Claudia, vhc., is another good bitch; she stands too high on the leg and is light of body. The Lady Isabel, first prize, well deserved her position; she is a really good bitch, good in face and body, a good mover and well quartered. Boadicea, second, is another good bitch and was well placed.

The two classes for brindles brought out some fairly good specimens, and they were correctly placed. The first prize brindle bitch Lily II. is a remarkably fine specimen, Mr. Taunton, her breeder, coming second with a full sister, only older. Mr. Evans won first and second in puppies with two very nice young bitches. Elaine, first, is more matured than her sister, and smaller in ear and better in color.

In Great Danes, or boarhounds, Sultan II. had a walk over in the champion class. He is certainly a grand animal and was shown in the best of condition, and worth going some distance to see. There were some good specimens in the open classes and the decisions seemed well received.

In Newfoundlands, Gunville won first in champion dogs (black), Joe Sadler being withdrawn from competition; Trojan winning in the next class, Trafalgar not competing. In champion bitches, the well-known Zoe had no opposition. In open dogs, first went to Courtier, a grand dog in good coat and condition. Scamp II., second, was rather out of coat. Leo V., vhc., is a good dog, bar his legs. In bitches, Mr. Nichols's Sybil won first easily. There was nothing else really good in the class. In Newfoundlands, other than black, there were six entries, representing almost as many different types, consequently there was general dissatisfaction among the exhibitors.

In deerhounds, Cuchullin, first in champion class, is a very good specimen with good hard coat and color, he might be larger. In champion bitches there was but one entry, Heather, who is showing age. In the open class for dogs, Corrie II., who won second, is a very nice dog of good size and good coat, he is rather light in color. Lord of the Isles, first, is a grand upstanding dog, good dark blue in color, with a beautiful coat. The bitches were well placed.

In greyhounds, County Member had a walk over in the champion class. There were no entries in champion bitches. In open dogs Whiskedale II. won easily and the same gentlemen won first and second in the bitch class and cup for best greyhound in the show, with Mother Demdike, she is a black and white. We saw her here for the first time and consider her the most perfect greyhound we have ever seen.

Young Wagg won in champion pointer class with nothing against him, Belle of the Ball repeating the same performance in the bitch class. In open dogs, Devon Sam, a liver and white with plenty of bone and substance, won first, he looks all over a workman. Nap, second, is a good sort of dog, with plenty of go in him, and showing quality. In bitches, Devon Fan, first, is a liver and white, with plenty of bone and quality.

In the setter champion dog class, Ganymede, an Irish setter, and Sir Alister, an English setter, were placed equal first. We would have given it to Sir Alister. The Irish setter bitch Geraldine won first in champion bitches, having no opponent. The English setter dogs were a very fine collection, the winner, a lemon-marked dog, by Emperor Fred, being one of the best setters we have seen lately; he might move freer behind, but he is much better than his sire in that respect. Glencairn, second, is another good dog, possessing good bone and substance, and at the same time full of quality, is a very difficult dog to beat. The bitches were not quite so good a class as the dogs. Mr. Cunnington's Lady Westmoreland, vhc., by his Sir Alister and bred by Mr. Cockerton, is a very fine bitch, good in coat, plenty of bone and full of quality. She may be a bit on the small side. Plimsy, second, is another moderately good specimen, almost white in color.

The black and tan setters were only a moderate collection, the winners in the bitch class being perhaps the pick of the basket.

Irish setters were a fairly good class, but nothing above the average. In puppies the winner looked a trifle high on the leg, but full of go. Sir Kent, second, struck us as a promising puppy with a very good coat.

Retrievers were a fine collection, Mr. Shirley having a very large entry and carrying away most of all the prizes, which he generally does in this variety. Curly-coated retrievers seem going back. There are not such strong classes as there were a few years ago. Banner, the winner in the dog class, was a very good specimen. Mr. Skipworth's puppy, Smike, second, is a very promising young one, well grown; he was heavily handicapped, competing against old dogs.

There was a special cup offered for the best team of pointers, setters or retrievers, and no less than nine kennels entered, Mr. Shirley's team of nine wavy-coated retrievers carrying off first honors. Next, Mr. Cunnington's collection of six English setters. As the several kennels possessed such quality, the committee decided to give some extra prizes, so Mr. Daly's curly retrievers and Mr. Bulled's pointers came in for extra prizes.

In Clumber spaniels, Lance, the only entry in the champion classes, did not put in an appearance. The winner, Boss, in the open class, is a remarkably fine young dog, large, long and low, but a trifle long in face. Ramble, second, is another fair specimen, his color is not quite what we would like, being rather a bright red. We missed Mr. Holmes's dogs on this occasion.

In Sussex, or liver-colored spaniels, there were no entries in champion dogs. In champion bitches, Brida II. won, with no opponent. In open dogs, Horatio, well-known, was an easy first. In bitches, Eastern Bee, first, was much the longest and lowest. She is rather weak in pasterns and short of coat, which no doubt will improve, as she is only twelve months old.

In water spaniels, champion dogs had no entries. In champion bitches, Lady and Young Hilda were equal. In the open class for dogs and bitches, first and second prize winners were only moderate specimens. This variety of spaniel seems to be dying out.

In champion field spaniels, dogs, other than black, Mr. Spurgin's Hop, and in bitches, Mr. Spurgin's Floss had a walk over. In open class dogs, first went to Bruce, a very nice young black and tan dog, rather dark in color. Counsellor, second prize, is a liver. Newtown Abbott Beau, vhc., is a very good black and tan, good coat and good color, a little short of feather, and not as square in head as we would wish him. In the bitch class, Mr. Easton was once more to the front with a very nice liver and tan, long and low.

In cockers, first prize went to Nellie VII., a very nice little bitch of the correct size and type, but out at elbows. Freda, second, is a black, tan and white, of fair quality. Lilac, hc., is of good stamp, with a bad head.

In black spaniels, champion dogs, Roysterer and Solus were equal first. We certainly would have had no hesitation in placing Solus first. The Messrs. Willets placed Solus over Roysterer at Birmingham, and Solus, we consider, looked much better on the present occasion. In champion bitches, Miss Obo won, beating Beverley Bess. We consider Miss Obo a very handsome, small field spaniel, but cannot recognize her as a cocker. In spaniel dogs (black), first went to Easton's Bracken. He has a good head, and is long and low, with plenty of bone. Lord Bute, second, is not so low as the winner, and is rather short of coat and feather. President, vhc., is a good dog with a good coat, but stands rather high on leg. In bitches, Easton once more won first with Busy, which makes a total of five firsts with brothers and sisters all out of one litter by champion Solus out of Beverley Bess. It is a pity Mr. Royle objects to put Solus to stud. If he did we certainly would see a great improvement in the spaniel class in a short time. We have seen some of Solus's puppies in Scotland which we consider equal, if not superior, to any shown at Warwick by Mr. Easton.

Collies came out in great numbers, and the quality was good. In champion dogs there were four entries. Charlemagne, who won first, quite deserved his position. Rutland was next best to our mind. Eclipse being in rather good company, good dog as he is. In champion bitches first went to Madge. We rather preferred Jessie. The open classes of collies were 50 dogs, 36 bitches, 33 dog puppies and 19 bitch puppies. The awards in every case did not seem to give general satisfaction. Nevertheless, we consider from the winner down to the vhc. dogs in each class, with few exceptions, they were all fairly good typical dogs, fit to win at any ordinary show. In champion smooth dogs Guelt had no opposition; in the corresponding bitch classs Yarrow beat Sattie. We consider the latter much the best. In the open class we would have placed the first prize winner third and the third prize winner first, leaving the second as it was. The bob-tailed sheep dogs were about the best class we have seen of this variety. The winner is a very strong, muscular dog, good in coat; the second prize Welsh Boy, not far behind the winner.

In champion Dalmatians, first went to Mr. Fawdry's Treasure, he was much the best. In the open class Mr. Fawdry

won first and second, with only moderate specimens; the others were an inferior lot.

In champion bulldogs first went to Diogenes, a very good white dog, beating Lord Nelson. Queen Mab won in champion bitches. In open dogs first went to Mr. Shirley's Cervantes, a very good fellow with a good chest, good body, and a well arched back, he is not as deep in face as we would like. Castor, second, is too small before the eye, and light of bone, he was shown in bad condition. In open bitches Rhodora was first. Dona Sol, vhc., is small of skull and light of bone. We consider her properly placed on this occasion. In bulldogs not over 45 pounds, first went to Monarch III., who was correctly placed, he is a good, well-made dog, a trifle small of skull. The rest were nothing above the average. The bitches not over 35 pounds, were a moderate lot.

In champion bull-terriers Max Marx had no opponent. In dogs and bitches over 25 pounds, Cairo won first; Count, second; we fancied most. Trentham Lady, vhc. reserve, drops before the eye and appears cheeky. In the small class Mr. George was first again, but the class was a very moderate one, a good many being over weight.

In champion fox-terriers, Brokenhurst Sting beat The Belgravian, a decision we cannot agree with, and one that seemed to give general dissatisfaction to the fanciers of this variety. In champion bitches, Diadem I. had no competitor. She is a very good one, with good ears which would be better if carried more close to the head. In open dogs there were forty-one entries. First went to Mr. Wood's Splinter, a son of Sutta Vida. He is a good up-standing dog with capital feet, legs and shoulders and good shaped body. We think he might show more quality about his head and neck, but we consider he won well. Forrester II. we did not like near so well. His head is short and strong. We preferred the vhc. Sago to this dog. Stockwell, third prize, is fine of face and coarse of neck; nevertheless we preferred him to the second prize winner. In bitches, No Joke, vhc. is strong and well made, but lacks quality. Cynisea, first, is well to the point. She is a good, well-made bitch with good body, feet, legs and coat, with lots of terrier character. Stanhope Semlah, third, has a good long head which lacks character. She has good feet and legs. Dusky, second prize, is another good bitch a trifle large in ear. Scoop, c., is a nice terrier in bad condition. The same remark applies to Miss Nick. In dog puppies, Rallison, vhc., stands high and is strong in head. Hognaston Rebel, first, is a good terrier. He might be in better condition. Raby Muddle, hc., is a good made young dog by Mixture. He is a little strong in head with ears badly carried at present. His markings are not what we would desire. Stockwell, second prize, was third in open dog class. In bitch puppies there were twenty-eight entries, Mrs. Candour, the third prize, weedy and faulty in head. Stanhope Semlah, third in open bitches, second here, and Dusky, second in open bitches, first here. Scoop, hc., we preferred to the third prize winner.

In champion wire-haired dogs Newboy was first, beating Briggs, shown out of form. In the corresponding bitch class, Miss Miggs won, being closely pressed by her kennel companion, Vora. The wire-haired dogs, open class, contained some real good specimens, and most of the noticed dogs are all fit to win. Scrimage, third prize, is on the large size. Quilp, vhc., carried his ears badly. Rocket, first, is a real good one, rather wide in chest. In bitches, first went to Rock Rose, a well-made one with good coat, deficient in head. Dolly Varden, second, held the same position in the puppy class, a good sort and preferred by many to the winner. In dog puppies, first went to Mr. Carrick's Tinker, a good young dog, but many preferred Jack Frost, commended, who has rather too much coat. Tormenter was first in bitch puppies; is rather snipy, long-casted and short of coat; she got more than she deserved.

The beagles were a small class, the prize winners being very good specimens.

Basset hounds had a very fair entry, and the awards were well received, as is usually the case when Mr. Jones judges.

In Bedlington terriers, champion class (dogs and bitches), first went to Dina, owing, no doubt, to Topsy being in bad condition. Projectile has had his day. Tinner, first in open dog class, had a clear win. In bitches, Domino won: she is a bitch we always admired, having a good head, plenty of go and style, with a good short back and arched loin, and is of the correct size.

Mr. Harding Cox exhibited three grand couple of harriers, and had no opposition.

Dachshunde turned out in good force, no less than seven champions, and the other class also well filled.

Airedale terriers were a small class, owing, no doubt, to the Halifax show being held the day previous.

In Irish terriers, dogs and bitches, first went to Glory. We prefer Pretty Lass, who was rather out of coat on this occasion. Thady II. deserved a vhc.

In hard-haired Scotch terriers, first went to Nipper, and correctly. Ailsa, vhc., was preferred by many to the second prize, Lochiel.

In Dandie Dinmonts, Jeannie Deans won well in the champion class, and her kennel companion, Rhoderic, won first in the open class and special for best Dandie of all classes. He is a good dog, with good head, ears, coat and color.

In the black and tan champion class, first went to Wheel of Fortune. We consider her too large, and she walks stilty behind. In the open class, dogs and bitches, first prize was awarded to Welcome, catalogued at £10 and claimed by several. She was afterward put up at auction and realized 19 guineas, at which price we consider her anything but cheap. Mr. Taylor won in the small-sized black and tans with Sissy II. She is rather light in body.

In poodles, dogs, Flute, the winner, is a real good specimen.

In champion pugs Stingo Sniffles, who won first, is a nice size, rather dark in face, and nose not quite black. In bitches So So had a walk over. Mr. Sheffield won again in open dog class with Sir Stafford; not good in face, the second prize dog being better in that respect, but larger.

In King Charles spaniels Alexander the Great was the only entry in champion class, Mr. Briggs also winning first in open dogs with Bend Or, the winner at the Palace last January; he is good in size, remarkably good in head, with a better coat than Alexander the Great, but is not so good in body. The winner in the bitch class was a good way ahead, remarkably good in ears and coat, good head, rather dark in color and light of body.

Blenheim spaniels and Yorkshire terriers were only a moderate lot.

Foreign dogs were a good class, Mr. Taunton as usual carrying away most all the prizes. There was a selling class, but no particular value offered. The local classes were filled with animals, but little above selling class form. Following is a list of the

AWARDS.

BLOODHOUNDS. — CHAMPION — *Dog:* Mark Beaufoy's Nestor. *Bitch:* J. C. Tinker's Dido: OPEN—*Dogs:* 1st and cup, Edwin Nichols's Triumph; 2d, J. C. Tinker's Duncan. *Bitches:* 1st, Osborn Hill's Witch; 2d, W. C. Nash's Daisy. *Puppies:* 1st, Samuel Amphlet's Judy.

ST. BERNARDS.—CHAMPION—*Dog:* Absent. *Bitch:* H. C. Joplin's Elfrida. OPEN—ROUGH—*Dogs:* 1st, Sidney W. Smith's Valentine; 2d, H. C. Joplin's Faust; 3d, G. Neville Wyatt's Ethelbert. *Bitches:* 1st and 3d, L. C. R. Norris Elye's La Mascotte and Crevasse II.; 2d, Thomas King's Dacia. SMOOTH—1st, Samuel Smith's Bruce; 2d, E. Duret's Silva; 3d, Joseph Small's Garnet. PUPPIES—*Dogs:* 1st and members' cup, Rev. Arthur Carter's Plinlimmon; 2d, Wm. B. Megone's Brennus; 3d, W. L. Bicknell's Rex. *Bitches:* 1st and St. Bernard cup, Rev. Arthur Carter's Thisbe; 2d, Mrs. Annie Mansfield's Lady Burghley; 3d, W. Cox's Lady Raggs.

MASTIFFS. — CHAMPION — *Dog:* Cup, Mark Beaufoy's Pontiff. *Bitch:* Dr. Forbes Winslow's Rosalind. *Stud dogs:* 1st, W. K. Taunton's Cardinal. OPEN—OTHER THAN BRINDLE—*Dogs:* 1st, Joseph Royle's The Prince; 2d, Joseph Egan's Moses; 3d, T. W. Allen's Montgomery. *Bitches:* 1st, Dr. J. S. Turner's The Lady Isabel; 2d, Z. W. Walker, Jr.'s Boadicea; 3d, Thos. Wallen's Olga. BRINDLE—*Dogs:* 1st, W. R. Taunton's Commodore; 2d, W. Francis's Kepler; 3d, James Hutchings's Titus. *Bitches:* 1st and challenge cup, F. J. Campbell's Lilly II.; 2d and 3d, W. K. Taunton's Cleopatra and Nell II. *Puppies —Any color:* 1st, and Cup and 2d, Joseph Evans's Elaine and Vivien. Mastiff breeders' cup, Dr. Sidney Turner.

GREAT DANES.—CHAMPION—*Dog:* Charles Petvzywalski's Sultan II. *Bitch:* No entry.—OPEN—*Dogs:* 1st, E. G. Martin's Nero; 2d, Mrs. M. Hazlerigg's Prince Charlie; 3d, Evelyn Wooten's Thunder. *Bitches:* 1st, Mrs. M. Hazlerigg's Peeress; 2d, H. St. James Stephen's Laura; 3d, Charles Petvzywalski's Flora. *Puppies:* Miguel Del Riego's Leal; 2d, A. A. Grosvenor's Mark Antony; 3d, Joseph Evans's Mentor.

NEWFOUNDLANDS.—CHAMPION—BLACK—*Dog:* H. R. Farquharson's Gunville. *Bitch:* T. E. Mansfield's Zoe.—CHAMPION—OTHER THAN BLACK—*Dog:* H. R. Farquharson's Trojan. *Bitch:* No entry.—OPEN—BLACK—*Dogs:* 1st and cup, H. R. Farquharson's Courtier; 2d, A. E. Ainsworth's Scamp II. *Bitches:* 1st, Edwin Nichols's Sybil; 2d, H. R. Farquharson's Lady in Waiting.—OTHER THAN BLACK.—1st, H. R. Farquharson's Seaman; 2d, Edwin Nichols's Admiral Drake. *Puppies, any color:* 1st, Edwin Nichols's Admiral Nelson; 2d, A. E. Ainsworth's Sebastian Cabot.

DEERHOUNDS.—CHAMPION—*Dog:* G. W. Hickman's Cuchullin. *Bitch:* D. P. Thomas's Heather.—OPEN—*Dogs:* 1st, G. W. Hickman's Lord of the Isles; 2d, Frank Dugdale's Carrie II. *Bitches:* 1st, Maxwell & Cassel's Minna; 2d, W. Gordon's Beatrice II.

GREYHOUNDS.—CHAMPION—*Dog:* H. C. Joplin's Country Member. *Bitch:* No entry.—OPEN—*Dogs:* 1st, Messrs. Charles's Whiskedale II.; 2d, S. P. Heatly's Hylan Prince. *Bitches:* 1st and cup, and 2d, Messrs. Charles's Mother Demdike and Acalia.

POINTERS.—CHAMPION—*Dog:* J. Taylor's Young Wagg. *Bitch:* J. Lee Bulled's Belle of the Ball. OPEN CLASS—*Dogs:* 1st and cup, J. Lee Bulled's Devon Sam; 2d, Edwin Bishop's Nap; 3d, J. Taylor's Earl of Croxteth. *Bitches:* 1st, J. Lee Bulled's Devon Fan; 2d, J. R. Jones's Ruby of Homestay.

SETTERS.—CHAMPION.—ANY VARIETY—*Dogs:* Equal 1st, Rev. Robert O'Callaghan's red Irish Ganymede and Thomas Cunnington's English Sir Alister. *Bitch:* Rev. Robert O'Callaghan's red Irish Geraldine. OPEN—ENGLISH—*Dogs:* 1st, J. H. Platt's Sting; 2d, Joseph Boyle's Glengairn. *Bitches:* 1st, Thomas Cunnington's Blue Maud; 2d, J. H. Platt's Plimsy. BLACK AND TAN—*Dogs:* 1st, Adrian Phillips's Young Duke; 2d, W. Long's Norwich Banquo. *Bitches:* 1st, F. A. Manning's Alice; 2d, Robert Parnell's Ruby. IRISH—1st, P. A. Beck's Lismore; 2d, Rev. Robert O'Callaghan's Tyrone. *Irish Stud Dogs:* 1st, Rev. Robert O'Callaghan's Ganymede. *Puppies, any variety:* 1st, Capt. E. H. Howell's Lymington Bruce; 2d, James Hogarth's Sir Kent.

RETRIEVERS.—CHAMPION—*Dog:* S. E. Shirley's Moonstone. *Bitch:* S. E. Shirley's Zee. OPEN—WAVY—*Dogs:* 1st and equal cup and 2d, S. E. Shirley's Tracer and Tractor. *Bitches:* 1st, Harding & Cox's Zealous: 2d, S. E. Shirley's Tacit. CHAMPION—CURLY—*Dog:* S. Darbey's Wonder. *Bitch:* no entry. OPEN—*Dogs:* 1st, S. Darbey's Banner; 2d, H. Skipworth's Smike; 3d, S. W. Hallam's Talbot. *Bitches:* 1st and equal cup, George Hyde Granville's Chicory II.; 2d, Dr. W. A. G. James's Lune.

POINTERS, SETTERS AND RETRIEVERS.—Team prize, equal 1st, J. Lee Bulled's pointers, Thos. Cunnington's English setters, and S. E. Shirley's wavy retrievers; 2d, S. Darbey's curly retrievers.

SPANIELS.—CHAMPION CLUMBER—*Dog:* No entry. *Bitch:* J. B. Wilkes's Lance. OPEN—1st, Joseph Allen's Boss II.; 2d, Messrs. Charles's Ramble. SUSSEX AND LIVER.—CHAMPION—*Dog:* No entry. *Bitch:* James Partridge's Brida II. OPEN—*Dogs:* 1st, Holley Bros.' Horatio; 2d, C. Newington's Laurie. *Bitches:* 1st, Arthur H. Easten's Easten's Bee; 2d, Holley Bros.' Aureola. ENGLISH AND IRISH WATER. —CHAMPION—*Dog:* No entry. *Bitches:* Equal, George S. Hockey's Lady and Young Hilda. OPEN—1st, W. W. Thompson's Barney O'Tale; 2d, G. F. Smurthwaite's Barney Malone. FIELD.—CHAMPION —OTHER THAN BLACK—*Dog:* H. B. Spurgin's Fop. *Bitch:* H. B. Spurgin's Floss. OPEN—*Dogs:* 1st, Arthur H. Easten's Bruce; 2d, H. B. Spurgin's Counsellor. *Bitches:* 1st, A. H. Easten's Bride; 2d, W. Van Wart's Cosie. COCKER, ANY COLOR.—OPEN—*Dogs:* 1st, R. Lloyd's Little Dan; 2d, G. W. Carter's Jingo. *Bitches:* 1st, C. H. Lloyd's Nellie VII.; 2d, H. B. Spurgin's Freda. BLACK.—CHAMPION—*Dogs:* Equal, H. B. Spurgin's Roysterer and J. Boyle's Solus. *Bitch:* P. P. Phipps's Miss Obo. OPEN—*Dogs:* 1st, A. H. Easten's Bracken; 2d, J. H. Hussey's Lord Bute. *Bitches:* 1st, A. H. Easten's Busy; 2d, H. B. Spurgin's Coy.

COLLIES—CHAMPION—ROUGH-COATED.—*Dog:* Cup, James Bissel's Charlemagne. *Bitch:* Rev. H. F. Hamilton's Madge. *Stud Dogs:* 1st, James Bissel's Charlemagne. OPEN—SABLE—*Dogs:* 1st, J. F. Godfree's Lord Clyde; 2d, M. C. Ashwin's Cairn; 3d, John Pirie's The Scot. BLACK AND TAN—*Dogs:* 1st, H. Ralph's Sly Fox; 2d, Henry Skipworth's Scotch Laddie; 3d, Dr. W. A. G. James's Flockmaster. SABLE—*Bitches:* 1st and cup, W. R. Dockself's Flurry; 2d, S. Boddington's Beck; 3d, Arthur L. Chance's Lady of the Lake. BLACK AND TAN—*Bitches:* 1st, Dr. W. A. G. James's Tippet; 2d, M. C. Ashwin's Ida; 3d, Joseph Beach's Myra IV. PUPPIES—ANY COLOR—*Dogs:* 1st and cup, W. B. Dockself's The Squire; 2d, J. F. Godfree's Lord Clyde; 3d, John Pirie's The Scot. *Bitches:* 1st, A. L. Chance's Lady of the Lake; 2d, J. F. Godfree's Gipsy Clyde; 3d, Dr. W. A. G. James's Glemosa. SMOOTH-COATED—CHAMPION—*Dog:* W. W. Thomson's Guilt. *Bitch:* W. W. Thomson's Yarrow. OPEN—1st, M. C. Ashwin's Lady Elcho; 2d, Joseph Royle's Clyde. SHEEP DOGS—BOB-TAILED—1st and 2d, D. P. Thomas's Sir Guy and Welch Boy. SHEPHEEDS' DOGS—ANY VARIETY—1st, James Freeman's Peter.

DALMATIANS.—CHAMPION—James Fawdry's Treasure. OPEN—1st and 2d, James Fawdry's Nelson and Gipsy.

BULLDOGS.—CHAMPION—*Dog:* Medal, John Scudamore's Diogenes. *Bitch:* John Morris's Queen Mab. OPEN—*Dogs, over 45lbs.:* 1st, S. E. Shirley's Cervantes; 2d, B. W. Donkin's Castor. *Bitches, over 35lbs.:* 1st, George Raper's Rhodora; 2d, L. Q. Kermode's Psyche. *Dogs, under 45lbs.:* 1st, C. F. Bartlett's Monarch II.; 2d, W. H. Sprague's Don Pedro. *Bitches, under 35lbs.:* 1st and medal, A. M. Hodgson's Pussy; 2d, J. S. P. Sellon's Belladonna.

BULL-TERRIERS.—CHAMPION—Alfred George's Max Marx. OPEN, OVER 25LBS.: 1st, Alfred George's Cairo; 2d, J. R. Pratt's Count. UNDER 25LBS.: 1st, Alfred George's Grand Duchess; 2d, James Chatwin's Treasure.

FOX-TERRIERS.—CHAMPION—SMOOTH—*Dog:* 1st, F. L. Evelyn's Brokenhurst Sting. *Bitch:* 1st, F. Redmond's Diadem. OPEN—*Dogs:* 1st and cup, A. R. Ward's Splinter; 2d, A. H. Clarke's Forest; 3d, F. Reeks's Stockwell. *Bitches;* 1st and cup, Rev. Charles T. Fisher's Cynisea; 2d, F. Redmond's Dusky; 3d, Joseph Foreman's Stanhope Semlah. PUPPIES—*Dogs:* 1st, A. Hargreaves's Rebel; 2d, F. Reeks's Stockwell; 3d, L. P. C. Astley's Acquisition. *Bitches:* 1st, F. Redmond's Dusky; 2d, Joseph Foreman's Stanhope Semlah; 3d, T. W. Haslehurst's Miss Candour. WIRE-HAIRED—CHAMPION—*Dog:* Cox & Jaquet's Newboy. *Bitch:* Earl of Lonsdale's Miss Miggs. OPEN—*Dogs:* 1st, Corner & Marfitt's Rocket; 2d, H. F. de Trafford's Jingle; 3d, J. B. Dale's Scrimage. *Bitches;* 1st, Geo. Raper's Rockrose; 2d, P. H. Field's Dolly Varden; 3d, Cox & Jaquet's Kate Broad. PUPPIES—*Dogs:* 1st, Wm. Carrick, Jr.'s, Tinker; 2d, F. H. Field's Buzfuz. *Bitches;* 1st, Percy C. Reid's Tormentor; 2d, F. H. Field's Dolly Varden.

BEAGLES.—1st and 2d, Charles H. Beck's Abigail and Myrtle.

BASSET HOUNDS.—*Dogs:* 1st and two cups, M. B. Kennedy's Fino V.; 2d, F. W. Blain's Bourbon. *Bitches:* 1st, George R. Krehl's Theo; 2d, H. V. S. Craig's Carillon.

BEDLINGTON TERRIERS.—CHAMPION—J. A. Baty's Diana.—OPEN—*Dogs:* 1st and special, G. F. B. Milner's Tinner, 2d, G. A. Koch's Bonus. *Bitches:* 1st, A. Holcroft's Domino; 2d, G. A. Koch's Olga.

HARRIERS.—COUPLES.—1st, 2d and 3d, Harding Cox's Shamrock and Archer, Lady and Beautiful, and Lenient and Marvelous.

DACHSHUNDE.—CHAMPION—Medal, H. A. Walker's Hager. *Stud dogs;* 1st, H. A. Walker's Ozone.—OPEN—*Dogs:* 1st and cup, Mrs. P. Merrik Hoare's Carlowitz; 2d, J. S. Pierson's Zagwong; 3d, H. A. Walker's Culoz. *Bitches;* 1st and cup, Mrs. P. Merrik Hoare's Zither; 2d, H. A. Walker's Zulina.—PUPPIES—*Dogs:* 1st, J. S. Pierson's Zagwong; 2d, Miss Field's Dachel. *Bitches:* 1st, H. A. Walker's Zinnia. —*Team prize:* 1st, H. A. Walker.

TURNSPIT DOGS.—No entry.

AIREDALE TERRIERS.—1st, H. C. Grove's Roy; 2d, F. P. Smith's Choir Girl.

IRISH TERRIERS.—1st and 2d, H. A. Grave's Glory and Pretty Lass.

SCOTCH TERRIERS.—1st, G. J. C. Harter's Nipper; 2d, Albert Krehl's Lochiel.

DANDIE DINMONTS.—CHAMPION—G. S. Ball's Jeannie Deans. *Stud Dogs:* 1st, C. H. Lane's Laird. OPEN—*Dogs:* 1st and cup, G. S. Ball's Rhoderick; 2d, A. Nutter's Gethart. *Bitches:* J. Sherwood, Jr.'s Mary Scott; 2d, Earl of Antrim's Quartz.

SKYE TERRIERS.—CHAMPION—W. Nicol's Saxon. OPEN—1st, J. K. Kaye's Claret; 2d, Rev. Thomas Nolan's Kingston Roy.

BLACK AND TAN TERRIERS.—CHAMPION—1st, C. Whitehouse's Wheel of Fortune. OPEN—OVER 12LBS.—1st, C. Whitehouse's Welcome; 2d, J. Blagburn's Laura. UNDER 12LBS.—1st, J. Taylor's Lizzy II.; 2d, Mrs. Frances M. Taylor's Dolly Varden.

POODLES.—*Dogs;* 1st, B. W. Donkin's Flute. *Bitches;* 1st, S. J. Forbes's Jet II.

POMERANIANS.—1st, S. R. Platt's Marco.

TRUFFLE DOGS—No entry.

PUGS.—CHAMPION—*Dog:* Mrs. W. L. Sheffield's Stingo Sniffles. *Bitch;* Mrs. W. L. Sheffield's So So. OPEN—*Dogs:* 1st, W. L. Sheffield's Sir Stafford; 2d, Miss Barlow's Nicodemus. *Bitches:* 1st, W. L. Sheffield's Set Set; 2d, Lady Brassey's Sunbeam.

KING CHARLES SPANIELS.—CHAMPION—Mrs. J. A. Buggs's Alexander the Great. OPEN—*Dogs:* 1st, Mrs. J. A. Buggs's Bend 'Or; 2d, Mrs. William Forder's Jumbo II. *Bitches:* 1st, G. Lodge's Lizzie.

BLENHEIM SPANIELS.—CHAMPION—Mrs. L. E. Jenkin's Bowsie. —OPEN—1st, H. E. Jenkin's Trixey; 2d, Francis Kuhnor's Prince Leopold.

YORKSHIRE TERRIERS.—CHAMPION—No entry. OPEN—1st and 2d, Mrs. E. M. Monck's Kitty and Dolly.

MALTESE.—1st, Miss Elinor Sidebottom's Bebe.

ITALIAN GREYHOUNDS.—No entry.

JAPANESE.—1st, John Lewis's Oskei; 2d, Mrs. E. M. Monck's Chang.

TOYS.—UNDER 7LBS—1st, J. K. Kaye's Sybil.

FOREIGN DOGS.—Selling and local classes we omit.

NEW YORK BENCH SHOW.

THE eighth annual bench show of the Westminster Kennel Club was opened at the Madison Square Garden, in this city, last Tuesday morning, and is now in progress. Nearly all of the 1,117 dogs entered were in their places Tuesday. Many of the classes have filled well, notably that of the St. Bernards, which are out in force. Such a display of this breed has never before been seen in this country. Pointers make a good showing; the quality is very much better than that of this class last year. English setter dogs are not up to the mark, though the open class of English setter bitches is most excellent. English setter puppies are also good. We do not consider that the dogs in the sporting classes are in so good condition as they should be at this season of the year. Collies and fox-terriers make a very creditable appearance. Below we give our usual table showing the comparative numbers of dogs entered in each class for the eight exhibitions of the Westminster Club:

COMPARATIVE TABLE.

BREEDS.	1877	1878	1879	1880	1881	1882	1883	1884
Mastiffs	26	18	20	36	24	36	61	40
St. Bernards	17	16	14	33	24	52	63	97
Berghunde	..	..	..	..	..	8	5	5
Newfoundlands	12	13	20	25	7	20	8	15
Greyhounds	18	23	15	15	28	28	20	16
Deerhounds	9	4	5	7	4	11	5	18
Pointers	121	83	128	134	125	144	112	149
English setters	203	123	157	135	160	173	159	150
Gordon setters	65	64	73	74	91	58	56	53
Irish setters	149	108	158	135	97	90	97	105
Chesapeake Bay dogs	..	..	..	..	..	..	7	3
Irish water spaniels	11	17	8	7	10	17	6	3
Field spaniels	32	18	31	41	43	56	8	13
Cocker spaniels	..	..	..	..	..	..	49	31
Foxhounds	14	46	9	9	18	13	10	13
Beagles	6	5	15	13	36	13	10	22
Basset hounds	..	..	..	..	..	..	..	2
Dachshunde	16	11	8	9	17	12	6	11
Fox-terriers	25	36	45	63	69	61	56	78
Collies	8	19	16	31	50	60	71	72
Bulldogs	10	10	8	19	15	14	23	20
Bull-terriers	11	29	36	34	23	24	15	19
Skye terriers	23	17	15	16	19	12	12	14
Irish terriers	..	..	..	..	4	3	5	..
Rough terriers	..	..	..	..	5	10	4	14
Black and tans	13	20	13	9	6	14	8	6
Dandie Dinmonts	10	3	3	6	5	6	4	3
Bedlington terriers	..	..	..	..	..	..	..	3
Yorkshire terriers	..	39	36	26	30	18	22	35
Toy terriers	21	12	9	18	5	10	10	11
Pugs	27	30	23	33	22	32	40	47
Toy spaniels	8	13	13	9	13	15	10	15
Italian greyhounds	6	14	9	10	10	..	6	5
Poodles	..	..	..	..	..	..	..	11
Miscellaneous	23	8	27	38	23	18	26	11

Tuesday was a rainy, gusty, drizzly, and what an Englishman would call "nawsty" day, but in spite of the pluvial downpouring, a very fair attendance of visitors gathered in the Garden. Yesterday was likewise stormy, a condition of affairs which must materially affect the pecuniary proceeds of the exhibition. The facilities for showing the dogs and for judging are better this year than ever before. The ring is capacious, and the work of awarding the prizes went on briskly on Tuesday and Wednesday. The awards up to the time of our going to press (Wednesday noon) are as follows:

Champion English Setters, Dogs.—1st, C. F. Crawford's Foreman, black, white and tan, 4yrs., Dashing Monarch—Fairy II.

Champion English Setters, Bitches.—1st, T. G. Davey's Belle's Pride. 4yrs., blue belton, champion Paris—Harrison's Belle.

English Setters, Dogs.—1st, F. E. Lewis's Rock, lemon and white, 2½yrs., Water's Grouse—French's Daisy; 2d, L. C. Clark's Bob White, lemon belton, 2yrs., Young Laverack—Lady May; 3d, Neversink Lodge Kennel's Laverack Chief, black, white and tan, 3½yrs., Pontiac—Fairy II. Very high com., Thomas F. Ryan's Count Dan, blue belton, 5yrs., Carlowitz—Queen Bess; Dr. S. Fleet Speir's Marquis de Correze, black, white and tan, 2½yrs., Emperor Fred—Lizzie Lee; Stewart McKay's Pride of Columbia, white, 2yrs., champion Cossack—Ophelia; H. Pape's Prince Messenger, white and black, 2yrs., Thunder—Loui; A. H. Moore's Prince Al, lemon and white, champion Leicester—Dodge's Rose. Com., T. G. Davey's Prince Phœbus (imported), black and white, 4yrs., Tam o' Shanter—Prue; G. F. Jordan's Telford, blue belton, 2yrs., Darkie—Rosie Morn.

English Setters, Bitches.—1st, E. W. Jester's Dashing Belle, blue belton, 34mos., Dashing Monarch—Blue Belle; 2d, E. W. Jester's Dashing Jessie (A.K.R. 815), blue belton, 34mos., Dashing Monarch—Blue Belle; 3d, C. A. Stone's Forest Dora, blue belton, 2yrs., champion Dick Laverack—Forest Fly. Very high com., John G. Heckscher's Modjeska, lemon and white, 2yrs., champion Leicester—Peeress; J. O. Donner's Princess Helen, orange and white, 2yrs., champion Thunder—Donner's Bessie; Thomas F. Ryan's Linda, black, white and tan, 21mos., Emperor Fred—Cecilia D.; E. A. Herzberg's Lucid, blue belton, 5yrs., Sim's champion Dash—champion Maid of Honor; John J. Scanlan's Flake, black, tan and white ticked, Druid—Swaze; Howard Hartley's Daisy Queen, white, black and tan, 3yrs., Rock—Meg; T. G. Davey's Genevieve, blue belton, 2yrs., Harrison's London—Dawn. High com., H. F. Aten's Crook, white, black ticked, 4yrs. 9mos., Carlowitz—Dell; F. B. Greenhough's Brier, white, black and tan, 2yrs., 8mos., Coin—Dr. Greenhough's Beauty; S. Fleet Speir's Lady Sanborn, orange belton, 6yrs., Count Noble—Spark; W. A. Buckingham's Alice Dale, orange and white, 2yrs., Waters' Grouse—Daisy Dale; Lawrence Shuster, Jr.'s Clemantine D., white, black and tan, 4yrs., Dash III.—Cornelia. Com., Locust Grove Kennels's Smut II., black, 5yrs., Pratt's Trim—Earl's Smut; R. W. Dodd's Lily, white, 21mos.; Charles E. Husted's Daisy, black, white ticked, 5½yrs., Benedict's Dash—Galloway's Flirt.

English Setter Puppies, over 12 and under 15 Months, Dogs.—1st, W. R. Travers's Rocket (A.K.R. 118), white, black and tan, 17mos., Wagner (A.K.R. 229)—Nell Kelly (A.K.R. 286); 2d, J. J. Scanlan's Drake Carter, black, white and ticked, 10mos. 6dys., Cashier—Flake. Very high com., S. B. Foord's Brant F., blue belton, 17mos., Dashing Monarch—Mollie Bawn; C. A. Stone's Royal. High com., G. K. Haswell's Jock, orange and white, 17mos., Promise—Abbey; H. Hodenan's Plunger, blue belton, 14mos., Emperor Fred—Polka. Com., Locust Grove Kennel's Paul, black and white, 15mos., Dash III.—Imported Blanche.

English Setter Puppies, over 12 and under 18 Months, Bitches.—1st, J. J. Scanlan's Cliney Carter, blue belton, 12mos., Cashier—Flake; 2d, Ed. Lohman's Mistletoe, lemon and white ticked, 12mos., Emperor Fred—Countess Belle. Very high com., Lawrence Shuster, Jr.'s, Clarenda T., white, black and slightly blue belton, 12mos., Thunder—Cornelia. High com., Bassford & Hall's Betsy Druid, black, white and tan, 15mos., King Dan—May Queen.

English Setter Puppies, under 12 Months, Dogs or Bitches.—1st, C. H. Mason's Princess Phœbus (imported) blue belton, 10mos., Prince Phœbus—Patch; 2d, S. B. Foard's Rosa F., black, white and tan, 10mos., Dashing Monarch—Leah II. Very high com., S. Fleet Speir's Windermere, lemon belton, under 12mos., Druid—Countess Louise; T. S. Dumont's Pendragon, black and white, 9mos., Count Noble—

Floy; Ricardo de B. Smith's Peek-a-Boo, blue belton, 10mos., Perfection—imported Beauty; H. D. Townes's Count Ranger, black, white and tan, 9mos., Count Noble—Gertrude; J. H. Lee's Cashboy, blue belton, 11mos. 21dys., Cashier—Flake. High com., Dr. R. T. Tull's Dashing Armida, black and white ticked, 11mos., Dashing Monarch—Armida; Dr. R. T. Tull's Dashing Prim, black and white ticked, 11mos., Dashing Monarch—Armida; Pierre Noel's Verra, white and orange, 8mos., Bruce—Abbey.

Champion Irish Setters, Bitches.—1st, W. Kemble Lente's Trix, dark red, 4yrs., champion Elcho—champion Fire Fly.

Irish Setters, Dogs.—1st, Hiram & William Harris's Jack, red, 2yrs., imported, Barney—Rhoda; 2d, J. Henry Roberts's Bruce, red, 3yrs., champion Elcho (A.K.R. 295)—champion Noreen (A.K.R. 297); 3d, Rory O'More Kennel's Rexford, red, 3yrs. 3mos., champion Berkley—Sampson's Nora. Very high com., H. B. Goerschius's Chief II. (A.K.R. 232), red, 3yrs., champion Chief (A.K.R. 231)—imported Doe: Charles W. Roedenberg's Chip, red, 3yrs., Chief—Doe; C. H. Bunnell's Berkshire, red, 12½mos., Chief—Kate. High com., Charles R. Thorburn's Rory O'More, Jr., dark red, 2½yrs., champion Rory O'More—Nora O'More; F. L. Van Benschoten's Red Pick, red and white, 5yrs., Elcho—Jessie; Philo, red, 4yrs., Derg—Kathleen. Com., Max L. Ranson's Larry II., red, 1yr, 9mos., Larry—Red Lassie.

Cocker Spaniels (liver or black) under 28 lbs., Dogs or Bitches.—1st, B. F. Wilson's Peerless Glass, black, 33mos., Young Berwerlac—Nellie; 2d, E. W. Burkee's Jumbo, liver, 12mos., Hornell Dandy—Hornell Dinah. Very high com., Andrew Laidlaw's Woodstock Flirt (A.K.R. 661), black, 14½mos., imported Tippo—imported Toronto Jet (A.K.R. 860). High com., Wm. Dunphy's Bessie, black, 15mos., champion Beau—Fancy. Com., Hornell Spaniel Club's Sam, black, 20mos., champion Bonanza—Pansy.

Field or Cocker Spaniel Puppies (any color) under 12mos.—1st, Winchester Johnson's Black Tournie, black, 8mos., Obo II. (A.K.R. 482)—Critic (A.K.R. 303); 2d, W. O. Postridge's Helen, black, 8mos., Obo II. (A.K.R. 482)—Critic (A.K.R. 303). Very high com., Dr. J. S. Niven's Niven's Darkey, black, 8mos., Frank—Nellie. High com., Hornell Spaniel Club's Darling, liver, 10mos., Dandy—Topsy.

Champion Foxhounds, Dogs or Bitches.—1st, Essex County Hunt's Vinegar, white and tan, 6yrs., imported.

Foxhounds, Dogs or Bitches.—1st, Essex County Hunt's Cardinal, white and tan, 5yrs., imported; 2d, Essex County Hunt's Warrior, white and tan, 6yrs., imported; 3d, Essex County Hunt's Manager, white and tan, 5yrs., imported. High com., W. Ball's Brownie, dark tan, 17mos., Sam—Flora. Com., Essex Kennel Club's Sport, black and tan, 2yrs.

Dachshunde, Dogs or Bitches.—1st, W. B. Vogelsang's Gretchen, dark brown and tan, 15mos., imported; 2d, J. B. Marris, Jr.'s Dutchy, brown, 3yrs., imported. High com, Essex Kennel Club's Waldman, black. Com., W. Schell, Jr.'s, Cora, black and tan, 3yrs., Dan—Tankell.

Champion Mastiffs, Dogs.—1st, Chas. H. Mason's Nevison, imported, fawn, black points, 4½yrs., Gurth—Juno.

Champion Mastiffs, Bitches.—1st, Ashmont Kennel's Dolly Varden (A.K.R. 75), fawn, black points, 4yrs., Young Prince—Merlin.

Mastiffs, Dogs.—1st, Harry Hill's Dan, fawn, 4yrs., full pedigree; 2d, Henry Pratt's Billo, 18mos., imported stock—Nellie; 3d, W. P. Stevenson's Homer, fawn, 16mos., Cato—Queen II. (A.K.R. 158). Very high com., David G. Yuneling, Jr.'s Jim, fawn, 3yrs., full pedigree. High com., William H. Lee's Ilford Cromwell, brindle, 3yrs., Cardinal—Cleopatra. Com., Max Meyer's Bruno, fawn, 18mos., full pedigree.

Mastiffs, Bitches.—1st, A. Grant's Regina, fawn, 3yrs., Young King—Rannee; 2d, W. R. MacDiarmid's Monmouth Meg, fawn, 2½yrs., Salisbury—Tigress II.; 3d, James L. Flung's Nana, fawn, black points, 3yrs., Cæsar—Dido. Very high com., C. D. Arthur's Queen, fawn, 20mos., Harold—Dido. High com., A. F. Hennings's Dizz, fawn, 20mos., imported Monarch—Nell.

Mastiff Puppies, Dogs or Bitches.—1st, W. P. Stevenson's Hector, fawn, 9mos., Nevison—Venus; 2d, James Lenox Banks's Mayor of the Cedars (A.K.R. 549), fawn and black points, 10mos., Nevison—Venus; 3d, M. M. Frothingham's Sandy, fawn, 4mos., Grim—Sallie Waters. Very high com., W. S. Phraners's Court, fawn, 4½mos., Harold—Dido. High com., C. F. Frotheringham's litter of puppies, fawn, 4mos., Grim—Sallie Waters. Com., C. H. Hays's Veuve Clicquot, fawn, 5mos., Harold—Dido.

Cocker Spaniels (any color other than liver and black) under 28lbs., Dogs or Bitches.—1st, Hornell Spaniel Club's Rattler, chestnut and tan, 1yr., Dandy—champion Dinah; 2d, Wm. Dunphy's Fancy II., black, 15mos., champion Beau—Fancy. Very high com., Capt. J. E. Jones's Bisson, liver and white, 15mos., Charley—Powder. High com., Capt. J. E. Jones's Powder, liver and white, 4yrs., Lord Cardigan's Kennel, Com., George Miller's Clytie, liver and white, 6yrs., Watson's Shot—Hall's Lou.

Italian Greyhounds, Dogs or Bitches.—1st, Mrs. Constance A. Andrews's Queenie, golden yellow, 3yrs., imported 1882, born in Italy; 2d, E. W. Jester's Pearl (A.K.R. 758), fawn, 5yrs., Douglas—Gypsy Queen.

Newfoundlands, Dogs or Bitches.—1st, C. J. Whigam's Jack, black, 5yrs., imported; 2d, Chas. T. Strauss's Tasso, black, 2yrs., Pontoon—Fannie. Very high com, W. H. Lacy's Bruno, black, 3yrs., imported. High com., W. Barbour's Cabot, black, white spot, 7½mos.

Champion Greyhounds, Dogs.—1st, H. W. Smith's Friday Night, black and white, 2½yrs., Master's Prince—I. H. Salter's Sally.

Greyhounds, Dogs.—1st H. W. Huntington's Bouncing Boy, black, 1½yrs., Walton Lad—Cremorne; 2d, Mrs. Henry Allen's Dell, fawn, 2yrs., imported. Very high com., J. Coleman Drayton's Slingsby, black, 7 yrs., Rapid—Sally. High com., Edward Cullen's Moscow, fawn, 3yrs., full pedigree.

Greyhounds, Bitches.—1st, H. W. Huntington's School Girl, black, 1½yrs., School Fellow—Bel Fa; 2d, withheld. Very high com., H. W. Huntington's Begonia, black, 4yrs., Born a Demon—Bella.

Greyhound Puppies, under 12mos., Dogs or Bitches.—1st withheld; 2d, Hy. Henderson's Flash, fawn, 9mos. Very high com., H. W. Huntington's La Belle, black, 10mos., champion Double Shot—champion Clio.

Champion Deerhounds.—1st, Clovernook Kennel's Roy, brindle, 2yrs., Paddy—Lassie.

Deerhounds, Dogs.—1st, Archibald Rogers's Bruce, dark brindle, 1½yrs., Grey Comyn (late Hector)—Leona (late Linda); 2d, W. D. Whipple's Bruce, dark gray, 5yrs. Very high com., Archibald Rogers's Spring, gray, 5½yrs., Marni—Thulah.

Deerhounds, Bitches.—Awards withheld.

Champion Pointers, over 55 lbs., Dogs.—1st, John W. Munson's Meteor, imported, liver and white, 3yrs., Garnet—Jilt.

Champion Pointers, over 50 lbs., Bitches.—1st, Luke W. White's Grace, liver and white ticked, Match—Nell.

Pointers, over 55lbs., Dogs.—1st, C. W. Littlejohn's Fritz, lemon and white ticked, whelped June, 1881, Beaufort—Spot; 2d, Neversink Lodge Kennel's Drake, liver and white, 2yrs., champion Croxteth—Lass; 3, L. & W. Rutherfurd's Danby, liver and white, 3yrs., Speck—Dinah. Very high com., Fred Wilbrath's Dash II., liver and white, 3yrs. 8mos., Rake II.—Juno; J. W. Munson's Maxim, imported, liver and white, 3yrs., Garnet—Jilt; J. W. Munson's Bang, imported, liver and white, 5yrs., champ. Bang—Luna. High com., J. H. Stromberg's Guy, lemon and white, 2yrs., Beaufort—Spot; C. M. Munhall's Donald II., liver, white and ticked, 20mos., champion Donald—Devonshire Lass; H. W. Force's Clydesdale, white, 3yrs., Massey's Dash—Virginia Belle.

Pointers, over 50lbs., Bitches.—1st Frank E. Rogers's Miss Merrymay, liver and white, 3yrs., King Bow—Grace; 2d, J. O. Donner's Fan Fan, liver and white, 4yrs., imported; 3d, G. W. Amory's Sal, liver and white, 3yrs., Dick—Ruby. High com., Knickerbocker Kennel Club's Lady Mac (A.K.R. 1040), black, 3yrs., champion Pete—Mab.

Champion Irish Setters, Dogs. — 1st, Dr. W. Jarvis's Elcho, Jr. (formerly Elcho VII.), dark red, 2yrs. 11mos., champion Elcho—champion Noreen.

Champion Irish Water Spaniels, Dogs or Bitches.—No entries.

Irish Water Spaniels, Dogs or Bitches.—1st, Archibald Rogers's Irish Chief, liver, 3yrs., champion Barney—Irish Nell; 2d, Essex Kennel Club's Wasso, liver, 18mos., Sailor—Fannie.

Champion Field Spaniels (any color) over 28 lbs., Dogs or Bitches.—1st, H. W. Huntington's Benedict (A.K.R. 61), black, 4yrs., champion Bachelor—Negress.

Field Spaniels (any color) over 28 lbs., Dogs or Bitches.—1st, Winchester Johnson's Critic, black, 2yrs., Brush II.—Blackie II.; 2d, James Watson's Bateman, imported, lemon and white, 18mos. Very high com., Andrew Laidlaw's Toronto Jet (A.K.R. 860) imported, black, 2½yrs., Nigger—Belle. High com., Hornell Spaniel Club's Jewell, black, 2yrs. 10mos., Brag—Nelly; Frank Thomson's Don, lemon and white, Bruno—Gill. Com., Herman F. Schellhass's Benedict's Boy (A.K.R. 130), black, 22mos., imported champion Benedict—imported Beatrice; Frank Thomson's Punch, lemon and white, Bruno—Gill.

Champion Cocker Spaniels (any color) under 28 lbs., Dogs or Bitches.—1st, J. P. Willey's Obo II., black, 23mos., Farrar's Obo—Chloe II.

GREYHOUNDS FOR SALE.—We direct the attention of breeders and exhibitors of greyhounds to the advertisement of Mr. Wm. Graham, who has received instructions to dispose of the dogs belonging to Messrs. Charles, of Neath, Wales. This is the finest kennel of greyhounds ever brought together, and the prices, considering the value of the dogs, are very reasonable. Catalogues can be obtained at this office.

INTELLIGENCE OF A SPANIEL.—Johnsontown, Va.—About '45 or '46 I became the owner of a cocker spaniel dog pup. I called him Cassius, which, of course, was shortened to Cash. He was very affectionate and intelligent, and I taught him many tricks, and some he took up of his own accord. I lived at that time on the south side of a street running east and west. My morning paper folded in the shape of a parallelogram was slipped under the door every morning early by the carrier. Cash would pick it up and bring it to my chamber door every morning and bark for admission. One morning a northeast rain storm was prevailing. Cash came up as usual but without the paper. I asked him where it was and he dropped his ears and tail, and I supposed that the paper had not come. When I went down stairs I found the paper in its proper place, but the rain had beaten under the door, wet the paper thoroughly and it stuck to the oil cloth. On the corner where the folds were thickest were the marks of Cash's teeth plainly visible, and the paper showed signs of tearing. Now, Cash seemed to have found that he could not get the paper without tearing the corner, and to have known that it must not be torn, and so he left it. If that was not "reason" what was it?—OLD FOGY.

CANINE JEWELRY.—They are having a big dog collar competition in this city. The Medford Fancy Goods Company, of Chambers street, without whose collars no well-bred dogs assume to bark or bite, has given a dozen collars for the best dogs at the Westminster show. There are silver and gold collars for pointers, leather and silver collars for greyhounds, fancifully ornamented collars for setters, big collars for mastiffs and St. Bernards, Mortimer collars for bulldogs, a collar with a silver buckle for the collie that is smart enough to win and wear it; and a set of harness for the best pug. When the successful collar competitors are arrayed in all this finery, the rest of the dogs will be mad with rage, unless their respective owners go down to the Medford Fancy Goods Company to buy for each a collar.

Rifle and Tray Shooting.

FIXTURES.

May 20 and 21.—Illinois State Sportsmen's Association Tournament Delaware, Ill. D. G. Cunningham, Secretary, San Jose, Ill.

May 20 to 23.—Knoxville Gun Club Second Annual Tournament, Knoxville, Tenn. C. C. Hebbard, Secretary.

May 26 to 31.—First International Clay-Pigeon Tournament, at Chicago, Ill. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

June 2 to 9.—Annual Tournament Louisville Sportsmen's Association, Louisville, Ky. J. O. Barbour, Secretary, 157 Third avenue, Louisville.

RATIONAL TARGET PRACTICE.

Editor Forest and Stream:

Your editorial on regular army rifle improvement in your issue of Feb. 25, leads me to request space for some remarks upon this subject, based upon my own observation and experience as an instructor, hoping that from these remarks others may be led to state their observation, and to see if we cannot get true improvement instead of fictitious merit.

At the very outset let me say that no one will more readily concede than I that improvement has taken place, for the time was not so very far back when such a thing as a regular organized target practice was unheard of; but although I fully sympathize with the present enthusiasm, and aid it in every way possible, still I contend, and always have contended, that our efforts are all tending in the wrong direction, and have not the true object in view, namely, the making of skilled and reliable shots, able to shoot at any and all times with a fine degree of proficiency.

Our system of instruction, though originally based upon "Lindley's Manual," has spread and extended under the various orders and instructions that have been issued from time to time, so that besides instruction we now have an elaborate series of reports to render, presumably to show what progress has been made from month to month, and it is the series of reports that I would particularly mention as being the primary cause that has led to the fictitious merit of which I complain, and to which I would direct attention. Doubtless emulation, as well as instruction, has beneficial results if properly guarded, but when reports are based, as at present, then emulation, being upon an improper basis, and not properly guarded, may, and I contend, does, produce improper results, and may, as I think it does, produce discontent and discouragement instead of pride and confidence.

Let us begin at the beginning and touch upon each point as it presents itself, not only as more systematic but as dividing the subject up into heads the more easily to be answered.

Instruction.—The principles of rifle shooting having been taught as thoroughly as may be, with a view toward making men good shots, should not individuality in the practice be then taught? Is it right for the instructor to continue to adjust wind gauges and elevations for each man, and coach him on every shot, so that he, the instructor, fires the shot in all except actually holding the piece and pulling the trigger.

For match or team firing I admit that the coach is indispensable; there the coach has nothing else to do but coach, and as a means to an end, coaching in practice may be admissible when not abused or carried too far; but the end we should have in view, being to make reliable shots on the field of battle against animate instead of inanimate targets, the coaching allowable should only extend to proper instruction and seeing that such instruction is followed by the men, and each man be taught to depend upon his own judgment and skill for success, whether at the target or the enemy.

At present I am convinced this is not the case. Shooting for record, under the vicious system of reports that are required, as will be shown later on, causes the instructor who desires to emulate in these reports, to substitute his knowledge, his judgment and his skill, for that of the individual, to the bettering of the record to be sure, but at the same time to the production of a record that does not exhibit the true merit of the shooting of his men, but a record that exhibits the result of his individuality impressed upon each man, instead of a record of his men as individuals.

In my own experience I have seen the bad results following such a system. I have seen men who were good shots when shooting under their coach, make most wretched failures when shooting as individuals, and from the acknowledged fact that they could not shoot when placed upon their own individuality. Apart from the coaching our system of instruction appears to me to be radically wrong. After such course of preliminary firing as may be followed, generally a full course of gallery practice during the winter months, the rifleman begins in the spring at 100 yards off-hand. Following the system of classification to be mentioned further on, as soon as he has made 66 per cent. for two scores, not necessarily consecutive, of five shots each, he is advanced to the 200-yard range; and so on up to 600 yards. Right here in his first advancement is the first error. True, it may be that firing at 100 yards at our eight inch bullseye is "nothing more than aiming and pointing drill," as I so frequently hear; but does any well instructed rifleman mean to say that long practice is not beneficial at this range, and that a tyro is sufficiently well instructed when he has made 66 per cent for two scores as above, to be advanced? I have had men who never had fired a piece before in their lives go out and "scratch" 66 per cent. the first day, then miss the target early every shot for a week's firing, then "scratch" 66 per cent. again, and consequently "by order" be supposed to know how to shoot well enough to be advanced; but who will claim that they did know enough to be advanced? As an experiment as well as obeying the order, I advanced them to the 200-yard range, and as a matter of course, they could not hit the target and had to go back to the 100-yard range and stay there until they could do reasonably good shooting before they were fit to be advanced.

It strikes me that preliminary practice at short ranges should be continued until a rifleman was thoroughly well grounded, not only in the principles of rifle firing but in ability to shoot, and 66 per cent. for two scores does not make him so. I have been shooting for the last nine years, nearly constantly, and I yet have to regret the long-continued "short-range" practice and training I subjected myself to, and I yet shoot at from 50 to 100yds. constantly to keep my hand in. It is true that I practice at smaller targets than the 8-inch bullseye, but still I keep up the short-range practice, for I know it benefits me at every other range, no matter how far, or even if I then am lying down.

But, following the order, let us see what becomes of the rifleman. Having made his 66 per cent. for two scores of five shots each up to and including 500yds., he is then a first-class man; that is, I presume a first-class shot. Now observe that but two scores are considered, that his best shooting is all that is taken account of (for as soon as he makes 66 per cent. he goes up and does not remain to better it), and that a man can make 66 per cent. by one score of 16 and one of 17 out of 25, not necessarily consecutive, or in the same month; that a score of 17 can be made with three centers, one inner and one outer, or by two centers and three inners (not counting better combinations of 5-4-3-2 to produce 17) and that even a center does not necessarily hit the centre of a man from the circular shape of the target, and one then can see for himself whether this man is in reality a first-class shot, or anything approaching one. Remember, also, that the poor shooting has not been considered, that no average is taken, and it will then be sufficiently apparent that this rifleman may be and probably is anything but a first-class shot.

But let us follow him again and see what becomes of him. Having become a first-class man (?) he now goes back to 200yds., or the lowest range, where he has yet 80 per cent. to make; for a man may have made 80 per cent. for two best scores, when he was only trying for 66 per cent. Here he begins again and shoots and shoots, under his "coach" or not, depending upon the belief of his instructor as to such a system being advisable or not, until he makes 80 per cent. for three scores, not necessarily consecutive or in the same month, when he is advanced to the next higher range, to there repeat the lesson until he has 80 per cent. or better for these three scores at 200 and 300yds. He then jumps the 400 and 500-yd. ranges and begins at the 600, and hammers away there until he has made his 70 per cent. for three scores. Each score must be of the required percentage—that is, each score of five shots must be 80 per cent. at 200 and 300yds. or better; and each score at 600yds., of five shots each, must be 70 per cent. or better. Perhaps some one right here will tell me how to make a score of 70 per cent. on five shots; it is beyond my arithmetic; but anything less than 70 per cent. for five shots don't count: consequently a man can't make 17 and 18 for two scores and count that, but must make 18 or better. Why don't the order then say 72 per cent. and have done with it? For scores of five shots are the standard, and not scores of ten shots, even if they be consecutive and on the same day (See G. O., No. 53, series 1882, A. G. O. ¶ XI.).

And now the man is a "marksman" (?), and on what qualification? He has gone over the range once and made 66 per cent. or better at from 100 to 500yds., inclusive, counting his two best scores, make his 66 per cent. each at each range; he has thus gone over the 200, 300 and 600yds. range, or as much as may have been necessary, and has made 80 per cent. for his three best scores at the 200 and 300yds. ranges, and 70 per cent. (72 per cent. in fact) for his three best scores at this distance. No account has been taken of his poor shooting, and he has not been required to shoot in all kinds of wind and weather; but I'll guarantee that the weather was fine and the wind did not blow when he made his "qualifying scores." And it is on this basis (?) that our marksmen (?) are "qualified" and orders are published and go forth to the world showing the number of marksmen in the army!!! On paper we have 4,834 marksmen, or had when the order was published, and I ask in all seriousness, how many of these were and are *bona fide* marksmen? I'll answer, not 50 per cent.; by which I mean that not 50 per cent. could go on to the line of battle and at 200, 300 or 600yds. repeat their qualifying scores of 80 per cent. or 70 per cent. against a five target, or will could, except under extraordinary conditions, repeat their qualifying scores upon the Creedmoor target.

But let us follow the rifleman a little further, and see what now becomes of him as a marksman. To become a sharpshooter he must go back again to the 200yd. range and there make 88 per cent., then to the 300 and 600yd. ranges and repeat these percentages for three scores at each range—making the required percentage, for each score of five shots—and making the third time he has gone over the range up to 600yds. Having, for his best scores still, made these percentages, he now for the first time begins to shoot at 800, 900 and 1000yds., and when (by a combination of favorable circumstances, by some coaching or what not) he has made 76 per cent. at these ranges for each of his scores, he is then a "sharpshooter" and supposed to be able to repeat his scores at any time (or he should so be able if he really is a sharpshooter) and to be qualified to act as sharpshooter against the enemy when called upon. As yet we have no sharpshooters, but next year how many may there not be who have made the scores requisite, but who, the same as marksmen now, will not in reality be sharpshooters.

Let us again follow the rifleman and see what now becomes of him. All this going over the range has had some good effect, or else has been so much "love's labor lost;" but by the time all this has been done, the "end of the target year" (Sept. 30) has probably drawn pretty near, and no more time is left for anything further. The movable, vanishing, skirmishers', or dolly target, have all been neglected so far and not a shot has been fired except at the regular Creedmoor range targets.

Oct. 1 comes to hand, and with it comes the "new target year." The rifleman who has not made his qualification as marksman, sharpshooter, etc., but who has yet but one score at the last range left to make to so qualify, loses all credit made for the preceding twelve months, and must begin again at the 100yd. range, make his 66 per cent. there, his 80 per cent. and 70 per cent., etc., anew, instead of going on from the point he had reached Sept. 30, and make that a stepping stone to something higher for the following year.

Would this going back be at all necessary if he had been properly grounded at first at the 100yd. range? Would not he have shot better all through the year if he had been so properly grounded, and would he not have been ready—if a marksman or sharpshooter—to have gone on to something better instead of going back? and if not quite yet a marksman or sharpshooter, would he not be then ready to keep on and make himself one during the remaining fine days in October or November, rather than to lose it all and have to begin anew? and what is the sense of this going back each year any way? If once I have learned to spell in two syllables, must I each year go back to rudiments because by a certain time I have not learned to spell in five or six? If I have learned once to spell properly in four syllables, and have not quite learned the five, must I go back and re-master the two, three and four before I complete the five? Would it not be better for me to keep on when I am just on the point of success and leave the five and then go on to six or seven? But no! Our system only taught me a smattering of two-syllable words, then a smattering of three and four, and consequently I am "stumped," because I did not learn the smattering of five syllables in the time set, and I must go back to the two syllables and get a re-smattering, and so on up again *ad infinitum*, and most decidedly *ad nauseum*.

This is our system and these our marksmen, and these will be our sharpshooters. Let us look at the cause, to be found in our classification, from our reports. Let us look at the reports first: At the end of each month each troop, battery or company commander has to render a report of target practice; said report only mentions the two best scores made by each officer and man during the month, and again no report is made upon the worst or average shooting of anybody. The result of these reports is published, and here the emulation comes in. Naturally I, being a troop commander, desire to have a high average for my troop, so as not to compare unfavorably with other troops, etc. Naturally, therefore, I select my days; I shoot when the weather is good and but little or no wind, and only then; for otherwise my percentage might be poor as compared with others. Naturally, also, I coach my men; I watch each man set his windgauge, fix his elevation, see that his piece is "level," etc., and do all the fine part of the shooting myself, and do not allow the individual to exercise his judgment in the slightest. Result, I have a fine report to make, and I stand "away up" as compared with others; I am "patted on the back" and am called a good boy, and perhaps by any one knows, I may deserve censure rather than praise for I may have given a false impression, even without any falsehood or false returns, and the average of my shooting or of my troop be much lower than that of some other troop whose best scores are lower than mine.

It is true that another report has to be made, giving the total number of shots fired by each man at each range each month, together with the percentages for this total number at each range, but what for passes my understanding, for no account seems to be taken thereof in any qualification, classification or figure of merit. If some account were taken of it; if marksmen were qualified and classified on their average and their number of shots, even if a lower percentage were called for; if the results were published, any standard of comparison taken therefrom or allowances made in figure of merit, then and only then would we begin to have intelligent and honest results, and the end of the year an annual report has to be made, and here comes in the "classification." This report is made from the monthly record of best target firing, and "any two scores of five consecutive shots, each at the same range, during the year, may be taken for determining the percentage at that range." From this we get our marksmen (except that now it will read three scores). So here we have the report of best firing at each range for each man for the entire year, and 80 per cent. at 200 and 300, with 70 per cent. at 600, makes a marksman—those who have made 66 per cent. at 200, 300 and 500 are first class men; those who have made 50 per cent. at 200, 300 and 500, second class men; and all others third class men. Nice qualification, isn't it, and ought not one to be proud to be classed as a marksman?

Now I have "qualified" as a marksman for two consecutive years, and, to be a little egotistic, let us see what I have done on my best scores for three years, and then, to be honest, let us see what my average was, counting every shot I fired, good, bad and indifferent.

In 1882, I was published in order as a marksman, with the following percentage for two best scores: 200yds., 82 per cent.; 300yds., 82 per cent.; 600yds., 82 per cent.; total, 82 per cent.

I began firing on Aug. 5, having been absent up to that time, and fired up to and including Sept. 28, with the following results:

At 100yds., total 45 shots, average percentage, 82.6.
At 200yds., total 45 shots, average percentage, 76 8 9.
At 300yds., total 140 shots, average percentage, 69 4-7.
At 400yds., total 110 shots, average percentage, 66 2-11.
At 500yds., total 100 shots, average percentage, 66 1-5.
At 600yds., total 125 shots, average percentage, 51 7-25.

And yet I made qualifying scores as a marksman, as follows:

At 100yds., 80 per cent. or over, 8 times—scores of 5 shots each.
At 200yds., 80 per cent or over, 4 times—scores of 5 shots each.
At 300yds., 80 per cent. or over, 2 times—scores of 5 shots each.
At 400yds., 80 per cent. or over, 4 times—scores of 5 shots each.
At 500yds., 72 per cent. or over, 6 times—scores of 5 shots each.
At 600yds., 72 per cent. or over, 4 times—scores of 5 shots each.

The above needs no argument. Had I been classified on my average, where would I have been, unless the percentage had been lower? And yet my best shooting is no criterion as to what I could be expected to do under any and all circumstances.

In 1883 I was published again as a marksman as follows: At 200yds., 90 per cent.; 300yds., 90 per cent.; 600yds., 94 per cent.; total 91.3 per cent. I began firing on the new target year Oct. 3, 1882, and fired during the year as follows:

At 100yds.—With carbine, 75 shots, average 85⅓ per cent.; with rifle, 15 shots, average 96 per cent.

At 200yds.—With carbine, 65 shots, average 76 4-13 per cent.; with rifle, 190 shots, average 72 11-19 per cent.

At 300yds.—With carbine, 50 shots, average 70.4 per cent; with rifle, 100 shots, average 74 10-19 per cent.

At 400yds.—With carbine, 15 shots, average 69⅓ per cent.; with rifle, 10 shots, average 96 per cent.

At 500yds.—With carbine, 20 shots, average 54 per cent.; with rifle, 25 shots, average 70.4 per cent.

At 600yds.—With carbine, 55 shots, average 56 per cent.; with rifle, 330 shots, average 54.4 per cent.

Scores of 80 per cent. or over, at 100yds.—Carbine 14, rifle 3; total 17.
Scores of 80 per cent. or over, at 200yds.—Carbine 6, rifle 12; total 18.
Scores of 80 per cent. or over, at 300yds.—Carbine 3, rifle 13; total 16.
Scores of 80 per cent. or over, at 400yds.—Carbine 1, rifle 2; total 3.
Scores of 72 per cent. or over, at 500yds.—Carbine 2, rifle 2; total 4.
Scores of 72 per cent. or over, at 600yds.—Carbine 1, rifle 23; total 24.

These figures again seem to need no comment, and yet on my aver age where would I again have been?

In 1882, in one of the Departments there were something like 223 marksmen; the highest had 80 per cent. as his total, and there were thirteen who had 76.6 per cent. for their totals, that is, they just had the required 80 per cent. at 200 and 300yds., and 70 per cent at 600yds. In 1883, in the same Department, there were something like 602 marksmen; the highest had 92.6 per cent. for his total, and about thirty-three had 76.6 per cent., or just qualified.

Now so far as the report shows, these last in the two years just managed to "squeeze in." They may have had several scores of 80 per cent. or 70 per cent., but from what I know of the *modus operandi*, the chances are that they did not, and therefore they probably are marksmen on the only scores they made that had the required percentage. Are such men necessarily marksmen? and are not the chances very great that they are not marksmen, but that they simply had luck enough to make the percentage and are therefore called such "by order." Understand that I do not mean to say that it is to any one's discredit that he should have made 80 per cent. or 70 per cent. at the proper ranges; it indicates something, and that something is of value, but I claim that it does not necessarily indicate a marksman. Now let us look at it in another way: A has thirty marksmen in his company troop, qualified as above explained; B has none. A's company or troop has a high figure of merit; B's company or troop stands away down. Let us analyze a little and see whether this is just.

The form and dimensions of the target now come in. The 100, 200 and 300yd. target, as all know, has an 8-in. bullseye, and a 26in. "4-ring" or center. Let us suppose B has taught his men to shoot on the vertical, and has bent all his energies to that, rather than to shooting for glory, record and marksmen; the chances are that he will have over fifty per cent. of his men who can "pull up" on either the 200 or 300-yd. target and make 16, 17, or 18, every time, but who have not the luck or skill to make the magical 20. Will not any one of three scores on the vertical be a more killing score than 20 made by scattering shots, all inside the 4-ring, but all so far out to right or left, that they would miss the size of a man? It is easy to make horizontal firing, that is to always shoot a little to the right or left; and, with our target, so long as they enter inside the 4-ring, even if it be on the extreme right or left edge, all the shots are fours, and the magic 20 has been made. Whereas it is hard work to shoot on the vertical line, and a 4-6, 4-12, 4-12 all so close that they all but hit the bullseye, followed by a 3-5, and 3-12 just outside the 4-ring is "by order" worse firing than the five fours at 9 or 3 o'clock, and the man gets no credit for it.

I have had men say to me time and time again, "If you will let me shoot as the men in Blank troop shoot I can make a marksman's score," when I know that shooting there was not so much for close and accurate vertical shooting as it was to hit the 4-ring. Hit it anywhere, but hit it, and be marksmen. I had several men last year—good shots, too—who had made 17-18-19 right along at 200 and 300yds., who could and did shoot on the vertical and close to the bullseye, but who, for some unaccountable cause, would always get in at least one three high or low in their scores. They never got to be marksmen, but I'll gamble on their shooting better and killing more men than many of the so-called marksmen. Then again, as between marksmen, all are alike marksmen, and all of one class by order, and yet what vast differences there are. One man makes only 80 per cent., and yet every shot is but six inches from the center of the bullseye; another makes 80 per cent. also, but every shot is thirteen inches from the bullseye center; the first man's shots were all on the vertical and measure say 36 for string; the second man's were all at 3 o'clock and measure 78 inches for string—some difference it strikes me, and yet each is only a marksman. So far as string measurement goes, the man with but 18 for a Creedmoor score can beat the 78-inch string 3 4-12 at 4½ inches from the center, and 2 3-12 at 13½ inches from the center only count 18, and yet the string is 40.5 inches, 37.5 inches better than five 4s at 3 or 9 o'clock on the extreme edge of the center.

Doubtless we need a standard of comparison, and the Creedmoor target was well enough in the infancy of target practice; but has it not outlived its usefulness, and has not target practice got beyond it? I recognize the difficulty of string measurement as applied to target practice where large bodies of men have to be practiced, scored and classified, and doubtless the circular target was invented to overcome this difficulty; but should we not now have another target? Should we not have a means of scoring and classifying the men according to their actual merits as shots, and not as now, according to so fixed and arbitrary standard, which may, or may not mean anything?

Over a year ago I had the honor to propose a system of targets that overcome the greater part of the difficulty. I proposed an elliptical bullseye, with elliptical decimal divisions—and these targets, or modification thereof, are being now discussed as the coming target.

It is conceded that no target, unless we return to the old outline of a man, can be devised that will embody everything we want. We use elliptical targets, where shots may hit and count high in the score which would have missed a man by going over his shoulder, beside his head or neck, etc.; but yet these elliptical targets would mean much more than the circular ones now do. A "tactical man" is assumed to be 22in. wide. All his vitals are inside of the limits of from 12 to 14in. in width and 16 to 18in. in length, not counting his head as being too small to shoot at with any chance beyond 300yds. Can we not, therefore, have a bullseye and series of elliptical rings that will cover this vital region, and then have a system of counting such that a shot in one of them means a vital or disabling shot, and not a miss or a possible miss, as at present? Draw the outline of a man, in proportion to the target, on the Creedmoor target for 100, 200 and 300yds., as it now is, and see how much space there is inside the 4-ring where a shot can hit and not have hit the man, and then my meaning will be beyond a doubt.

I would not wish it to be understood that I claim that a marksman should always be able to make a dead shot, was always to be able to make his qualifying scores at the target, for I know such would be an absurdity. I know that when firing at unknown distances the best of shots have got to feel their way; I know that a man is a very small object at even so short a distance as 600yds., and that it takes an excellent shot to hit one even once out of five times, but I do claim that we should have some intelligent basis for scoring and classification, that means what it says, and when it says that a man is a marksman then I or any other commander can depend upon that man to make as good a shot as is possible when a long and difficult shot presents itself. I claim that a system of classification and set of targets should be used, such that I and every other man may get justice from our scores. I want to see my men have credit for their shooting that I know would be very dangerous shooting for a man as a target at the same distance, and I do not want to be censured for a low figure of merit when such is not deserved.

I claim that our present system is wrong and faulty, and a humbug from beginning to end. Under it we have made improvement, and have made many men who are really marksmen, whether so classed or not, as well as many men who are not marksmen, although they are so classed. Under a better system doubtless we would have fully as many marksmen, but they would all be genuine, and many who are now so classed would drop out.

If the recent orders had been in such a right direction they would have been hailed with delight by every true friend of rifle shooting; but they are simply an extension and continuation of our present system of humbug, and therefore worthless for true results.

FORT MCKINNEY, Wyo. C. D.

RANGE AND GALLERY.

GARDNER, Mass., April 30.—Only seven members of the Gardner Rifle Club were present at Hackmatack Range to-day. The new American decimal target was used, distance 200yds., shooting off-hand, with a possible 100. The totals made were as follows: G. F. Ellsworth 91, A. Mathews 90, M. Atherton 86, G. E. Fordyce 86, H. C. Knowlton 81, W. C. Loveland 77, G. C. Goodale 77.

BOSTON, Mass., May 3.—The matches for the month of April, at the Mammoth Gallery, closed last Wednesday night, Mr. A. B. Loring winning the first prize, gold badge, M. L. Pratt the second, B. W. Gardner the third, J. J. Monroe the fourth, and C. L. Foster the bronze badge in beginners' match. Some very good shooting was done, as the scores will show. A list of regular prizes will be put up for this month.

Amateurs' Match, No. 1.

A B Loring	46	47	47	46	46—232
M L Pratt	46	46	46	46	47—231
B W Gardner	45	45	45	47	47—229
J J Munroe	45	45	44	44	44—222
E B Edwards	43	43	44	44	44—218
J A Hills	43	43	42	43	46—217
J H Bird	44	43	43	43	43—216
J F Stetson	43	43	42	44	44—216
A B Wilson	43	44	42	43	43—215
W E Dugan	45	42	42	44	42—215
A W Johnson	43	43	43	42	43—214

Beginners' Match.

C L Foster	42	53	44	43	43—215
T A Lynch	42	43	42	42	43—212
L V Smith	41	41	41	41	41—205

BOSTON, May 3.—The members of the Massachusetts Rifle Association turned out in strong force to-day at Walnut Hill range. The large attendance was due in part, no doubt, to the fact that a trial of skill was to take place between teams representing the home club and that of the Springfield armory. As neither team could leave home, it was arranged that each should shoot on its own range and the scores be telegraphed. The result, recorded below, shows a defeat for the home team, Springfield winning on a score of 318 against 309 at 200yds. During the day the wind caused trouble, blowing from 11 to 12 o'clock, but the light was excellent. The day's records are appended:

Creedmoor Practice Match.—O. M. Jewell 48, J. B. Fellows 46, D. Kirkwood 45, F. Chauncey 45, J. C. Chambers 43, J. H. Payne, Jr., 42, F. Stetson 40, W. H. Morton 40, E. B. Smith 40, F. W. Fowle (mil) 39, J. D. Darmody (mil) 39, M. Williams 38.

Decimal Match.—W. Charles 82, A. C. Adams 78, W. Gardner 79, J. N. Frye 74, Lewis Ross 73, G. Warren 70, W. H. Ober 68.

Creedmoor Prize Match.—J. R. Bates 44, Lewis Ross 44, E. B. Souther 43, H. Mortimer 41, D. Humphrey 40.

Rest Match.—S. Wilder 96, C. B. Edwards 92, P. Sylvester 87, J. Hurd 83.

Team match.—Springfield Armory team: T. B. Wilson 47, R. T. Hill 46, J. Kimball 45, S. S. Bumstead 45, L. H. Mayott 44, M. W. Bull, 43, T. R. Bull 43, total 313. Massachusetts Rifle Association: W. Charles 47, J. B. Fellows 46, D. Kirkwood 44, O. M. Jewell 44, J. A. Frye 44, J. N. Frye 42, H. E. Bixby 42, total 309.

The full scores of the winning team are appended. The marksman having the 1 point allowance used Springfield army rifles. Hare used a Hotchkiss repeater and Mayott a Ballard. The wind was an ugly 5 o'clock fish tail:

T R Bull	4544444544—42+1—43	L H Mayott	4554444554—44 —44
T B Wilson	5545554454—46+1—47	R T Hare	4544555545—46 —46
M W Bull	4444454454—42+1—43	S Bumsted	4545444455—44+1—45
J W Kimball	4444455455—44+1—46		
Total			313

THOMASTON, Conn., May 5.—At a meeting of the Empire Rifle Club, Wednesday evening, April 30, it was decided to accept the challenge of the Canton Gun Club to shoot a series of matches, the first one of the series to be shot June 4. The team will be selected from those of the club making the highest aggregate in three weekly shoots, from the first ten shots. The club also voted to have a shoot, open to all, May 21 and 22, and formally open their new range. The cash prizes will aggregate $90, divided as follows: $40, $20, $15, $10, $5. There will also be numerous other prizes, some of which are now on exhibition at Williams's drug store. Mr. Williams is secretary of the club, and is doing all in his power to make the shoot a success. At the weekly shoot Saturday last, the following scores were made: W. H. Dunbar 104, G. Canfield 102, G. Gilbert 101, C. F. Williams 94, E. Bennett 88, Dr. Goodwin 88, C. Alling 87, A. Fox 83.—F. A. P.

U. S. SHARPSHOOTER.—Capt. J. M. Thomson, 24th Infantry, of Fort Supply, Indian Territory, has taken the first sharpshooters' certificate under the new regulations. It was issued by Lieut. Manning, of Rifle Practice, for the department of Missouri. The scores made are remarkably fine ones as qualifications for sharpshooters, which are: 88 per cent. at 200yds. standing, 300yds. kneeling, and 600yds. lying; 76 per cent. at 800, 900, and 1,000yds. lying, in three scores of five shots each, the possible scores being 25 points each, or 75 points at each range. Capt. Thompson's scores are as follows: 200yds., scores 23 and 24, per cent. 92 and 96. 300yds., scores 22 and 23, per cent. 88 and 92. 400yds., scores 22, 22 and 22, per cent. 88. 600yds., scores, 21, 22 and 19, per cent. 84, 88, and 76. 900yds., scores 20, 21 and 23, per cent. 80, 84, and 92. 1,000yds., scores 20, 22, and 21, per cent. 80, 88 and 84.

DENVER, Col., April 27.—The rifle match between the Trinidad Rifle team and the Governor's Guard, which has been on the tapis for several weeks past, was shot to-day, the former team shooting at their home, the latter at the Jewell Park range. Company B's team shot with a high wind blowing and only made a score of 359, which, with the 20 points allowed them by their opponents, made a total of 379. The Trinidad team telegraphed Capt. Lower that their score was 372, thus leaving the Governor's Guard team winners by 7 points. The following is the score in detail of the home team: J. Lower 37, H. S. Davis 34, E. W. Lehman 36, L. Marix 39, C. C. Compton 35, F. P. Jackman 34, G. S. Henderson 34, Ed. Armor 35, G. Lower 44, W. G. Hardin 31.

WALTHAM, Mass., May 2.—The Hillside Rifle Club, of Waltham, held its first shoot of the season at its range in this town to-day. Since last summer the club has increased its membership, put in a new pit, and otherwise materially improved its range. The individual scores (being out of a possible 50) are as follows:

Creedmoor Match—John Foster 46, W. H. Stone 46, L. O. Dennison 45, E. C. Osgood 43, E. A. Emerson 43, G. Bassett 42, F. Dunlap 41, R. B. Edes (mil.) 41, C. H. Gray 39, H. L. Whiting 38, John K. Low 38, George Strickland 38, G. B. Brown 36.

Rest Match—L. O. Dennison 49, W. H. Stone 46, J. R. Monroe 46, John Foster 44.

The spring meeting of the Massachusetts Rifle Association has been fixed for May 29, 30 and 31.

BULLSHEAD RIFE CLUB.—April 24, 12-ring target, possible 120: A. Lober 117, G. Zimmerman 116, C. Rein 114, G. D. Johnson 108, G. Wendelken 107, S. Mehrbach 105, J. Schneider 110, J. F. Campbell 100, D. Lounski 99, D. Holland 96, B. Waters 95.

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

ASHLAND, Mass., April 28.—The Ashland Glass Ball Club has just held its third annual meeting. The report of the Treasurer, J. H. Dascomb, shows that the club is in good standing financially. The club has done what it could during the past severe winter to preserve the birds in this section by placing barley and other grain in places most convenient for the birds. The election of officers resulted as follows: President, George G. Tidsbury; Vice-President, J. B. Knowlton; Treasurer, J. H. Dascomb; Secretary, F. N. Oxley. It was voted to join the State Association for another year. G. G. Tidsbury and F. N. Oxley were chosen delegates to the annual meeting of the State Association.—F. N. O.

WINCHENDON, Mass., April 30.—The Winchendon Gun Club had a practice to-day, with the following results: Glass balls—L. F. Martin, 5 thrown, all broken; H. E. Curtis, 5 thrown, 3 broken; F. F. Hopgood, 10 thrown, 7 broken; P. S. Davis, 10 thrown, 5 broken. Clay-pigeons—F. M. Brown, 7 thrown, 4 broken; H. E. Curtis, 8 thrown, 3 broken; James Sutherland, 10 thrown, 7 broken; F. F. Hopgood, 10 thrown, 7 broken; L. F. Martin, 10 thrown, 6 broken; P. S. Davis, 10 thrown, 2 broken. The regular shooting of the club begins next week.

SPRINGFIELD, Mass., May 15.—*Editor Forest and Stream:* Inclosed I hand you a slip cut from this morning's *Republican*. Our team were not treated as they should have been, as the article states; and it is too bad that anything which is contrary to the "squarest deal" should be allowed to enter into these friendly matches between true sportsmen. Here is the extract: "A correspondent writes in this way: After a recent match at glass balls, shot in this city, the charge was made by the Worcester *Spy* that the visitors were received with scant hospitality and that shameless attempts were resorted to to defeat fair play. These charges were afterward repudiated by the visitors themselves, and sufficient apology was offered for such inaccurate expression on the part of the *Spy*. Last Tuesday a team from our home club visited Worcester to compete for the state badge and were defeated. The reason for their defeat was that they were unable to make their score sufficiently high to overcome that of the Worcester team. The cause of such inability, however, was evident to all present at the match; and it is probably true that to the increasing number of marksmen from all parts of the State, who decline to visit Worcester in any further contests with the Worcester club, may be added those from Springfield." I wish you could find some corner under "The Trap" column for this article, as I believe it to be a clean protest which may help eliminate such conduct from future contests.—SPRINGFIELDER.

TOPSHAM, Me., May 1.—At the annual meeting of the Riverside Shooting Club held on April 24, the following officers were elected for the ensuing year: M. C. Hall, President; Chas. Goud, Secretary; A. Q. Goud, Treasurer. A. H. Perry and C. L. York were added to the above named officers to constitute the executive committee. At their annual shoot on May 1, the following scores were made. Shoot for silver badge, 10 single clay-pigeons, 18yds. rise, use of both barrels, second barrel to count a half bird, 5 single balls, 18yds. rise, 5 pairs pigeons, 15yds. rise, Card revolving trap:

	Singles.	Doubles.	Balls.
A S Alexander	1110011*1	11 11 01 10 10	11111—19½
M C Hall	*1110111	01 11 11 11 00	11011—19½
C Keay	1110011*111	10 11 11 10 01	11111—19½
A Q Goud	1011*11001	11 11 01 10 01	01111—18½
G H Goud	1*01110111	11 00 11 11 10	00011—16½
A D Hall	1*0001*110	00 01 01 10 11	11101—14
G E Keen	1*01*01001	00 10 10 11 01	11100—13
E W Fuller	1000100010	00 11 01 01 11	01010—12
W Dunning	0001*10100	10 12 00 11 10	00010—11½
C H Greenleaf	1101101011	11 01 00 00 10w.	
S Strout	1*10011110	10 11 11 11 00w.	
G B Strout	1000010000*	00 10 00 00 00	11111— 8½
C M White	0000000010	01 00 01 10 00	00001—5

Ties on 19½—M. C. Hall 110—2, A. S. Alexander 111111—6, C. Kean 111011—5.

*Second barrel.

WORCESTER, Mass., April 29.—At Coal Mine Range to-day there was a large number of sporting men present. The principal event was the team match for the State Championship Badge of the Massachusetts Glass Ball Association. It has been held some time by the Worcester Sportsmen's Club. Their opponents were the Springfield Club. The men in the two teams shot and scored in the following order:

Worcester Team.

George A Sampson	1111111110111111111—19
G J Rugg	0011011010111111110—14
E T Smith	1111101111111111101—18
C B Holden	1101111011111011110—15
W S Perry	1111110111111011111—18—84

Springfield Team.

S E Ford	1010010010111010111—12
Bradford Moses	1011011011111111111—16
J Keith	1101110111111111111—17
S H Barrett	1111111101111110111—18
A Brugg	1011111111111011110—17—80

The judges were Mr. M. D. Gilmon, of Worcester, for Worcester team, and Mr. Smith, of Springfield, for Springfield team. Mr. A. Graham, of Webster, being referee. The Worcester team have held the badge since they won it from the Massachusetts Rifle Association last September. They also hold the Individual Championship Badge of the State Association.

MAINE.—The first challenge shoot for Ligowsky medal, following the State championship tournament, held on April 17, took place today, April 30, on the grounds of the Androscoggin Club at Lewiston. The weather was all that could be desired, and the match was watched by a crowd of interested spectators. The shooting was governed by the following conditions: Teams of 5 men, 10 single birds, 18yds. rise, and 5 pair doubles, 15yds. rise. Five traps, three yards apart, set in fourth notch. Second barrel break half bird. Col. E. C. Farrington, referee; Wormel and Irish, judges. The Riverside Club, of Topsham, have challenged the winner:

Androscoggins.

Nason	1111111011— 9	11	10	11	11	01— 8—17
Donovan	1111111111—10	11	11	11	11	10— 9—19
Shaw	1212111111— 9	11	11	11	10	11— 9—18
Pettengill	0121011101— 6½	01	10	00	11	10— 5—11½
Whitney	0100110012— 4½	10	10	00	10	00— 3— 7½—73

Willard Club, Portland.

McKinney	2111012111— 8	11	11	11	11	11—10—18
Randall	1201101111— 7½	10	10	10	10	10— 5—12½
Todd	1111121111— 9½	10	11	11	11	10— 8—17½
Willard	1120101012— 6	10	11	10	10	01— 6—12
Harmon	0011111112— 7½	00	10	00	10	10— 3—10½—70½

BOSTON GUN CLUB TOURNAMENT at Wellington, Mass., April 30 and May 1. Many clubs were represented at the above shoots, the absence of some of the team shooters prevented the necessary number of teams filling up the gold medal match; for this purpose additional dates are added, May 14, June 11 and 25, which will conclude and decide the preceding in three man team, clay-pigeon shooting. The second day of the shooting the matches more in order were those like to conform with the shooting expected at the great tournament, Chicago. Fine weather afforded ample scope for all the shooting desired which was keen and close right through, hardly a shooter being present but was recognized as being the best from the surrounding clubs within fifty miles. The two days' shooting being too much to give in full, only winners are given of the different events:

FIRST DAY.—First event, five clay birds, twelve entries—Schaefer first, Sampson and Perry divided second, Parker and Kirkwood divided third, Evans fourth.

Second event, three pair birds, nine entries—Evans first, Kirkwood second, Perry third.

Third event, five clay birds, twelve entries—Johnson first, Eager second, Schaefer and Pillsbury divided third.

Fourth event, three pair birds, fifteen entries—Eager first, Evans and Kirkwood divided second, Sampson and Curtis divided third.

Fifth event, five clay birds, five traps, sixteen entries—Kirkwood and Eager divided first, Pillsbury and Maloon divided second, Perry and Cutting divided third.

Sixth event, three pairs birds, twelve entries—Perry first, Snow second, Eager third, Johnson and Parker divided fourth.

Seventh event, two man team match, fourteen entries—Sampson and Perry first, Eager and Stark second, Kirkwood and Maloon third, Jones and Pillsbury fourth.

Eighth event, three pair double birds from five traps, fifteen entries—Sampson first, Perry second, DeRochmont third, Tinker fourth.

Ninth event, seven birds, five traps, nine entries—Perry first, Eager second, Tinker third.

Tenth event, five clay-birds, twenty entries—Eager and Jones divided first, Perry and Curtis divided second, Stark and DeRochmont divided third, Tinker fourth.

Eleventh event, three pairs double birds, fourteen entries—Sampson first, Kirkwood and Stark divided second, Tinker and Perry divided third, DeRochmont and Parker divided fourth.

Twelfth event, five single birds, five traps, eighteen entries—Eager and Sampson divided first, Tinker and Sampson divided second, DeRochmont and Curtis divided third, Cutting, Evans and Snow divided fourth.

Thirteenth event, seven birds, eleven entries—Stark and Parker divided first, Eager second, Donovan third, De Rochmont and McDonough divided fourth.

Fourteenth event, three pairs birds, fourteen entries—Evans first, DeRochmont second, Snow third, McDonough fourth.

Fifteenth event, five clay birds, fourteen entries—Eager first, Shattuck and Cutting divided second, Kirkwood third, Snow fourth.

Sixteenth event, five clay birds, fourteen entries—Evans first, De Rochmont second, Donovan, Snow and Cutting divided third, Parker fourth.

SECOND DAY.—First event, ten singles and five pairs double birds, five traps—Eager first, Stark second, Sampson third.

Second event, same conditions—Sampson first, Eager second, Perry third.

Third event, six singles, two pairs double birds, five traps—Eager first, Gardner second, Houghton and Stark divided third, Gerrish and DeRochmont divided fourth.

Fourth event, seven clay birds—Eager and Sampson divided first, Perry second, Gardner and Rowe divided third, Gerrish fourth.

Fifth event, three pair double birds—Sampson and White divided first, Eager and Chambers divided second, DeRochmont and Rowe divided third, Gerrish and Houghton divided fourth.

Sixth event, five clay birds—Chambers first, DeRochmont and Rowe divided second, Eager third, Gerrish fourth.

Seventh event, seven clay birds—Law first, Houghton and Sampson divided second, White third, Gardner fourth.

Eighth event, five single, three pair double birds, for two-men teams—White and Gerrish first, Sampson and Perry second, Eager and Stark third.

Tenth event, five clay-birds, five traps—DeRochmont first, Gerrish second, Thompson third, Nichols fourth.

Eleventh event, five clay-birds—White and Parker divided first, Snow second, Gerrish and Nichols divided third, Chambers fourth.

Twelfth event, a miss and out, was won by Nichols and Snow.

MALDEN GUN CLUB, May 3.—The club had a very enjoyable shoot to-day at Wellington, the record showing: First event, 7 birds,

Saunders first, Hopkins second, Snow and Lewis third; second, 10 birds, Snow first Hopkins second, Wemyss and Brown third; third, 5 birds, Short and Lewis first, Scott second, Brown third; fourth, 5 birds 21yds. straight way, Hopkins first, Brown and Adams second, Scott and Lewis third; fifth, five birds, Hopkins first, Adams and Ellsworth second, Scott and Lewis third, Sanborn and Snow fourth; sixth, 3 pairs, Hopkins and Saunders first, Short and Snow second, Ellsworth and Adams third; seventh, 5 birds, Binden first, Brown and Saunders second, Adams third; eighth, 5 birds, Saunders and Hopkins first, Scott second, Adams and Ellsworth third; ninth, 7 balls, Adams and Ellsworth first, Saunders and Short second, Binden and Snow third; tenth, 5 balls, Snow and Hopkins first, Lewis and Brown second; Ellsworth third; eleventh, 5 birds, Hopkins and Short first, Saunders and Brown second, Adams and Scott third; twelfth, cup match, Buffum, 6, 6, 6; Wemyss, 5, 6, 5; Hopkins, 6.

PROVIDENCE, R. I., May 5.—The following are the scores for the three last weekly shoots for the Ligowsky State championship badge, all shot upon the grounds of the Narragansett Gun Club, at 25 clay-pigeons from five traps, 15yds. rise.

April 17.—W. H. Sheldon 24, E. Tinker 23, E. S. Luther 22, C. B. Payne 22, C. H. Brown 21, Geo. Barney 21, F. E. Tingley 18, Isaiah Barney 18, C. B. Potter 17, S. D. Greene 16, W. G. Crandall 15, C. C. Gray 14, H. D. Mathewson 14. W. H. Sheldon won for the third time.

April 24.—E. W. Tinker 22, Geo. J. Crandall 22, J. B. Valentine 21, W. H. Sheldon 20, H. D. Mathewson 20, C. B. Payne 19, C. H. Brown 18, C. B. Potter 15, G. F. Butts 15, H. Salisbury 13. Mr. E. W. Tinker won on the tie by breaking 4 to Crandall's 3, out of 5, making 8 times that Mr. Tinker has won this badge.

May 1.—W. H. Sheldon 21, C. F. Baldwin 20, G. F. Butts 20, E. W. Tinker 20, H. D. Mathewson 19, Geo. Anthony 18, F. O. Wehoskey 18, C. C. Gray 17, C. B. Potter, 16, S. D. Greene 15, F. Hoard 8. W. H. Sheldon wins badge for fourth time.—W. H. S.

Yachting.

FIXTURES.

May 18.—Eclipse Y. C., Opening Cruise.
May 24.—Oswego Y. C., Opening Cruise.
May 24.—Boston Y. C., Opening Cruise.
May 28.—Quincy Y. C., First Match.
May 30.—Knickerbocker Y. C., Spring Matches.
May 30.—Atlantic Y. C., Opening Cruise.
May 30.—Newark Y. C., Spring Match.
May 30.—South Boston Y. C., Spring Match.
May 30.—City Point Mosquito Fleet, 13 and 15ft. boats.
May 30.—New Haven Y. C., Opening Cruise.
May 31.—Boston Y.C., First Match, Connor and Commodore's cups.
June 9.—Portland Y. C., Challenge Cup.
June 9.—Savannah Y. C., Opening Cruise.
June 10.—Atlantic Y. C., Annual Match.
June 11.—Hudson River Y. C., Annual Match.
June 12.—New York Y. C., Annual Matches.
June 14.—Seawanhaka Corinthian Y. C., Annual Matches.
June 16.—East River Y. C., Annual Matches.
June 16.—Newark Y. C., Open Match.
June 19.—New Jersey Y. C., Annual Match.
June 21.—Hull Y. C., Pennant Match.
June 23.—Newark Y. C., Open Matches.
June 24.—New Haven Y. C., Spring Match.
June 28.—Boston Y. C., Ladies' Day.
June 30.—Manhattan Y. C., Annual Cruise.
June 30.—Eclipse Y. C., Spring Match.
June 30.—Quincy Y. C., Second Match.
July 4.—Larchmont Y. C., Annual Open Matches.
July 4.—Hull Y. C., Review and Cruise, five days.
July 9.—Beverly Y. C., Marblehead, First Championship.
July 12.—Boston Y. C., Second Club Match.
July 12.—Hull Y. C., First Club Match.
July 19.—Hull Y. C., Ladies' Day.
July 26.—Beverly Y. C., Nahant, Second Championship.

HARDLY CORRECT.

A WELL written letter from London last week in the *Herald* conveyed the impression that the new Scotch yawl Wendur's decks were too narrow to carry sufficient crew to work her racing sails to advantage. We have it on the best authority that no such trouble was found with her at all, and that if the crew ever was "pumped," it was simply from too much work, just as crews often get pumped in broad boats. Wendur's crew always mustered the customary number of hands, and more would only have been in each other's way. The same letter from London says such boats are very wet in a cross sea. This is opposed to recent experiences in the lleen, a 5⅞ beam cutter, for she proved herself especially dry under the worst circumstances, and it is a fact known all over the world that the six-beam Jullanar is about the "dryest" yacht ever floated. It seems evident the letter in question was prepared to suit the supposed American palate. But we have already learnt better in America, and decline to hoist aboard any taffy, even when coming from an apparently good source. Enough will be seen of the lleen this season for those still in the dark about narrow boats to discover their real merits.

The Wendur is 91.5×17.7, according to Lloyds, and that means about 90ft. L.W.L., so that she is little more than a five-beam boat, or, gauged by other racers, such as Vanduara and Samœna, she is not a particularly narrow boat, and we hear nothing about too little deck room aboard her sister vessels. One foot more or less beam makes quite a difference in the proportion of beam to length, but cannot possibly have any practical bearing upon handling the sails. The 40-tonners race without trouble on 11 to 12ft., so Wendur is well off with more than 17ft., which, considered by itself, is very good breadth, and a crew which cannot work in 17ft. could accomplish nothing more on 25ft. The fact is, Wendur proved herself a very smart boat, and the London critics merely seek to quibble and find fault because she is not a South of England production. If she did not win as often as others, it was more owing to her tonnage, which unfits her for class racing, as the smaller yachts find their weather much oftener than a big vessel of 125 tons.

RACING IN ENGLAND.

WE take the following from the *Fortnightly Riview*. It was written by Mr. Dixon Kemp:

"It is a debatable point with many whether the long, narrow, deep-hulled and heavily-ballasted hulls of the present day are, on the whole, superior as sea boats, or for speed, to the vessels of greater comparative beam of a quarter of a century ago, but the general balance of evidence tends to show that for any given tonnage a well-ballasted and judiciously-sparred yacht of five beams length is, taken all round, more capable boat than one of four beams. The reason of choosing a greater length for any given tonnage was the knowledge that, other things being equal, the greater the length the greater the speed. The adoption of extreme proportions for any given tonnage had always been held in check by the necessity of providing a yacht with great comparative beam, in order that she might carry a large sail spread. Speed was thus made dependent as much on the sail-carrying power as upon the length of hull, and until within the last quarter of a century it was considered that four and a half beams of length was the happy medium. The gradual discovery that sail-carrying power could be made almost dependent upon ballasting and depth led to beam being dispensed with in favor of depth, and a consequent low situation of the dead weight. To such an extent is the modern system of ballasting carried that modern racing yachts of ninety tons downward have the whole of their ballast outside in the form of lead keels. They are about five and a half beams to length, and for any given length carry more sail than a yacht of four beams would have carried twenty years ago. The chief objection to this modern type of craft is its extreme costliness, and this circumstance has contributed to the diminution of the number of competitors during the last few years. The Yacht Racing Association has, it may be supposed, taken this view of the case, for its members have passed a new rule for the rating of yachts in competitive sailing based on sail area and length of hull. Contemporaneously the chief yacht-racing clubs in America, led by the New York Y. C., have adopted a similar rule, and it is said to have been much approved. Theoretically, it seems sound and just that if a yacht's success depends upon her length and upon the sail she can carry, these two elements should form the basis for estimating a compensation for differences between yachts in competition; and, further, that the tendency of such a compensation should be to limit sail-spread and length of hull, and so at the same time reduce the expense of producing and working a racing yacht."

While we can agree with the foregoing in most particulars, we cannot concede that the paucity of entries in English matches is due to the large cost of modern narrow-beam cutters. It seems to us the reverse is the truth, and it is of some importance that clear ideas should prevail. For, double the beam of the Tara, Annasona, Freda, Buttercup, Chittywee, and all of them would cost more than at present, even though depth were decreased. Displacement, rig and size all over would be increased. The narrow boat is not more costly but cheaper than a beamy one of like length, supposing both to be equally first-class in every respect. Witness the cost of a 30×5ft. Chittywee of 11 tons displacement and sq. ft. of sail, and a 30×10ft. Itchen boat like Keepsake, with 15 tons displacement and sq. ft. of sail. The latter has the depth and draft of the former, with larger displacement, beam and rig, topsides, deck, etc., and is bound to be more costly, and requires a larger crew to race.

No, the real reason why we see so few entries in English matches is *not* the first cost of narrow cutters, but simply the outrageous handicap the present Y. R. A. rule imposes without reason upon beam, making it perfectly futile for the beamy boats to appear at the line, saddled with ten to fifty per cent. more tonnage than they really possess in competition with narrow boats having ten to fifty per cent. greater tonnage then they are assessed for. Abolish the Y. R. A. rule and substitute sail area and length, and then the beamy and narrow boats will be put approximately on an even footing, and the broader yachts will at once put in an appearance again at the races.

ESTIMATING DISPLACEMENT.

Editor Forest and Stream:

In your paper of April 24, you give the displacement of the cruising schooner Gaetina as 13 short tons. Her L.W.L. is 35ft., her beam 11½ft., draft at heel 6ft. Will you please give the rule by which you get the displacement, as this only gives a co-efficient 0.25, and she is a pretty full boat. Cass.

[For an approximate estimate of displacement of a tolerably full boat, the co-efficient is about 0.33 or one-third the circumscribed parallelogram of the three cardinal dimensions. In case of Gaetina it is 35×10. the beam on L.W.L. to outside of plank, and that again multiplied by 3ft. 6in., the depth from L.W.L. to lower edge of rabbet on midship section =1,225. One-third of this, or 408, will be the displacement in cubic feet, which at 64lbs. per cubic foot, represents an approximate displacement of 26,112lbs., or say 13 short tons. For exact displacement the application of Simpson's rule to the sections in detail would be necessary, as explained in "Kemp's Yacht Designing" or in works on naval architecture. Gaetina is a little full about the sections, but has a lean after end, so that her co-efficient is probably not over 0.33.]

FLORINDA'S GREAT TRIUMPH.

OUR report of the Nice regatta was from special sources, not influenced by any preference for English yachts. We now quote the conclusions of the London *Field* on the trial between the English yawl Florinda and the Boston schooner Gitana. The *Field* expresses a very positive conviction, which coincides exactly with our own: "The result was highly satisfactory to the admirers of the English type of yacht, as Florinda on every point of sailing showed a very decided superiority over Gitana." Again, in speaking of the sailing the first day, the *Field* says: "Florinda soon overhauled Dauntless and luffing sharp up on Gitana's weather in grand style took her place in the van. Florinda steadily increased her lead and at the end of the second round the times of finish were as under: Florinda 3.35.32 and Gitana 4.06.58, Dauntless having given up." Of the second day's race, the *Field* says: "Dauntless was an absentee, apparently thinking she had no chance of winning a prize. Florinda and Gitana were soon leading the fleet, and the former was leaving the latter even faster than she did on the previous day. * * * Florinda was showing Gitana how she could march out to windward, and had a long lead when she weathered the eastern mark and set her spinnaker for the run home. * * * Florinda was steadily increasing her lead, when ultimately the wind died away and Gitana and the small craft closed up. * * * The times at the finish were for Florinda 5.28.14 and for Gitana 5.35.04."

BALLAST WHIPS BEAM.

OUR reports of the Nice International, sailed April 15 and 16, are very disagreeable reading. They announce the complete discomfiture of our two crack schooners, Dauntless and Gitana, by the English yacht Florinda. But for the rig prize given to schooners the first day, our vessels would have come away empty-handed. The easy manner in which Florinda polished off our schooners, even after allowing them a deduction of their tonnage for difference of rig, an allowance not granted by our home clubs, is the latest testimony to the fallacious flogmas upon which our yacht-building practice rests. Not only did Florinda exhibit superiority of a very marked kind, but she did it with a rig only two-thirds as large as those of our schooners compared to their loadline lengths. If we refuse to take to heart these signal defeats at Nice, the consequences will be upon the heads of those responsible for blinding our people to the truth, that in the building of fast yachts we have been left far in the wake of our cousins. What show would we have against a Wendur or even against Florinda herself in the light of the experiences at Nice? The races were sailed in "our weather," mild winds and smooth water, and if, under such conditions, the English yacht can overmatch us from a quarter to half an hour, what would she not do in a slogger, with pile-driving in a head sea? The triumph of Florinda will be hailed with delight by all who wish to see the best type carry the day. With us the nationality of the competitors has no weight or meaning. We know Florinda to be a very stiff, able, and exceedingly roomy yacht of handy rig, in every way and on every count preferable to the schooners whose pretensions to speed she so signally demolished. Hence we rejoice in her victories, and insist that unless we take a fresh departure from such ringing defeats as our vessels have sustained, the future for our glory in yachting looks dark.

NEW YORK Y. C.

SECRETARY'S OFFICE,
Club House, 67 Madison Avenue, May 1, 1884.

COMMODORE BENNETT instructs me to state that he offers the following prizes to be competed for by steam and sailing yachts during the New York Y. C. cruise in August next:

No. 1. A cup of the value of $1,000 to the steam yacht winning with time allowance.

No. 2. A cup of the value of $1,000 to the steam yacht making the shortest time over the course.

No. 3. A cup of the value of $500 to the steam yacht arriving second without allowance of time.

The above race to be over a course of not less than sixty statute miles, and no race unless five vessels start.

No. 4. Cups of the value of $500 each to two classes of schooners, and cups of the value of $500 each to two classes of sloops, to be awarded to the winners of a race from Brenton's Reef Lightship to and around Sandy Hook Lightship and back to the starting point.

The above race to be without time allowance.

If it can be arranged, Commodore Bennett also desires to offer valuable cups for a steam launch race.

All launches not measuring more than sixty feet upon the water line will be entitled to enter, under such rules and classification as the regatta committee may see fit to impose. Launches will be divided into two classes.

The races for steam yachts and launches will be open to the competition of vessels belonging to all duly organized yacht clubs.

All the above races are to take place while the New York Y. C. squadron is at Newport, and upon such dates as may be mutually agreed upon or fixed by the regatta committee. The regatta committee will make the necessary arrangements for the aforesaid races, and have entire control of the same, but should any question of dispute arise they shall be settled by the rules and sailing regulations of the New York Y. C.

Yacht owners intending to enter their vessels for the above races are requested to notify the undersigned to this effect at their earliest convenience. C. A. MINTON,
Secretary New York Yacht Club.

THE NICE INTERNATIONAL.

AS an international affair the Nice regatta, in spite of its large prizes and many attractions, turns out a disappointment this year more than ever. The absence of English racing yachts is attributed to the very peculiar rulings of French committees and courts, which have not acted in accord with the recognized customs adhered to among yachtsmen, but rather with the intent of giving the public on shore a good treat. Hence the races which ought to constitute the chief European event in the year have degenerated into local struggles of little more than scratch importance. The only two matches of any interest to the American public were the classes for schooners and yawls, sailed over a sixteen mile course, twice round. The entries included the New York schooner Dauntless, Mr. Colt, 116½ft. waterline, the Boston schooner Gitana, Mr. Weld, 92½ft. waterline, and the little English iron-built cruiser Gladys, Mr. Collins, 79ft. waterline, from Liverpool. Also two yawls, the Florinda, 85½ft. loadline, and a small French craft called Gabrielle.

The wind was light to moderate and not over steady. Florinda quickly went into the lead and beat all the schooners as she liked, crossing the finish in 3.35.32 corrected time, half an hour ahead of the leading schooner. Of the two-stickers, Gitana went into the lead and won in 4.02.44 corrected time, beating the Gladys by about forty-six minutes; the Dauntless having been so badly outsailed at the start that she gave up after the first round, being twenty minutes astern of the Gladys. The easy manner in which the yawl Florinda turned away from our American schooners is a warning as to what will happen should a large English yawl show up in our waters after the America cup, of which there is some likelihood before long. Florinda took first prize and Gitana got the special purse of $1,600 for schooners.

The second day there was a match open to all yachts for the "prix d'honneur," over a sixteen mile course. The wind was feeble from east and at times almost calm. A small local craft of 16 tons captured the prize. The large yachts in this race included Florinda, 100 tons; Gitana, 127 tons, and Gladys, 65 tons, the same trio which met in the first day's event. Dauntless did not appear, as she has been found so slow and leewardly in working to windward that she stood no show. Of these three large yachts, the English yawl Florinda led the schooners by twelve minutes, finishing in 5.27.31, the Boston schooner Gitana second, in 5.35.05, and the small English cruiser Gladys third, in 5.37.33.

The time allowance was ridiculously small, the 127-ton Gitana allowing only 58 seconds to the 100-ton Florinda, and but 2m. 28s. to the 65-ton Gladys. The Florinda, Gitana, and Dauntless were the best mated as to size, and of the three Florinda was found considerably the best boat. She is 85.7ft. loadline, 19.3ft. beam, 11.9 draft. Mainmast, deck to hounds 54.5ft.; mizzenmast, deck to sheave 33.5ft.; bowsprit, outboard, one stick 26ft.; mainboom 56.5ft., maingaff 42.5ft., topmast, fid to sheave 44ft., area of lower sails 5,257, which is only 0.61 of the square of her loadline and in strong contrast to the unwieldly sail areas of our beamier boats, which the Florinda beat handily. The Gitana was to race in the Menton International as well, but could not reach the start in time to cross with the rest, a scrub lot of small French boats of all varieties.

WINDWARD.

THIS single-hand yawl is now ready for her ballast and rig at Stephens's shop, West New Brighton, Staten Island. She is well worth an inspection from those interested in small boats. Her lines and details were published in our issue for Feb. 7. She is 18ft. on water line, 28ft. over all, 6ft. beam and 4ft. draft, with 1,500lbs. on keel. The deck plank is laid dead fore and aft with the house and cockpit all on the square, ship fashion. The house is more like a hatch, low and handsome, but supplies 5ft. 2in. head room in the cabin. The cockpit is roomy enough for one hand to recline in while steering. Below are two good berths and locker room. In the run a 30-gallon water tank and store room. She will be uncapsizable, unknockdownable, and unfillable, as the cockpit is narrow and the door sill at deck height. The "door" will be a flap hinged on the bottom, opened by dropping down. It can be shut in an instant by turning up and slamming to. The boat will be yawl rigged with single jib and pole mast. She is an excellent example of what a small single-hand cruiser of moderate draft should be. Her speed and general performance will, of course, be in proportion to the excellence of her lines. Fast boats of similar dimensions have been built often enough, and there are no reasons why anything should be urged against boats like the Windward on the score of wanting in speed. It is only a question of good lines to open and close the water, proper build and ballasting and a racing rig, and upon those items each boat must rest for her individual perfection. The type in itself is perfectly compatible with speed, and as for comfort, accommodation, usefulness and handiness, these deep little boats require only to be seen to capture every man who knows what he wants a boat for. They are now becoming so popular that a special club to further their interests will be formed before long. A yacht club limited to decked boats under 25ft. would contribute much to the spread of racing and cruising in small but perfect craft, which are within the reach of the multitude. Nothing could be more thoroughly sporting in spirit than the gathering of the webfooted clans aboard a fleet of two and three ton cutters and yawls, manned solely and always by owner and friend, who quickly learn to delight in roughing it and participating in sea life so far as the tonnage of their boats will permit. The proudest official position in the yachting world will some day be conceded to the man who flies the Commodore's burgee from a three-tonner, the leader of a club with several hundred practical yacht sailors who can design their craft from keel to truck and then sail them with boldness and skill, which will rank them far ahead of the mere yacht owner whose chief qualifications to esteem is the possession of wealth.

YACHT BUILDING ON THE DELAWARE.

Editor Forest and Stream:

The yacht Nohma, 28ft. over all, has been thoroughly tested, and the 2,800 pounds of iron on keel and small iron centerboard has proven a complete success. She was originally a sandbagger with a large board. The change was thought risky, but being a boat of large displacement this great weight was really a necessity, and much to the surprise of old shellbacks did its work as the owner expected. The sail plan of course has been brought down to a lower center of effort consistent with a low center of weight. Two men can handle her now except in a race, when large light sails have to be used. She is active in light airs, turns nicely, and holds on well in heavy weather and lumpy water without her board. Next season her centerboard trunk will be removed, and she will be lengthened aft about 5ft. with a nobby fantail. She has been heeled down until the lee edge of her house top was submerged, but goes about her business all the same and never loses her way. Her long-footed jib has been split in two, and of course, like the other improvements, was to be all wrong. The little Curlew, 18ft. long, 9ft. beam, 32in. deep, owned by Doctors Earl & Davis, originally open and also a sandbagger, has been housed, centerboard trunk taken out, and a keel substituted. I have witnessed her performance, and find she does her work admirably, notwithstanding every one predicted a failure. I candidly admit, in the Curiew's case especially, I was skeptical of success. I built this boat and thought her form too wide for a keel, but her deadrise and weight pulled her through. You will probably be glad to know that the teachings of FOREST AND STREAM are appreciated even here in a stream but little more than a half mile wide. Low centers, heavy displacement, etc., are being understood and acted upon by intelligent yachtsmen, such as Ferry, Whitehead, Davis, Earl, Williams, Walker, and a host of others. For myself I can say, though the father of dish boats, I took up your ideas, gave them a full, practical test, and I am not ashamed to say, found it best to hedge.

2,053 BRANDYWINE STREET, Phila. R. G. WILKINS.

[We may add that Mr. W. M. Brisben is having an 18ft. loadline cutter built by Albertson Bros., of Kensington, and that designs for other small cutters have been sent to Philadelphia.]

EARLY OPENING OF THE DEATH-TRAP SEASON.

A SLOOP yacht belonging to Toronto, Ont., capsized two weeks ago and three hands were drowned. The smack Wreck—most appropriate cognomen—capsized in the Lower Bay last week, and the crew would have been drowned but for the lucky proximity of a rescuing vessel. Other "accidents" of the kind have happened. It is only a matter of time when the community is to be startled with the wholesale drowning of "prominent yachtsmen" in one of the many traps of gilded pretension which still exist in the New York fleets, awaiting only the first unfortuitous combination of circumstance to tumble over and spill their cargoes of human freight.

NOURMAHAL.—This big steamship, building by the Harlan and Hollingsworth Co., of Wilmington, Del., for Mr. Astor, of this city, was launched last Saturday, and will be fitted out as fast as possible for a voyage to Europe. She is 238ft. 5in. on deck, 221ft. waterline, 30ft. beam, and 18ft. 7in. hold. Vertical direct acting compound engines of 1,400 I. H. P. cylinders, 34 and 60in by 36in. stroke. Four steel boilers 12ft. long and 8ft. 3in. diameter. Bark rigged, with 7,000sq. ft. of sail. Foremast, 74ft.; mainmast, 76ft.; mizzenmast, 71ft.; fore and main topmasts, 21ft.; fore and main topgallantmasts, 21ft. 6in.; poles, 5ft. 6in.; mizzentopmast, 73ft.; fore and main yards, 52ft.; fore and main topsail yards, 41ft.; fore and main topgallant yards, 28ft.; foregaff, 26ft.; mizzengaff, 27ft. 6in.; bowsprit outboard, 20ft. Built to class at Lloyds. Will have a steam launch 35ft. long, with coil boiler; 35ft. gig, 28ft. lifeboat and dingy. Model on Norwegian lines, with considerable sheer and characterless watermelon stern, according to the old dogmas of the Copenhagen school, which still talks of "keeping down the midship section" to the least possible, though experience has long demonstrated the fallacy of such notions, as witness the big midships of Bedouin, driven as fast as the much smaller section of the Gracie with the same sail area. Form and not area is the true basis of estimating resistance, but anything at all will do in a steamship.

PHOTOS.—We have received from Mr. Ed. Lincoln, of Cambridgeport, Mass., a very fine assortment of instantaneous views of the principal yachts of New York and Boston. Among them we mention several views of the famous Maggie, of Boston, one showing her bursting through the Gut in last year's open Hull match, when she slid out from under the lee of several blanketing sloops in a way one shall never forget. Also the Bedouin, abeam, bows on and quartering; very instructive in the details of her rig and fittings. A broadside view of the nobby Oriva close aboard, Gracie, Fannie, Crocodile and other well known sloops in all kinds of situations. These photos are by far the best of the kind yet taken in America. They may be procured from Mr. Lincoln direct, who will send a circular and prices upon application.

EASTERN Y. C.—Mr. Henry S. Hovey of the smart schooner Fortuna, has been elected Commodore E. Y. C, vice Com. Pickman resigned.

ADELINA.—This Eastern keel sloop, soon to appear in New York waters, was built in 1880, in Charlestown, Mass., by Commodore D. H. Musgrave. A letter informs us that "She is on the deep plan, with iron on keel and reduced beam, of the style now called the modified cutter. At that time she was derided by all the old fossils, and was predicted to be a failure on that account. She proved very fast, a grand sea boat, and one of the entering wedges to the now accepted models which you have so long and faithfully labored to bring into notice. Her former owner now intends to build a full cutter. Her new proprietor picked her from a lot of others which were for sale for her fine model and good sailing qualities, and is fully satisfied with his bargain."

NOMAD.—Rear-Commodore Wintringham's new sloop was launched from Mumm's yard, Bay Ridge, last Saturday. Model by her owner. Intended for near-by family cruising. Shows up large room inside and in the cockpit. Finished inside and out in polished woods in neat and ship-shape manner. Has cabin, stateroom, pantry and forecastle for one hand. Thayer's noiseless brake or pump wipdless on bits. Length over all 26ft., waterline 32ft. 2in., beam 13ft. 6in., depth 5ft., draft without board 3ft. 7in., ballast 5 tons inside. Mast, deck to hounds 37ft., masthead 5ft., topmast 24ft. 6in., boom 36ft., gaff 21ft., bowsprit outboard 17ft.

BOSTON Y. C.—Has prohibited shifting of ballast. No restriction to sail. One hand to every five feet and fractional part of her measurement. Yachts will be measured on loadline with one-third after overhang added. This is entirely too much and very unfair to yachts having long overhangs, as we will show by a special article next week. Classes for yachts over 38ft. 26 to 32ft. and 18 to 26ft. First two classes to be subdivided according to rig as occasion demands. Any yacht may enter larger class by assuming minimum length of that class.

WENONAH—Has had only 1½ tons lead added outside and not 10. Her rig is not considered too large at all by Mr. Harvey. She has always been able to carry it well enough, contrary talk notwithstanding. The addition to her lead is simply to fill up about the garboards where an angle was left as a rabbet to measure from under the former bulk rule of the New York Y. C. Filling up this angle is only bringing the yacht up to the original intentions of her designer.

NORMA.—Comments upon the launching of the Norma are drawn as mildly as the case admits upon the editorial page. The law ought to step in to secure the public against similar exhibitions, which argue a total ignorance of the principles of stability even by the so-called "designers" of this latest commonplace piece of yachting furniture.

BERTIE.—Mr. Fred Gallatin's new sloop was launched last Saturday from Mumm's yard, Bay Ridge. Usual New York type, though deeper than older sloops. Over all 55ft., on waterline 49ft., beam 17ft., depth 6ft. 8in., draft without board 5ft. Mast, deck to hounds 46ft., masthead 6ft., boom 46ft., gaff 28ft., bowsprit outboard 23ft. 6in.

LARCHMONT Y. C.—New club house and grounds were opened last Saturday. Includes three buildings, the visitors' house, billiard room and additional sleeping apartments, which offer permanent accommodations of forty sleeping rooms.

WANDERER.—This schooner, Mr. Weld, has been off shore cruising. Ran from New Bedford to Bermuda in five days. Thence to Hampton Roads and Norfolk, from which port she sailed May 1 for New York.

MONTAUK.—This schooner arrived off Staten Island at midnight last Saturday, bringing her eleven weeks' cruise at sea to a close.

LOOSE FOOT.—The yawl White Cap, Com. David Hall Rice, is to have loose foot mizzen this year, and square head topsail.

CUTTER RIG.—Sloop yacht Emily is being altered to cutter rig by McManus & Son of Boston.

BEDOUIN.—The addition to the hoist of her mainsail is 2½ft. instead of 4ft., as reported.

DOURON.—This Eastern yacht is to be altered from centerboard to keel.

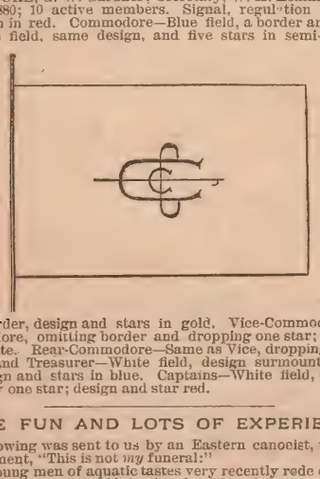
Canoeing.

FIXTURES.

May 10.—First Cruise Chicago C. C.
May 30.—Pittsburgh C. C., First Annual Regatta.
June 1.—Hudson River Meet at Newburgh.
June 1.—Connecticut River Meet.
July 9 to 15.—Chicago C. C., Club Cruise.
July 19.—Chicago C. C., First Annual Regatta.
July 24 to 26.—Lake George Meet at Lorna Island.

CLEVELAND C. C.

COMMODORE, G. W. Gardner; Secretary, W. H. Eckman. Organized 1880; 10 active members. Signal, regulation size; white field, design in red. Commodore—Blue field, a border an inch wide around the field, same design, and five stars in semi-circle over



design; border, design and stars in gold. Vice-Commodore—Same as Commodore, omitting border and dropping one star; design and stars in white. Rear-Commodore—Same as Vice, dropping one star. Secretary and Treasurer—White field, design surmounted by two stars; design and stars in blue. Captains—White field, design surmounted by one star; design and star red.

SOME FUN AND LOTS OF EXPERIENCE.

THE following was sent to us by an Eastern canoeist, with the indorsement, "This is not *my* funeral:"

Eleven young men of aquatic tastes very recently rode out into the country to enjoy a quiet mid-day lunch. They drove out in style and sent their six canoes ahead by draymen, intending to float down the swift and tortuous B. brook from the bosky wilds of P. The recent rains have filled it to overflowing, and it is now quite a river. The drive and the lunch were a hilarious success. The canoeing was also a success, but in a different way that temporarily dampened the spirits of the party. Two canoes were capsized and the occupants summarily ducked; two other canoes attempted to shoot some dangerous rapids and were broken in two in the middle, leaving the passengers to crawl or swim ashore amid the plaudits of all C. Two other men lost or broke three paddles; and still another lost a roll of bank bills and half of his clothes. At this point the picnic divided. One party was taken to the hospitable hearth of a well-known gentleman, while the other party packed the remnant of the canoes upon a hay cart and walked home. Such good clothes as belonged to the party when they started for home, being either lost or soaked, the fatigue dress in which the retreat was made was highly picturesque, though far from æsthetic. The procession moved as far as possible across country and through back yards and alleys.

CANOEING IN FLORIDA.

CANOEING has received quite an impetus in this place and, in fact, all along the St. Johns this winter. Here in Mandarin we have a fleet of seven canoes, including the Psyche, N. Y. C. C.; the Sunbeam, an Everson Shadow, the Wyomi, Blue Lightning, Vixen, and another, all open Rushton canoes, provided with fan centerboards.

The word Wyomi is the Seminole for whisky, and when the owner of the canoe of that name was asked why he thus christened her he replied that he wished to associate in his canoe and its name the two things most dear to him.

In flinging to the Florida breezes all five of the flags which she is now entitled to display, the canoe Psyche assumes such a gala day appearance that she is invariably saluted by all passing steamers. Their pilots probably imagine that she has an excursion party on board.

The owner of the Sunbeam purchased and received his canoe but a few weeks since. When he was ready to make his trial trip in her a number of his friends assembled on the wharf to see him start. Stepping boldly into the canoe she at once turned bottom up and he was temporarily lost to view. Since then, in answer to numerous congratulations upon his success, he remarks that he was merely testing the stability of his canoe by attempting to walk along her gunwale.

All canoes sent to Florida from the North should be shipped by schooner to Jacksonville, which can be done at a moderate cost. By all means avoid the railroads. I recently shipped the Psyche from Fernandina to Jacksonville, a distance of thirty miles, over the Transit Railroad, and was made to pay ten cents per mile. She came in a freight car, at shipper's risk. By steamer the exorbitant charge of $20 is made for a canoe from New York to Savannah.

O. K. CHOBEE.

MANDARIN, FLA.

MERRIMACK RIVER MEET.

ENOUGH canoeists have signified their assent to warrant the announcement that a local meet will be held on the Merrimack River, between Lowell and Lawrence, June 14, 15 and 16. A beautiful site has been selected, and permission obtained to camp, in a secluded spot near "Deer Leap," five miles below Lowell. Ample room is provided on high land by a level, open space, backed up by a wooded hill. Water supplied by a spring directly opposite. River broad enough for sailing just below camp, and races can be arranged if desired.

Proposition is this: Ship canoes to Lowell (care George E. Stanley, truckman); leave city early Friday afternoon and paddle in fleet down the river, running Hunt's Falls, a half-mile series of easy rapids, en route; camp Saturday and Sunday; break up Monday morning and paddle five miles to Lawrence, from which point canoes may be shipped home or cruise continued to Newburyport (thirty-six miles) at mouth of river. It is proposed to establish a genuine camp (no hotels in vicinity). Individuals or parties will, therefore, provide themselves with tents, blankets and three days' rations.

All New England canoeists are cordially invited to attend and make the meet a rouser. Location central, expenses light. Further particulars given by letter, and views of camp ground and river sent on application. It is desirable to know at once who and how many will come. Communicate with R. F. Hemenway or F. H. Pullen, Lowell, Mass.

THE MOHICANS OF ALBANY.

ALTHOUGH the river had been free of ice for some time previous to the 8th of April, for reasons beyond the control of the club no canoe was taken out before that day. Then General Oliver tried his new sails and found them working like a charm. The new riggings of both the Marion and the Snake (R. W. Gibson) will create a sensation, I think, at Newburgh, and deserve great praise for the ingenuity of their designers in making reefing easy.

W. B. Wackerhagen has sold his Henrietta (North River build), and has been rather unlucky in his effort to acquire a new one from the same builder; the shop of the latter, Chauncey Smith, burnt down with seven canoes, Wack's among them, almost ready for delivery.

B. Fernow's Fior da Lice, a Waters Nautilus, is being shorn of her keel, and provided with an Atwood C. B. Her owner expects to do something in the sailing line this year.

The Peterboro, new model (decked), imported by General Oliver, has been sold by him to Walter L. Palmer, the well-known painter, and a new member of the M. C. C.

Henry R. Pierson, Jr., also a new member, is negotiating for a Shadow, now the property of Dr. Gardner of the Cincinnati C. C., and lying at Crosbyside.

Two other new recruits to the paddling fraternity, Messrs. Weidman and Weine, have built themselves two canvas canoes after a shortened Ellard model. One of them is entitled to special mention for having been the first this year to leave the deck of his canoe for the cooling waters of the river. Cause: Hatch not fastened.

George Hilton, our last vice-commodore, being prevented by business engagements from active canoeing this season has sold his North River to S. M. Babcock, also a "Morgan," though a young one.

The Mohicans will appear in force at Newburgh, and anticipate great fun; but not so much in the "mashing" line (as the Torontos insinuate) as by their good "seamanship" and general jollity.

After the meet the Marion and the Fior da Lice, with such others as will join, intend to carry by rail to Deposit, on the Delaware; cruise down the Delaware, through the Gap—not to speak of such minor incidents as Coshocton Falls, Lackawaxen Dam, etc.—to Belleville, N. J.; thence by rail to Hamburg, or Franklin, on the Walkill; make acquaintance with the "Drowned Lands," trees and snags, dams and falls of this stream, and try to reach, without any serious accidents, the Rondout Creek, and emerge into the Hudson near Kingston.

FIOR DA LICE.

THE CHART LOCKER.

VIII.—THE SUSQUEHANNA.

BINGHAMTON, N. Y.—River navigable for your canoe from this point. Distance to Owego, 22 miles. Would advise start from here as it is a beautiful part of the river all the way to Owego. Your canoe will be cared for until you want it, can launch within 80 rods of the freight office, good roads to landing and river banks low. Freight Agent, N. Y., L. E. & W. R. R.

Owego, N. Y.—No obstructions in the river here. Steamboats drawing 20in. run in summer. Postmaster.

Tunkhannock, Pa.—In ordinary times canoe will pass easily. Parties from here go up as far as Owego and come down in boats. Force of current about 3 miles an hour. Postmaster.

Wilkesbarre, Pa.—No obstructions here. A slight fall about a mile above the town, but it can be easily run. Stage of water varies with the seasons; steamboat drawing 15in. runs down to Nauticoke, 9 miles. At Nauticoke there is a dam, but you can run through the shute. Postmaster.

Sunbury, Pa.—No obstructions in the river north of Harrisburg. Just below Harrisburg there are falls, called Canawago, which you could not run at any time. Current about 3 miles an hour. Dam here which you can get past through the lock. You will have no trouble in going down as far as Harrisburg.

The following points were got by corresponding with a young lawyer in Tunkhannock, Pa.: The river is very low in July, August and September, and in places not navigable for canoes then. Canawag Falls (as they are called by the natives) are really a series of rapids, which rafts go down but are pretty heavy for canoes. A rise generally occurs some time in June, called the June "fresh," when rafts are floated down, and by putting the canoe on one of these the falls could be run. Scenery very fine below Harrisburg. Sunbury is about half way between Owego and the bay—a raft covers the distance in about five days during a fresh, laying up at night. Rafting begins in in April, when the water is high.

My own experience—No dangers of any kind between Binghamton and Harrisburg. A few rocks were varnished the last day of the cruise. All falls—if you can call them so—can be run, and the several dams got round by running the shutes or carrying round. Lots of springs all the way. River water very good. Food to be had in plenty either from the farmhouses or small towns all along the route. My cruise was made early in May. Find out before starting the height of the water, and time your trip accordingly. Transportation to and from the river by rail fairly cheap.

Experiences of others.—Gen. Oliver and Mr. Fernow of Albany, cruised last May from Binghamton, N. Y., to Bloomsburgh, Pa. Mr. Chas. L. Tilden, of Boston, cruised down the Susquehanna in 1868 in a Rob Roy, all the way to the bay, running every rapid, including the Canewago Falls, below Harrisburg. Mr. F. S. Hubbard, of Boston, who has also made cruises on the river, says: "I can most sincerely recommend the lower part of the river below Columbia as a cruising ground. This cruise should be taken in May, so as to get a good stage of water, as the channels are narrow and the rocks pretty thick in places, especially at the Canewago bridge and below."

A trip of over 400 miles can be accomplished on this river, the waters of which carry you from New York, across Pennsylvania and into Maryland. Try it.

THE GALLEY FIRE.

CANOE AND CAMP COOKERY.

III.—FISH.

FISH caught out of muddy streams have an unpleasant taste, which can be lessened to a large extent by soaking them half an hour or more in strong salt water. Fish that have been frozen should be soaked in cold water to thaw them before cooking. Don't boil a fish under three pounds weight, and of course don't bake a fish too small to be stuffed. If you do not carry a fish-car to keep your captured fish alive, kill them as soon as caught by a sharp rap on the back just aft of the head with a stick or the handle of your big knife. This not only in justice to the fish but because he tastes better, for the same reason that a butchered steer would taste better than one that was smothered to death.

You may find grubs in fish along the backbone in July and August. You will generally remove them by taking out the backbone and its branches. But if you don't get them all out, never mind; they are good to eat; but if any one of the party is squeamish, tell him you have got them all out any way; he won't know any better after they are cooked. It is to be supposed that everybody knows how to clean a fish after it is caught, so I will proceed at once to its preparation for the camp table:

Boiled Fish.—Tie or pin the fish in a clean cloth. If the pot is small for the fish skewer the tail into the mouth. Put it into enough boiling water to cover it about an inch, and simmer steadily until done. Some fish boil quicker than others, as a general rule those of white flesh requiring less time than those of a darker tinge. If a couple of tablespoonfuls of salt and four ditto of vinegar are put into the water the fish will cook sooner. About twenty-five minutes are necessary for a three-pound fish, and over that six minutes extra to every pound. An underdone fish is not fit to eat, and one boiled too long is insipid. When the meat separates easily from the backbone it is cooked just right. Take it up, remove the cloth carefully, and pour over the following hot

Fish Sauce.—Put two tablespoonfuls of butter and two ditto of flour into a hot frying pan over the fire and mix them together with a spoon into a smooth paste. Pour over very gradually about a pint of the water in which the fish was boiled, stirring it well in. Boil up once and season with pepper and salt. If an acid taste is desired, add a few drops of vinegar.

Fried Fish.—Small fish may be fried whole, but large ones should be cut up. Have enough pork fat or lard bubbling hot in the frying-pan to well cover the fish. Smear the fish well with dry corn meal or flour, or, what is better, dip it into well-beaten egg and then into bread or cracker crumbs, and fry both sides to a clear golden brown. Sprinkle lightly with pepper and salt just as it is turning brown.

Baked Fish.—Prepare a stuffing of bread or cracker crumbs, mixed with one chopped onion and enough butter or lard to make the mixture moist. Put the stuffing lightly into the fish and sew up the opening. Dig a hole in the ground eighteen inches deep and large enough to contain the fish; build a fire in it and let it burn to coals. Remove the coals, leaving the hot ashes in the bottom, on which place a thick layer of green grass. Put the fish on the grass, cover with another layer of grass; then rake back the coals and loose earth and build a small fire on top. In an hour the baking will be complete, the skin will peel off and leave the flesh clean. A fish prepared this way need not be scaled, as the scales will come off with the skin after it is cooked.

CLUB NOTES.

CHICAGO C. C.—Chicago, April 28.—*Editor Forest and Stream:* Canoeing is "booming" here. At the last meeting of the Chicago Canoe Club eleven new members were admitted, increasing the roll to forty-two. At least a dozen new canoes will be launched this spring, the majority of which are being built by Messrs. Thomas Kane & Co. A new model cruiser, designed by a veteran canoeist, will be put on the market shortly by the above firm. Two or three have already been ordered. It is confidently expected that she will prove to be the boat for cruising on the lakes. The first Saturday afternoon cruise will take place on May 10. Canoes assemble at foot of Thirty-fifth street, at three P. M. Cruise south five miles, through the small lakes of South Park, returning to starting point. The first regular annual regatta will be held on Lake Michigan, off Chicago, July 19. Several handsome gold medals will be offered by individual members as prizes. The club cruise will take place from June 9 to 15, inclusive. Starting from Madison, Wis., where a regatta will be held, the club will run the Rock River as far as time permits. The fleet will be under the command of Com. G. M. Munger. Individual club members stand ready to erect a handsome boat house as soon as a suitable site can be secured, for which a diligent search has been instituted. A special meeting has been called for May 9.—QUI VIVE.

NEW YORK C. C.—The float has been out for several weeks, and a number of the boats are already in commission. Dr. Neidé was a guest of the club on Saturday last, at Marmalade Lodge, and enjoyed a paddle on the Kills in the evening. On May 4 the Jessica, Mr. Cooke, Mosquito, Mr. Delavan, and Pirate, Mr. McMurray, paddled down the Kills and up the bay to the Morris Canal at Pamrapo, portaged over and paddled across to Newark Bay, and making another portage into the bay, paddled home, arriving at 3 P. M. The Freak, Mr. Schuyler, was the first boat in commission this season. During the winter she has had a new deck with greater crown, air tanks in each end, a 3inch keel in place of her centerboard, and some changes in her sail plan. The Surge, Mr. Bailey, has also had air tanks of copper put in, one on each side of her trunk and one aft, while another mast tube has been placed forward, 15in. from the bow.

SPRINGFIELD C. C.—The Springfield C. C. own a convenient floating house 55x25ft., on the Connecticut River. On each side are nine shelves to hold one canoe each, and nearly all are now occupied, besides which there are a number of boats on the floor. Mr. W. R. Holt has sold his Racine Shadow to Chas. P. McKnight, a new member, and will have an Ellard or Grayling. Mr. F. L. Safford has sold his Racine St. Paul, to a Chicago man, and he is going to order an Ellard. Dr. Brewer has sold his Shadow to A. L. Spooner, and is to order an open canoe, and the canoeing season promises to be early and active. The club now owns 20 canoes, 11 having centerboards, besides 1 birch, 1 sneakbox and a St. Lawrence boat.

THE HUB C. C.—This club was lately formed in Boston, the officers being C. W. Hedenberg, canoe Rambler, Captain; T. A. Walter, canoe Alice, Mate; G. E. Dutton, canoe Waif, Purser. A meet is proposed on Decoration Day.

PITTSBURGH C. C.—Ten canoes are now in the house and four are building. Nearly all are in use. The club will hold their first annual regatta on Decoration Day.

ROCHESTER C. C.—The new house on Irondequoit Bay, on the site of old Fort de Sables, is nearly ready for occupancy. The club has now twenty members.

THE AMERICAN CANOE ASSOCIATION.—Dr. Neidé is now in New York attending to the completion of the annual Association Book, which will be ready in about ten days, being now in press. The book will be published by the Forest and Stream Publishing Co.

BIRCH BARK CANOE LEAKS.—I notice in your last issue a request for information as to how to repair a leak in a bark canoe. It can be done as follows: Take some pine pitch and melt it. Then dip a piece of linen or cloth in it and apply over the hole. Cover this thickly with the rosin and smooth it down so as to present no rough edge. If the pitch is allowed to burn a little in the melting it gets much harder and does not soften in the sun. The Indians in Canada always carry a tin basin full of pitch in the bow of the boat, and the whole operation of repairing does not take more that fifteen minutes. —R. B.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

C. F., New York.—A .38 or .45 will suit you best.

J. H., Elizabethtown, N. J.—The address is Providence, R. I.

C. J. C., Dorchester, Mass.—For gun barrel browning recipe see issue of Jan. 31, 1884.

W. H. S., Philadelphia.—Miss Sarah McBride is not making flies now. She is in Australia.

J. W. C., Brooklyn, N. Y.—You will find no snipe shooting within 100 miles of New York in July.

C., Hartford City, Ind.—Where can I buy trout fry? Ans. Address Eddy & Co., Randolph, N. Y., or James Annin, Jr., Caledonia, N. Y.

CONSTANT READER.—Yacht you inquire about costs, hull, spars and rigging, $1,500, and completely fitted out, $2,300. Is perfectly safe for cruising along the coast and well adapted to such service.

R. A., St. Louis.—The celebrated English gunmaker, Joseph Manton, died in 1835. His guns were the most famous of the day, being the highest development of the flint-lock and the pioneers of the percussion cap arms.

W. A. R., New Haven.—The route to Grand Marian, N. B., is from Boston, by steamboat to Eastport, Me., thence by steamer. Consult Osgood's "Maritime Provinces," an admirable guide book. We can send it to you. Price $1.50.

J. G. D., Ohio.—The arm is in process of manufacture. It will form the subject of one of our illustrated papers on the rifles of the day. Your suggestion about other papers has been considered before, and will probably be put into execution.

S. B., New York.—Where can I have good trout fishing in the Catskills and also which flies are most killing. Ans. At Big Indian you will be near many streams. Write Mr. Dutcher, Giant Ledge House. Take a general assortment of flies, as professor, coachman, cowdung, etc.

W. S. V., Quebec.—1. Use light drilling for tent, waterproofing with boiled linseed oil and tereben. We cannot give you the other recipe. 2. Your gun can probably be changed from muzzleloader to breechloader. Write to some of the gun dealers whose addresses are to be found in our columns.

F. W. W., Grovetown, Ga.—Will you please inform me as to the manner of fishing for the leather or mirror carp? Ans. Carp are very shy biters. They are taken with a fine line and a small hook on single gut. Bait with boiled peas, dough worked into cotton, or

worms. The carp has a hard mouth, and it should be allowed to gorge the bait. A cloudy day is best and a ripple on the water hides the splash; do not use a sinker.

H. W., New York.—Snipe shooting at Jamaica Bay is sometimes good, but the locality is too near to the city and too much frequented by gunners.

C. D. W., Portland, Mich.—1. Is there a rifle barrel made to use inside a breechloading shotgun? 2. What fly is best for black bass? 3. What is best work or works on taxidermy? 4. A new edition of Coues's "Key to North American Birds" is now in press. Ans. 1. The Shelton auxiliary barrel is such an implement. We believe that it is no longer manufactured. 2. There are many bass flies. 3. Try Manton's, price 50 cents. 4. We can furnish it when it is published.

G. W.—There are a great many shad at the head of our river, and I want to try them with the fly. Can you give me the name of the kind of fly used? I have seen accounts in FOREST AND STREAM where the shad are caught successfully, but the name of the party and the kind of fly and the manner that the shad are caught I have forgotten. Ans. Shad are taken with the fly at Holyoke, Mass. Thomas Chalmers, of that place, makes flies for them. The fishing is usually done toward or after sundown, and the line is let down with the current. Yellow sally, white miller and soldier moth are good shad flies.

A. B. S., Bellevue, Huron County, Ohio.—Can you tell me the name of the duck of which this is a description? It was shot on a pond about ten miles south of Sandusky Bay. Short bill, full webbed feet, black chops, top of head and throat white, black bar across breast, black on back with few brown feathers in wings, two long black feathers in tail like pin or pigeon tail. Length from point of bill to end of tail 18½ inches. Don't say it was a pin-tail, for we are familiar with that duck. Ans. Your description is vague enough, but we presume the bird is a male old squaw or long-tailed duck in summer plumage. This is a very common marine duck, sometimes found on the great lakes. Its scientific name is *Harelda glacialis*.

DIRIGO, Portland, Me.—1. If in shooting double clay-pigeons a broken and a whole bird leave the traps, and the shooter breaks the broken one and misses the other, how should the referee decide? 2. If he misses the broken one, and breaks or misses the whole, how should he decide? Ans. 1 and 2. The referee should decide one broken and one missed. The shooter may refuse to shoot at the broken bird and demand another; but if he shoots at it, he must abide by the result.

GREENWING, Syracuse, N. Y.—A party of men from Syracuse have leased a trout stream. The sign boards which they have erected contain these words, "Fishing not allowed in this stream." There is no name signed. Are the boards made according to law, and can they prosecute a person for fishing in the stream? The land that is leased is not inclosed, neither are there any signs except along the brook. Ans. The law regarding trespass reads as follows: Section 16. Any person who shall knowingly trespass upon cultivated or inclosed lands for the purpose of shooting or hunting any game protected by this act, or shall take any fish from private ponds or streams not stocked in whole or in part by the State, or after public notice has been given by the owner thereof as provided in the following section, shall be liable to such owner or occupation, in addition to the actual damages sustained, in exemplary damages to an amount not exceeding $25. Sec. 17. The notice referred to in the preceding section shall be given by erecting sign boards, at least one foot square, upon every fifty acres of land upon the limits thereof, or upon the shores or bank of any lake, stream, or pond, in at least two conspicuous places on the premises; such notices to have appended thereto the name of the owner or occupant, and any person who shall tear down or in any way deface or injure such sign board, shall be liable to a penalty of $25.

A. L. P., New York.—1. Do you know any place within three or four hours from New York where I can have good black bass fishing? I know the usual places, Greenwood Lake, etc., but I do not care to fish from a boat, and prefer fishing a stream on account of the exercise. Last year I tried some alleged trout streams in the Delaware regions, but found them fished out. Of course I want to get fly-fishing, if possible. When does black bass fishing in this region begin? 2. What is the best trip for fishing purposes (about two weeks) to take from Chicago in July? I believe that I saw some time ago an article on the Northern Peninsula of Michigan. Can you give me any address to write to in order to get the necessary information? Ans. 1. You might find some bass fishing along the Delaware River, above Lambertville and about Point Pleasant. It is not certain at all times. 2. Go to Mackinac and cross the straits, or go to Escanaba. From these places you can easily reach good trouting. Consult the map. Guides can be had at $2 per day.

PUBLISHER'S DEPARTMENT.

A NEW DEPARTURE.—Mr. E. G. Koenig, of Newark fame, will this week open his new store at No. 1 Cortlandt street, N. Y. City, where he will aid in properly equipping sportsmen. While still running his Newark store, he proposes to devote the major part of his time to the Gothamites. He will have a fine stock of guns and fishing tackle, and is the New York agent for H. M. Sprague's boats and canoes.

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Signed, **R. HARRISON, BARTLEET & CO.,** Sole manufacturers of Harrison's Celebrated Fish Hooks, Redditch, England.

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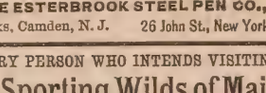
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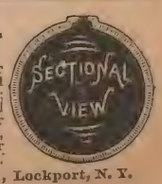
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There is the American Fishcultural Association, which is national in design, but in reality chiefly supported by its Eastern members, who represent a quite circumscribed territory. But the society is unquestionably national in its influence; the fruits of its efforts are seen from the Atlantic to the Pacific. The National American Kennel Club, the American Canoe Association, the National Rod and Reel Association, and the National Rifle Association are all strong and useful bodies, each of which in its special sphere has materially advanced the special interests to which it is devoted.

Some years ago a National Sportsmen's Association was formed. It tried to do too much; to cover too much ground, to unite the inharmonious interests of trap-shooting and game protection. It proved too big, was unwieldy, and fell to pieces. The history of the movement is instructive; we may recur to it at another time.

At the clay-pigeon tournament in Chicago, it is expected that twenty-five or thirty clubs will be present, representing fairly well the trap-shooters of the country, and it is proposed to take advantage of this meeting to form a new national association, which shall have for its purpose the encouragement and direction of trap-shooting in this country. In another column will be found a letter from Mr. J. E. Bloom, giving an outline of what it is thought such an organization might do. We publish the letter and call attention to it at this time, so that the gentlemen who are going to Chicago to represent their clubs in the clay-pigeon tournament, may have an opportunity to discuss the project with their fellows before leaving home.

Nothing is easier, on this side of the Atlantic Ocean, than the formation of a national association. We apprehend, then, that it will be no difficult task to organize the proposed society at Chicago, and to elect a president and other officers. But, the society once established, it is quite another thing to keep it going. We suggest, then, the importance of very thoroughly discussing the exact aims and character of such a national body before taking decided measures to establish it. The purpose ought to be very definitely understood; and the efforts of the members should be directed to that one thing alone.

So far as we are informed, the purpose for which it is desired to establish the new association, is to provide annual tournaments, in which the clubs belonging to it can contest at the trap for prizes and renown. The success of the project then, will depend upon whether or not the association can make annual provision of sufficient inducements to attract clubs to come from a distance to its tournaments. In other words, the one question to be considered is the financial one.

GAME PROTECTION FUND.

IN another column may be found a letter from a New York gentleman who knows something of the way in which the game of this and other States is being peddled out of season, and who understands that the administration of justice so far as it relates to this subject is a huge farce. As things go now, game traffic is carried on all the year around. Our correspondent then proposes to gather funds for the detection and prosecution of offenders. He asked us what we thought of the project. We replied that it was excellent, but that its great weakness was that it appealed to the pocket-book. There are plenty of folks who will talk game protection by the hour, but few who will give anything toward it. But we should be glad to own up mistaken in this case. Does anybody want to join in raising such a fund?

This gives us occasion to repeat what we have often said, namely, that in New York State there ought to be a live association of men bound together by their interest in game and fish, to take active charge of all matters pertaining to the enactment and carrying out of the laws on the subject. There is abundant material for such a body. Why can it not be organized?

We believe that were such a society started by the right persons, it would receive the support of a sufficient number of sportsmen to carry through any measure it might think best to urge at Albany. This would do away with the annual game law tinkering at Albany, and would insure a good statute against being subjected to the interested scheming of men who are working for mercenary or selfish ends.

OPEN SEASONS.

ONE way to secure the observation of the times and seasons for game and fish is to make them known. This we are doing to the best of our ability by publishing every year a revised list of open and close seasons. That it may be correct, we have invited the co-operation of our readers in the several States. Now the request is repeated. Please report to us any changes that have been made in the laws of your State during the past winter.

THE AMERICAN FISHCULTURAL ASSOCIATION convened at Washington last Tuesday, and the meeting is now in progress. Mr. Theodore Lyman, of Massachusetts, delivered the annual address, and Mr. John A. Ryder read a paper on "Legislation Necessary for the Protection of Ocean Industries." A report of the proceedings, with the papers read, will be given in our columns.

A FULL REPORT of the bench show in this city last week is contained in our Kennel columns. As we have there noted, a remarkable improvement was seen in some of the classes exhibited. There were unnoticed exhibits in classes which, according to the standard of excellence at former shows, would have received the ribbons. The show was well managed, and ranks high among the creditable exhibitions given in this country.

MAINE LAKES.—The ice is out of the Richardson, Moosehead, Umbagog and Rangeley lakes, and the boats are running. Elsewhere will be found a communication on the subject.

A NON-SPORTING DOG SHOW.

ACTING on the suggestion contained in the FOREST AND STREAM of April 24, the gentlemen interested in inaugurating a bench show of non-sporting dogs, have conferred with the Westminster Kennel Club, which has consented to give such an exhibition. The show will be held in the Madison Square Garden, this city, in the third week of next October.

There is just now a tremendous "boom" in the popularity of these classes which are known as non-sporting dogs. The demand for these dogs exceeds the supply, and all sorts of ridiculously fancy prices are paid for fairly good specimens. Almost every steamship from England brings into port accessions to the multiplying canine hosts. The bench shows are crowded with them. In fact the exhibition of the Westminster Kennel Club has grown to proportions altogether unwieldy. The number of classes and the entries in each are so great that there is abundant material for two exhibitions instead of one. This arrangement will accomplish more in the education of the public than could have been attained by the other plan. With the spring exhibition devoted chiefly to sporting dogs, and the fall exhibition to the other breeds, visitors will have a better opportunity of intelligently studying the several classes. The judging can be finished more promptly; there will be more room for display; and in various other ways the exhibition can be managed to greater satisfaction than is now attainable.

A COMPETENT FORESTRY OFFICER.—We have had several opportunities of discussing forest conservancy with Mr. Charles F. Amery, a gentleman of considerable professional experience, gathered both in the forest bureaux of Germany, and in the East Indian forest department, in which latter he held a high appointment for fourteen or fifteen years. Mr. Amery is well known in India and to forest men in England by his "Notes on Forestry," a little work in which the whole system of forest management in Germany is intelligently set forth, together with practical instructions for its application to the East Indian forests. His wide experience in practical forest management, and in dealing with the many difficulties inseparable from the inauguration of a system of forest conservancy, would render his services very valuable at the present juncture in this country, where in spite of the generally recognized necessity of doing something for the maintenance of a permanent timber supply, action is paralyzed by the difficulty of deciding how best to set about it. It is precisely difficulties of this sort for which the services of the trained professional are required, and the appointment of such a man as Mr. Amery on the staff of the forestry department would be regarded as an earnest that the Government had at length come to the resolution to face the problem squarely. Mr. Amery is an alien, if it is proper to apply the term to one who has made this country his home, and has no claims to political patronage, his sole claim to nomination is the value of the services his special training qualify him to render, and these are certainly exceptional.

FOREST FIRES AND FOREST FOLLY.—Our exchanges have been filled with reports of the extensive and disastrous forest conflagrations which have raged in various portions of the country, and numerous editorial pens have bewailed the consequent loss of human life and the destruction of millions of dollars' worth of property. But no one of our numerous and highly-esteemed contemporaries appear to have thought it worth while to suggest that one-tenth part of the money which has been so lost, if judiciously expended in securing protection against the forest fires, would have averted the terrible calamity. It requires a long time for us here in America to learn these things.

CANNED GOODS should not be cooked in the cans, for the physicians tell us that there is danger of poison if this be done. The proper way is to pour the meat or vegetables into a cooking vessel. It is possible to provide abundant facilities for all necessary culinary operations without cumbering oneself with a heavy load of pans and kettles. In another column we quote from "Woodcraft" the description given by "Nessmuk" of his camp tinware.

THE MASSACHUSETTS FISH AND GAME PROTECTIVE ASSOCIATION will hold its last meeting for the season to morrow evening, and the matter of the defeat of the game bill will be thoroughly discussed and plans for the future mapped out.

The Sportsman Tourist.

SPORT IN THE APENNINES.

WHILE spending some months in Tuscany, the luxuriant garden of Italy, the ill health of a member of the family caused us to seek for cooler air and complete rest in some secluded spot high up the Apennines. The journey thither was a thing to be remembered; what lovely drives over well kept roads, up steeper and steeper grades, the roads winding up apparently endless hills; a turn, and suddenly another green valley would be seen, with quaint old stone-built farm houses, with the old-fashioned tools lying around, telling of patient and hard toil at the bosom of mother earth, cumbersome and clumsy ploughs, all but the ploughshare of wood, and a job for four oxen to pull at, now at rest, however; for were not the valleys smiling with the ripples of the waving wheat, and was not the Indian corn rising, green and strong, and telling of plenty and of happiness? Every farm house had several old walnut trees growing around it, or some lofty old oak, towering, every inch a king, over the many mulberry trees, food for the silk worms, another source of richness.

Higher and higher, and the mulberries ceased to grow, and the grapevines were no more festooning in rich garlands from tree to tree, but instead now and then a straight cedar would appear, or a tall spruce, or even, but more rarely, an old pine would be seen looming up above other trees, as if foolishly it was challenging the ready woodman's axe. Further on and the chestnut trees begin and increase in frequency, and here and there a thin column of dark smoke announces the spot where charcoal makers are at work. For many, many miles do the chestnut trees surround the road, and cover the hills everywhere, trees of great use, for the wood serves as fuel or is made into charcoal, and the chestnuts are eaten, or collected and dried in the sun and ground into flour, to form the principal staple of food of the Apennine mountaineers.

Later on even the chestnut trees cease to thrive, and cedars, pines, spruces, birches, sycamores, firs, maples, and many others are growing thickly; the air is cooler and balmy, with a faint but delightful odor of hidden violets and little red wood strawberries.

This journey having lasted a few days, we reached our goal, a little, unpretentious inn nearly on the summit of one of the lofty hills, where the breeze was cool and agreeable and heavily laden with perfumes of Alpine flowers, and the invalid felt as if new and purer blood was coursing through her frame, and as if every inspiration was another word written on a new lease of life.

Dinner at once and plentiful. The first dish, trout! Trout indeed; and how I wanted to know all about them, and where they were caught and how; and could I fish for them, and this and that, until the folks around had a faint suspicion, becoming hourly more marked, that I was the invalid, whose affliction was a mental one. I could see a rod nowhere, and I found out that the way trout were caught in the neighborhood was primitive, if not sportsmanlike, for it consisted in one man holding a big landing net over any hole in the rocks or under some old log, while another poked in the hole with something like a hop-pole, resulting in an occasional catch and many misses.

I had a small rod with me; I have it still, and have been a twin brother to it for years; I also had a few small snelled hooks with me, and the next morning the few rare inhabitants were amazed at seeing an otherwise sober-looking American pursuing sundry roosters in quest of material for flies. With surreptitious help from the ladies' bonnets and a little waxed sewing silk, several gorgeous specimens of fanciful entomology were soon at hand.

Next morning I started with a small boy and we walked a couple of miles to a mountain brook, quite a good sized one, where the boy said there were "trote." We arrived at one lovely pool, and I put my rod up, and the boy was astonished; I placed the reel, he was amazed; I placed a couple of flies, "yellow rooster and ostrich" and "brown rooster and ostrich" or some other colored rooster and ostrich, the boy's eyes started out of their sockets, and in a subdued way he said, "Maria Santa, è pazzo." Well, he may have thought he had good reason to believe he was with a lunatic. I whipped this pool, caught nothing, and the boy smiled. I tried another, same luck, the boy laughed. I tried another, and the boy looked as if he was thinking of home, and about to cry. I was tired, took a rest; had another cast on principle, and a rise. The fish gave a good pull, and I being excited, gave another, and forgetting that once upon a time I had been a good angler, made up my mind to catch a trout before that boy, and I pulled again, and it only took us a half an hour to disentangle the quarter-pounder and the flies from a good sized maple tree whither they had betaken themselves to flight.

After this signal success, I went on, and finding better pools higher up I managed to kill about a dozen handsome fish, the largest a trifle over a pound and the smallest about six or seven to the pound. We turned homeward, and I felt proud, disgustingly proud no doubt, and very happy. I placed my rod against the barn, and after a cheerful evening went to bed.

Next morning, as I rose early, I went to the barn; the whole available population was there, looking on, much interested in the description the small boy was giving of my methods, and finally an old fellow shook his wise and venerable pate, and declared he hardly believed it was right, inasmuch as he knew it had never been done before.

Many another good day's fishing did I have in those mountain brooks, those rippling and bubbling brooks, now tearing down in the torrent bed and now calmly resting in some deep, dark pool, under the shades of old trees; and the fun was glorious, even with small results.

A few days after I met the government forester, a charming and clever young Italian, a graduate of the School of Forestry at Vallambrosa. He promised to take me with him on his next trip up the wooded hills, and told me to take my gun along.

A day or two after we started off on a prospecting tour, as he had to mark certain trees that were to be felled, and to see some young trees he had planted recently. By his learned talk and enthusiastic descriptions I saw how much he loved the woods, how he was laboring to restore the forests, and I never understood so well how much we in America are to blame for our short sighted negligence of our woods as after having explained the whole process of regeneration by my friend. For a few years only he had held his position, and already he had established a huge nursery, where thousands and thousands of young trees were being carefully reared. He had planted thousands about the hills, and had done a great work. He proudly stated that the saving to the government in repairs to the postal road from the washing of its bed by mountain torrents, which he had nearly stopped by tree-plant, covered a large slice of his expenses.

We had with us two lean hounds who had been rummaging about, and suddenly gave voice, and were off like lightning. The old guard with us said, "Una volpe," and we separated, and waited wherever we thought we had a chance. After three-quarters of an hour or more the deep baying sounded nearer and nearer; after a while I heard a shot to my right, and the young forester came up to me, dragging old reynard by his brush. The guard skinned him there and then, and we went on. Before the day was over I had a chance at a couple of big hares, and bagged them both.

As I reached home we saw all the villagers assembled, and we saw they were looking at the body of a large wolf, that had been killed in the morning by one of the shepherds high up on the hills. I was told that he had killed a large number of sheep before he had succumbed to the big round ball from the old five-foot smooth-bore.

The invalid recovered and we went away. I had not seen much sport, but I expected none, and I had had much enjoyment; but the best of it was that I had seen the work of one man, with little help, in the forests there. There are thousands and thousands of us here that are interested in ours. Shall we let them go to ruin? G. V. S.

NEW YORK CITY.

Natural History.

THE CATBIRD.

(*Mimus Carolinensis.*)

THE vine tangles along the roadsides and in the swamps are losing their rusty appearance, and the gray lengths of Virginia creeper have thrust their tendril fingers into the crannies of the rough bark, and are drawing themselves up to the soft spring air and sunshine. Delicate green tufts of miniature leaves are already quivering on every swaying branch and twig, and soon their soft rustlings will come to us on the wandering breeze. In the midst of all this spring loveliness appears the catbird with his unostentatious suit of slate-colored feather cloth. Unannounced he comes when he arrives, and where from we know not, so well has he kept the secret these many years.

Scrupulously neat, his modest dress is none the worse for wear, and his black cap is set as jauntily as ever on his saucy little head. The old sparkle is still showing in his bright eyes, and the quick flirts of his long tail evidence the workings of the restless spirit that has always pervaded his little life.

Curiosity is strongly developed in the catbird, for a more inquisitive little chap it is hard to find. Walk quietly on the borders of a wood, where the briers and vines have grown and interlaced themselves through and through the bushes, hanging in festoons from every sturdy sapling. Here, if you remain quiet, you will see and hear much to interest you. Confine your observations for the present to the subject of our remarks, the others we may investigate at another time. All is very still, and we see the midges hovering in a fantastic dance about a shaft of sunlight that glances down into this secluded spot. Hist! what was that? *Churr! churr!* Ah! here he is, and half hidden in the leaves of an alder we discover the sly fellow; so still he sits, that were it not for the utterance of that cautious *churr, churr*, he would have altogether escaped our notice. After a most careful examination of us, he runs swiftly up the trembling branch on which he has been so quietly perched, and pausing an instant to look back, flutters off for his mate. How carefully he pilots her as they both return. Together they crouch in the shade, while he seems to be telling her how it was he first discovered us. As they approach more closely you see their dusky wings open and shut in their nervous excitement, and hear the quiet *churr* of encouragement as they draw closer to the object of their curiosity. Let them see that they are observed, and the bushes will ring with their alarm cry of *chee, chee.* I have often had a pair of these birds attend me for a long distance through the woods, keeping pace with me, now ahead, and now to one side, but ever silent, until a sudden movement startling them, they would commence their cries.

They build a nest, much like that of a robin, in the thickets among the briers, or on the borders of the woods or swamps, and are also very fond of locating in the spruce and hemlocks on the lawn. Housekeeping well under way, the male bird will mount the topmost bough that bends above his home, and ruffling himself into a fluffy ball of feathers, he will pour out his little soul in song; low at first as though afraid to trust his voice, his notes gradually increase in power until the air is filled with the sweet trills and warblings of this much maligned, because little understood, songster. I find one fault with the rascal, however—while the ear is ravished with his exquisite notes he will suddenly utter one or two rasping cries, and entirely destroy the effect of some of his most lovely passages. Morning and evening are his favorite song times, and as he is a first cousin of the mocking bird one is not surprised to recognize the notes of many of our familiar birds, intermingled with his own. An incessant bather, he is constantly spluttering about the bird tank, and immensely does he appear to enjoy it.

The sun has set and as the twilight lingers with a rosy gloom, among the fleecy clouds we see our little friend mounting the topmost spray of his spruce, and presently his pure voice floats out clear as a crystal among the multitude of feathered choristers as they chant an evening hymn of praise. One by one their little voices are hushed until finally it is left almost alone with his music. Admonished at last by the silence, that it is bed time, he ceases abruptly, and with a quick dive, drops from his perch and joins his mate, under the dark green boughs. A good-night to the little fellow. WILMOT.

NEW YORK CITY.

CROSSBILLS IN NEW JERSEY.—Maplewood, N. J., May 8.—*Editor Forest and Stream:* A flock of a dozen or more American red crossbills (*Loxia americana*) have frequented this neighborhood for several weeks, feeding on coniferous trees. April 28, I captured several specimens of both sexes. On dissecting the females, I found eggs in a very undeveloped state, and the breast showing no signs of nesting. I understand these birds breed early in spring. Are these birds likely to be found in a flock while breeding?—C. B. RIKER. [This species sometimes breeds in winter in the northern New England States. Perhaps those you took had already bred.]

DEER IN THE ADIRONDACKS.

BY C. H. MERRIAM, M.D.

[From advance sheets of the Transactions of the Linnean Society of New York.]

Cariacus Virginianus (Bodd.) Gray.

COMMON DEER; VIRGINIA DEER; RED DEER; WHITE-TAILED DEER.

The Chase—Continued.

"DRIVING" consists in chasing a deer with hounds, and killing it, if possible, when it takes to water. A deer is not much afraid of a dog, and when the latter commences to bay on the track does not start off at once, but waits till sure that the hound is really chasing it. It then moves away at a brisk pace, rapidly distancing its pursuer, and is apt to run several miles, circling through valleys and over hills, before taking to water. If now a stream of any size is reached, the animal is liable to wade for a considerable distance in order to throw the dog off the scent. It then stops to listen, and if after a while the dog again finds the track, will generally take a pretty straight course for some neighboring lake, and swim it in order to rid itself of the annoyance of being followed. Instead of swimming, it sometimes skulks in shallow water near shore, and in this way baffles the dog.

The details of the hunt having been arranged over night, the participants proceed, soon after daylight, to their respective posts, while the guide puts out the dogs. If the lake about which the hunt centers is a large one, two or more men are stationed at different points to watch it, while the others make portages to adjacent lakes and ponds. The guide commonly starts several dogs, each on a separate track. Each watch-point is provided with a boat, and the hunters keep a sharp look out, for the deer is frequently so far ahead that it takes the water before the bay of the hound comes within hearing. If the game is a doe or fawn, and particularly if early in the season, the head alone is commonly seen above the surface, and at a distance it is likely to be mistaken for a buck. A buck swims higher, and the later the date the more of its body shows out of water. Deer killed in September generally sink, but after this month they usually float. This depends on the state of the pelage; for when in the red coat they sink, while, on the contrary, when the blue coat, which grows very rapidly, is an inch in length, it will, as a rule, float the deer that carries it, and this length is generally attained about the 1st of October.

When a deer is seen swimming the lake, the hunter waits till it has gone far enough from shore to give him an opportunity to head it off, before launching his boat and starting in pursuit. By exercising a little caution and not hurrying too much, he is often able to approach within easy range without being observed; but, if the animal sights him or hears any suspicious noise, it swims so fast that unless in a large lake and some distance from shore, the hunter has great difficulty in overtaking it.

When a large buck is overtaken and unexpectedly finds that he is pursued, he suddenly turns toward the boat, with a look of mingled astonishment and horror, rises high out of water and snorts; then, facing about, makes a desperate but usually fruitless effort to escape.

In September it is not uncommon for a guide to drive the deer about the lake till well nigh exhausted, and then catch and hold it by the tail, so that it will not sink, while the "sportsman" kills it!

In driving, a hunt ordinarily lasts seven or eight hours, and is apt to become a trifle monotonous, particularly for those who do not happen to see a deer. It commonly has this advantage, however, that there are at this season (autumn) no flies to pester the watchman, who, if he can manage to keep warm, and has enough to eat, may maintain a tolerable degree of complacency.

"Still-hunting," with us, consists in following a deer, by its tracks on the ground, and in attempting to overtake and shoot it, by daylight, in its home in the forest. It is sometimes, though rarely, practiced by our most skillful still-hunters in summer and early autumn, after a recent rain has so moistened the surface that the footprints can be traced. But it is when the ground is covered with a few inches of newly fallen snow, in November and December, that this method of hunting is commonly resorted to. A rifle is the weapon usually employed.

In order that he may step as noiselessly as possible, the hunter lays aside his boots, covers his feet with several pairs of woolen stockings, and over them draws a pair of well-made buckskin moccasins. Starting early in the morning, he makes a circuit in search of fresh tracks, and if deer are plenty, pays no attention to those of does and fawns, but proceeds till the track of a large buck is discovered. This he follows slowly and cautiously, taking care lest he tread on some dead branch or in any way make a noise that might alarm the wary deer. The animal often takes fright and makes off at full speed before it has been seen at all. This the hunter at once detects by the difference in the track, the long spaces between footprints plainly showing that it was on the run. He now throws off all restraint and strikes into a brisk pace, for the deer is already likely to be several miles away, and whatever noise is made cannot possibly reach its distant ears. When the tracks indicate that the deer has slackened its gait into a walk, and has, perhaps, commenced to browse a little, then it is time to advance again slowly and with great circumspection, for having been once alarmed, it is even more on the alert than usual, and can only be approached with the utmost care.

It not unfrequently happens that the deer enters a swamp where several others are feeding, in which case the snow is apt to be so much cut up that it is impossible to follow the original track unless its size serves to distinguish it; and even then it may cross and recross its own path so many times as to bewilder the hunter, who must now do one of two things; either advance stealthily and noiselessly through the swamp, without regard to the footprints, hoping by chance to get a shot; or he must make a wide detour, circling around it, to see if the track he is after leads away in any direction. If it does not, he knows that the deer is still in the swamp, and must return and attempt to find it. Appreciating the difficulty of the undertaking, he moves with great deliberation, his practiced eye penetrating, at each step, every space and recess that the slight change of position brings in view. To the left he observes a prostrate maple, felled by the winds, and, knowing that deer are fond of the kind of browse it affords, works cautiously toward it. The branches are reached but no live thing is seen, and his eyes are bent in other directions when—crash, crash, under his very nose, and he is deluged with a shower of snow that, for the moment, completely blinds him. He may, or he may not, get

his eyes open in time to catch a vanishing glimpse of the affrighted deer, and now that it is too late, discovers the bed of his would-be victim under the fallen treetop, at his very feet.*

The hunter rarely sees the whole outline of a deer in still-hunting. The forests are so thick, and the evergreens so loaded with snow, that an object is not commonly visible at any great distance, and a part of the leg or a patch of hair constitute the target usually presented to his eye. He sometimes fires directly at what he sees, and sometimes "allows a trifle," aiming a little ahead or a little behind, as the case may be. If severely wounded, without being killed outright, the animal is generally left for several hours, or until the next day; for if pursued it would continue to run as long as its strength held out; while, on the other hand, if left alone it soon lies down and will probably never rise again. Judge Caton says: "But few animals will go so far and so fast, after receiving a mortal wound, as a Virginia deer,"† and I have myself followed a buck, shot through both lungs with a .44-caliber rifle-ball, more than a mile and a half through the woods.

In localities where deer are abundant, an expert still-hunter frequently kills two or three in a single day, but such hunts are very laborious, for the track often leads many miles, in a tortuous course, over hard-wood ridges, across stretches of spruce and hemlock, and through dense balsam and cedar swamps. It is a long distance to camp, but thitherward, at nightfall, the weary hunter wends his way. His course lies through a swamp in which the evergreens grow so near together that the eye is unable to penetrate further than a few paces in any direction, and are so loaded with snow that the dark green of the few uncovered branches contrasts markedly with the uniform white of the tent-like cones from which they protrude. The silence is oppressive, and unbroken even by the sighing of the wind. The imagination, aided by the gathering shades of dusk, sees in this picture a primeval forest, among whose time-worn trunks stands the long deserted encampment of a bygone race. The well-preserved wigwams of spotless white, bleached by many winters, and pitched upon a floor of alabaster, mark the final bivouac of an unremembered nation.

Of the three methods of hunting heretofore considered, driving is the least sportsmanlike, and affords the deer the smallest chance of escape. It requires neither skill nor cunning on the part of the executioner; for patience, and a very ordinary amount of common sense, are the only essentials. It has this advantage, however, that the deer, if wounded at all, is almost certain to be killed outright—which cannot be said of the other methods.

"Floating" requires one of the actors to be expert in the use of the paddle, and is really quite an exciting diversion. This is partly because it can only be practiced by night, and partly because each change of position of the boat, and each curve and bend of the shore brings new objects into the limited field of vision, keeping the expectation in a state of acute tension. But after all, when the novelty has worn off, one cannot help realizing that it is like carrying a lantern, any dark night, through a frontier pasture, and shooting the first unlucky cow that chances to stand in the path.

In still-hunting, on the other hand, the hunter is thrown entirely upon his resources, and it is the only method of taking the deer in this Wilderness that requires any particular skill or labor on his part. The guide is here superfluous, unless it be to string up the game and find the shortest way to camp when the hunt is over.

Still-hunting tends to toughen the muscles, to sharpen the vision, to quicken the hearing, and to impart to the whole system a glow of health and vigor. It calls into play the exercise of functions that are apt to be neglected by the student and man of business, and inspires the lover of nature with a zeal and enthusiasm not easily extinguished.

In addition to the three foregoing legitimate (!) methods of hunting the deer, there are sometimes practiced here two other ways of killing—I might say butchering—that are too despicable even to be spoken of without a feeling of shame. They are: by means of licks and by crusting.

A lick is a place where salt is put‡ and the supply from time to time replenished. The deer, being exceedingly fond of salt, after having once discovered the place, repair to it with great regularity. When they have visited the lick nightly for some little time, which is ascertained by examining the ground round about for tracks, the murderous pot-hunter, armed with a doublebarreled gun loaded with buck-shot, secretes himself at dusk behind some convenient covert, or in a neighboring tree, and in silence awaits the approach of his unsuspecting victim.

"Crusting" is a method of destruction that is still more unfair and atrocious than that just described, and is only practiced by the most worthless and depraved vagabonds. It depends, fortunately, upon a condition of the deep snows that is usually of short duration, and rarely occurs save in the months of February and March. When the snow averages four or five feet in depth on the level, a thaw, followed by a freeze, converts the surface into a stiff crust, which renders the deer very helpless. Taking advantage of this state of things, the crust-hunters sally forth. Their snowshoes enable them to skim lightly over the surface, while the poor deer are unable to move except by the greatest effort, and are soon exhausted. They sink to their bellies at every plunge, the sharp hoofs cutting through the frozen crust, which lacerates their slender legs till the tracks are stained with blood. The cruel foe is upon them, and well do they realize that the struggle is for life. Every muscle is strained to the utmost in the frantic effort to escape, but in vain. Every leap tells bitterly on the fast-waning strength, and they soon sink in the snow, breathless and with heaving sides. Their large liquid eyes are turned toward their brutal pursuers, as if to implore mercy, but none is given. All share a like fate—they are butchered in cold blood.

Deer Protection.

For many years an army of hardy lumbermen, woodchoppers, and bark-peelers has been steadily at work, together with its concomitant devastating fires, in making progressive and disastrous inroads upon the ill-fated forests of the Adirondacks. Much of the proper borders of the region, long since stripped of timber, present to the eye a desolate and barren waste, whose present irregular boundaries are still contracting with ominous rapidity.

New sawmills, pulpmills and numerous other manufacturing establishments that consume vast quantities of wood, are constantly being erected; and, as if this were not enough, it is possible that before the snows of another winter cover the earth, a railroad will pierce the very heart of this grand Wilderness.

It augurs ill for the deer when the footprints of the panther or wolf are found near its winter quarters, but the cold steel tracks of the iron horse admonish us of the presence of a tenfold more insidious and subtle foe; for the railroad not only brings the deer's greatest enemy, man, into its immediate haunts, but destroys and carries off the forests that constitute its home. Hence it naturally follows that unless the region is early converted into a State preserve, which, unfortunately, seems hardly probable, the laws that heretofore sufficed to enable this animal to hold its own will soon prove inadequate. Therefore, the subject of deer protection becomes one that claims earnest and thoughtful consideration from our sportsmen and hunters, and demands intelligent and judicious legislation.

The present law was a fairly good one at the time of its enactment, but it has ceased to meet existing conditions; that it will prove ineffectual against the demands of the rapidly increasing occupancy and destruction of the forests, requires no great perspicacity to foretell.

There are two weak points in the law as it now stands: First, the open season is too long by at least a month; and second, there is no limit put to the number of deer that a party, or an individual, may kill during this period. The season begins with the month of August, and when the weather is propitious more than a hundred boats are nightly engaged in floating, on the various watercourses of the Adirondacks. Now it is an undisputed fact that by this method of hunting, more than twice as many does as bucks are killed, and that a large percentage of those fired at are wounded, and escape into the woods to die. It is also a fact that, as a rule, each doe has two fawns, and that fawns deprived of their mother's milk before the first of September usually die. Hence the appalling truth becomes apparent, that for every twenty-five deer secured by floating, at least fifty (and probably a much larger number) must be destroyed! Therefore it seems proper that the season should not open before the first of September. The second weak point in the law is also a vital one. It is notorious that during the past two years many hundreds of deer have been slaughtered over and above the number necessary to keep the parties killing them supplied with venison. In parts of Canada, and in the State of Maine, the law sets a limit to the number of moose, caribou and deer that may be killed by an individual or camp during a given period, and I see no reason why a similar law might not be enacted and enforced in our own State with like good results.

*Deer greedily devour the lichens that adhere to the branches of trees that have long been dead, and the buds and twigs of those that were living when they fell. This fact is well known to woodsmen, who invariably assert that if a tree falls during the night, tracks of deer can always be found there next morning. And I have heard more than one old hunter affirm it to be his sincere belief that deer know the cause of the noise produced by a falling tree, and, guided by the sound, at once set out in quest of the spot. Mr. John Constable tells me that he once shot a deer in the act of browsing upon the lichens that clung to a fallen treetop. The animal was standing on its hindlegs, with its forefeet resting upon a large limb, and was reaching up for the lichens.

†Loc. Cit., p. 385.

‡The only natural deer lick in the Adirondacks, so far as I am aware, is thus spoken of by Colvin: "I observed in a moist place a deposit of marly clay, a rare thing in this region. What was most interesting, however, was the fact that this was a natural deer-lick, many places showing where the deer had licked the clay, possibly obtaining a trifle of potash, alumina and iron, derived from sulphates from decomposing pyrites." (Report of the Adirondack Survey, 1880, p. 193).

SUPERFETATION IN THE DEER.

IN FOREST AND STREAM of April 17, 1884, p. 224, under the heading, "A Zoogenic Paradox," Mr. Frank J. Thompson, Superintendent of the Zoological Garden at Cincinnati, records the following very interesting case: "On the 31st of last December the female axis deer (*Cervus axis*) in the society's collection, gave birth to a fully developed male fawn, which has grown apace and promises to become a fine specimen. On the 5th inst., a few days over three months after the first birth, she bore a fully developed female fawn, which, in less than an hour after birth, was strong enough to frisk around its mother. * * Now here is an instance of an animal giving birth to two fully developed young ones within less than one hundred days of each other, whose period of gestation is well known to be eight months, and as customary with the family, only produces once a year. Is it possible that she could have been impregnated at two periods, with the above intervening space of time? If so, those who have made the zoogeny of the deer a special study, will have to write a new chapter on the subject."

In response to Mr. Thompson's inquiry it may safely be said, not only that it is perfectly possible that this deer was impregnated at two distinct periods separated by nearly one hundred days, but that this is the only rational explanation of the facts. Had the fawn born Dec. 31 been expelled prematurely, the case might be regarded simply as one of twin pregnancy, but this was not the case, for Mr. Thompson expressly states that both fawns were "well developed," and both were alive and doing well at time of writing. The case falls under the head of superfetation, and has many parallels in the human subject. In the Edinburgh *Medical Journal* for 1865, Dr. Bonnar, of Cupar-Fife, recorded several exceedingly interesting cases, in which the time intervening between the two deliveries varied from one hundred and twenty-seven to one hundred and eighty-two days. Dr. Tyler Smith, in his "Manual of Obstetrics," states that a woman "miscarried at the end of the fifth month, and some hours afterward a small clot was discharged, inclosing a perfectly healthy ovum of about one month. There were no signs of a double uterus in this case." When a double uterus is present, superfetation is of far more frequent occurrence, and a large number of authentic instances have been recorded.

Now it must be remembered that while a double uterus is exceedingly rare in the human female, it is the normal condition in the great majority of mammals, including the deer. Hence the question arises, Why is superfetation not more frequent in those species of deer which normally bear but one young? There are two excellent reasons: First, because as a rule the physiological process of ovulation is in abeyance between the time when conception takes place and the expiration of pregnancy; and second, because in the deer, as in the majority of wild animals, there is a definite period of rut, after which no impregnation takes place till the next season. The artificial life of captivity, in inclosures of limited size, and particularly where the animals are subjected to unnatural climatic influences, coupled, as is commonly the case, with a more or less radical change in the nature of their food, brings about a modification of the animal's habits, and frequently perverts the reproductive function. Therefore, instead of "a zoogenic paradox" we have simply a very interesting example of superfetation in the deer—a case which does no violence to the well-known physiological laws, and which was rendered possible by the artificial conditions incident to the semi-domesticated state in which the animal lived. C. HART MERRIAM, M.D.

LOCUST GROVE, N. Y.

DECREASE OF SONG BIRDS.—Boston, Mass., May 7.—*Editor Forest and Stream:* I notice in your advertising columns the advertisement of a Boston taxidermist who calls for "all kinds of native birds." You may not be liable to be taken to task for so aiding and abetting the violation of our bird laws, but I am inclined to be wroth over it. You may not recall the fact of my having for some thirteen years noticed the simultaneous arrival of the Baltimore oriole with the opening of the cherry blossoms here, or rather at my home. This year the trees blossom almost one month late, and still "Lord Baltimore" has not been seen or heard. I account for it, perhaps, on the ground that other taxidermists have advertised in local papers to same effect as above, for last summer I saw in the window of a large millinery store here over one hundred and fifty stuffed skins of the Baltimore oriole all together, labeled 75 cents each. I was so mad I didn't get over it for a week, and my family shan't spend a cent in that store if they go bareheaded the remainder of their lives.—REIGNOLDS.

Philadelphia, Pa.—The past week did not bring the flights of black-breasted plover, robins, snipe and dowitchers, looked for by some. The season is backward, but they will no doubt arrive on our coasts within the next ten days, especially if a southeasterly storm occurs during the period of time mentioned. As these birds treated us last spring, so will they act this—a sudden appearing and a very brief stay—it may be but for a day or two. Many of the warblers have shown themselves. The black and white creeper of course is here, the summer yellow bird arrived some days ago, and on Sunday, the 3d inst., the blue-winged yellowback could be seen among the fruit blossoms in the rural sections of Philadelphia. Both the Baltimore and orchard orioles have been present for several days, and the yearly war on the part of the so-called collectors of birds for scientific purposes against these bright-plumaged songsters has begun. Each collector, armed with a copy of our game laws, which allows the shooting of insectivorous birds for scientific purposes, goes forth, fearing no interference, when every feather secured finds its place in the hat of the fashionable milliner, instead of on the shelves of the ornithological cabinet. We have a city ordinance that can be enforced in the case of these people. It is that of discharging firearms within the county limits, for which there is a fine for every offense. When the State law is faulty the city law should be resorted to.—HOMO.

CORN CRAKE (*Crex pratensis*).—Owing to the number of FOREST AND STREAM for Feb. 14 being mislaid until a few days ago, I did not see Mr. Park's communication on the occurence of this bird in the State of New York last November. Some years ago, I think in 1859, I saw a specimen which was shot by one of the officers in Halifax garrison while on a sporting trip in Newfoundland. More singular still, a specimen was shot by my lamented friend, the late Lieut.-Col. Wedderburn (42d Highlanders) in the remote Bermudas. Here is Col. Wedderburn's account of it in our "Naturalist in Bermuda" p. 45: "The Landrail of Europe (*Crex pratensis*).—On the 25th of October, 1847, while out shooting in the dusk of the evening, in Pembroke Marsh, my good old dog Flora pointed, and a well known bird took wing, which I most fortunately killed, and it proved to be a young male landrail of the year. I sent the specimen to the late Mr. Yarrell, and at the sale of his effects it was purchased by Col. Drummond, who recognized the skin. The occurrence of this bird in such an out of the way place as Bermuda, and so far to the westward of its line of migration, is most wonderful, and it certainly gave me more pleasure to find this single bird, than the whole of the other birds put together. I sent a notice of the occurrence of this bird to the *Zoologist*, in 1849." To reach the Bermudas from the American continent, this bird must have traversed some six or seven hundred miles of ocean; no small distance for a member of a family not specially fitted for continued flight.—J. MATTHEW JONES (Fern Lodge, Waterville, N. S.).

CHIMNEY SWALLOWS.—Saratoga Springs, May 4.—Last evening and this evening I witnessed the unusual sight of myriads of chimney swallows circling around and dropping into an unoccupied chimney of a house adjoining the Arlington Hotel. Fully one thousand of these birds were together, attracting the attention of parties in the vicinity by their chippering cries and erratic evolutions, as they passed over the chimney top, halting for a moment, when apparently their courage gave way and they would circle around again, till at last some of last year's veterans (evidently posted as to the internal arrangements of the chimney) dropped confidently down, when bushels followed in rapid succession. Evidently the birds have just arrived, and use the old chimney as a sort of assembly rooms, where they discuss matters pertaining to the coming season, pair off and seek permanent nesting places. The habits of this bird are singular, it is the only one of the feathered tribe that never alights, except in the dark recesses of its nesting place. It breaks a twig for its nest while on the wing; it gathers its food while on the wing; it is a perfect barometer, predicting storm or rain by skimming along near the surface of field or road, and soaring high for its food when a high temperature exists near the surface. The stormy petrel, purple martin, whipporwill, swallows and all apparently tireless birds are seen to rest occasionally on land or water, but the chimney swallow never. —A. B. F.

ANOTHER SEAL IN LAKE ONTARIO.—Learning that a harbor seal (*Phoca grœnlandica*) had recently been captured in Lake Ontario, near Henderson, Jefferson county, N. Y., I addressed a letter of inquiry to Mr. C. H. Sprague, of that place, and have received the following reply: "A seal weighing 100 pounds was taken from a trap net set in the head of Henderson Bay, near Henderson Harbor, Sunday morning, April 20. He was dead when taken out, evidently having drowned. He was of a grayish color, and a perfect specimen. This is the only one that has been captured here."—C. HART MERRIAM, M. D. (Locust Grove, N. Y., May 10).

DEATH OF WILSON FLAGG.—Wilson Flagg, the naturalist and author, died at his home in Cambridge on Monday, after a long and painful illness. Mr. Flagg was born in Beverly in 1805. He received his education at Andover Phillips Academy and at Harvard College, and afterward studied medicine, but never practiced the profession. He removed from Andover to Cambridge in 1836, where he had since resided.—*Boston Advertiser, May* 8.

Game Bag and Gun.

A HUNTERS' CAMP.

THERE was a sudden stir in Astoria among lovers of river shooting, one late October day, when two hunters, who had been down on the bottoms prospecting, brought back word that the fall flight of wildfowl had begun. Tents were overhauled, and camping traps of all sorts were speedily put in order, for ours was to be a party of genuine lovers of the camp-fire. There was to be no clinging to civilization in the shape of boarding houses or hired cooks. Such things might do for novices, but when we had once entered the swamp forests there was to be no coming back to soft beds and easy chairs until the hunt was ended.

The party went out of the village in the early morning, perched high on rolls of bedding and boxes of provisions, which had been bestowed in an ancient lumber wagon, drawn by a matched team, a low-spirited horse, and a discouraged-looking mule. Steve, the stalwart farmer, was strangely silent about the fields, thickly carpeted with growing wheat, or studded with obese shocks of corn; enough to loosen the tongue of the most taciturn tiller of the soil. He was not silent, however, about former river expeditions. There was a wistful look in his eyes, as though he could already, in imagination, hear the whistle of teals' wings.

The sorriest figure in the party was cut by the Parson. His shining beaver was replaced with a weather-beaten slouch, and his coat and breeches were evidently not out on their first expedition, though certainly out at elbows and knees. The Deacon, occupying the rear berth in the wagon, smoked away placidly in spite of the rain and hail that pelted us as we toiled through the mud. Another team brought the balance of the half score—Senator, Doctor, the Notary, Tom, another dominie (afterward christened the Pelican, when he tried to palm off, as a fresh corpse, a cadaver of that species, which he had picked up in the back-water), the Mote (weight 225 pounds) and last and least, the Bantling. The Deacon ruled that in case of dispute, the Senator should decide all legal questions involved; in case of accident the Doctor should be allowed to officiate; and any member of the party should have "benefit of clergy" in case of hanging.

It was a long pull from the landing, where the boats were loaded, back into the lakes, where the cracking of guns led to the ducks' highways and pastures. The storm had passed and the sun was hanging among the trees, when the boats were pulled up on the eastern shore of Steward Lake, above the mouth of the Any Carte. The tents were deposited under maples and elms, whose leaves were brilliantly streaked with red. The prevailing autumn color of the trees on the river bottom, however, especially if the first frosts are light, is yellow. Back on the bluffs there are plenty of reds, but here the mass of color is yellow; not the shallow, flat, murky sort, but clear and transparent. Sometimes, pushing your boat into a bayou or narrow inlet, you will catch sight of a pecan or soft maple stained the deepest saffron.

But while we have been looking at the trees, the hunters' ready hands have cut posts and poles and stretched the tents. There is a hurried search among the "plunder" after loaded shells, for the sun is dipping out of sight, and if any one gets a shot before the night falls, it must be soon. The Parson and the Senator drift together as the party scatters to shooting points, and for the rest of the week the law and gospel go hand in hand.

There seemed to be no method in the flight of the birds; they were evidently looking for lighting places. The Parson hushed the Senator in the midst of a funny story, as a bunch of low-flying mallards came toward their blind. The guns flamed and two drakes dropped out of the flock. Dusk was gathering, but a flock of teal sweeping across the lake, catching sight of the half-concealed gunners, mounted sharply, their climbing forms silhouetted against the sky and offering a rare shot. Three of them dropped at the edge of the water when the guns blazed. It soon grew too dark for seeing, though swift wings could be heard fanning the air overhead provokingly near. At such a time the hunter longs for power to see in the dark.

At the camp the Deacon, who, by the way, had a weakness for good feeding, had installed himself as cook, a position all were willing he should have and hold after they had once tasted the fruits of his culinary skill. Then and there a burden of anxiety rolled from the minds of all the party as the Deacon—who had joined the expedition in the capacity of philosopher seeking escape from the turmoils of civilization, rather than as a hunter—volunteered to have the meals ready when the others came from their boats and blinds. He blandly called attention to a set of by-laws which he had unanimously adopted and pinned up in a conspicuous place. Here they are:

1. The cook must be exempted from wood cutting and dish washing.

2. The man who snores shall be fired into the lake. [The Mote regarded this as personal.]

3. The wearing of buttonhole bouquets is strictly forbidden.

4. For every tardiness at meals the offender shall forfeit one duck to the cook.

These rules were simple enough, but there was a suspicion in some minds that the Deacon had his eye on many ducks in No. 4, a suspicion which seemed confirmed, as his string of birds grew longer each day.

How we slept that night. A heap of dried leaves, covered with gum coats, made a bed, where we slumbered as men do only under like circumstances. Strange it is that one rarely takes cold in a tent. A silk skull cap drawn well over the head is the only preventive needed. With the wind blowing in at every corner, and the rain sifting through the canvas in a fine mist on your face, you awake with a head as clear as a May morning. Ye dwellers in pent-up offices and stuffy parlors, take to tents and forget that men are ever troubled with colds and sleepless nights.

"Hello-o-o-o!" shouted some one just as we had fallen asleep, as it seemed, but hours after as it proved. It was the Notary, who had caught the noise of swiftly moving wings close above the treetops. We were soon in boots and away. The eyelashes of the dawn were already visible. There came a flash across from the point of timber where Steve had taken his stand behind the willows. He afterward brought in four redheads as the result of shooting into what he called "a bunch of shadows."

The Senator's teeth chattered and the Parson was blowing his fingers behind a blind formed of willow twigs stuck in the mud. A flock of mallards came squarely toward the blind, the dominie catching sight of them first. The Senator sat still, wondering why the Parson didn't shoot, as he seemed to have a fine bead on the birds, and to be fairly reaching after them with his gun; but the birds went "tailing off" in safety, for the Parson was pulling with all his might on the guard of his gun instead of the trigger. The mistake cost him some chaffing at the breakfast table. There was rare shooting that morning. A steady, low flight of mallards kept the guns smoking. In the clear morning light the birds looked as large as brant, and there was a constant temptation to shoot too soon, under the impression that the game was within range. Some old hunters insist that one must wait until the duck's eye can be seen before he is fairly within range; but with No. 4 shot in our shells and 4½ drams of powder behind them we did not wait for quite such close range work. A fine lot of birds were strung up in front of the tent at breakfast time, the Notary exciting every one's envy by contributing a pair of canvas-back drakes. These are not often bagged on the Illinois River, the more numerous species being mallard, teal, bluebill, "blackjack," sprigtail, redhead and wood duck.

One day the Doctor and Tom wandered for a change into the woods, after stalking through the wet ground for several hours after jack snipe, with a total result of twenty-one birds. They brought back a brace of crippled owls, much to the delight of the Bantling, and the whole camp for a while. As the proper one to handle the wounded, the Doctor thrust his hand into Tom's shell bag for the birds. One of them resented the intrusion by striking his claw into the Doctor's palm. "Take him off! Take him off!" he yelled, while Tom cautiously backed away from the scene of conflict. "Why don't you drop him?" suggested Tom, as he dodged behind the Mote. "I can't. Take him off!" fairly shrieked the victim. The Bantling had no difficulty after that in securing an unincumbered title to the owls.

The Notary and the Pelican were sitting, one evening, behind a blind beside the lake, debating a proposal to cross to the camp. It was at that feverish moment when the hunter wants just one more shot before quitting for the night. The two had at their feet a score of teal and bluebills. The Notary said there was "an unsatisfied longing in his soul," "an aching void," which ducks could not fill. He was looking wistfully at a flock of geese driving like a wedge along the horizon. But not even the "howitzer," a number seven bore, used for heavy work, would reach them, unless they came lower. All at once the leader dropped a little and changed his course. Down they came toward the water, wheeling with heavy flight to scan the lake. The Notary fumbled for shells loaded with heavy shot. It was the work of a moment to slip these into the guns. Steadily the old gander led his flock toward the concealed battery, which opened fire with effect. The first to fall was the leader himself. After him came two others, dropping with tremendous splashes into the unruffled water. "My longing is satisfied," said the Notary, as they waded out after the birds, "the aching void is filled." They were in high feather that night at the camp. The evening hour in the tent is a delicious one. Stretched out at full length, with feet toward a hot fire, the hunter talks glibly, if ever. The Pelican had been a soldier, and told of the times when he hunted with a rifle cannon, instead of a Remington shotgun. Steve had been a gold miner in California, and had had many a brush with the Indians. There were no dull ones in that company, and the evenings were all too short for the things which were to be recounted. It will be long before the good fellowship of that congenial half score will be forgotten by any one of the number.

RICHARD GEAR HOBBS.

CIMARRON TO CIMARRON CANYON.

I ROSE very leisurely on the morning of Dec. 26, and just as the clock struck 9 here came Tracy in his lumber wagon, drawn by a two hundred-dollar mare and a twenty-dollar Texas pony, with the old wagon filled with corn, grub, tent, wood and the hundred and one things, that when we cut entirly loose from the railroad we have to take with us. I had not got my wagon packed yet, but everything was ready and piled in a heap in the hall. Blankets, grub in boxes, bread baked, coffee ground, cartridges and corn, and before Tracy had disappeared over the hills to the south I was packed into a buggy that is made of an old government ambulance altered over, with Mr. C. by my side, and we were off for a two weeks' trip, across the shallow Arkansas, through the sandhills, and over a long, dreary, twelve-mile flat; then more hills and at sunset we drew up at the Wolfley dugout on Crooked Creek, which this winter is infested by cowboys. The owner has a kind of rheumatism, and has gone East for repairs, and has lent his dugout to the boys who are holding some cattle. As I knew them all they treated us with great hospitality. Gave us a nice supper and drank up all my whisky while we were eating it. We did not find Tracy at the ranch, but in about an hour one of the boys came in and reported him in camp two miles up the creek. I never camp out when I can find a house, especially in winter, and so C. and I concluded that we would hitch up early and catch him at daybreak. The evening was spent by the gentle cow-punchers in seeing who could tell the biggest lie in regard to riding bad horses and other feats.

We found Tracy just ready to start and in good spirits in spite of his lonesome night, and pulled out for the southwest again. Thirty miles over a rolling prairie, with no water and not an animal in sight and we came to Wildhorse Lake, a pond that generally has water in it. There we unhitched, fed the horses and watered them, got something to eat, hitched up and pulled on. We soon met a freighter coming from Beaver Creek, with an eight mule team, two wagons tied together and loaded with about eight thousand pounds of buffalo bones, which he was taking to Dodge City, where they are worth $15 a ton. They are shipped to St. Louis by the carload, and are said to be used in a sugar refinery. He reported buffalo on the head of the Beaver about one hundred miles from the Cimarron Canyon, and that the country up there was said to be filled with white men, Indians and Mexicans hunting them. So we went on, and about dark camped.

When it became light we saw a large herd of wild horses in three bands about a mile from camp. When they noticed us they edged off a little, but kept in sight of us, traveling in a parallel course with us for several hours. We were close enough to see the stallions herd their bands. They work in the rear of the herd like a shepherd dog and bite the stragglers. There were about sixty head in all. They stay on this big flat summer and winter, unprotected from the terrible storms, and seem fat and happy.

At about noon we reached the Cimarron Canyon or river (so called). Where we struck it, the water barely runs from pond to pond. It is a broad valley about a mile wide, with sandhills stretching back about five miles on each side, and all the antelope for fifty miles each way watering at the creek and grazing in the sandhills. Where we struck the creek the Harwood Cattle Company has a side ranch, where they are feeding ninety saddle horses corn and seventy fine bulls hay. Two men are in charge of the ranch and live in a big dugout. They are Boston boys, and have got as many of the comforts of civilization as they can command. Have good food and lots of it furnished by the company—a very uncommon thing, by the way, in the average cow camp, where coffee, poor flour and bacon are all that is generally furnished (beef is considered too rich for the blood). They had lots of papers and "Seaside" novels, and a real kerosene lamp to read by, instead of fire light and an occasional candle. The creek bottom was covered with cattle and antelope. I counted about a hundred antelope in sight.

I wanted to camp near the dugout, but Tracy, who is a little bashful, thought we had better go a mile up the creek, and I assented. We then had a council of war in regard to going on to buffalo, and Tracy and John both wanted to stop at Cimarron and make a load of antelope. Tracy said we didn't have enough corn to go to buffalo, and I had to give in, though reluctantly. So John and Tracy went on up the creek to make camp, while I stopped at the dugout and mended my buggy with Texas iron (rawhide). I was pretty sulky, but when Frank Mayo asked me up to dinner, and told me I had better put my horses in the corral and feed them hay, I began to see life in a different aspect. I didn't hurry in mending the wagon much, and at sunset drove up the creek to find camp, but no camp could I find, and just as I had turned back to go to the dugout and spend the night, I heard Tracy's old wagon come rattling in from the hills, and met him at the creek. He and John had killed three antelope and wounded another. Tracy had come to camp, got the wagon and gone after the carcasses, while John followed up the wounded one. By the time John came in unsuccessful, we had the tent up, a fire made, supper cooked—more antelope liver fried than anything else—and we all ate with hunters' appetites.

When we got up the next morning one of my horses was gone, and after breakfast I started after her, while Tracy and John went to the hills on foot I found my horse in about an hour, took it back to camp and picketed it—tied it to a stake by a long rope—and started for the hills on horseback. After riding from point to point for about two hours, occasionally catching glimpses of Tracy and John in the distance, just as I came up on the hill there was an antelope herd on the other slope, about half a mile away, in full sight. I know some of them must have seen me as I slid off my horse and crawled back out of sight on all fours, leading the horse, but I peeped when I got my horse out of sight and they had all gone to feeding again. The wind was blowing directly from me to them, so I had to go around them and come up on the other side. The country was all very hilly and I struck out to ride the circle at a fast lope, keeping as near the antelope as the lay of the land would let me and yet be out of sight.

When I got down wind I picketed my horse and walked up almost to the top of the hill and there crawled over to about a hundred yards from twenty of the prettiest antelope I ever saw. I carefully stuck my feet toward them, sat up, rested my gun in a pair of rest sticks that I sometimes use on a windy day, and aimed at a buck's shoulder; he fell at the crack and I jumped up and got in about six more shots as they ran off and saw one more drop.

Disemboweling the two dead ones I followed the herd on foot and soon found blood. When I went over the ridge there stood another, shot through the paunch; he saw me and ran off a few hundred yards and stopped, I followed and shot at him at 250 yards or so and missed; then kept following and missing for three miles. Just as he went up a ridge about a mile ahead of me I saw six more feeding in a little hollow to the right, and I concluded I had rather try a new antelope than that old one, and commenced to make a sneak on the new band and got up to about 150 yards. Shot, but miscalculated distance, and shot under, and the band ran right toward me to about fifty yards and stopped. I put that bullet in the right place anyhow, exactly into the old buck's throat. He went down as if struck by lightning, and the rest ran through a little opening in the hills, helped along by a couple of shots from the Winchester as they went. I heard a shot a few minutes after they had disappeared as I was bleeding and fixing my buck, and then went on top of the hill to mark it by sticking aiming sticks up and tying my handkerchief to them so that I could find my game when I came after it with the wagon. As I stood there counting the empty loops in my cartridge belt John came in sight. He came over and told me that he had one dead and followed another about as I had and lost him at last. So I struck out for my horse to go to camp and get the buggy. In about an hour I had the buggy back to the scene of action, got my two and found Tracy and picked up one for him. Got John's buck and mine and at dark was in camp; tired, oh my. About two pounds apiece of that rarity in a hunter's camp—fried liver—lots of strong coffee, and some bread and butter; and we crept into bed after feeding the horses and went to sleep at about 7 P. M., all three in one bed, John in the middle, with loads of blankets and comforters over and under us. Nig, the dog, occasionally made a dash out of the tent to run off the coyotes, who, attracted by the smell of blood, howled around the tent all night, but he came right back and lay close to our feet on the foot of the bed.

At daybreak next morning Tracy got up and cooked breakfast, and John and I arose and eat it up for him, and we hitched up the best team to the buggy, tied Nig, who would catch a wounded antelope in good shape, behind, and flew for the hills. [Nig was poisoned last week, since I got home, and it hurts me to have to speak of him. A big, coarse black greyhound that knew as much as a man, that would catch and kill anything that I drew blood on, that would not eat game if you left it lying around—he was the best broken catch-dog that I ever owned and I never expect to see his equal.] We saw antelope after driving about three miles, and stopped and unhitched the horses and tied them to the wheels to eat grass while we hunted. Just as we got ready to go for them, two of Harwood's herders came into sight, both carrying a rifle. I pointed to the antelope and waved them to keep out of sight as they came toward us, and they came up carefully. Tracy, John and one of them crept one way, the other man and I another. Tracy and company soon fired and missed. They were too far off for me, so I sat down and waited for the boys to come back. We got together and had a talk. They were pretending to herd cattle, but had really come out after buffalo, which were reported to be drifting north. A man had seen two about five miles from our camp the day before.

While we were standing together, I saw antelope beyond us in a shallow canyon about two miles away—I carry a

field glass—and after the herders went off we went over toward them, got good cover and shot at them at about 125 yards. J. and I let Tracy have the first shot because he shoots a single shot cartridge gun, while we both shoot a Winchester. He killed, and John and I shot half a dozen shots apiece at them as they ran off, and got two more down and wounded three. I put for the team, soon got back, took Tracy in, and went after a wounded one. Turned Nig loose, when the antelope commenced to run off, and he killed it after a chase of a mile. When we got to him he was lying down biting it in the neck, surrounded by an admiring audience of Texas cows. He smiled with his tail when he saw us coming, and we gave him some water in a pan from our keg and put him and the antelope into the wagon and went back for another; but J. had killed one and lost the other, so we had to be contented with five. John drove for camp a roundabout way, because the ground was rough and Tracy and I went cross-lots on foot. We saw John stop and finally crawl out and shoot at five antelope that were coming out into the hills from water; and finally we got into camp and had two hours of daylight to get a good supper in. We went to bed soon after dark.

The wind rose in the night, and when we got up next morning it was snowing and colder than ever. I soon made up my mind that staying in the tent through a bad storm and having our horses stand out would be foolish, and told the boys that I was going to the dugout and that they could do as they pleased. In half an hour we had packed and started in a storm so severe that we could not see fifty yards. When we got to the dugout I acted as spokesman, and we soon had our horses under the lee of a big haystack and ourselves in the dugout. The thermometer stood at 5° below zero at 9 A. M., with a strong wind, and we stuck to the house for the day. I fetched in some of our provisions, butter, etc.—in fact, things that they did not have—and Ed. Newell, who officiated as cook, and I got up a wonderful New Year's dinner. The next day was not much better, but Tracy got uneasy, and he and John started out on foot, making me promise to meet them in the hils at about 2 P. M. with the buggy to fetch in the game. When I went out it was as cold as ever. The icicles hung to my mustache in a few minutes and I was very cold, though I had so many clothes on I could scarcely stir, and had half our blankets and robes in the buggy. I finally found the boys, saw them at a distance on a knoll. They had killed three antelope. We bundled them into the buggy and all rode home at a trot.

The next morning by 9 o'clock it was warm and pleasant, and we went out in the buggy across the bottom, through the water where the crossing was good, past hundreds of cattle that had come in to water, up a long slope and into the red grass hills. A drive of a mile and we came to the edge of a saucer-shaped prairie, and we could drive no further. The prairie was a mile wide and two long, and there feeding quietly were at least four hundred antelope in bands of from ten to fifty. We unhitched and made a plan of action. The wind blew directly toward us, and so John and I crept and walked along the hills to the left of the prairie, while Tracy worked down straight toward the nearest bunch. We had got well past the first bunch and crept up on the ridge as near as we could to the line we knew that they would run, when Tracy shot, and here came the band past us. We fired two shots apiece ineffectually, and just as they swung past a point Tracy fired again and down came a buck. Tracy was at least four hundred yards away. I ran out to the antelope, bled him and looked for the bullet hole. It was in the head, a little hole that showed Tracy's .40-caliber had done the work. Tracy was coming, and I put the point of my knife in the hole and gave it a twist. It looked like a .45 then. Up comes Tracy: "Who killed that antelope?" I silently pointed to the mark of the big bullet in the head, and Tracy gave a grunt. We were shooting for share and share alike, but of course everyone wanted to kill the most, and I regret to say that at times Tracy brags insufferably when he gets ahead.

John went back after the buggy, and Tracy and I went on and soon reached ground that was slightly rolling, with a band in sight about a mile off. They were moving up wind and uneasy, sometimes feeding a little, and we sneaked after them like coyotes, walking when we could, crouching along sometimes, and occasionally crawling on hands and knees for a hundred yards or so, but keeping out of sight. I have worn the skin off my knees till they bled three times this winter by this fool trick of crawling. We finally got to within about 225 or 250 yards, and as we could get no nearer both shot together at the word. Tracy shot his buck through the paunch, I missed. Here is where Tracy has the best of me with a .40-85 rifle against my .45-60. I can beat him at 100 yards, but when an animal is over 150 and I miscalculate the distance a little I shoot over or under, while his gun shoots on so flat a trajectory that he don't have to raise his sight anywhere within 200 yards. His gun is sighted for 125. The band ran off, but the buck soon stopped, and we went around him and approached him so that when he got up he would run toward the way the wagon was coming from. When he saw us he got up and ran just the way we wanted him to and stopped after about a half mile run. We had lots of chances to get a shot at 50 yards, but we kept driving him on till at last here came Nig over a ridge a mile away, close to a badly wounded antelope, John after them in the old buggy, the horses on a run, making the buggy bounce over the rough prairie. Nig soon had his buck by the leg and the buck showed fight. John stopped and looked on, and Tracy and I ran for the scene of action, but before we got there John had unhitched the team and tied them to the buggy, ran up and helped Nig kill the game and had a broad grin on his face as we came panting up. He had shot the buck as he was going back for the buggy. Hitching up and all getting in we soon found the other, but he had enough life in him to give Nig a run of about a mile, in a circle. Nig made a grab at his fore leg when he got up to him and threw the buck heels over head; before he got up, Nig was at the back of his neck and gave him a few big bites, and by the time I got to him he had about kicked his last kick, and we drove for the Harwood dugout with an antelope apiece. At least Tracy said so.

That night as we sat around the fire we heard the coyotes howl, and just as I opened the door to hear them more distinctly—for I like to hear them—down the wind came the long-drawn, hollow howls of a pack of big wolves. They were the first I had heard for several years, and it seemed pleasant, for it showed we were in a wild country. The next morning Tracy had another bashful fit, and nothing would do him but to move down the creek two miles and leave that nice dugout again, and to keep peace in the family we did so. We put the tent inside a roofless claim cabin belonging to the Harwood Company, and as it was late concluded to get some dinner before we went hunting. As we sat around the little fire drinking black coffee and eating some of that everlasting liver that T. is so fond of and even the name of which he rolls like a sweet morsel in his mouth, and which is rather poor fodder in my opinion, the old man gazed intently up and across the creek, and said, "After I eat some liver I am going up to kill one of them antilope yonder." I looked in the same direction and saw some light-colored spots skipping around that did look like antelope in color, but pretty soon I saw a large, dark object get up and charge around a little and fall down again. I got my field glass, and sure enough it was fifteen big wolves killing an A yearling. I remarked in an off-hand way that they were wolves, and it would have tickled you to see the boys drop the liver and go for their guns. I had to scratch, too, for they were off before you could say scat. We ran up the creek and the yearling got up and came down toward it, with the wolves worrying her. Several saw us and ran back for the hills, but five came on, not noticing us. As the heifer passed us at 125 yards one big wolf reared up, put his paws on her stern and commenced biting her at the root of the tail. The blood was all over his head and foreparts, and the heifer was all bitten to pieces. T. and I shot. I shot just over the wolf's back and T. also missed, and the wolves ran over the hills and far away. The heifer went down to the spring branch, waded in, drank, and then lay down. I knew that I could not save her life (she died that night), so I left her and struck for the hills, following John and Tracy, who were away ahead. I soon saw them stop and commence crawling to the right to get out of sight of a band of antelope coming down toward water; but they were too late, the antelope had seen them and ran back, and I made a run of half a mile and caught up with the boys, a little out of breath.

A short walk and we saw the band of antelope grazing quietly, and I had to crawl about three hundred yards and re-skin my knees. We got to within 125 yards, and when we shot, I killed dead, Tracy missed, and John's cartridge failed to explode, and so John exploded. We went on after the herd, and the boys walked me down in about two miles, as I had chased a runaway horse about five miles in the morning before we started, and was pretty tired before we commenced hunting. So I sat down and they went on and killed three of the biggest bucks I ever saw. By the way, out of thirty-four antelope that we killed on this trip, there were but three young ones; all the rest were six years old or over, and only six does out of thirty-four. John said that we were probably sent down by providence to kill them before they died of old age. We sent John back after the buggy by drawing matches to see who would go. He was gone a long time, and when he came back we bundled in our game and started for camp. The reason he was gone so long was that he had to take the tent down, as a man came to camp that wanted to roof the cabin. When we got in we had a roofed home to sleep in and the man was still at work. I got supper as quick as possible, liver as usual, at Tracy's special request, and invited Brown—the man who was fixing the house—to eat with us, which he did at once. I started after supper for the Harwood dugout, to bake some bread, for it is tedious work baking bread outdoors. I was invited to stay all night and of course accepted. Brown came up, and staid all night too, and nearly talked us all to death. I went to sleep trying not to listen to the monotonous drawl which that pestiferous sheepman inflicted on us; and when I awoke next morning he was talkings till—perhaps he stopped a few minutes to sleep, but I doubt it. As a singlehanded talker I will back Sheep Brown against the world for ten cents; but I won't stay around and judge the match. When I got to camp the boys had gone hunting afoot and left me a letter, written on a feed box, to follow them with the team. When I found them they had four dead and four wounded. Nig caught three of them, and we went to camp with seven.

We decided to start for home the next day, and at daybreak we started, with Tracy's lumber wagon stacked full and seven in my buggy. Passing the dugout we bid the Harwood hands good-bye and commenced pulling across the forty-five mile dry strip against a head wind. It was so cold that we had to walk almost all the way, and got to Crooked Creek at 12 midnight in a blinding snow squall. We overtook a man with a team on the road and we all went into camp together in the brush, made a big fire and cooked a lot of eggs that the new man had in his grub box. I ate a sparing meal of eight boiled, washed down with coffee, and slept tranquilly as an infant. When we awoke the sun was shining and we got some breakfast and started off on the home stretch. When we reached the Arkansas it was frozen. We crossed in good shape and soon were in my house, where liver is not the popular food. It is good to go hunting, and it is better to come home.

W. J. D.

FISH AND GAME IN MANITOBA.

Editor Forest and Stream:

In your issue of April 17 "Delta" was giving "S. E. B." a lesson in geography. About the lakes in Northern Michigan, I haven't much knowledge, but I am of the opinion that there is no lake in Manitoba called Birch Lake, certainly no very large one. He is quite right about the fish, but they were caught mostly in Lake Manitoba and in the Assiniboine River and Long Lake, which is an old bed of the same river; and he is astray in the distance from the railway, as Lake Manitoba is not more than ten miles from the Canadian Pacific Railway.

A person who has not actually been here can hardly believe how fish swarm in the lakes and rivers. I have not yet heard any one express a fear that the supply will ever become exhausted. I have seen the pike, or jackfish as they are called here, so thick in the Seine River, a tributary of the Red, which empties into the Red at St. Boniface, that the half-breed children would go to the banks with manure forks and throw them out on the shore, and even kill them with sticks; and that while the water was so thick with sediment that the fish could not be seen, but were killed with random blows. In the ditches along the C. P. R. from St. Vincent, in Minnesota, to Winnipeg, the jackfish are very plentiful and are caught with wire nooses on the end of a pole. The stupid fish will not move a fin while the noose is slipped over his head. The jackfish is not considered so good a fish as the whitefish, those caught in Lake Winnipeg especially, being very fine.

The spring here has opened fully two weeks earlier than last year. The birds are nearly all here. The chickens have wintered well, and from present appearances we will have splendid shooting next fall. This is the breeding ground of geese and ducks, and both are here in great numbers. Have no geese yet, but the ducks are very fine. We have larger game than those, of which I will have more to say at some other time.

NORTHWEST.

CARBERRY, Manitoba, April 25.

A FUND FOR GAME PROTECTION.

Editor Forest and Stream:

There are now before our Legislature at Albany two little jokers in the shape of amendments to the game laws which, if passed, will not only do away with the efficiency of all the game laws, but will eventually do away with all the game. One of them is to allow the farmers to snare and trap on their own lands, and the other one to prevent practically any search warrant to be put into operation, by giving the owner of the ice box ample time to clean out his ice box before any inspection takes place.

Is it not about time that the sportsmen wake up out of their lethargy, and take out of the hands of a very few interested demagogues the making of the laws? I am told that to-day or any other day of the year, open or closed season, there are to be had from any wholesale poultry dealers, game of all kinds, quail, woodcock or partridge. For an illustration to what I say, I send you herewith two quail, gotten this very morning from a wholesale poultry dealer.

If there is any "detective fund" needed anywhere, it is certainly for New York city, where the game laws are nothing but a dead letter. If you think yourself able to raise or start such a fund, I for one will subscribe to it at once to the amount of ten dollars. We have real sportsmen enough in this State to make this fund a perpetual fund of about one thousand dollars, to enable us to employ somebody to represent us ably and decently, and by able argument counteract the workings and doings of a few parties interested in having the game annihilated to enable them to sell it the whole year around.

G.

NEW YORK CITY.

PHILADELPHIA NOTES.

THE forest fires have extended over a large portion of the woodland section of our State, and I fear many nests of the ruffed grouse have been destroyed. In the Wind Gap section the hillsides have all been ablaze, and from the upper Lehigh and Pocono comes the news that the woodlands have been swept over by the blaze. The Pocono section has always been good grounds for grouse, and it was upon the plains of Pocono that the "heath hen" once existed. No better field for "pheasant" or ruffed grouse shooting could be found in Pennsylvania than the latter, but I fear all prospects of sport of this description for the coming autumn are destroyed, for an early hatching is now out of the question.

It is reported that Mr. John McCarty, who owns an extensive property six miles from Hagerstown, Md., has liberated 2,000 quail in his section, together with twenty-four pairs of English pheasants. This being correct, we may expect the region for miles around Hagerstown to be well stocked by the coming season, if the birds have been properly put out. It is a great mistake to put out more than one or two pair of quail in one particular spot; they should be well scattered to prevent any possibility of the birds running together into a covey or pack, in which case they very often remain in a flock and refuse to pair the first season, especially in a strange country.

Snipe shooting has been a failure hereabouts this spring. In the first place the birds were scarce, and in the second place we have had but little fitting weather.

HOMO.

CAMP TINWARE.

MY entire outfit for cooking and eating dishes comprises five pieces of tinware. This is when stopping in a permanent camp. When cruising or tramping, I take just two pieces in the knapsack.

I get a skillful tinsmith to make one dish as follows: Six inches on bottom, 6¾ inches on top, side 2 inches high. The bottom is of the heaviest tin procurable, the sides of lighter tin, and seamed to be water-tight without solder. The top simply turned, without wire. The second dish to be made the same, but small enough to nest in the first, and also to fit into it when inverted as a cover. Two other dishes made from common pressed tinware, with the tops cut off and turned, also without wire. They are fitted so that they all nest, taking no more room than the largest dish alone, and each of the three smaller dishes makes a perfect cover for the next larger. The other piece is a tin camp-kettle, also of the heaviest tin, and seamed watertight. It holds two quarts, and the other dishes nest in it perfectly, so that when packed the whole take just as much room as the kettle alone. I should mention that the strong ears are set below the rim of the kettle, and the bale falls outside, so, as none of the dishes have any handle, there are no aggravating "stickouts" to wear and abrade. The snug affair weighs, all told, two pounds. I have met parties in the North Woods whose one frying-pan weighed more—with its handle three feet long. How ever did they get through the brush with such a culinary terror?

It is only when I go into a very accessible camp that I take so much as five pieces of tinware along. I once made a ten days' tramp through an unbroken wilderness on foot, and all the dishes I took was a ten-cent tin; it was enough. I believe I will tell the story of that tramp before I get through. For I saw more game in the ten days than I ever saw before or since in a season; and I am told that the whole region is now a thrifty farming country, with the deer nearly all gone. They were plenty enough thirty-nine years ago this very month.—"*Nessmuk*" *in* "*Woodcraft.*"

WHAT THEY SAY OF "WOODCRAFT."

The Indianopolis (Ind.) *Journal*, April 30, says: "Poet as well as woodsman and philosopher, his writings possess a peculiar grace and worth and all that he so diffidently suggests is so wholesome, so very reasonable that the reader is won over to his view, unless indeed the reader be already a crank in matters pertaining to wood-life. This book is written for the masses, the author not caring to waste his efforts on men of means sufficient to have everything their own way. To those who care to enjoy a summer outing in the best, easiest and cheapest manner, this book of hints is indispensable. It is woodsy and wholesome in every line. The author's fifty years of life among the summer forests fits him for what he has at last undertaken; a guide to the best, easiest and most enjoyable manner of preparing to spend a vacation in the woods. The investment of one dollar here will make rich returns."

"Seneca" in a private letter praises the book in this wise: "'Woodcraft' certainly is a work that stands without a peer in its field, as was only to be expected from the years of experience and habits of observation of its author. Its main value is in its thoroughly practical instruction, and the veriest tenderfoot ought to enjoy camp-life as thoroughly with this book at hand as the oldest hunter. 'Nessmuk' hits me in a tender spot in his talk about frogging and about still-hunting from the patient sitting on a log, for I have been there in both cases to the fullest extent of enjoyment possible, and these two particulars have been a hobby of mine ever since I can remember. Old 'Nessmuk' never wrote anything that showed his happy style better than the description of his ten days' tramp through Michigan, which reads like a veritable fairy tale."

MARSHALLTOWN, Ia., May 4, 1884.—A few days ago one of our best shots, Mr. Hank Bruner, spent the day in a call on the *Scolopax*, and returned with a bag of 42. Reports last few days are of the scarcity of birds, and opinion prevails they have continued northward.—DISNER.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

"Spicewood" is right. An overcharge of coarse powder in any gun 20 inches and under and 10-gauge and under, will not all burn when discharged. An "overcharge" would be 5 drams in a 10, 4½ drams in a 12, and 3 in a 20-gauge. Shoot such charges in the dark and observe the long stream of burning powder beyond the muzzle. It will not be the mere red heat of the "dirt" or "powder scales left in the gun from former charges," but will exhibit a long blaze of burning powder. Clearly, then, the powder does not all burn in the gun. If all the particles or grains were not ignited at once, nor while traveling through the barrels, would it be unreasonable that some were not, after they left the barrels. This experiment has been tried time and again. Spread sheets of paper on the ground twenty feet long and four or five feet wide; shoot such overloads of coarse powder over them horizontally, and after a few shots you can gather from the sheets a charge (small) of unburned powder, and fire it off in the gun again. The only remedy for this waste, is a medium charge of coarse and fine powder mixed half and half in gauges ten and over, and in lesser gauges a medium charge of fine powder. Such medium charges as will all burn in the gun, or nearly all, will be likely to give you the best pattern and penetration of which the gun is capable.

In our eagerness to make others admire our guns and our ways of shooting, holding and loading, we frequently fall, unintentionally, into serious errors. For instance, "Sportsman," in the same paper (May 8, 1884) in his excellent article on "Two-Eyed Shooting," says: "When yout get a gun to fit, as per above rule, you will find that you will undershoot rising birds and birds at long distances; therefore, it is advisable to get a gun that shoots a little higher or 'nearly' a fit. Having selected your gun, you have only, when going to shoot, to look at the object to be shot at intently, and until you fire, with both eyes open. Throw up the gun, and from the moment of throwing the gun up to the time of discharge *let there be an interval of about two seconds.*" (The italics are mine). In conclusion, "Sportsman" says: "The advantage in this kind of shooting is apparent in pond duck-shooting so late in the evening that one cannot see the sights of his gun," etc. Now, if his advice to hold the gun still about two seconds before shooting only applied to duck sitting on the water, or any bird not in motion, no doubt he is correct; but it does not appear to be so limited, for he speaks of "snap shots" and "birds rising, and birds at long distances."

In the latter event, if the gun be held after it is thrown up to the shoulder two seconds and the bird flying at the rate of only 40 miles per hour, it would have flown in two seconds a little over 39 yards. If at 60 miles per hour (about the average speed of a scared bird on the wing) the distance flown in two seconds would be over 58 yards. Add to these distances the space between the gunner and the bird at its rise, or at the time when the gun was thrown up to the shoulder (generally from 20 to 40 yards) where would the bird be by the time the two seconds interval had expired? Evidently from 70 to 100 yards away, too far to hit or kill with any degree of certainty, especially in cover. Two seconds of interval is too much. It would not do even if he had advised the carrying of the gun along with the flight of the bird and shot 20 feet ahead of him. D. W. C.

CLEVELAND, Ohio, May, 1884.

Editor Forest and Stream:

I think that a few facts may not be amiss—and, by the way, let us have facts. By facts I mean actual experience at the target with a counted charge of shot and a measured distance of 40 yards and a circle of 30 inches diameter. All of these long shots in the field prove little or nothing, for they may be made by a gun that don't shoot central, and the shooter happening to hold in the right place, the bird is killed; then some one paces off the distance, taking long steps, and it is 45, 50 or 60 yards. "Almo" tells us about killing game 100 yards with No. 10 shot. Any one can satisfy himself as to the killing power of No. 10 shot at this distance, by measuring 100 yards and shooting his gun at a target 6 feet square, using No. 10 shot. At this distance the killing force won't be very great, neither will the killing circle be very large. Many a bird have I killed and thought it a long shot until I measured the distance, and some of the writers will find 60 yards is a long way, to say nothing about these 100-yard shots which we hear of.

For years I have thought a gun should be somewhat in keeping to the caliber of the man using it, and don't think it advisable for any man to load himself down with a gun that he cannot carry all day and handle with ease. A man who uses a 12-bore, 28 to 30-inch barrels, right barrel cylinder, left barrel choked and sticks to the same gun after he has targeted it and knows the proper charge to use in it, is a hard man to beat. Neither can I see any decided advantage in using a 10 bore, 8½-pound gun, for the 12-bore of the same weight will kill just as much game, and there is an advantage in the 12-bore as the ammunition for it costs less. Not long since I saw a letter from a prominent officer in a Western fort, who wanted an 8-bore, 8½-pound built, claiming this was the gun to use, and that the time would come when no other bore or weight of gun would be used. Perhaps that time will come, but doubt it a good deal, and I also know that no good maker would build any such gun, as the proportion of metal and wood differs so much from the caliber of the gun that the beauty and balance would be entirely out of place. I think that a 10-bore ought to weigh from 9½ to 10½ pounds, for this makes a good proportion and a good-looking gun, and 32 inches is long enough to balance, and do not see how there is any benefit to be derived in using a 10-bore, 12-pound gun, as the 10½-pound gun will shoot just as well and will burn all the powder necessary and all that will burn to good advantage, yet some say a 10-bore, 12-pound gun is the thing to use. When you get over 10½ pounds the caliber should be 8 and the weight 12 to 14 pounds and barrels 32 to 34 inches in length. To illustrate the way guns are sold, I relate the following, which was told me by the dealer himself: A customer came in to buy a gun and selected one that suited him, but wanted to see it shot. The gun was taken into the backyard and a target placed against the building. The proprietor took the gun to the shooting point, which was forty measured yards. This was a long, narrow place between two buildings. Back of the store there was a square place before you entered this narrow lane. Telling his customer to step around the corner, he goes to the forty-yard mark and then calls him to look and see where he then stands, which he did; then motioning him back, so as not to be in the way of the charge, he (the proprietor) runs up about ten yards, fires and runs back before his customer can see where he fired from. The buyer's eyes are upon the target, which, under these circumstances, is a decidedly good one, being made at thirty and not forty yards, as the customer thinks. Being well satisfied, he takes the gun home and tells all his friends what a wonderful shooting gun he has, and produces the target to prove it. But if he should happen to shoot his gun at forty yards and with a counted charge, it would open his eyes.

Then, again, some one gets a gun, and they tell him the target was made with No. 8 standard, when, if the truth was known, it was No. 9 "trap shot." It is time this humbuggery was stopped. With one exception, don't know of a single American maker (and very few English) that can tell by actual count what one of their guns will do. Each one is anxious to outdo his opponents, so puts in a heaping measure of shot, shoots his gun a few times, and marks the highest pattern (not the average) made; and when the gun is actually tested it falls short of what it is marked. Who will be the first maker to give us guns targeted as they should be, and have done with this guesswork? If all the makers adopted this plan, then one could make a comparison of any gun and tell what it ought to do. I think this would save the FOREST AND STREAM answering so many times the question, what ought my gun to do? Personally I do not own a gun, and have long hoped to own one of these wonderful guns that shoot so far, kill their game so dead, and make such large targets; and if you know of any such gun for sale, I will give a good round price for one of them. "Octo" did not accept my offer, as he has none to sell, and says he did not claim a good gun would average 440 in a 30-inch circle at 40 yards. Had he made his promised experiments before saying "that a good gun at 40 yards, with 1¼ No. 8 Tatham's shot (400 to ounce), and 5 drams of powder, should put 375 to 440," he would never have written any such thing for this reason.

A short distance from where I now write there stands a shooting horse, and pointing north is a target 40 measured yards. Over this horse have been shot the following different makers' guns many is the time and oft: Westley Richards, W. W. Greener, Charles Daly, Clabrough, Scott, Dougall, Remington, Parker, Colt, John A. Nichols, and many others, and as good guns as these makers can make, and not one of them did or will do what the maker claims a good gun ought. And if any of his friends have a gun that will average these figures I would like to purchase it, and will pay more than it is worth. Some time ago a noted English maker gave a gun as a prize, made to order, for the winner in one of our United States shoots. Well, the gun came and it was a "daisy" to look at, and according to all reports could outshoot any gun. A friend borrowed it and brought it to shoot over this same horse. A noted American maker also brought one to shoot against it. Well, the American maker's outshot it, but the shooting of both was below what either was marked. The American maker said he had better shooting guns in stock, but took the first one he came to. This looks strange when there was so much talk about the shooting of this gun. At that time the American maker had never shot one of his guns at 40 yards (and don't now), and at that time shot all of his guns from the shoulder, which is a very uncertain way. He now uses, I am told, a shooting horse. Yesterday I asked a good gunmaker why it was that I could never get one of these guns that do such shooting and what a good gun ought to do. "Well," he said, "with all of your experimenting haven't you yet learned that these guns are very, very scarce?" "The best gun I ever saw is one I have heard them tell about."

HAMMERLESS.

Editor Forest and Stream:

Perhaps a record of some actual experiments might be more interesting than my views and opinions.

After reading a well-known English maker's book on chokebored guns it occurred to me to test whether he could make a gun for a moderate price which would do as well as he says in his book guns ought to do. A gun to be of any use must be a hard hitter as well as able to give a good pattern. I therefore wrote to ask if he would make me a light gun, 12-gauge, weighing not over 7 pounds, and with barrels not over 28 inches long, that would throw 70 per cent. of the pellets of an ordinary charge of shot into a 30-inch ring at 40 yards and also penetrate at least 30 out of 60 sheets of a Dennison pad. The answer was "Yes." The gun was ordered and tested for me by a careful operater with the following results, which I need not say were very satisfactory:

RECORD OF TESTS

with a 7-pound, 12-bore, 28-inch barrels, double hammerless Greener, treble wedge-fast, No. 19,848; 16 shots, all fired at 40 yds. into 30-inch ring; Dennison target and pad of 60 sheets, from ordinary rest, wind light. Powder used: Dupon't Eagle Ducking No. 2, two pink-edge wads over powder; one Baldwin over shot. Shot used: 1½oz. of Spark's Philadelphia chilled and soft No. 6 shot.

No. of Test.	Right or Left Barrel.	Powder Charges.	Shot.	Pattern. Total number of pellets in charge.	Pattern. Number inside of 30in. ring.	Pattern. Percentage.	Penetration. No. sheets of Dennison's pads.
1	R.	3 drams.	Chilled.	253	195	.77	28
2	R.	3 drams.	Soft.	245	218	.89	27
3	L.	3 drams.	Chilled.	253	175	.69	30
4	L.	3 drams.	Soft.	245	238	.97	25
			Average.....			.83	27
5	R.	3¼ drams.	Chilled.	253	149	.59	31
6	R.	3¼ drams.	Soft.	245	226	.92	33
7	L.	3¼ drams.	Chilled.	253	214	.87	31
8	L.	3¼ drams.	Soft.	245	198	.80	32
			Average.....			.79	32
9	R.	3½ drams.	Chilled.	253	169	.67	36
10	R.	3½ drams.	Soft.	245	198	.80	30
11	L.	3½ drams.	Chilled.	253	163	.64	42
12	L.	3½ drams.	Soft.	245	195	.80	33
			Average.....			.73	35
13	R.	3¾ drams.	Chilled.	253	145	.57	40
14	R.	3¾ drams.	Soft.	245	223	.91	32
15	L.	3¾ drams.	Chilled.	253	181	.71	40
16	L.	3¾ drams.	Soft.	245	167	.69	34
			Average.....			.72	36

Total averages { Right barrel..... .765 and 32
Left barrel..... .771 and 33½

Several things are worthy of notice. First, the right and left barrels shoot nearly alike, the left a little the better. Second, chilled shot has the greatest penetration, but soft shot makes the best pattern. Third, as the charge of powder is increased the pattern is not so good but the penetration increases.

I finally adopted a standard charge, consisting of 3¼ drams powder and 1 ounce soft shot. This averages about $\frac{80}{100}$ for pattern and 35 sheets penetration. I would suggest that when careful experiment has determined the best charge for any gun it should be engraved on the gun, or on a plate set into the stock, as the information is too valuable to be lost.

This gun makes very regular patterns, and inside of a 20-inch ring at 40 yards leaves no holes the size of a quail uncovered by shot. Owing to its barrels being comparatively short and heavy at the breech, it balances well, and is altogether the best gun for upland shooting I ever owned, while its cost was moderate.

Allow me to suggest that you take the above form, or with improvements, and ask your correspondents to give actual tests of their guns. Then if tabulated by you and published would give us a common standard of comparison.

EXPERIMENTER.

SEABRIGHT, N. J.

Editor Forest and Stream:

In reply to gun queries in your valuable paper of April 24, by "E. W." First, that a 16-bore gun will kill quite as far as a 12 or a 14 bore provided they are bored on same principle and are properly charged; but in 20-bore the force of the shot would be greatly diminished—the range shortened. Second, small-bore barrels are made shorter than barrels of larger bore to give proper pattern, as a 16-bore barrel 30 or 32 inches long would shoot too close for any use, while a 10 or 12 bore 28 inches long would be just the reverse, the pattern would be too open. Third, there is no use in having barrels longer than 30 inches in 12-bore or 32 inches in 10-bore, as long barrels will produce the same effect as small bores—the force of the shot would be very much lessened. Fourth, in 20-bore gun, barrels 28 inches, would not have them choked under any consideration; but if 16-bore would have right barrel cylinder and left barrel modified choke. R. H. M., JR.

EDGEFIELD, S. C.

Editor Forest and Stream:

I use a 10-bore, 8-pound gun, and load my shells with a thin Baldwin card wad on top of the powder, next an Eley's ⅜-inch white felt wad, then another Baldwin card wad, and lastly a thin cardboard wad over the shot. "Byrne," in issue of April 24, has expressed my views exactly about those persons who can "kill every time" at 50 to 75 yards. An occasional good shot does not justify a man in saying he can do the same thing every time. In many cases no doubt they magnify their feats in order to give spice to their tale, yet how much more pleasure is derived from an article in which you know the simple truth is told, and upon which you can rely. WOODCOCK.

PRINCETON, N. J.

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

I would be much obliged if you or some of your correspondents will be so kind as to inform me: First—With what rifles were the extraordinary off-hand scores made in the New York shooting gallery, at 200 yards, as recorded in your paper for March 13? Second—Whether there are any American sporting rifles from .40 to .45-gauge which, with a charge of powder not less than one-third the weight of the bullet, can be depended upon when fired from a rest, to put several successive shots into a square of six inches width at 200 yards? If so I would be glad to know the names and addresses of the manufacturers.

Judging from the published targets there is no rifle which seems to me to make such fine shooting at sporting ranges as the Maynard, the .40-gauge of which takes a charge of powder one-fourth the weight of the bullet, and I am much inclined to doubt if this proportion can be exceeded without spoiling the accuracy at 200 yards. I have not yet seen an express rifle which can be relied upon to hit a deer in the right place at distances beyond 150 yards, and by the words "rigt place," I mean not merely the heart, but anywhere in the thick part of the lungs, a wound which will cause an animal to drop quickly through suffocation even when made by a bullet of moderate size. A deer hit in the wrong place, such as the bowels, by a bullet of the largest size, will frequently run for miles, and eventually escape to die uselessly and in torture. While, therefore, appreciating a flat trajectory very highly, I would never attempt to gain it by a sacrifice of accuracy. I do not consider that any one ought, for sport, to fire at an animal beyond 200 yards, but whatever the sporting range may be, the rifle ought to be capable of hitting, at that range, the spot aimed at.

As a very interesting controversy about the best kind of hunting rifle has been going on in your paper for some time past, perhaps I may be permitted to give the result of my own experience, having killed quantities of large game during a residence of several years in India, and a few deer in America. I have used eight different rifles, varying in gauge from a .36 express with 20 grains of powder and 150 grains of lead, to one with a round bullet weighing 13 to the pound and 90 grains of powder. As an all-round weapon, to be constantly in the sportsman's hand, for use in both thick brush and open ground, there is nothing made in the British market equal to a double-barreled central fire .45 express about nine pounds weight, with a powder charge not exceeding 125 grains and a hollow bullet of not more than 300 grains, hardened with one-tenth or one-twelfth part of tin. It is light enough to be carried all day with comfort by a man of average strength; it requires when fired at an animal's shoulder, no judging of distance up to 150 yards, and when properly handled, has been proved by plenty of good sportsmen to be powerful enough for killing tigers and polar bears, which are doubtless as tenacious of life as the American grizzly bear. With a stock like that of a shotgun and held against the shoulder, the recoil is not unpleasant, and is not even felt when firing at game. Doubtless it would bruise severely if the rifle had a short stock with crescent-shaped butt and were held at the upper arm in the American fashion. The latter system I personally prefer when the charge is light in proportion to the weight of barrel, for mere off-hand shooting at a mark, but it is not good for quick shooting at game.

With regard to the weight, the late Capt. Forsyth, of the Indian army, in his book upon the sporting rifle, said that he found 9 pounds about as much as an average man could carry for any length of time and use effectively. My own experience agrees with his, and when out shooting in India with men who had rifles of 10 or 12 pounds weight I have always noticed that they often gave them to attendants to carry, and thus risked losing good chances of game. I am of average strength, and was in the habit for many years of walking in the American bush and Indian jungles, frequently for eight or ten hours daily, yet found that when fatigued I could not use a rifle of even 9½ pounds with the same quickness and precision as one of half a pound less weight. Taking, then, 9 pounds as about the weight, it is difficult to see how any gauge can be equal to .45. If, for

instance, it be made .40, with the usual charge of 80 grains and a hollow bullet of 220 grains, the trajectory up to 150 yards is equally good, and, from the diminution in recoil, the accuracy may be slightly better, but the immediate effect of the bullet is not sufficiently paralyzing upon dangerous animals like tigers or bears, or even upon deer the size of the American elk.

If, on the other hand, the gauge be increased to .50, there is only a choice between two evils—either the powder charge must be so much smaller in proportion to the lead that the trajectory is spoiled, or the recoil must be so great that the accuracy is spoiled. With only 125 grains of powder and a hollow bullet of 340 grains, a .50 express must weigh at least 9½ pounds to be fired with any comfort, and cannot be used beyond about 120 yards without making allowance for the curve of the bullet's flight.

Rifle makers' assistants, accustomed to heavy charges, and employed constantly in sighting rifles, will make good shooting from a dead rest after fixing themselves in a certain position, even with light weapons, but a sportsman who is often obliged to fire quickly without thinking of the way he holds his rifle, will find a marked difference in the practical accuracy obtainable with great instead of moderate recoil.

For many years I used rifles with round bullets of about an ounce in weight, and even now am by no means sure that they are not, on the whole, equal to expresses for shooting in thick woods. Their striking surface is sufficiently great for most purposes, and they cut through twigs which will turn conical balls out of their course, while their penetration is so great that they usually go clean through large animals lengthwise. In nine-pound rifles they can be made almost as accurate as express bullets up to 150 yards, and with a very flat trajectory up to 110 yards.

Of late years I have chiefly confined myself to two rifles for game shooting, viz.: a double central fire, 16-bore, and a "Cape gun," with the right barrels 16-gauge and smooth, for shot or ball, and the left .45 express. The latter weapon was manufactured to order by one of the best English makers, for a purpose which it completely fulfilled, that of shooting for food in remote districts, where it was often uncertain whether large or small game would be met with.

The double rifle weighs ten pounds, and has barrels 26 inches long. The bullets are round, weighing 472 grains, and are fired naked with from 96 to 100 grains of Curtis & Harvey's No. 6 powder. One of Eley's felt wads $\frac{7}{16}$ of an inch thick, is placed between powder and bullet. Fired from a rest the rifle will hit a square 4½ inches wide almost every shot at 100 yards, and I once put 14 successive bullets into that space from alternate barrels without any rest, but sitting down with an elbow on each knee, the 100 yards being measured, and the charge 110 grains of powder. At 150 yards the accuracy decreases considerably, the bullets being seldom in a smaller space than a 10 or 12-inch square, and the best shooting I have made from the sitting position was to put 7 successive shots into an 8¼-inch square. At 200 yards no reliance can be placed upon the rifle.

The express barrel of the Cape gun takes brass conical cartridge cases holding from 110 to 125 grains of powder, over which are placed a card wad, a lubricated felt, and then another card. The bullets are cast slightly too large and passed through a swedge. They have cannelures for holding lubrication and are used naked. They are of three kinds—a hollow conical weighing 270 grains, a solid of the same weight with a flat point like that of the Winchester repeater, and one with a hollow less in diameter than that of the first and weighing 290 grains. At 100 yards there is no difference in the accuracy of the three bullets, but the solid one performs best at 200. Eley's machine-made papered bullets fit equally well, but do not give better shooting, and any number of shots can be fired at a time without the least necessity for wiping out.

The rifle weighs 8 pounds 12 ounces, and the barrels are 28 inches long, with rebounding locks and pistol-grip stock. Fired from a rest a number of successive bullets go into a square 4½ inches wide at 100 yards. The best continued shooting from the sitting position that I have made was putting four bullets into a square 3½ inches wide by 2½ deep, and six into 4 wide by 6 deep. At 150 yards I have not been able to shoot closer than four bullets into 9 inches wide by 5 deep, six into 11 wide by 5 deep, and six more into 11 by 5¼ on the same occasion. I once put five bullets into 4½ by 5¼, but the sixth struck six and a half inches below the square. At 200 yards the shots are seldom less than about 20 inches square, and the best work I have done was putting six into 17 inches wide by 9 deep. The bullets make a curve 3½ inches high between the muzzle and 150 yards, and the block sight is so arranged as to make them strike 1½ to 2 inches high at 80 yards and drop the same at 150.

Although shooting from the sitting position gives rather inferior results to that from a fixed rest; it will be seen from the above account that the accuracy of the rifle falls off very materially at 200 yards, and almost every express has the same defect, according to my experience. The problem yet to be solved in hunting rifles seems to be the proportion of powder to lead which can be used without producing inaccurate shooting. I. I. M.

LONDON, England, April 16, 1884.

Editor Forest and Stream:

With respect to "G. H., M.D.'s," communication in your issue of March 27, it may interest him to know that there is a miniature rifle cartridge made by Messrs. Kynoch for the Morris tube, which is almost perfect for the work it is intended. The little cartridge of drawn brass is bottle-shaped, .295 reduced to .230, central fire, ¼ of an inch long; it takes a charge of 5 grains powder and a hardened bullet of 40 grains; .45 inch long, perfectly cylindrical at its rear end, which is not reduced to fit the shell.

This bullet has no cannelures for lubrication, a jute disc and greased wad doing this work most efficiently. It is cupped at the base. This cartridge is said to have an initial velocity of over 1380 f.s., and to carry well to over 500 yards in the Morris tube. It makes splendid practice, and has a fairly flat trajectory up to 100 yards. I was shown a tube out of which more than 4,000 shots were said to have been fired, and it showed scarcely any signs of fouling. The little bullet penetrated over three inches of pine at thirty feet and splashed on an iron plate behind. There is a shorter cartridge, taking 3½ grains of powder with the same bullet. A cartridge of this kind, lengthened to take a bigger charge, would, I think, satisfy "G. H., M.D.'s," wants. It is beginning to be used a good deal this year for rook rifles, and is displacing the large sizes in this country. The most popular sizes here are the .295 or .300, which carry 10 grains powder and 80 lead, and are very accurate at short ranges.

The Morris tube is used with the Snider or Martini rifles, for musketry instruction; it fits inside the rifle barrel, and is in two pieces. The tube itself is inserted from the muzzle, and its breech end from the breech of the rifle, and the two are then screwed together. A collar screwed on to the muzzle of the tube keeps it steady. An extractor is worked by that of the rifle, and ejects the cartridge on the breech of the rifle being opened. A tube of .300-bore can be fitted to shotguns. The Morris tube is rifled only for about half its length, the rear half is smooth-bored, on account, I suppose, of manufacturing difficulties, as it is so long. The cost of the .230 cartridge is 2s. 6d. and 3s. 9d. per hundred, that of the .22 rimfires being 2s.

Perhaps the following particulars of the usual weights, charges, etc., of English express and other rifles may be of interest to your readers.

Caliber.	Weight, Pounds.	Charge of powder, grains, approximate.	Weight of bullet, grains, approximate.	Remarks.
Express. .36	6 to 8	40 to 50	150 to 180	Flat trajectory to 140yds. Suitable for small antelope, bustard, etc.
.40	7 to 8½	80 to 110	180 to 220	Suitable for antelope and small deer. Very flat trajectory and high velocity.
.45	7½ to 10	95 to 150	270 to 320	Suitable for all antelope and deer, but many prefer the .500. Trajectory flat to 200yds. with large charge.
.50	8½ to 11	120 to 160	340 to 390	The best "all-round" rifle for all game. Great penetration with solid bullet.
.577	10½ to 12½	160 to 180	480 to 500	Suitable for dangerous game. Very effective with solid ball.
Large bore. .73 (12-bore)	10 to 13	160 to 200	580 spherical to 800 conical.	Suitable for dangerous game, preferred by some to the heavy express.
.77 (10-bore)	About 14	220 to 270	700 spherical to 1,000 conical.	Suitable for heavy thick-skinned game.
.835 (8-bore)	About 16¼	270and over	860 spherical to 1,360 conical.	Suitable for heavy thick-skinned game.

The barrels of the small bores are usually of steel, those of the large bores mostly of twisted metal. Their length is from 26 to 28 inches. Double rifles usually weigh a little more than single. Solid bullets weigh from 20 to 60 grains heavier than hollow-pointed ones. The muzzle velocities of the .40, .45 and .50 expresses with the heaviest powder charges are close on 2,000 f.s. Recoil with the expresses is not severe, but they require a long, straight stock, and should be held properly; with the large calibers recoil heel plates are necessary.

The following tables (see the *Field*, Sept. 8, 1883) show the powers of a .45 express and long-range rifle in comparison:

Rifle.	Weight—lbs.	Length of barrels—inches	Powder—grains	Bullet—grains	Proportion of powder to lead	Muzzle velocity—ft. per second	Striking energy—foot-pounds
.45 double barrel express by Messrs. J. & W. Tolley	10	26	150.87	274	1 to 1.822	2,000	2,431
.45 Gov't Martini-Henry	9	333-16	85	480	1 to 5.64	1,315	1,841

Rifle.	Velocity at			Time of Flight (seconds) to			Striking energy at		
	60 yards	100 yards	150 yards	60 yards	100 yards	150 yards	60 yards	100 yards	150 yards
.45 Express	1759	1611	1439	.09612	.1675	.2661	1880	1578	1238
.45 M.-H.	1222	1167	1104	1419	.2418	.3759	1590	1450	1297

Rifle.	Heights of trajectory in inches.			
	At 100yds. range.		At 150yds. range.	
	40yds.	60yds.	60yds.	80yds.
.45 Express	1.2672	1.3260	3.1560	3.4176
.45 Martini-Henry	2.6712	2.7384	6.4128	6.8208

The 276-grain bullet loses velocity very rapidly, and much better work would be done by a heavier ball of about 320 to 350 grains weight, the loss of flatness of trajectory would be practically nothing, and the gain in striking energy at the longer sporting ranges very great. Double rifles shoot well enough at sporting ranges. A double .40 express, by Messrs. D. & J. Fraser, put seven out of eight shots into a 3-inch bull at 110 yards at one of the Wimbledon competitions a few years ago; but I have mentioned this subject already in one of my letters. Lancaster's four-barreled .45 express, a beautifully made, though very costly weapon, is only 10 pounds in weight, and very handy. Its action is similar to that of a double action revolver, the hammer, an inside one, being cocked, and each barrel fired in turn by the trigger; but the "pull off" is beautifully light and better arranged than that of any double action revolver. BENGAL SEPOY.

LONDON, Eng., April 7.

SNIPE ABOUT ROCHESTER.—Rochester, N. Y., May 8.—Those of your readers who are opposed to spring shooting will not be pleased to hear the fact that the snipe shooting has been excellent in this county the present season. There was the usual strife among sportsmen to get the first bird, and numerous trips were taken to the fields before the snipe had left the south. But the reward of the ardent ones came at last, and for the past two weeks they have been knocking the birds right and left, in numbers sufficient to satisfy any reasonable person. The best bag I have seen was in the possession of Secretary Hartman of Greece, who brought in thirty-six as the result of one day's shooting. Various other men have been almost as successful in thinning the ranks of the feathered passengers on their way to the breeding ground. We have all done it, but it does not seem right to carry out in this way the sentiment "after us the deluge."—E. REDMOND.

COST OF SHELLS.—Washington, D. C., May 9.—*Editor Forest and Stream:* Yesterday, when I began to lay in my supply of ammunition for spring bay bird shooting, I found, to my dismay, that the paper shells had risen, and the rise took my breath away. The second grade, N. M., for which I had all along been paying 65 cents a box, had jumped to 95 cents. Now I for one deplore that the speculators have turned their attention to the sportsmen's goods. If they succeed in this venture there will soon be a corner in shot, powder and caps. I kicked and bought nickel shells, and I hope the fraternity of sportsmen will combine and not submit to any imposition.—CHASSEUR.

"WAKE ROBIN."—Will Mr. Riddick allow me to correct a slight misapprehension into which he has fallen, in his pleasant article "Concerning Robins," in the issue of FOREST AND STREAM for May 1, of the current year? The title of Mr. Burroughs's book, "Wake Robin," is derived, not, I am assured, from *Turdus migratorius*, as Mr. R. states, but from the flower *Trillium canadensis*, one of spring's earliest harbingers in New England, and which is known to Northern children by the name of "wake robin." Of the derivative philology of the name I am not sure, but think it may possibly be derived from the early coming of the bird.—H. P. U.

BUFFALO SPRING SHOOTING.—Buffalo, N. Y., May 6.—The spring duck shooting is over and our shooters have oiled and laid away their big duck guns for the summer. The shooting on the whole was not satisfactory. The ducks were few and far between, while there was no lack of hunters. One morning a few days before the season closed, your correspondent shot nine bluebills and whistlers, which was not considered bad under the circumstances. Swivel guns have been used by certain parties living on the Canadian shore, slaughtering and driving away a good many ducks.—W. A. A.

BELLEFONTAINE, O., April 22.—A gun club was organized here last evening with thirty members, for the protection of game, trap-shooting, etc. The club will be known as the Fountain Gun Club of Bellefontaine, O. The following officers were elected for the ensuing year: President, J. C. Brand, Jr.; Vice-President, H. C. Garwood; Secretary, C. C. Lane; Treasurer, J. H. Hornberger; Executive Committee—W. H. Taylor, S. Faris, B. Laport.—C. C. LANE, Sec.

IOWA PRAIRIE CHICKENS.—Woodbine, Harrison County, Iowa, May 5.—Prairie chickens are more plentiful than they have been in a number of years, so those that live here tell me. Some quail left, too.—L. A. R.

Sea and River Fishing.

CAMPS OF THE KINGFISHERS.

Black Lake, Michigan.

PART I.

UNCLE DAN SLOAN and the Writer, with four other good fellows, spent our summer vacation of 1882 on the old stamping grounds, the ever lovely upper and lower waters of the Intermediate chain of lakes in Charlevoix and Antrim counties, Northern Michigan. It appeared to be an off year with the fish, and the trip did not prove as entirely lovely and satisfactory as some of our former camps on the same chain, so that when Brother Bert. Hughes, of Hamilton, Ohio, in November of the same year, filled Jim (ye Editor) chock full of marvelous yarns about the beauties and charms of Black Lake, the prodigiousness of the black bass stiffening its waters, and the enormous proportions of some of the *Esox nobilior* infesting its dark depths, the old place lost its sweetness; the current of our thoughts was changed, and we resolved to kindle our flickering camp-fire somewhere on its, to us, unknown and unexplored shores.

When Jim had been charged until he could hold no more, he hied himself down to the city to pour into the willing ears of Old Knots (the Scribe) and I the wonders and attractions of this lake of the dark waters, and soon after we paid Hughes a visit and received from him many choice morsels of information, that Jim, in his inability to hold everything, had failed to bring down and impart to us. Hughes, with a party, had fished this lake a couple of weeks in September of that year, and had some wonderful stories to tell of the size and numbers of black bass and pickerel taken, notably of an afternoon's sport when they took fifty-six fish with six frogs, and how their lines were repeatedly snapped and their rods smashed into countless fragments by powerful but unseen fish that never stopped to say good-bye when they started for some other part of the lake, or even to drop them a hint about the inefficiency of their tackle, or the masterly skill they displayed in not stopping them. And then he told us that he had seen three or four fingerling trout in a spring branch that flowed into the lake within a rod or two of their camp.

This meant trout, at least in some of the streams in the vicinity, and when he told us that a settler, their nearest neighbor across the lake, had given them a pointer on a stream, seven or eight miles from the head of the lake, that literally swarmed with grayling—so thick in fact that the water had to be changed twice a day to keep them from famishing—we were ready to throw up our hats and shout "Eureka," or anything else that would serve as a safety valve to ease the pressure that was nigh bursting our "piscatorial bilers." It appeared, however, that the pointer had been given them only a day or two before breaking camp, as is usual in such cases, and they were unable to pay the stream a visit.

According to the settler's story, the tangles of this stream, the "Occueoc," had never been penetrated except by a stray mossback now and then. No city feller had ever thrashed its quiet pools with "a sunfish pole and a bunch o' fool fethers," or polluted it by squirtin' tobacker juice into its limpid waters.

It was wild and pure almost as when the sun first shone

on it, and we promised ourselves then and there that we would pay our respects to it and take out a sufficient number of its silvery treasures to give the remaining few a chance to get an abundant supply of a purer flow of water without changing.

We were referred to this settler, a Mr. O. S. Merrill, for further information and particulars, and I at once opened up a correspondence with him. He corroborated all of Brother Hughes's statements and put in a side winder occasionally on his own hook, which so increased the fever in us that by the time spring opened, a trip to Black Lake was a foregone conclusion, and our preparations were made to that end.

The last "sockdologer" we got from this guileless moss-back, in May, was in the shape of a string inclosed in his letter, which, he said, represented the length and girth of a black bass taken in the lake a short time before. The string was 31 inches long, the length of the fish, and 24 inches of it, to a knot tied as a marker, was the girth around "the minnow and frog compartment." Great Scott, what a bass! Not an ounce under 14 pounds.

Does any brother of the rod, with the spirit of a green frog in him, wonder that the fever immediately seized on us with a fiercer and more relentless grip? I inclosed the string to Old Dan (along with a few remarks that I thought would touch the spot), and Dan showed it to Ben R—w, a farmer neighbor, who had for some time been balancing himself on the edge of a strong desire to join the Kingfishers in a trip to the North Woods, but had not just made up his mind which way to fall. That string laid him out, and he came full length on the Michigan side. This "new member from Macon county" filled our party to the limit of eight, viz.: Old Knots, ye Editor, Uncle Dan Sloan, the Writer (the scarred veterans of the old Kingfishers), John R., one of the party the previous year, Ben R—w, Dick Mac and H. H. Muller, Assistant Postmaster of our sooty city of Cincinnati. The three last had never "fit musketers and cussed black flies in the bresh of Northern Michigan," and we, who had gathered up a good deal of experience in this branch of angling, looked forward to an opening night in the woods that would reflect credit on the new members, and at the same time be a source of comfort to the afore-mentioned insects. The entertainment came off as expected, and Dick M. will attest to the extreme end of his natural period that it was a most—agonizing success. Dick, by the way, is a "jaynius" in his way, but a mighty good fellow withal, and as Knots usually tacks on a nickname to each new member to fit some peculiarity in their make up, he was dubbed Mrs. Partington, on account of his fondness for using big words with an utter disregard of their fitness. Any word that came uppermost, with plenty of sound and syllables in it, he would fire out perfectly regardless, and with a refreshing serenity that nothing would disturb. Johnny R. was called the Deacon, by reason, perhaps, of the violent contrast between him and any *bona fide*, well-regulated deacon in good standing, and so on to the end of the string.*

Our preparations were made to start about the middle of July. We shipped our camp outfit and a box of provisions ten days ahead to Cheboygan, in order that we might not be delayed in our start for the woods when we got there by the cheerful information "goods not arrived."

The Scribe, Editor, Dick and John R. decided to start four days ahead of the time set for the party to leave, which would give them time to take a run over to Mackinac Island, buy and have ready butter, eggs, flour, etc., that we would need in camp, and have the wagons, engaged ahead through the kindness of that prince of landlords, Mr. Wm. Spencer, of the Spencer House, Cheboygan, loaded and ready to move on the arrival of the rest of the party. Brother Muller would be unavoidably detained three or four days, and this left the Writer to go it alone again as far as Ft. Wayne, Ind., where Dan and Ben were to strike the G. R. & I. road.

Stepping out of the train at Fort Wayne, I looked all around for Dan, but the old pelican was not to be found, and I concluded he and Ben must have missed connection or met with an accident, for I felt that when old Dan failed to be on time on a fishing trip, something must be out of gear. While rapidly deliberating on what to do in the case, a thin-faced man with a fierce moustache, wiry-looking in every fibre, bronzed and sun-tanned and brown as a ripe hazel nut, stepped up and said very deliberately, "My name's Ben R—w, and you must be 'Old Hickory,' the feller old Dan Sloan has told me so many lies about?" "Yes, same feller; shake, powerful glad to see you, but where is the old pelican?" "Well, I'm sorry to tell ye that jest afore I left Decatur, he was taken suddenly sick, and as I didn't want to disappoint the party, I jest took the train and come on, and here I am." Our traps are all here, and now what do you think we'd better do, go on and leave Dan, or wait till next train? for I think he'll be able to travel to-night." Here was what Capt. Truck would have called "a h—l of a category." Going a-fishin' without old Dan, my veteran comrade in many a pleasant camp, who had fished with me in sun and rain, and even snow, who had shared with me the triumphs of numberless battles with the black warriors of divers streams and lakes for the last score of years, would be playing Hamlet with that moonstruck melancholy appendage left out.

While trying to figure out the best course to pursue in the matter, Ben scraped a match on the rear of a new pair of jeans breeches, which I noticed were tucked carefully into his boot tops, and lifting a short briar root pipe, which he had loaded while talking, said: "Tell ye what, if we stand here much longer blowin' our horns, that train'll hie out, and we'll git"—biff, came a smart blow on my left ear, and turning quickly around to flatten out the offender, there stood old Dan, looking as radiant as a young school marm after a creditable examination, and then those two old loons just humped themselves and laughed "voriferously"—as Dick would have said—at the joke they had played on "Old Hickory." How going a-fishing doth make boys of us all. After seeing all their luggage put on, Ben and I hustled Dan into the train, and we were soon discussing the prospects for big sport at Black Lake.

At Grand Rapids, in the evening, we were met at the depot by our friend Charley Pike, of the First National Bank, who steered us uptown and entertained us very agreeably during the hour or more that the train laid by. We missed the beaming "phiz" of genial, fun-loving old Bill Hess, whose acquaintance and Pike's we so happily made in the "bresh" two years before, as he was out of town, but he left his blessing to be bestowed on us by Charley, and a promise to hunt up our camp in the next fortnight if he could spare the time from his business. Blessed old Bill! may his days be long in the land.

At Mancelona, early next morning, our old cook of '81, Frank Frantz, joined us, having been engaged by letter for the trip a week before. Here, too, we took on a menagerie and circus combined in the shape of a box containing 375 live, speckled frogs, for bait. The box, made for this special purpose, with wire netting sides ¾-inch mesh and a hinged door a foot square in the top, was sent up some time ahead to one of our old neighbors on Central Lake, a Mr. William Derenzy, with instructions to have his boy Tommy catch the frogs a few days before we were to be along and send them up to Mancelona by the mail wagon. The reason for this streak of forethought was we were going to a wild and strange place, and we could not be certain of procuring suitable bait in sufficient quantity to keep the boys in good humor, and if anything is calculated to make ye honest angler forget his early Sunday-school training it is to run short of bait when the fish are just in a mood to ask for it.

The result proved the wisdom of the venture, for we found frogs were a scarce varmint around Black Lake, and we found only one locality on the lake where we could catch minnows large enough for good bait, and these had to be taken with hook and line. Besides, speckled frogs have, with our party at least, proved a better bait than minnows in these Northern lakes, and they certainly are not one-tenth the trouble to keep alive and transport from one camp to another, if occasion requires. When in camp place your box where the water of some little stream near by can run through one corner of it without wetting the whole bottom, and a handful or two of grass scattered inside will evoke various toned croaks of satisfaction that will convince you that even frogs are not devoid of gratitude. Under this treatment they will live four or five weeks on wind, albeit they will look a trifle gaunt in the region of the waistband, but they will be almost as frisky as when first put in the box.

I write all this about frogs, that in case any of the brethren who may take a notion to make a camp on any of the lakes of this region of Michigan, they may have the benefit of our experience. KINGFISHER.

[TO BE CONTINUED.]

* Just here I will crave the indulgence of the craft for jotting down all these little details and peculiarities, and offer as an excuse that I like to read such things when written by others, and will take it for granted that every sportsman likes to do the same; that he takes interest in the preparations made by a party before making a proposed trip; shares the joys of their anticipations; likes to know about the material and make-up of the party, and wants to know where they are going and how they get there.

FLY-FISHING FOR SHAD.

Editor Forest and Stream:

There is a great awaking among the angling fraternity. The number of letters on the shad fly and shad angling are such it would be impossible for me to answer them individually, and wishing to accommodate as many as possible of the lovers of the gentle art, I will ask the use of your columns for a few hints to those who would try for the sport in fresh pastures.

Shad fishing at Holyoke, for the last two years, has been so poor that I have not put up a fly in that time, and as there have been no brawny workers in Western Massachusetts the increase of shad in the Connecticut has been left to the praying ones. If the prayers are heard and answered, I will have to depend on an old cast containing three old favorites, namely, a white miller, second drop; a yellow Sally or a soldier moth, hand drop; a red ibis for trail fly. The red ibis and the white miller are favorites through the season. There are times when the shad will take any fly, in fact I have seen them taken with three or four feathers bunched, and tied to a hook without other preparations of any kind.

There are many other hooks to choose from, and almost every angler has a choice of hooks which he considers the very best. For my own use I dress to a No. 4 Limerick hollow point, but would recommend a hook about the size of a No. 6 Limerick H.P., for the reason I could rise ten fish with the small hook, to two with the large hook, but generally secured more fish with the No. 4. The cast can be stained, or natural color, as suits the taste of the angler. I never could see any difference in the chances offered, nor does it matter whether the reel is placed above or below, as far as the fish are interested. I'll take sugar in mine if it should kill me.

As some of the inquirers are located on tide water, I would say try it, if the current is strong enough to support your flies at or near the surface, with from forty to fifty feet of line out. Let the flies trail out and try it at shorter or longer distances; if not current sufficient to keep the flies floating, try casting a long line across stream, letting the water carry the flies down stream, at the same time draw gently round below the stern of the boat. I have taken some very good fish in that way when crowded out of the regular fishing grounds; also in rowing gently round and trailing the flies has brought some good fish into the boat.

For regular river fishing above tide water, where there are no rapids, I would select the strongest running water. Anchor your boat and let the water trail out the flies to several distances; I would change places often, it makes no difference whether the flies are on the surface or a foot under; I would also try casting as above, as well as different kinds of flies, for I am persuaded that shad can be taken in all fresh water, and the goal, when reached, will be a pleasant one. From 4 to 10 o'clock A. M., and from 5 to 9 P. M. are the best hours to take them; if the day is cool and cloudy they will take the fly all day. THOMAS CHALMERS.

HOLYOKE, Mass., May 10.

THE MAINE SEASON OPENED.

MIGRATION to the Maine trout and land-locked salmon waters has never set in with more enthusiasm. Although the ice is hardly out of some of the lakes yet, several sportsmen have got tired of waiting and have started. A party of five or six Boston merchants started for Moosehead Saturday, and on their return, in about a week, they will go to Bangor and thence to Aroostook to try the waters. A company of five merchants will leave Boston next Saturday for Rangeley Lake and the upper Androscoggins. They will be gone two weeks; the latter one a part of them will spend at Lake Kennebago, that jewel of trout lakes nestling in the unbroken forest, eight miles from Rangeley. But alas! the march of improvement wakes us up from the pleasing dreams of trouting in the wilderness, with only pine boughs for our pillow and the stars for a covering. I hear that a little steamer has been or is to be put into Kennebago even, and that a hotel is to take the place of the old camps. Alas! Those steamers and hotels. They bring the lazy tourist into our dearly loved nooks, and they drive away the sensation of rest born only of solitude. Their ceaseless bluster takes us right back to the active, bustling world again.

A larger number than usual of merchants and professional men have planned fishing trips to the Maine waters this season. Nearly 100 from Boston and the neighboring cities and towns will make the early spring trip, to be followed later by the fly-fishermen in June, the teachers, clergymen and schoolboys in July and August, and the late fly-fishermen and sportsmen with dog and gun, in September. Senator W. P. Frye, of Maine, will go into camp under his own shingled roof on Lake Moosclucmaguntic, early in the season. Weston Lewis, of Boston, vice-president of the Oquossoc Angling Association, with other members—some of them the near neighbors in New York of the FOREST AND STREAM—will start for their camp at Indian Rock, head of Moosclucmaguntic, before these lines are scanned by you, dear reader. The lamented A. D. Lockwood, president of the association, will not be with them this year. He has gone to his rest. The last time he visited the happy trouting waters, where he had been punctual nearly every season for some twenty or thirty years, it was with crutch and cane in one hand and rod and reel in the other. A true, noble lover of nature. He could organize and carry on successfully powerful manufacturing companies, but he never forgot the twirl of the trout, even when white hairs had frosted his brow, and years of active business had enfeebled his manly step.

At the lakes all is bustle, if ever those guides and backwoodsmen can bustle. The boats are painted and out to dry. The minnows are caught or mapped out where they can be secured with a dip net at an hour's notice; the (don't turn up your nose, kind readers) worms are dug. Next week the lakes will be dotted here and there with boats, a guide at the oars (sunbrowned and tanned as black as a red man) and a sportsman in the stern with trolling line and live minnow, sunburned and blistered as red as the flesh of an indoor white man knows how to be. Some big trout will be caught, five, six and even up to eight or nine pounds. Don't imagine, dear uninitiated novice, that such big trout commonly rise to the fly. No, they are feeders upon larger bait. A truthful record of the catching of about nine-tenths of all the large trout taken in Maine waters would show that they were lured upon the hook by some kind of bait. The fly is more sportsmanlike, neater and requires more skill to handle, but when trout will not rise then bait must be resorted to or we go back to our desks and counting rooms to dream over them another year with only a two-year-old recollection to help us through to the next season. SPECIAL.

BOSTON, Mass.

AN ANGLER'S WIFE IN CAMP.

AS the summers have rolled around, with our boy we have enjoyed the life in camp, beside some stream, or in the deep groves of maples, until I prefer "tenting on the old camp ground" to any summer resort, hotel or boarding-house. The years have come and gone, until I am almost as much interested in matters pertaining to angling as my husband, possessing my own rod—a fine lancewood—my own reel, lines and hooks; flies I do not aspire to yet, hence satisfy myself with fishing from a boat, with my boy for my boatman; and to his credit be it said, he can handle a boat well, so well that he has taught me to row. I have but once before attempted to write my camping experience; my husband's reputation is established, while I am but pluming my feathers. For ten long years my husband has borne a *nom de plume* which I have come to recognize almost as closely as his given name. I see his pen skimming page after page oftimes when he should be resting; find the letters going to well-known sportsman's journals, and but for the fact that almost twenty years of married life has woven his name into my daily life, I should prefer to call him by his *nom de plume*. As I take the journals and read the very interesting letters from different anglers, sometimes reading them nearly all through when I come to one that reads like "Norman," I look at the end of the letter, and there is the old familiar name. And here is my thirteen-year old boy stringing out long sentences, quoting poetry, giving his experience to the genial "Kingfishers," whom we had the pleasure of meeting in Michigan when *in transitu* for our camping grounds, and find him corresponding with gentlemen whose names are well known in the angling world. So you will not think it strange that I have caught the scribbling fever. But to my story.

We camped this past summer close to a small creek containing some beautiful trout. Every time they were brought to camp and I cooked them, I longed to try for some myself. I love the dainty little fish, and take pleasure in serving them on the table crisp and brown, but cooked to perfection.

Just below the camp, about a quarter of a mile, was another creek, broader and deeper than the one we had fished; so we determined to try this. Rigging up a rod and line, we took worms for our bait, and began fishing. We climbed logs, clambered over fallen trees, creeping through the thick undergrowth, once in awhile finding a place to drop a line, but I presume the trout knew I was a novice, for they would come out from their hiding places and glide swiftly back under the old stumps and logs. Once, yes twice, my lady friend had one right out of the water, but just when she was about to take him off the hook he was gone, and before she could pick him up he was into the water again.

And now we are in the thick of the forest to get trout; we must walk on logs, for they lay every way across the stream, thickly covered with moss, the stream at times almost hidden from sight with stumps and undergrowth, but the ripple of the clear, cool water guides our way. Our friend and his wife are gone up the stream, and I am trying to swing my bait into a hole under some stumps when, instead of dropping into the hole, my hook swings into the thick brush. I step, as I think, on another log, to save my rod, but it proved to be nothing but brush wood covered with moss, and in I went. My greatest fear was that my rod would be broken; it bent under the pressure almost into an half circle. Somehow I managed to pull myself out again, and saved my rod; fortunately the brush had kept my clothes from getting wet. I was not going to leave off for this little dip, so kept on up stream determined to try again.

Well, we saw the trout and we will have them next time, and although we had to content ourselves for this day with a nice string of perch which we caught on the dock, yet the beautiful woods and the cool creek, with the lovely moss-grown logs, will be remembered for a long time. But I am going to try again another summer, and keep on trying until I can bring home trout, and place them beside my husband's as he empties his creel. We cannot all be expert anglers, and study the nature and habits of this beautiful fish in his wild-wood streams, deep in the forests. I can pardon my husband's enthusiasm when discussing trout with a brother angler, and his earnestness with his pen when defending

them; his love for the depths of the forest is deep and genuine, and I think sometimes he spends more time watching their habits than he does killing fish. I judge so from his creel when he comes home; he never kills for count.

MRS. LUCY J. T.

HALLOCK, Minn.

MINNOWS FOR TROUT.—A great number of pike have been lately taken by anglers, who are fond of the sport, from the New Jersey ponds situated near the city. I am sorry to state that the illegal catching of bass in the same State by Philadelphians has reached the writer's ears. Why can not two weeks more of patience be practiced, when all can fish with a clear conscience? On the trout stream of Carbon county, Pa., which your correspondent fished only ten days since, there is a fair-sized dam, once used to furnish power, but now abandoned by the lumberman. The stream above and below this dam is fished to death, yet still contains a tolerable supply of trout, but all of them now doubly educated. The pond harbors many fish of large size, the water being very deep at the breast. To this portion the trout before the spawning season congregrate until they ascend the stream. In this deep part of the pond they never rise to the fly, no matter how skillfully cast, but in the shallower parts smaller ones at times take the fly freely and make good sport. Occasionally a big fellow is hauled up by a bait fisherman sitting on the breast, who has the patience to wait until his worm is swallowed by the trout at the bottom, and his size always indicates the dimensions of more below. A plan I have proposed to my friend living near the stream, who bye the bye is a true fly-fisherman, and has heretofore vowed he will use nothing but the feather, has at last been accepted, and he will attempt to lure these "whoppers" with the minnow and twelve-foot leader, his bait being caught and carried to the pond from the Lehigh. I am anxiously waiting to hear the results of his attempts, and although the minnow does not occur in the stream where these trout exist, I feel confident the plan will succeed and a number of large fish will be taken. Can any of your correspondents inform me if they have ever caught trout in the manner proposed? In England it is considered legitimate early in the season. Why should it not be here at times and under the conditions stated? Nothing else will bring these big fellows from this deep hole.—HOMO.

VERMONT.—Highgate, Vt., May 3.—"Verily the world moves," and it gives me great pleasure to say that since my last letter to your journal, the net fishers in this vicinity have been taught a severe lesson. Fish Wardens Atherton, of Waterbury, and Tuttle, of Montpelier, have seized a full dozen of seines, trap and fyke nets, and have arrested the ringleaders among the fishermen, two of their number, Herb. Donaldson and Nat. Sheets, have already been fined $100 each, with costs, while the others are under heavy bonds to appear at the next term of county court. Wardens Atherton and Tuttle's task has not been an easy one, but unflinching firmness, backed by muscle and trusty revolvers, has enabled them to conquer all opposition. Owing to the extreme high water that we have had here during the past month, spring duck shooting has been poor. The trouting season opened here on the 1st inst., but as the streams are still full bank the catches have been small. Now that net fishing is stopped and bass and pike-perch are allowed to spawn and multiply, we may soon expect good sport in the Missisquoi River and Lake Champlain, and fish food will become to our citizens a common article of diet instead of a rare luxury.—STANSTEAD.

WHITE PERCH IN LAKE GEORGE, N. Y.—There are a number of salt-water fish which, when they are placed in fresh water, grow to twice or three times the weight they would ever attain in salt or brackish water. The white perch, *Roccus americanus*, is one of these fish. It is often caught in fresh water weighing two or three pounds, whereas in salt water a fish weighing a pound is considered large. Knowing this fact, Capt E. S. Harris, Messrs. W. W. Lockhart and O. B. Lockhart, determined to place some in Lake George. With this object in view the two latter gentlemen went to Sing Sing, where friends assisted them in procuring fish from fykes set for the purpose. On April 26, they left with seven milk cans full of fine lively fish, and arrived at Lake George the evening of the same day with the fish in good condition. There was quite an assemblage of people at the depot when the train arrived, to see the new fish; every one seemed pleased with their appearance. The gentlemen feel well satisfied for the trouble they have taken in first introducing this fish into the waters of Lake George.—A. K. FISHER.

FISHING FOR COUNT.—Worcester, Mass.—A large and enthusiastic meeting of the Worcester Sportsmen's Club was held on Thursday evening, May 8, at the Bay State House to make arrangements for the annual "fish day" and dinner. Asa R. Jacobs and R. L. Golbert were chosen captains, and Maj. L. G. White, H. E. Smith and H. B. Verry, with the two captains, constitute the committee to arrange all the details of the affair. Wednesday, May 22, was decided upon as the day for the fishing, the dinner to be served on the evening of the following day. In choosing up sides every member will be chosen, and all who do not "go a-fishing," but who attend the dinner, will be counted on the losing side and also fined one dollar; and all members who neither fish nor attend the dinner will be fined one dollar. All money thus collected to be used toward paying for the dinner. The club held its first fishing day festival last year and it was a complete success. If this one is equally successful it is safe to say all will be well satisfied.—W. S. K.

DOES THE RAINBOW TROUT MIGRATE?—Since our editorial note on this fish we have heard that two rainbow trout have been caught in the Hudson, near Hyde Park. The fish were taken by men who were "scapping" for the river herring (alewife), and were sold to Mr. John A. Roosevelt, the well-known bass caster of Poughkeepsie, and they weighed three-quarters of a pound each.

BUFFALO, N. Y., May 6.—The perch fishing has not fairly commenced as yet, although several strings of from thirty to forty have been made. A continuance of the pleasant weather that we have been enjoying for the past few days, will warm up the bays and improve the fishing.—W. A. A.

MONSON, Me., May 5.—The ice is all out of the lakes and ponds in this vicinity. Our local anglers are already making good catches of spotted trout. Spring fishing is ten days earlier here this year than it was at the same time in 1883.—J. F. S.

CATALOGUE OF WILLIAM MILLS & SON.—We have just received the illustrated catalogue of fine fishing tackle of William Mills & Son, 7 Warren street, New York. It is designed for the retail trade and includes a complete outfit for an angler, from a Leonard split bamboo to a boy's rod costing not more than twenty-five cents, and from waterproof lines to tents and wading boots. Reels, lines, hooks, and the many other articles used by anglers are shown in great variety.

FLY-FISHING FOR SHAD.—I note your reply to "G. W." with reference to fly-fishing for shad. I have seen them taken at Holyoke at various times of day, especially at midday and in bright sunshine. The white miller was used at the end of a long hand line, in some cases, when fishing from the bridge, from 200 to 400 feet long. The fishermen informed me, however, that, like the black bass, they were whimsical biters.—MILTON P. PEIRCE.

THE NEVERSINK CLUB, of which Mr. Alfred Roe is president and Mr. W. Holberton is secretary and treasurer, has leased four miles of the west branch of the Neversink River, two miles above and below Parker's. The club will make a vigorous effort to preserve this stream and have begun stocking it with trout. The rules of the club forbid any member to take more than twenty-five fish in one day, and no fish must be under six inches in length.

Fisheulture.

THE MENHADEN QUESTION.

Editor Forest and Stream:

I wish to make a few remarks in regard to the menhaden fishery, and call your attention to a few statements made by your correspondent, Mr. Church.

Aristotle, when asked what has a man gained by telling a falsehood, replied: "Not to be believed if he speaks the truth."

First. The menhaden is bait and food for nine-tenths of all the hook fish along our coast. Mr. Church knows that thousands of barrels of this fish are salted for mackerel bait yearly, the bank and lobster fishermen use it, and the club houses along the coast use it as feed and bait for bass fishing. Mr. Church has a great deal to say about the tautog and porgies which is not to be considered in the argument upon menhaden, for it is neither bait nor food for these fish.

Second. In the summer of 1882, Mr. Church fitted his fleet of steamers with small-meshed seines, to catch the small half-grown fish along the New Jersey coast. He was censured by those who knew it to be true, and they wrote that the meshes should be restricted by law.

The taking of these small fish was denied by the Church Company in a letter printed in the Fall River *Weekly News*, of Nov. 23, 1882, from which I extract the following: "Still further our opponents make the apparently unanswerable argument that we drive the fish from their old feeding grounds. I admit that they have deserted their old feeding grounds for the time being, but contend that we have no agency in the matter, and as a case in point to show how little we know about fish, their habits, enemies, etc., will cite what I saw the past summer while fishing on the Jersey coast between Cape May and Barnegat. About the first of August, the coast above mentioned was packed with small menhaden, so small that our nets were not fitted to catch them, and besides there were plenty of large ones, so that we had no occasion to molest them. Well, these small fish drifted up the coast from the southward until they had passed the whole of the menhaden steamers, and when ten miles north of Barnegat they stopped, turned in their tracks, and went southward again, proving conclusively to me that they had met the same unseen enemy in the water which had drawn the large menhaden from their old feeding grounds."

This admits what I claimed in my article of Jan. 10, viz., that there is a scarcity of fish, caused by the crowding of this fish from the coast.

In a letter written to Prof. S. F. Baird, and printed in the "Bulletin of the United States Fish Commission of 1883," page 463, and signed by D. T. Church, in defense of taking these small fish, he says: "* * * Hence, we shall catch all we can of any size we can get hold of. By observation we know that during ninety days of the year 1880, 30,000,000 barrels of menhaden were destroyed by bluefish and weakfish in Narragansett Bay, and in a tract of water only twelve miles long by two miles wide. As the total catch with purse seines is less than 3,000,000 barrels a year, it seems foolish to limit free fishing. * * * I believe that more menhaden are destroyed in one hour by fish than are destroyed by man in a year."

Admit this foolish statement to be true, and that the fish seeks its food for ten hours a day, it would take nearly 30,000,000 barrels a day to feed the fish along the coast. Now, let us glance at the menhaden fishery for the past five years; from 1878 to 1882 the steamers had crowded this fish from the coast from Maine to New York. There were less than 100 barrels taken in the harbors and inlets of Rhode Island in the season of 1882. In the season of 1883, as the fish were coming on the coast, thick fogs and fresh gales protected the fish from the purse seine at sea. True to its instinct, it reached the inlets of New York, Connecticut, Rhode Island and Massachusetts in a limited amount, and a few—the first for five years—reached Maine. As the weather settled, the steam fleet soon caught what they could in the inlets and crowded the rest from the coast, where they could only be reached by the largest steamers. With ninety of the fleet pushed from the business of 1883, and 1,000 men thrown out of employment, the remainder made a fair season's catch.

This fish has decreased 90 per cent. within twenty-five years from our shores. There have been more than 500 purse seines pushed from the business, since the steamer was introduced, for want of fish, yet Mr. Church tells the public that they are more plenty than ever; place his shark story with the above statement. In my opinion, there could not be a man found from Maine to South Carolina, who is acquainted with the business, who would believe these statements if made under oath.

Protect this fish for ten years from the purse seine and fish would be the cheapest food found in the market. The best would not be more than ten cents per pound. If the Fish Commissioners along the North Atlantic States would investigate this subject they could tell the public that their labors were almost worthless in comparison with what they would be if this fish was protected so that it might deposit its spawn in the inlets near the coast, for the fry of the herring, shad and salmon is used up for food and bait. This demand was supplied by the menhaden for our hook fish before it was crowded from our coast. If there could be located 100 steamers with oil works in the best places at New Foundland, Belle Isle Strait and the Gulf of St. Lawrence to catch the numerous schools of herrings that are found in these waters, it would make the hook fishing as worthless there in ten years as it is on our own coast. The man that would dare to speak in defense of the hook fishermen of those waters would hear from some one of the steam fleet that there was no scarcity of food fish nor of herring, and there was no law needed to protect this fish, for it did not spawn along the coast, but at the North Pole; and that they were disciplining seamen for the navy and the Government should send its revenue cutters to protect them to fish against the public wishes, and with many other foolish statements.

With a word to your Pacific coast readers, I will close. The purse seine and oil works are already established on your coast at or near Puget Sound to catch the herrings, which are the food of your salmon, halibut, cod and mackerel. As these herrings are used up the above-named fish will soon leave your coast, the salmon first, for better feeding grounds.

FISHERMAN.

WESTPORT HARBOR, Mass.

MR. ROOSEVELT ON THE CARP.—Hon. R. B. Roosevelt, of the New York Fish Commission, has been up to the Caledonia hatchery and has eaten carp. He said to a reporter of the New York *Herald:* "A carp, taken from the preserve where he had been feeding on the aquatic growth, not artificially, and consequently in the best condition, was the first to be experimented upon. He weighed two and a quarter pounds, and was plainly boiled, so that his flavor should not be changed either for the better or the worse. The conclusion arrived at was that the carp was not in any way disagreeable and far better than no fish at all, but that he did not compare with most of the native varieties, such as the sucker or the bullhead. His flesh was exceedingly soft and yet quite tough, leaving a sort of stringy residuum after it was masticated. The flavor was not bad, and is probably capable of unlimited improvement with condiments and sauces. The fish not only gave good sport on the light rod with which it was captured, making many desperate runs to escape, but also seemed so tame when taken out of water, although it had never been fed nor fondled, that the captors disliked to kill it. This proved that its race could be made interesting pets."

THE OSWEGO FISHWAYS.—Oswego, N. Y., May 9.—*Editor Forest and Stream:* I am pleased to be able to report that by practical test the fishways placed in our river last fall by the State, of the McDonald pattern, are a success. The mullet, or red band sucker, a fish which is taken in great abundance in these waters in the early spring but which have never been found above the dams since they were first built, is now being caught upon the first and second levels of the river, conclusively proving that the ways must have served their purpose. We have strong hopes that the salmon fry deposited this year by Col. McDonald, of the U. S. Fisheries, will thrive, and if they do we look forward to the day when our river will again be as noted as it was forty years ago, offering sport to the salmon fisher without the expense of a trip to Canada or Brunswick. We have this spring added 50,000 brook and mountain trout to the supply in our small streams. We propose to keep Oswego a fishing county.—H.

BLACK BASS FOR STOCKING.—There is a demand for black bass of all sizes, for stocking new waters, and no one seems to attempt to supply them in quantities at all times. Occasionally we hear of some for sale and on announcing it they are gone. Mr. Livingston Stone, Charleston, N. H., sometimes fills orders but does not always have them. A correspondent writes us that Henry Harris, Weverton, Md., has three hundred for sale.

The Kennel.

FIXTURES.

BENCH SHOWS.

June 10, 11, 12 and 13.—The Second Annual International Bench Show Chicago, Ill. Mr. Charles Lincoln, Superintendent.

Oct. 8, 9, 10 and 11.—Third Annual Bench Show of the Danbury Agricultural Society, Danbury, Conn. E. S. Davis, Superintendent, Danbury, Conn.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1213.** Volume I., bound in cloth, sent postpaid, $1.50.

THE VICARS TESTIMONIAL.

Editor Forest and Stream:

After a very long delay I have the pleasure to inform the subscribers to the above testimonial that a monument has been erected in St. James's Cemetery, Toronto, over the grave of the late Bloomfield H. G. Vicars, secretary and treasurer of the Dominion of Canada Kennel Club, whose lamented death we all mourned after the first bench show held under the auspices of the Dominion Kennel Club at Ottawa. The delay has been caused by many circumstances, especially the departure from London of the secretary of the fund, and the tardiness of the subscribers in sending in their subscriptions. I will be happy to forward to any subscriber a statement of the disposal of the sum placed in my hands to be used according to the wishes of Mrs. Vicars.

The following is the inscription which met with her approval: "In memory of Bloomfield H. G. Vicars, Secretary of the Dominion of Canada Kennel Club. Born Jan. 27, 1850. Died at Ottawa, April 4, 1883. This monument is erected by those who appreciated his services to the club. Faithful unto death."

I hope this will meet with the approval of the subscribers.

J. S. NIVEN (Chairman of the V. T. F.).

TORONTO, Canada, May 1, 1884.

THE CHICAGO DOG SHOW.

THERE will probably be a large number of dogs exhibited at the bench show, to be held in Chicago next month, and the managers are confident that they will close the season with the best show that has been held in the West.

There will be extra champion classes for setters, pointers, and spaniels, that have won not less than three prizes at any bench show, in addition to the regular champion classes. Major Taylor will judge setters and pointers, and Mr. James Mortimer all other classes. Premium lists may be secured on application to Mr. Charles Lincoln, Superintendent, Chicago, Ill. There will be a great number of special prizes. Many Eastern exhibitors have already promised to send their dogs, especially so among non-sporting exhibitors. The month of June is particularly well adapted for a bench show, as the weather in Chicago at that time is cool and pleasant, and the building is capitally ventilated. Prizes will be given for the greyhound or deerhound showing the most speed, and there will also be trials for setters, pointers, spaniels, etc., for retrieving; in fact, no pains will be spared to make this one of the best shows of the season. Special arrangements have already been made with the various railway and express companies and everything will be done to insure the comfort and welfare of dogs and their owners.

DANBURY SHOW.—The third annual bench show of the Danbury Agricultural Society will be held with the annual fair in Danbury, Conn., Oct. 8, 9, 10 and 11. An annex to the main building was built last year expressly for the bench show, in which suitable pens are placed for complete accommodation of the dogs. Competent attendants, night watchmen, food and all necessary care are provided by the Society. Dogs are taken from and to the trains at the expense of the Society. For full particulars of entries, prizes, and of other matters pertaining to the exhibition, apply to the superintendent of the bench show.—E. S. DAVIS (Danbury, Conn.).

WESTMINSTER KENNEL CLUB SHOW.

THE eighth annual bench show of the Westminster Kennel Club, which opened on Tuesday the 6th instant, closed last Friday.

From the point of view of those interested in our dogs, the show was a most successful one, though it was not a money-making affair. The number of dogs actually exhibited was very large, and the quality of the classes was, on the whole, an improvement on anything that has been known in America. The exhibits were by no means confined to animals owned in this country, and a number of the best known breeders and exhibitors of England sent drafts from their kennels to compete for the prizes. While the so-called sporting classes were as usual numerically the largest of the show, yet it is clear that the non-sporting classes are annually growing stronger, and forcing their way into public favor. Thus there were shown this year nearly one hundred St. Bernards, forty mastiffs, seventy-eight fox-terriers and seventy-two collies. This increase in popularity of the non-sporting dogs is a most healthy sign of the time, and promises more and more for future bench shows. There is certainly no reason why pointers, setters, spaniels and other dogs used in the pursuit of game, should, as they have hitherto, greatly outnumber the dogs which are kept for other purposes, and the fact that the former made up at this show only a little more than one-half of the total number shown will be satisfactory to all lovers of the dog. Mr. Lincoln fairly outdid himself, and at no previous show in this country have the arrangements been so satisfactory. The benches, while not differing materially from those of past years, were more neatly finished and had a better general appearance. Those devoted to the Westminster Kennel Club's dogs were partitioned off by iron railings instead of the ordinary pine lumber, and these railings had a very pleasing effect. The arrangement of the different breeds was much more satisfactory than on some occasions in the past, the classes seeming to follow one another as one went round the building in a natural sequence. The arrangement of the judging ring was a vast improvement on any previous show. The whole central space was inclosed by a high wooden railing, thus perfectly keeping off the public from the ring sacred to judges, reporters, and exhibitors or keepers. This ring was strewn with fresh sawdust, and formed not only a most excellent place for judging, but also a capital place for exercising the dogs when it was not in use for other purposes.

The dogs owned by the Robins Island Club, thirty-seven in number, were benched together, without any partition between, making a very attractive appearance. A number of the large kennels also made excellent displays of their dogs. Many of the stalls were nicely fitted up and tastefully decorated. The performance of the trick dogs was the best that we have ever seen. The retrieving was also very interesting to the spectators, who warmly applauded the various performances. The running of the greyhounds was not a decided success except for the winner, whose name and owner we were unfortunately unable to obtain.

There was considerable dissatisfaction with the judging, and this was especially marked in the mastiff and pointer classes. This dissatisfaction was due in a measure to the fact, that this year Stonehenge was laid aside and everything was left to the discretion of the judge, who selected the type of dog which best fitted his eye, without reference to any of the standards laid down in the books. This being the case, a wide margin was left for individual preferences, and in our comments on the various classes given below, we shall have occasion to differ widely from many of the decisions.

There was some sickness among the dogs during the show, and a few deaths. We saw many puppies and some old dogs which were quite sick, and no doubt more or less deaths will follow in due course. Those who exhibit puppies, however, take the risk of this. The dogs were fed on Spratt's biscuits, and the arrangements for their comfort as to clean bedding and fresh water were all that could be asked. Features of the show were the exhibition of the dog collars, chains, and other necessary articles of dog furnishings by the Medford Fancy Goods Company, the exhibit of Mr. H. C. Glover, and the book table of the Orange Judd Company.

The weather during the four days was anything but pleasant, Tuesday, Wednesday and Thursday being rainy, and Friday more or less overcast, though occasionally the sun showed his face. The attendance, though fair, was by no means what might have been anticipated had the days been fine, and only on the last day was there at all a large crowd. This, while no doubt to be deplored by the managers, was from the visitor's point of view a real advantage, since it gave him abundant opportunity to study the dogs to the best advantage. We understand, however, that there was a small credit balance after all expenses were paid. Next year we hope to see the New York show held for three days only, and that the judging may all be over by the end of the first day. Our bench show managers will have to come to this, and they may as well do it now as later. The reasons for this are so manifest that they do not need repetition here.

Among those present at the show were most of our well-known Eastern sportsmen and breeders of dogs, as well as many from the West and some from England.

Leaving now the general features of the show, we pass to the consideration of the classes in detail.

MASTIFFS.

The showing of mastiffs was not so good as we had expected to see, although there were several fine animals present. In the champion dog class Nevison was awarded the prize. He was not in good form and had a nasty mange sore on his hind leg. He should have given place to Hero II., a capital big dog, with plenty of bone. He is better in skull, muzzle and hind legs than the winner and as good in body, coat and feet. He was well shown, having filled out since we saw him at New Haven. We understand that he was claimed at his price by the Ashmont Kennels. Zulu, the only other entry, is rather small for good company. There were but two in the bitch class. Dolly Varden, the winner, is a grand bitch, but her condition was very bad and she should not have been shown. Dido, the only other shown, is far from a good one. The open dog class was badly placed. Dan, who won first, has a fair skull and body, but is weak behind and lacks mastiff character. Billo, who was given second, is much worse than Dan, as he has no redeeming qualities. Homer, who won third, should have been second. He is a very good dog with a grand head, good ears, except that they are set on too high, good body and legs. He is small in size and might be a bit better in feet. Jim, who was vhc., we thought well placed. He has good body and legs, but is poor in head. Ilford Cromwell, who was hc., was the best in the class. He is a grand dog with an immense head and is excellent in body, legs and feet. He has but just arrived from England and was not in the best of condition; should he fill out well he will take a lot of beating; his worst fault is a light eye. Bruno, who was c., was the third best in the class; he is a fair dog, although he lacks character. First in the bitch class went to Regina, who was much the best; she is a trifle under size, but has a good head, body, legs and feet, and looks a mastiff; her ears are a bit large and she might be a little better in bone. Monmouth Meg, who was second, is light in bone and lacks character. Nana, third, is leggy and has a long, thin head, and should not have been noticed. Queen, who was vhc., should have been second; she is fairly good all round. The puppies, except the three winners, were not much. Sandy, who was third, we thought the best of the lot. There was an immense nine months' puppy, measuring full 33 inches at shoulder, but like most large dogs he is long in face and may not mature well.

ST. BERNARDS.

The showing of St. Bernards was by far the best that has ever been seen, except at the exhibition of the St. Bernard Club in England. Bonivard was alone in the champion rough-coated dog class. He was in grand condition and well deserved his prize. In the bitch class Gertie had an easy win. She was in better form than when at New Haven. In the open dog class Duke of Leeds made his first bow to the American public. He is a grand young dog, even better than Bonivard, and with these two Mr. Hearn has a brace that we do not believe can be beaten. Second went to Caliph, a very good all-round dog. We liked Cardinal Borromo, vhc., full as well for the place, except that he was short of coat and lacked condition. He has the best head and color, and when at his best will, without doubt, find no trouble in getting a better place. Primate, also vhc., is very pretty and is nicely marked, but altogether too small. In the bitch class Rhona, who won first, has one of the best heads that we ever saw. Were she a little higher at the shoulder, she would be a very hard bitch to beat. Millicent II., who won second, is a grand big bitch, with good color and markings. She has a capital body, but might be better in bone behind. She has rather a long, sharp face. Baromo, who won third, has a very good body, with capital legs and feet. She will undoubtedly make a good brood bitch. Beryl, vhc., has a beautiful head, but lacks substance. Sappho, hc., also has a good head and, if nothing befalls her, will do better when mature. In the champion smooth-coated dog class Fido had a walk over as did Baroness in the bitch class. The open dog class contained some good ones. We thought them well placed except that we should have transposed second and third. Royalist, who was second, is lanky and long in face. Sultan, who won third, is a good all round dog, although he is rather small. Jolly Friar, who was c., is also small and has too much coat for his class. Leila, who won first in the bitch class, is the best bitch we ever saw, although heavy in whelp she was clearly much the best. The winners in the rough-coated puppy class were a fair lot, we thought them well placed. In the smooth-coated class we liked Snowstorm for first place, and Noblesse for second, instead of the vhc. each received, we think them very promising. We know that it is next to impossible to form a correct idea of what a puppy will turn out, especially when of so large a breed as the St. Bernard.

BERGHUNDE.

There were but four present in the berghund class, and we can do no better than to repeat our comments of last year: "The berghund, although a noble looking dog, is a mongrel, and should never be recognized as a distinct breed. He is certainly no better than the St. Bernard or mastiff from which he comes, and consequently is a failure as a distinct breed, and he should be relegated to the miscellaneous class, where he belongs."

NEWFOUNDLANDS.

The Newfoundland class was not a very good one. Jack, who won first, is a big dog with a fair head and a good flat coat which is of a good color. He lacks a little in bone. Tasso, who won second, is also of good coat and color and has more bone, but is not so large as Jack. We liked Bruno, vhc., full as well for second place. Matt, unnoticed, is of good form but much too small.

GREYHOUNDS.

Friday Night showed up in the champion dog class in much better form than when at New Haven, although he was not quite at his best. There were no entries in the champion bitch class. The open dog class brought out a rare good one in the winner, Bouncing Boy. He, with School Girl and Begonia, who won first and vhc. in the bitch class, have just been imported by their owner, who may well be proud of them. In the bitch class, the second prize was withheld. We can only account for this in that she was decidedly inferior to School Girl, and did not by comparison please the judge. We thought her more than an average bitch when compared with the entries of previous years, and should have placed her second. There was nothing very good in the puppy class.

DEERHOUNDS.

There was a larger display of deerhounds than we have ever before seen together. Many of them were in very bad condition, and poor coats, flabby muscle and soft flesh was the rule. Roy, who won in the champion class was, however, fairly well shown, which will perhaps account for his defeat of Lance. In the open dog class, both of the Bruces, who won first and second, are very good specimens. The judge failed to find anything in the bitch class that he thought worthy a prize, and all awards were withheld, although to our mind there were two or three of more than average merit.

POINTERS.

The exhibition of pointers was much better than last year, both in numbers and quality. There were 149 entries with 13 absentees. This number has been exceeded but once. Two years ago there were 151 entries with also 13 absent. There were eight in the large champion class. Meteor, who won the pride of place, is of the type of the small pointer, although he is one or two pounds over the dividing line when in good condition. We first saw Meteor at the Chicken Trials a year ago last September, and then wrote of him, "With the exception of being a little off in head, Meteor is one of the best formed animals that we ever saw. He has a thoroughbred, gamy appearance that is not often found." He was in beautiful condition, except that there was an unsightly lump, caused by a bite, upon the side of his head. Beaufort was not at his best, although he has improved since he was at New Haven. He has grown throaty since we first saw him and appears to have some trouble behind which we presume is caused by his recent illness. He is, without doubt, the best large pointer we have and should have been placed at the head of his class. The others were looking well.

Water Lily won in the bitch class. She was very well shown, except that she was a trifle too fat. There was not much to choose between her and Nan, who was also in good condition. The open class for large dogs was the best we have ever seen. There was scarcely a poor one in the lot. They were placed as well, perhaps, as was possible, except that Scout and Jimmie, both unnoticed, were well worth the two letters at least. We greatly admired Fritz, who won first. He is very good all over, with no striking faults, and does great credit to his sire, Beaufort. In the bitch class Miss Merrymack won first. She is quite a nice bitch, with a fair chest, good shoulders, body, loin and legs, and fair feet; she might be better in head and greatly improved in tail. Fan Fan, who won second, is a big bitch with lots of quality; she is too wide and round in chest. Sal, who was third, has the same fault and lacks quality. In the champion small dog class Bravo was an easy winner; he was well shown. Mr. Sterling declined to judge the bitch class, as he once owned one-half of Vanity, and Mr. George DeForest Grant was called upon to decide upon the merits of the class. Vanity, who won the prize, is an elegant looking animal, of much quality and very well put together; she carries her ears badly and is too wide in front, and might be straighter in fore legs; she has a capital tail, but carries it badly. Duchess should have won, although she was not quite at her best, and age begins to tell on her. With the exception of a faulty head and tail she is a very hard bitch to beat.

The open dog class was not well handled. Pride, who won first, was in capital condition, which is about all that can be said in his favor. He has not a first-class head, and is leggy and lathy. There was not much to choose between Fritz, second, Match, vhc., and Bob, unnoticed, for first, second and third. The two former we have described before, Bob is rather an ordinary looking dog at first glance, but a close examination will show him to be of exceptionally good form with plenty of bone. He has not a good head, and his color, black and white, does not improve his appearance. The rest of the class received all that they deserved.

In the bitch class first went to Jilt, who was perhaps deserving, although we liked Belle and Joy, both hc., full as well. Vision, who won second, was transferred from the large class, is also a very fair animal. Flash III., who was third, is very well made, with plenty of bone and good legs, but her very bad feet should have left her out of the money. The dog puppies over 12 and under 18 months were nothing extra. The corresponding bitch class was very fine indeed, and had the judge given Nell III. one more letter, they would have been as well placed, perhaps, as was possible. The puppies under 12 months we are not disposed to criticise, as there is no breed of dogs that is so uncertain when young as the pointer. Many of them looked very well, but we noticed nothing that was mature enough to warrant a guess as to its future.

SETTERS.

The champion English setter dog class brought out only three. Foreman, who won, has greatly improved in form since last year, having gained in muscle and filled out in loin. He was short in coat and feather, having been worked until late in the season. He has also just recovered from a touch of mange. He is very nearly the correct type for field work. Emperor Fred was shown a bit too heavy. He was not in his usual blooming condition. Dick Laverack we never saw looking so well. He is a capital dog, and was, like all of Mr. Davey's dogs, in beautiful condition. Plantagenet and Prince were absent. In the bitch class first went to Belle's Pride, a very good bitch, except that her head is too large, which gives her a coarse appearance. We greatly preferred Queen Alice for the place notwithstanding her bad condition, as she has much the best head of the two, and is fully the equal of Pride in every respect and a little ahead of her in appearance.

The open dog class was not a good one. First went to Rock, a very fair dog in beautiful condition. He is of good type and very well put together with very good shoulders, chest, body and loin. His ears are too thick and set too high. His fore feet stand too close together and his tail is carried too high. Bob White, who won second, was in very bad condition and should not have been shown. He was a long way ahead of anything in the class, and had he been shown in proper form he would have carried off the highest honors. The bitch class was of better average quality than we have ever seen. The large number of excellent animals rendered it very difficult to bestow the honors, indeed the unnoticed ones made a very fair class of themselves, although more than half of the class received mention. We thought them well placed. The puppies over 12 and under 18 months were not quite up to those of last year, although there were several very good ones shown. The puppy class, under 12 months, brought out several promising ones. Princess Phœbus, the winner, is very good indeed. She bids fair to turn out as good a Laverack as we have.

The black and tan setters were much better than we have seen in a long time. In the absence of Mr. Wise the classes were judged by Messrs. Sterling and Higgins. In the champion class one judge was in favor of Argus, while the other thought Turk the best. Mr. J. M. Tracy was finally called upon to decide the question, and succeeded in convincing them that Flash was better than either, and he was given the prize. There were but two in the bitch class, Lady Gordon and Perley. Both are very good indeed, with not much to choose between them. Perley, who finally won, is a shade better in head. The open dog class contained several very fair specimens, who were well placed, except that Duke, who was vhc., is better in head and bone than Punch, who was third, and they should have changed places. The bitches and puppies were fairly good and correctly judged.

The Irish setters were a grand lot all through. The champion dog class was magnificent. Berkley, who was on exhibition only, was looking finely. Dash is a grand dog in coat, color and chest; he has not an Irish head and is faulty behind. Chief was never shown in better coat and feather. Elcho, Jr., the next on the list, furnished the winner; he is a very good all-round dog, with an almost perfect head and of the correct type all through; he was not in first-class condition, and might be a bit better in back and coat. Glencho was not quite at his best, yet we thought him good enough to win, but Mr. Higgins likes a small, compact dog, and Elcho, Jr., just filled his eye. Trix was an easy winner in the bitch class, although she was not in good coat or form. Faun is also a rare good one, and may surprise some of the best of them next year unless they are at their very best. The open dog class made a splendid appearance in the ring. Many of them were very good, although we failed to find anything very remarkable. The winner is a little faulty in head, which was the most common fault to be found with the class. We thought them well placed. The bitches were better than the dogs. Noreen II., who won first, is a very sweet bitch, although she is not quite perfect in color. Reeta, unnoticed, should have been second, although she was not in good form. Nearly all of the others in the class were good, and the seven vhc's. that were given were no more than were deserved. Irish setter puppies are notoriously uncertain, as they often change in form and color. Rory O'More II., who was first in the dog class, was rightly placed. He is grand in color, and if he matures well he will be heard from again. In the bitch class we should have transposed first and second.

CHESAPEAKE BAY DOGS.

There were only three entries in this class. The two winners are very good specimens.

SPANIELS.

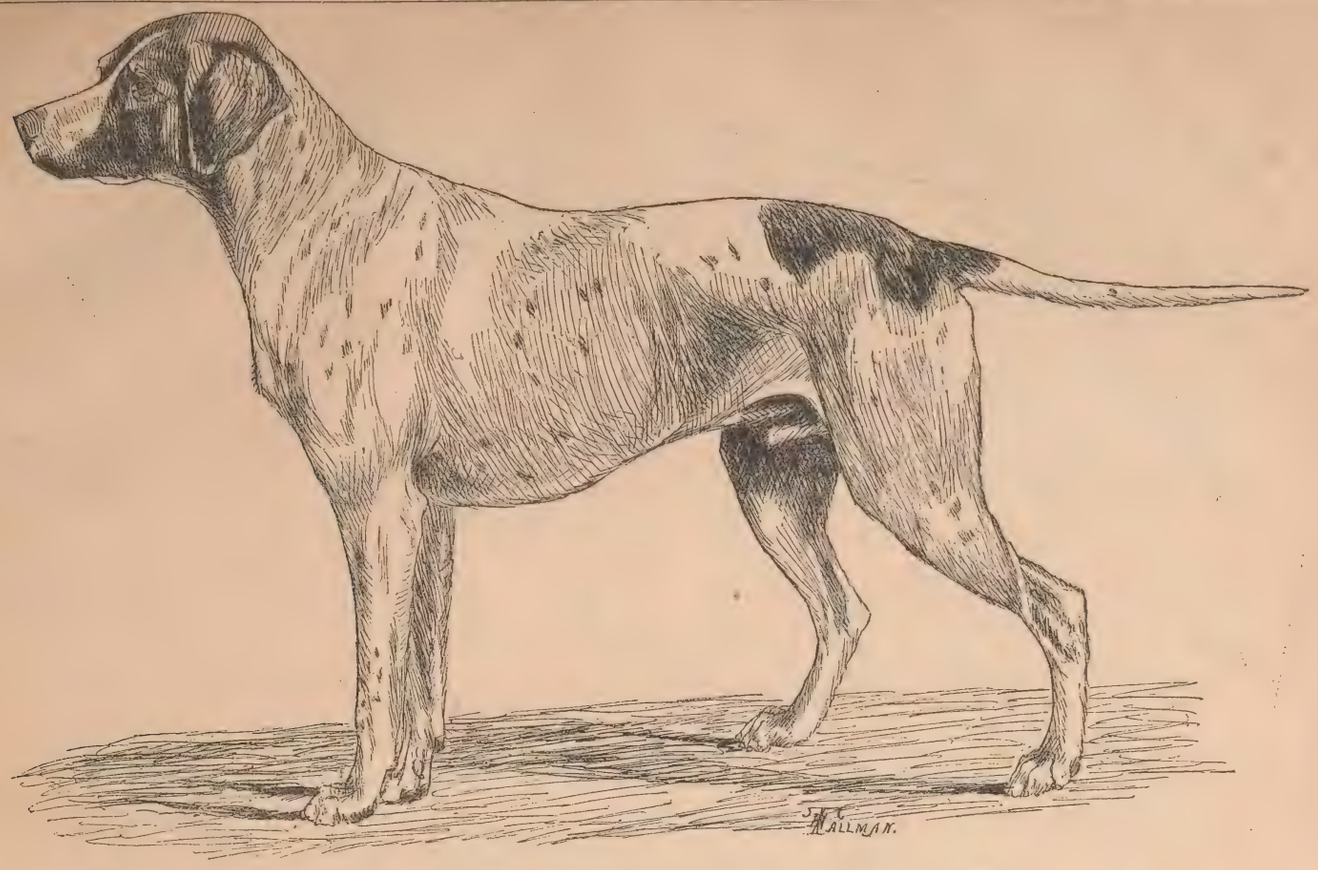
There were no entries in the champion Irish water spaniel class, and only three in the open class. The winner is a very good specimen. In the champion field spaniel class Benedict added another to his long list of wins. He certainly was not in such bloom as we have seen him, but his good body, legs and feet carried him through. Black Prince was in magnificent shape and he never looked better. Dash, who is rather heavy in head and a trifle low at the shoulders, is good in coat and body, but is a little out at elbow. In the open field spaniel class the winner is not as straight in front as she might be, and was a little off in coat. Bateman, given second, is a strong, good-headed dog, a little short of ear, but with a very good set of legs and feet. Toronto Jet, vhc., Don hc., Jewell hc. and Punch and Benedict's Boy, c., were tolerably good ones. In champion cockers, any color, Obo II. had a walk over. He well deserved his prize. In liver and black cocker spaniels, Peerless Gloss was given first. He was shown in poor coat, doubtless owing to his recent sea voyage. He is just imported. He has a very good head and body, and excellent legs and feet, with plenty of bone. Jumbo, second, is another good one. He is rather high on his legs and light in bone, but has a capital coat and was well shown. Woodstock Flirt, vhc., is too fine in bone. Bessie, hc., is a trifle leggy, but will improve with age. In cocker spaniels other than liver or black, Rattler was awarded first. He was in very poor coat, and we do not like his eyes. He has good length of body and plenty of substance. Fancy II., second, we do not admire. Blossom, vhc. is a good little dog of the old type, but was bad in coat. Powder, hc., and Clytie, c., were well placed. In spaniel puppies, Black Tournie was given first, Helen, second, Niven's Darkey, vhc., and Darling, hc. This was a very good class and well judged.

FOXHOUNDS.

Vinegar was the only entry in the champion calss. He is a first-class one, good all through. In the open class, the Essex County Hunt with Cardinal, Warrior and Manager won first, second and third respectively. These are all good ones, Cardinal being a little the best in back and loin. Brownie, hc., and Sport, c., though fairish dogs, were quite outclassed in this company.

BEAGLES.

In placing the beagles, Mr. Mortimer followed the standard of Stonehenge, which says: "With the exception of the head and ears the modern beagle has all the points of the fox-



COL. W. E. HUGHES'S LIVER AND WHITE POINTER DOG "METEOR."
Winner of Champion Prize and Large Pointer Sweepstakes, New York, 1884.

hound." The standard of the American English Beagle Club is different in some respects, and as many of the animals exhibited are owned by members of the club it will be as well, perhaps, to compare the merits of the dogs under the latter. The class was well filled and of better average quality than has yet appeared at any of the Westminster Club shows, clearly indicating that the interest in this breed is rapidly advancing. The necessity for a class division for height was clearly demonstrated. Probably half the exhibit were dwarf beagles, and when brought into competition with the larger variety serve to perplex the judge and mystify the lookers on, who cannot understand why a 15-inch dog should beat a 10-inch one, or the reverse. In the champion class, two contestants appeared. The winner, Bush, is a fair average beagle; her principal faults are in forelegs and feet, coat and carriage of ear. Leader, who entered the lists against her, is best in ear and coat, but falls behind in back, loin and muzzle. In other points they are very near together, the bitch being a shade the best. In the open class for dogs we differ from the award. Frank, placed first, was shown in the pink of condition and is an attractive dog, but a careful analysis of his points shows him very wide of the mark as a pure beagle. His eye is light in color and too small; he is long in body and tail, and his coat totally disqualifies him. Duke, awarded second, is a much better dog and should have been first: he is rather cloddy in make-up, but is a useful-looking hound, and, moreover, shows no impurity in breeding. Bugle should have been second, Apart from his head being too conical he is quite a good average beagle with no absolutely strong points, yet no positive defects. Foreman, hc., should not have been shown; the dog was quite ill and moved in a listless, woebegone manner about the ring. This no doubt lost him a place higher in the awards. Pedro is well eared and looks like a workman; hardly up to standard style, however. Jack is rather long bodied, but has fair head and ears. Prince has either basset or dachshund blood in his veins, and his looks strongly inclined to that side of the house. Charm is a large puppy with well hung ears; his coat is rather short for a beagle, looks as though he would be useful in the field, but has no positive beagle qualities, and when grown will be oversize. The closest competition was in the open class for bitches, which class was really very good. While we regard Chase as being an exceptionally fine bitch, we differ with Mr. Mortimer in placing her first, for which position we prefer Deborah, who was given third, the latter will score very high as a typical beagle, and as the contest was in reality between these two it will be proper to note our reasons. Deborah is better in muzzle, jaw and lips, in hips, thighs and hindlegs, and in width of ear, although Chase's are excellently hung and the proper length and texture. Both bitches are slightly open in forefeet, with these exceptions they are model beagles. Midget, a very good little bitch, got second. Rena should have been assigned this position in our opinion. She is better in skull, ear and eye, while in lips and muzzle Midget is best, as she is also in neck. In back and loin Rena is somewhat the best of the two, while in rib Midget reverses the order, and is best also in forelegs and feet. In hips, thighs and hindlegs, Rena has a decided advantage, in other points they are about on a par. Balancing the pros and cons Rena will outscore. Tiney, weak in muzzle and light in bone, is withal quite a neat little bitch, and has some very good marks. Fly is a handsome beagle, with strong back and loin, and good tail and coat. She is off in skull, ears and eyes, but has a well sprung rib and her feet and hindlegs are good. Lady Elmore could not be roused up sufficiently to be critically examined, being obliged to look her over in her stall, therefore cannot go into detail, but consider her general appearance good. Belle, the last of the class, shows a very defective hip and loin, has great length of back, and bad forelegs and feet. She lacks beagle character. Among the puppies, Marjory, first, is the best of the lot. Music, vhc., has a remarkably high domed skull with low-hung ears. She is, or rather will be, oversize, somewhat long in body, but taken all in all, quite a nice puppy. Keiser's head is not quite the thing, but has a good body. We thought Judy a little too much out at elbow, but being young may improve in that respect, otherwise she is moderately good.

BASSET HOUNDS.

This was the first time that a class had been made for this excellent breed, and Nemours, the winner, is a good specimen, being perfect in color and markings, with good head, a trifle snipy in muzzle, perhaps; ears of great length, placed low on the head and hanging in graceful folds: great length of body, with short, but strong forelegs and feet. Countess, the only other entry, is of good length and close to the ground, but is not of the requisite color.

DACHSHUNDE

Were not a good class. Gretchen, the winner, is a nice little dog, but more of the terrier type than the hound. Dutchy was second, Waldman, hc., and Cora, c.

FOX-TERRIERS.

Champion Fox-Terriers, Dogs.—This brought out Brockenhurst Joe, Mixture, Royal and Fennel. Fennel is the youngest of this celebrated quartet, and showed it. He is good in body, legs and feet, and coat, but has a bad head, is weak in jaw and has heavy ears. Mixture is a well-shaped little fellow, but is blind of an eye. Royal shows his age. He has a beautiful head and ears, but is not quite straight in front. Brockenhurst Joe, the winner, though ten years old, carries his age like a two-year-old. He has a beautifully-shaped head, small ears, well placed, good neck and shoulders, and tiptop coat. He is a trifle high on his legs, and his feet were not so good as they might have been, still his fire and terrier quality made him an easy winner. In champion bitches, Richmond Olive was much the best. She is a nice-shaped bitch, a trifle large, with good head, ears nicely carried, fairly good legs and feet, but lacks bone and coat. The latter probably due to the fact that she has just reared a litter of puppies. She comes with the best of credentials from England, and is no doubt one of the best we have yet seen. Viola, an honest little bitch, begins to show age. Jeopardy was shown too fat, and Gypsy was here out-classed. The open class for dogs was the best ever seen in this country. First prize was awarded to Belgrave Primrose. He has the best set of legs and feet we have ever seen on a terrier, his coat is perhaps a bit soft, and his ears, though small, are not at all times well carried. Scarsdale, given second, is a rare-stamped little dog, with good head and ears, feet and legs; he is a trifle heavy and straight in the shoulder. Raby Tyrant, given third, we were somewhat disappointed in. He is wide in chest and is not so good in his legs and feet as he should be, still he is undoubtedly a well bred one. Vakeel, Marlboro Jockey Jr., Roderick and Buff, vhc., are all good ones, Vakeel being a little the best. Roderick is a nice dog, but on too large a scale. Marlboro' Jockey is a gamy-looking dog, not quite straight in front and a trifle soft and open in coat. Buff shows age. Grip, Terror and Belvoir Jim, hc., were far above the average, while Governour, Nip and Tough, c., were well worthy of honorable mention. In fox-terrier bitches, Dance was given first over Village Belle, second. These are both very good ones, of a different type. Dance is very good in coat, body, legs and feet. Village Belle is a little fine in bone and coat, and perhaps a trifle cowhocked. Warren Testy, given third, is rather weak in jaw, has heavy, large ears and soft coat. Diamond, vhc., is a good little bitch, almost too small. Squeak, vhc., is pretty, but light in bone. Twinkle, hc., has good head and coat, but is somewhat out at elbows and bad on her feet. Lady Gay, c., is a neat bitch, too fine in bone and coat for the present day.

In wire-haired terriers, Tyke was a good first. He is too fat, and is getting soft in coat. Meg was placed second, and Sweetbriar third. It is a pity this workman-like terrier does not become more popular. In dog puppies, under 12 months, Warren Joe was given first, to which honor he was well entitled, and Acteon, a nice puppy but almost too large for his age, was given vhc. In the class for bitches Clover Belle, with her good coat, legs and feet, was an easy winner. Azola, vhc., and Daphne and Juno, hc., were each nice ones, as was also Betsy, hc. Taken altogether, the fox-terrier classes were the best that have ever been seen in this country, and many of the unnoticed dogs could have won easily a few years ago.

COLLIES.

In the champion class for dogs, Robin Adair was awarded the prize over Bruce and Jake, Rex and Tweed II. being on exhibition only. The winner is a very typical dog, with a beautiful head, nice ears correctly carried, good coat, abundant on neck and shoulders, but short on back and loin, nice tail and of very stylish carriage. Bruce is also an exceedingly good collie, first-rate head and coat, but a trifle shallow in chest and slack in loin. Jake was outclassed. In the champion bitch class, Zulu Princess, Effie and Meg competed, and the honors went to Princess. We never saw this handsome bitch in better shape. In the open class for dogs, Hiram was given first, Duncan second, Brack third, Sandy and Hero vhc., Rokeby and Laddie hc., and Donald c. This class did not compare favorably with the bitch class in point of quality, and we did not think one of them first-rate. In the class for bitches, Winnie was placed first. This is a first-class bitch, and fully bore out our prophecy at New Haven, when we said she would make it hot for any of them when in good coat. Jean, second, is a nice little bitch, with the good coat and rather heavy body of her sire, old Marcus. Fairy, third, is a good mover, but we do not like her heavy ears. Of the three vhc.'s, Flyaway, Jersey Lily and Lizzie, we liked Flyaway the best. Eigg, c., is a well-bred bitch with good coat, but too short on leg and cloddy in appearance. In collie dog puppies, under 12 months, Argyle, placed first, we liked very well. Fritz and Robin Hood, vhc., are both nice puppies, the latter showing a good deal of quality, but is at present short of coat. Collie, Shepherd Boy and Major, hc., and Help, c., are all good puppies and worthy of mention. In the collie bitch puppies, under 12 months. Peep o' Day, a clever little tricolor, was given first; this is a very handsome puppy, with good head and ears, but a trifle short of coat. Effie Dean, vhc., is very little behind the winner. Nannie O., vhc., has profuse coat, heavy, badly carried ears, and is coarse. Juno II., hc., and Laurie, c., are both promising youngsters, especially the former.

BULLDOGS.

The champion class was divided into dogs and bitches. In the dog class Messrs. R. & W. Livingstone's Boz, shown in the very pink of condition, just managed to beat Tippoo, who was below himself in flesh and is a little pinched in muzzle. Bill is also a first-rate dog, but scarcely up to the standard of Boz or Tippoo. Old Ben was not for competition. In the bitch class Bellissima, in magnificent shape, easily beat Sweet Brier, who is pinched in face. In the open class for dogs, Hamlet, a tolerably good little brindle, beat Hero II., given second, and Boxer third. Mose, vhc., and Moses, c., we did not like. In the corresponding bitch class, Rhodora, a white bitch, wrongly entered as brindle, won easily over Helen, a very good-bodied bitch, placed second. Jenny, third, has seen her best days, and Julia is only a very moderate one.

BULL-TERRIERS.

It the champion bull-terriers over 25 pounds, Grand Duke, shown in superb condition, was given first. Young Bill shows age, and Lord Nelson, though he has a good body, is coarse in head and lippy. Bull-terriers, dogs or bitches over 25 pounds. President was placed first over Charley, given second, and Rose third. These are three fairly good ones. In champion bull-terriers under 25 pounds, Little Maggie was the only entry. She is a very good little bitch, rather coarse in tail. Bull-terriers under 25 pounds, dogs or bitches, were a very moderate lot. Doonie, transferred from Class 91, was given first, Venus second, Short third, and Katy vhc. Bull-terrier puppies brought out one fairly good one in Rosa, who was given the award.

BLACK AND TAN TERRIERS.

Black and tan terriers over seven pounds, dogs or bitches, was a small class. Bessie, the winner, is a very good one, especially in head; her markings might be a trifle better, but she is a well-shaped bitch and hard to beat. Lady, second, is well marked, but a trifle small and not so good in head as the winner. Brilliant, vhc., is a good shaped dog, rather thick in skull and a little too dark in color of tan. Of the others, Doctor, hc., and Sambo, c., are little more tan toys.

ROUGH-HAIRED TERRIERS.

This was the usual odds-and-ends collection. They were well judged. Some thought Sir Garnet should have been in the money, but our idea is that an Airedale's place is in the miscellaneous class. Heather and Tam Glen are two very good rough-haired Scotch terriers, the proper stamp of dog to win in this class.

DANDIE DINMONTS.

There were only three in the class, we thought them properly placed, the winner is quite a good specimen.

The Bedlington terriers were a small class, only two facing the judge out of the three entries. Blucher, the winner, is a first-rate dog, perhaps a little weak in jaw, but is of good coat and the correct type. Second prize was very properly withheld.

SKYE TERRIERS.

Jim, well known by this time, took another championship from Pepper and Souter Johnnie. In the open class there

were several very nice ones, only they were decidedly undersized. There was not much to choose between Boss and Watty, while Fanny was a good third. This was a remarkably well-judged class in our opinion. Indeed, Mr. Mortimer seems to be especially at home with long-coated terriers.

PUGS.

Pug owners did not agree with Mr. Dana putting Roderick over Joe in the championship class. True, "Rod" was looking better than we have ever seen him, but he is so bad in his hindlegs, double jointed in fact, that we must say we think Joe should have been first. Effie had a walk over for her championship. In the open classes the average quality was poor, for after the first three were sifted out the others were not worth much. Max is good in head and wrinkle, but has a flesh-colored nose, and the Roderick hindlegs. Bob is a very good one for a nine months' puppy. Tu-Tu is heavy in ears, faulty in skull and weak in under jaw. Wrinkle is plain in head, light in mask and small in eye. Pete is light in eye and lacks character. In the bitch class, Victoria we greatly preferred to Duchess, whose ears are outrageously large. Victoria, but for her loose tail, is a hard one to find fault with. Forest City Kennel's Dolly was shown too fat, and was nothing like so good as Minnie May II. In this class we should have placed Victoria first, Cryer's Dolly second and Minnie May II. third. The puppies were mostly of very tender age, and it is precarious work picking out winners at three months old and as bad to criticise such awards.

YORKSHIRE TERRIERS.

Through the whole of the Yorkshire classes Mr. Mortimer exercised excellent judgment. Hero was alone for the large championship. He is going off in coat, both in color and in quantity, and his owner was fortunate to sell him for a good price. In the large open class we had Lancashire Star first, good in coat and color. Prince is rather light in color, but makes up for that defect in length of coat. Bright on the contrary was good in color, but his coat should be longer. Both Nellie and Ben are Montreal silvers and were properly placed behind Billee Taylor and Eddie, both fairly good ones. Mrs. Kisteman was again to the front in small Yorkshires, winning the championship with Crickie and first in open class with Spring, the latter a very good little one. Chester is another nice one both in color and coat. Nellie and Teddie were not well shown, and we might have been inclined to give Charley third place though he is a little off in color. Mr. Marriot's pair were hardly up to the highly commended standard.

TOY TERRIERS AND SPANIELS.

In toy terriers under seven pounds, commendations were very freely distributed. Daisy we missed from her cage when making our inspection, but marked Gyp as best of the lot we did see. Pud and Nellie were also worth noticing, but the others had no great calls except on a judge's liberality.

The winning King Charles spaniel is far too large, and Sankey is not a good one. Mr. Phillips's unnamed one is too long in the face and not good otherwise. Duke of New York is a wonderfully short-faced dog, but that is all. Roy has no tan and Gypsy was out of condition. In Blenheims Sir Guy is nice in color but is too long in the face, and Duke is a big coarse dog not well marked. The Japanese spaniels were small in number but really extra good in quality. Ada promises to make up better than anything in the class.

POODLES AND MISCELLANEOUS.

Mr. Heckscher hit the mark every time when he handled the poodles, and next year the poodle owners ought to support his nomination for the same position. Rajah II. is a good dog and was well barbered, indeed the barber has as much to do with winning as the dog in the poodle classes. In the miscellaneous classes there was nothing of any great merit.

Many of the specials followed the awards in the regular classes. Where judging was necessary the decisions were in most cases satisfactory. In class NN., for the best English setter, dog or bitch, we do not understand why Mr. Higgins should give the place to Rock. For reasons already given we think him inferior to Foreman. The prize should have gone to Queen Alice, who is better than either. The FOREST AND STREAM prize for the best trained setter or pointer which has been trained by the method laid down in "Training vs. Breaking," brought out three, being nicely trained pointers, A. C. Collins's Fritz, Philip Thurtle's Jilt, and Luke W. White's Grace. All of them performed their tasks in a cheerful and intelligent manner that reflects great credit upon their handlers. That this exhibition was very pleasing to the spectators was manifest in the well merited applause which they liberally bestowed. The different classes were judged as follows: Mastiffs, Newfoundlands and pugs—Mr. Paul Dana, New York. St. Bernards, berghunde, spaniels (all classes), beagles, bassets, dachshunde, fox-terriers, collies, bulldogs, bull-terriers, and all other terrier classes—Mr. James Mortimer, New York. Greyhounds, deerhounds and Italian greyhounds—Mr. Joseph R. Pierson, Buckingham, Pa. Pointers—Mr. E. C. Sterling, St. Louis, Mo. English setters—Mr. John C. Higgins, Delaware City, Del. Black and tan setters, Irish setters and foxhounds—Mr. E. C. Sterling and Mr. John C. Higgins. Chesapeake Bay dogs—Mr. Isaac Townsend. Poodles—Mr. John G. Heckscher.

Following is a full list of the

AWARDS.

Champion Mastiffs, Dogs.—1st, Chas. H. Mason's Nevison, imported, fawn, black points, 4½yrs., Gurth—Juno.

Champion Mastiffs, Bitches.—1st, Ashmont Kennel's Dolly Varden (A.K.R. 75), fawn, black points, 4yrs., Young Prince—Merlin.

Mastiffs, Dogs.—1st, Harry Hill's Dan, fawn, 4yrs., full pedigree; 2d, Henry Pratt's Billo, 18mos., imported stock—Nellie; 3d, W. P. Stevenson's Homer, fawn, 16mos., Cato—Queen II. (A.K.R. 158), Very high com., David G. Yungling, Jr.'s Jim, fawn, 3yrs., full pedigree. High com., William H. Lee's Ilford Cromwell, brindle, 3yrs., Cardinal—Cleopatra. Com., Max Meyer's Bruno, fawn, 18mos., full pedigree.

Mastiffs, Bitches.—1st, A. Grant's Regina, fawn, 3yrs., Young King—Rannee; 2d, W. R. MacDiarmid's Monmouth Meg, fawn, 2½yrs., Salisbury—Tigress II.; 3d, James L. Flung's Nana, fawn, black points, 3yrs., Cæsar—Dido. Very high com., C. D. Arthur's Queen, fawn, 20mos., Harold—Dido. High com., A. F. Hennings's Dizz, fawn, 20mos., imported Monarch—Nell.

Mastiff Puppies, Dogs or Bitches.—1st, W. P. Stevenson's Hector, fawn, 9mos., Nevison—Venus; 2d, James Lenox Banks's Mayor of the Cedars (A.K.R. 549), fawn and black points, 10mos., Nevison—Venus; 3d, M. M. Frothingham's Sandy, fawn, 4mos., Grim—Sallie Waters. Very high com., W. S. Phraners's Court, fawn, 4½mos., Harold—Dido; C. F. Frotheringham's unnamed, fawn, 4mos., Grim—Sallie Waters. Com., C. H. Hays's Veuve Clicquot, fawn, 5mos., Harold—Dido, Jr.

Champion Rough-Coated St. Bernards, Dogs.—1st, E. R. Hearn's Bonivard (E.K.C.S.B. 11,733, A.K.R. 361), dark orange tawny, 4½yrs., Souldan—Myzar.

Champion Rough-Coated St. Bernards, Bitches.—1st, E. R. Hearn's Gertie (A.K.R. 738), orange tawny, 3½yrs., Nero—Clio.

Rough-Coated St. Bernards, Dogs.—1st, E. R. Hearn's Duke of Leeds, imported, rich orange brindle, 2yrs., Mount Zion II.—Novice; 2d, Rev. J. Cumming Macdona's Caliph, whelped August, 1882, Centaur—Snowdrop; 3d, Washington Seligman's Brave, red and white, 2yrs., full pedigree. Very high com., Mrs. D. P. Foster's St. Elmo, tawny and white, 4yrs., full pedigree; Rev. J. Cumming Macdona's Cardinal Borromo, whelped July 30, 1882, (E, 11,737) Boniface—Bessie II.; J. E. Orr's Bronze, imported, brindle, 29mos., champion Cardinal—Abbess; Rev. J. Cumming Macdona's Primate, (E. 11,737) Boniface—Duchess (E. 9,385). High com., Locust Grove Kennel's Tige, tawny, brindle and white, Major—Beauty; Jonathan Thorne, Jr.'s Pontiff, tawny and white, 4yrs., Matterhorn—Madge; Arthur C. James's Alp, tawny and white, 20mos., Grosvenor—Eiger. Com., J. H. Smith's Judge, black, white and tawny, 3yrs., Phelps's imported Bruno—Pheips's imported Minka.

Rough-Coated St. Bernards, Bitches.—1st, E. R. Hearn's Rohna, imported, orange and tawny, 18mos., S. W. Smith's Rollo—Mr. Snelling's Queenie II.; 2d, Rodney Benson's Millicent II., orange and white, 2½yrs., Ruler—Darig; 3d, Rev. J. Cumming Macdona's Baronne, Ch. Barry, 6,414—Mont Cenis. Very high com., Rev. J. Cumming Macdona's Beryl, whelped Feb. 23, Ch. Bayard, 8,447—Richmond Brande. High com., Jonathan Thorne, Jr.'s Sappho, tawny, white and black, 15mos., Monk II.—imported Sheila (A.K.R. 796).

Champion Smooth-Coated St. Bernards, Dogs.—Springhurst Kennel's Fido, tawny and white, 8yrs., imported from Hospice St. Bernard, Switzerland.

Champion Smooth-Coated St. Bernards, Bitches.—Springhurst Kennel's Baroness, tawny and white, 3yrs. 9 mos., Grosvenor (E.K.C.S.B., 9,366)—Vesta.

Smooth-Coated St. Bernards, Dogs.—1st, E. R. Hearn's Don II. (E. K.C.S.B. 12,907) imported, orange tawny, 3yrs., champion The Shah—Dewdrop; 2d, Millbrook Kennel's Royalist (A.K.R. 580), orange tawny, 5yrs., champion The Shah (E. 4,481)—Bernie III; 3d, James H. Hyde's Sultan, white, tiger spots, 18mos., Pluto—Blanca. Very high com., Springhurst Kennel's Harold, tawny and white, 23mos., Fido—Baroness; A. M. Dodge's Guard, brown and white, 2yrs. 10mos., imported Harold—Judy. High com., Springhurst Kennel's Jumbo, tawny and white, 18mos., Fido—Baroness. Com., Charles S. Smith's Diogenes, tawny, 2yrs., 5mos., Rex—Diana; Miss C. Pryor's Schnei, tawny and white, 14mos., Haine's champion Harold—Haine's Vix; Rev. J. Cumming Macdona's Jolly Friar, whelped July 4, 1882. Full pedigree, Hermit—imported Dora.

Smooth-Coated St. Bernards, Bitches.—1st, E. R. Hearn's Leila (E. K.C.S.B. 12,912), imported, tawny brindle, 2½yrs., Roland—Nellie; 2d, Milbrook Kennel's Snowball, orange tawny, Pearsall's Fido—Loomis's Dinah; 3d, Springhurst Kennel's Gladys, tawny and white, 1yr. 11mos., Fido—Baroness. Very high com., R. W. Leonard's Rosary, tawny and white, 4yrs., Chamounix—Blanc.

Rough-Coated St. Bernard Puppies, under 12 Months, Dogs or Bitches.—1st, Jonathan Thorne, Jr.'s Schoonhoven, tawny and white, 9mos., Monk II.—Sheila (A.K.R. 796); 2d, E. R. Hearn's Gora (A.K.R. 1050), light tawny and white, 10mos., Monk—Sheila. Very high com., Neversink Lodge Kennel's Alp, tawny, 8mos., Carlisle—Beauty. High com., Miss Hilda Ward's Ma-Gog, fawn, white and black markings, 8mos., Macdona's champion Bayard (E.K.C.S.B. 8447)—Bega (E.K.C. S.B. 1359). Com., Essex Kennel's Bernardo, tawny and white, 3mos., Alp II. (A.K.R. 705)—Daphne II. (A.K.R. 489).

Smooth-Coated St. Bernard Puppies, under 12 Months, Dogs or Bitches.—1st, John P. Haines's Juan, orange and tawny, 3mos., Lohengrin—champion Jura; 2d, John P. Haines's Caro, orange and tawny, 3mos., Lohengrin—champion Jura. Very high com., Millbrook Kennel's Eckhardt (A.K.R. 413), orange tawny, 10mos., Rex—Alma I.; G. F. Baker's Como, tawny and white, 10mos., imported Fido—Rosary; E. R. Hearn's Puritan, brindle and white, 3½mos., Rector—Alma II.; Chequasset Kennel Club's Noblesse (A.K.R. 503), orange, brindle and white, 5mos., Alp II. (A.K.R. 705)—Brenner (A.K.R. 706); Springhurst Kennel's Tony, tawny, 11mos., imported Fido—Rosary; Rev. J. Cumming Macdona's Snowstorm, 7mos., Rupert—Duchess; John P. Haines's Chic, orange and tawny, 3mos., Lohengrin—champion Jura. High com., Woodbury Langdon's Argus, tawny and white, 10mos., Rex—Diana; John P. Haines's Perro, orange and tawny, 3mos., Lohengrin—champion Jura; R. P. Lounsbery's Buster, tawny and white, 10mos., imported Fido—Rosary; E. R. Hearn's Druid, brindle and white, 3½mos., Rector—Alma II.

Berghunde, Dogs.—1st, George E. McCollom's Don, orange, tawny and white, 4½yrs., imported Marco—imported Alice; 2d, W. A. Fuseron's Dan, tawny, 3yrs., imported, out of Pflocksie. Very high com., F. M. Du Faur's Belle, tawny, 3yrs.

Newfoundlands, Dogs or Bitches.—1st, C. J. Whigam's Jack, black, 5yrs., imported; 2d, Charles T. Strauss's Tasso, black, 2yrs., Pontoon—Fannie. Very high com., W. H. Lacy's Bruno, black, 3yrs., imported. High com., W. Barbour's Cabot, black, white spot, 7½mos.

Champion Greyhounds, Dogs.—1st, H. W. Smith's Friday Night, (A.K.R. 753) black and white, 2½yrs., Master's Prince—I. H. Salter's Sally.

Greyhounds, Dogs.—1st H. W. Huntington's Bouncing Boy, black, 1½yrs., Walton Lad—Cremorne; 2d, Mrs. Henry Allen's Dell, fawn, 2yrs., imported. Very high com., J. Coleman Drayton's Slingsby, black, 7 yrs., Rapid—Sally. High com., Edward Cullen's Moscow, fawn, 3yrs., full pedigree.

Greyhounds, Bitches.—1st, H. W. Huntington's School Girl, black, 1½yrs., Schoolfellow—Sol-Fa; 2d, withheld. Very high com., H. W. Huntington's Begonia, black, 5yrs., Born a Demon—Bella.

Greyhound Puppies, under 12 Months, Dogs or Bitches.—1st withheld; 2d, Hy. Henderson's Flash, fawn, 9mos. Very high com., H. W. Huntington's La Belle, black, 10mos., champion Double Shot—champion Clio.

Champion Deerhounds.—1st, Clovernook Kennel's Roy, brindle, 2yrs., Paddy—Lassie.

Deerhounds, Dogs.—1st, Archibald Rogers's Bruce, dark brindle, 1½yrs., Grey Gonwyn (late Hector)—Leona (late Linda); 2d, W. D. Whipple's Bruce, dark gray, 5yrs. Very high com., Archibald Rogers's Borrua, dark brindle, 2½yrs., Wallace—Lorna.

Deerhounds, Bitches.—Awards withheld.

Champion Pointers, over 55 lbs., Dogs.—1st, John W. Munson's Meteor, imported, liver and white, 3yrs., Garnet—Jilt.

Champion Pointers, over 50 lbs., Bitches.—1st, Christopher Moller's Water Lily, lemon and white, 5yrs., Skidmore's Don—Dolly.

Pointers, over 55 lbs., Dogs.—1st, C. W. Littlejohn's Fritz, lemon and white ticked, whelped June, 1881, Beaufort—Spot; 2d, Neversink Lodge Kennel's Drake, liver and white, 2yrs., champion Croxteth—Lass; 3d, L. & W. Rutherfurd's Danby, liver and white, 3yrs., Speck—Dinah. Very high com., C. W. Littlejohn's Pilot, liver and white, 3½yrs., Scout—Spot; J. W. Munson's Maxim, imported, liver and white, 3yrs., Garnet—Jilt. J. W. Munson's Bang, imported, liver and white, 5yrs., champ. Bang—Luna. High com., J. H. Stromberg's Guy, lemon and white, 2yrs., Beaufort—Spot; C. M. Munhall's Donald II., liver, white and ticked, 20mos., champion Donald—Devonshire Lass; W. H. Force's Clydesdale, liver and white, 3yrs., Massey's Dash—Virginia Belle.

Pointers, over 50 lbs., Bitches.—1st Frank E. Rogers's Miss Merrymack, liver and white, 3yrs., King Bow—Grace; 2d, J. O. Donner's Fan Fan, liver and white, 4yrs., imported; 3d, G. W. Amory's Sal, liver and white, 3yrs., Dick—Ruby. High com., Knickerbocker Kennel Club's Lady Mac (A.K.R. 1040), black, 3yrs., champion Pete—Mab.

Champion Pointers, under 55 lbs., Dogs.—1st, Norbury Kennel's Bravo, lemon and white, 4yrs., Bragg—Kate.

Champion Pointers, under 55lbs., Bitches.—1st, J. W. Munson's Vanity, liver and white, 2yrs., champion Baug—Pride.

Pointers, under 55lbs., Dogs.—1st, W. Tallman's Pride, liver and white, 2yrs., Croxteth—Royal Fan; 2d, A. C. Collins's Fritz, lemon and white ticked, 2yrs. 7mos., imported Bob—Gabbs's Fly-Shot; 3d, I. S. Crane's C. Don, liver and white, 2yrs., Robin—Sigler's Gypsy. Very high com., G. F. Jordan's Booths, lemon and white, 2½yrs., St. George—Dinah; Knickerbocker Kennel Club's Craft (A.K.R. 1038), lemon and white, 2½yrs., Bang—Jean; R. C. Cornell's Match, liver and white, 4yrs., champion Sensation—champion Grace; Francis Lynch's Max, fawn and white, 4yrs. High com., Dr. John A. Wells's Puck, liver and white, 2½yrs., Lewis Joe—Martin's Fan.

Pointers, under 50lbs., Bitches.—1st, Neversink Lodge Kennel's Jilt, liver and white, 19mos., champion Croxteth—Lass; 2d, R. Hitchcock's Vision (A.K.R. 778), liver and white, 3yrs., Croxteth—Vinnie; 3d, J. W. Munson's Flash III., liver and white, 2yrs., imported Bang—Pride. Very high com., Charles R. Christy's Nina, black and white, 2yrs., Nat—Susy Royal; J. N. Lewis's Jill, liver and white, 2yrs., Joe—Fan Fan. High com., W. R. Williams's Rose, liver and white, 2½yrs., champion Don—Lamb's champion Elf; D. S. Gregory Jr., 2d's Belle (A.K.R. 203), lemon and white, 4yrs. 3mos., Sensation—Grace; R. T. Vandevort's Joy, liver and white, 2yrs, Boon—Rena.

Pointer Puppies, over 12 and under 18 Months Old, Dogs.—1st, Chas. F. Murphy's Rox (A.K.R. 566), liver and white, 14mos., Dick (A.K.R. 76—Gen. McLaughlin's Belle, by Scout out of Freeman's Belle; 2d, Jas. K. Heyde's Don, lemon and white, whelped April 27, 1883. Jim (A.K.R. 353)—D. Allerton Jr.'s Dione.

Pointer Puppies, over 12 and under 18 Months, Bitches.—1st, C. M. Munhall's Dora, liver and white, 13mos., champion Sensation—Devonshire Lass; 2d, W. F. Sage's St. Kilda, liver and white, 12mos., Dilley's champion Ranger—Dilley's White Lily. Very high com., Neversink Lodge Kennel's Romp, liver and white, 14mos., champion Croxteth—Lass; Essex Kennel Club's Cora, liver and white, 16mos., Arcos I.—Cora. High com., Thomas F. Ryan's Nell III., lemon and white, whelped Nov. 13, 1882, Czar, by Snapshot—Gypsie, dam Nell II., she by Rake II.—Nell.

Pointer Puppies, under 12 Months, Dogs or Bitches.—1st, Norbury Kennel's Daisy Bravo, lemon and white, 8mos., champion Bravo—Lily; 2d, F. R. Hitchcock's Prince Hamlet, lemon and white, 8mos., Sensation—Lass. Very high com., Dr. A. C. McCollom's Faust II. (A.K.R. 696), liver and white, whelped May 12, 1883, champion Faust—Gertrude. High com., Garret Roach's Lou, lemon and white, 11½ mos., Beaufort—Duchess; Knickerbocker Kennel Club's Jule (A.K.R. 1042), liver and white, 8mos., St. John—Folly; Julien Rosenblatt's Don, brown and white, 10mos., Don, Sr.—imported bitch; Francis Lynch's Windsor, white and black, 7mos., Bang Bang—Daisy Dean.

Champion English Setters, Dogs.—1st, C. F. Crawford's Foreman, black, white and tan, 4yrs., Dashing Monarch—Fairy II.

Champion English Setters, Bitches.—1st, T. G. Davey's Belle's Pride, 4yrs., blue belton, champion Paris—Harrison's Belle.

English Setters, Dogs.—1st, F. E. Lewis's Rock, lemon and white, 2½yrs., Water's Grouse—French's Daisy; 2d, L. C. Clark's Bob White, lemon belton, 2yrs., Young Laverack—Lady May; 3d, Neversink Lodge Kennel's Laverack Chief, black, white and tan, 3½yrs., Pontiac—Fairy II. Very high com., Thomas F. Ryan's Count Dan, blue belton, 5yrs., Carlowitz—Queen Bess; Dr. S. Fleet Speir's Marquis de Correze, black, white and tan, 2½yrs., Emperor Fred—Lizzie Lee; Stewart McKay's Pride of Columbia, white, 2yrs., Cossack—Ophelia; H. Pape's Prince Messenger, white and black, 2yrs., Thunder—Loui; A. H. Moore's Prince Al, lemon and white, champion Leicester—Dodge's Rose. Com., G. F. Jordan's Telford, blue belton, 2yrs., Darkie—Rosie Morn.

English Setters, Bitches.—1st, E. W. Jester's Dashing Belle, (A.K.R. 414) blue belton, 34mos., Dashing Monarch—Blue Belle; 2d, E. W. Jester's Dashing Jessie (A.K.R. 815), blue belton, 34mos., Dashing Monarch—Blue Belle; 3d, C. A. Stone's Forest Dora, blue belton, 2yrs., champion Dick Laverack—Forest Fly. Very high com., John G. Heckscher's Modjeska, lemon and white, 7yrs., champion Leicester—Peeress; J. O. Donner's Princess Helen, orange and white, 2yrs., champion Thunder—Donner's Bessie; Thomas F. Ryan's Linda, black, white and tan, 21mos., Emperor Fred—Cecilia D.; E. A. Hemberg's Lucid, blue belton, 5yrs., Sim's champion Dash—champion Maid of Honor; John J. Scanlan's Flake, black, tan and white ticked, Druid—Swaze; Howard Hartley's Daisy Queen, white, black and tan, 3yrs., Rock—Meg; T. G. Davey's Genevieve, blue belton, 2yrs., Harrison's London—Dawn. High com., H. F. Aten's Crook, white, black ticked, 4½yrs., Carlowitz—Dell; Dr. F. B. Greenhough's Brier, white, black and tan, 3yrs., 3mos., Coin—Dr. Greenhough's Beauty; Dr. S. Fleet Speir's Lady Sanborn, orange belton, 3yrs., Count Noble—Spark; W. A. Buckingham's Alice Dale, orange and white, 2yrs., Waters' Grouse—Daisy Dale; Lawrence Shuster, Jr.'s Clemantine D., white, black and tan, 4yrs., Dash III.—Cornelia. Com., Locust Grove Kennels's Smut II., black, 5yrs., Pratt's Trim—Earl's Smut; R. W. Dodd's Lily, white, 21mos.; Charles E. Husted's Daisy, black, white ticked, 5½yrs., Benedict's Dash—Galloway's Flirt.

English Setter Puppies, over 12 and under 18 Months, Dogs.—1st, W. R. Travers's Rocket (A.K.R. 118), white, black and tan, 17mos., Wagner (A.K.R. 229)—Nell Kelly (A.K.R. 250); 2d, J. J. Scanlan's Drake Carter, black, white and ticked, 10mos., Cashier—Flake. Very high com., S. B. Foord's Brant F., blue belton, 17mos., Dashing Monarch—Mollie Bawn; C. A. Stone's Forest Royal, blue belton, 18mos., Prince Royal—Forest Queen. High com., G. K. Haswell's Jock, orange and white, 17mos., Promise—Abbey; H. Hedeman's Plunger, blue belton, 14mos., Emperor Fred—Polka. Com., Locust Grove Kennel's Paul, black and white, 15mos., Dash III.—imported Blanche.

English Setter Puppies, over 12 and under 18 Months, Bitches.—1st, J. J. Scanlan's Cliney Carter, blue belton, 12mos., Cashier—Flake; 2d, Ed. Lohman's Mistletoe, lemon and white ticked, 12mos., Emperor Fred—Countess Belle. Very high com., Lawrence Shuster, Jr.'s, Clarenda T., white, black and slightly blue belton, 12mos., Thunder—Cornelia. High com., Bassford & Hall's Betsy Druid, black, white and tan, 15mos., King Dan—May Queen.

English Setter Puppies, under 12 Months, Dogs or Bitches.—1st, F. Windholz's Princess Phœbus (imported) blue belton, 10mos., Prince Phœbus—Patch; 2d, S. B. Foard's Rosa F., black, white and tan, 10mos., Dashing Monarch—Leah I. Very high com., Dr. S. F. Speir's Windermere, lemon belton, under 12mos., Druid—Countess Louise; T. S. Dumont's Pendragon, black and white, 9mos., Count Noble—Floy; Ricardo de B. Smith's Peek-a-Boo, blue belton, 10mos., Perfection—imported Beauty; H. D. Towner's Count Ranger, black, white and tan, 9mos., Count Noble—Gertrude; J. H. Lee's Cashboy, blue belton, 11mos. 21dys., Cashier—Flake. High com., Dr. R. T. Tull's Dashing Armida, black and white ticked, 11mos., Dashing Monarch—Armida; Dr. R. T. Tull's Dashing Prim, black and white ticked, 11mos., Dashing Monarch—Armida; Pierre Noel's Verra, white and orange, 8mos., Bruce—Abbey.

Champion Black and Tan Setters, Dogs.—1st, G. R. Reed's Flash (A.K.R. 388), 3yrs. 4mos., Brown—Cute.

Champion Black and Tan Setters, Bitches.—1st, Dr. W. H. Tillingharst's Perley, 6yrs., Marble's Grouse—Queen Bess.

Black and Tan Setters, Dogs.—1st, Edwin S. Dixon's Little Boy, 1yr. 5mos., Dixon's Pilot—Fly; 2d, Miss Lillian Woodworth's Phil, 3½yrs.; 3d, Miss Maggie E. Mann's Punch, 6yrs., Dr. Fleet Speir's Romeo—G. C. Colburn's Fannie. Very high com., Theobald Puckeridge's Ocolia, 21mos.; Ed. Maher's Duke, 3yrs., Bob—Nell; L. Waterbury's Pride of the Frontier, 4yrs., Howe's Duke—Fisher's Flirt. High com., L. W. Pye's Puck, 21mos., Dexter (A.K.R. 379)—Belle. Com., Stony Point Kennel's Black Shoon, 3yrs.; Neversink Lodge Kennel's Bruce, 4yrs., champion Bob—champion Beauty.

Black and Tan Setter Bitches.—1st, Malcolm McLaue's Daisy Blossom, 2yrs., Blosson—Bessie B., by Marble's Grouse—Young St. Hilda; 2d, J. L. Campbell's Diana, 2yrs., Jack (Grouse—Moy)—Gup (Duke—Belle III.); 3d, W. H. Mason's Daisy, 2yrs. 8mos., Dr. Aten's Glen—W. H. Pierce's Fannie.

Black and Tan Setter Puppies, under 12 Months, Dogs.—1st, James T. Walker's Grouse, Jr., black, 5½mos., Jock—Black Bess (A.K.R. 422); 2d, James T. Walker's Jock, Jr., 5½mos., Puddicombe's champion Jock—Black Bess (A.K.R. 422).

Black and Tan Setter Puppies, under 12 Months, Bitches.—1st, James T. Walker's Dora, black and tan, 5½mos., Puddicombe's champion Jock—Black Bess.

Champion Irish Setters, Dogs.—1st, Dr. W. Jarvis's Elcho, Jr. (formerly Elcho VII.), dark red, 2yrs. 11mos., champion Elcho—champion Noreen.

Champion Irish Setters, Bitches.—1st, W. Kemble Lente's Trix, dark red, 4yrs., champion Elcho—champion Fire Fly.

Irish Setters, Dogs.—1st, Hiram & William Harris's Jack, red, 2yrs., imported, Barney—Rhoda; 2d, J. Henry Roberts's Bruce, red, 3yrs., champion Elcho (A.K.R. 295)—champion Noreen (A.K.R. 297); 3d, Rory O'More Kennel's Rexford, red, 3yrs. 3mos., champion Berkley—Sampson's Nora. Very high com., H. B. Goetschius's Chief II. (A.K.R. 232), red, 3yrs., champion Chief (A.K.R. 231)—imported Doe; Charles W. Roedenberg's Chip, red, 3yrs., Chief—Doe; G. H. Bunnell's Berkshire, red, 18½mos., Chief—Kate. High com., Charles R. Thorburn's Rory O'More, Jr., dark red, 2½yrs., champion Rory O'More—Nora O'More; F. L. Van Benschoten's Red Dick, red and white, 6yrs., Elcho—Jessie; H. L. Bullard's Philo, red, 4yrs., Derg—Kathleen. Com., Max L. Ranson's Larry II., red, 1yr. 9mos., Larry—ited Lassie.

Irish Setters, Bitches.—1st, John F. Dwight's Noreen II., red, 2yrs., 11mos., Elcho—Noreen; 2d, H. B. Thomas's Fama, red, 1yr., Glencho—Nora; 3d, Chas. R. Thorburn's Phroney Jane, dark red, 2yrs., champion Berkley—Nora. Very high com., A. S. Guild's Dorcas, dark red, 16mos., champion Glencho—Syren II.; F. M. Carrington's Hazel, red, 3yrs. 11mos., Elcho—Rose; C. R. Squire's Ruby S. (A.K.R. 512), red, 2yrs. 3mos. 8 days, champion Rory O'More—Nora O'More; Chas. J. Stwart's Meg, red, 3yrs., Max Wenzel's Chief, Rory O'More Kennel's Lady Edith, red, 21mos., champion Rory O'More—Lady Berkley; J. J. Scanlan's Lulu II., red, 4yrs., champion Berkley—Lulu. High com., Frank Leonard's Bess, red, 15mos., Glencho—Syren II. Com., Rory O'More Kennel's Gay, red, 4½yrs., champion Elcho—Fire Fly; C. E. Bunnel's Lady Berkshire, 12½mos., red, Max Wenzel's Chief—Kate, and Kate, red, 4¾yrs., Lincoln & Hillyar's Dash—Bray's Kate.

Irish Setter Puppies, under 12 Months, Dogs.—1st, Rory O'More Kennel's Rory O'More II., red, 9mos., champion Rory O'More—Norah O'More; 2d, John J. Scanlan's Pride of Glencho, red, 6mos., champion Glencho—Lulu. Very high com., Stony Point Kennel's Red, 9mos., Dan—Moy; W. G. Brokaw's Pilot, 9mos., Dan—Moy; Bassford & Hall Harrison Kennel's Garfield, 11mos. 27dys., imported Zig—Fashion; D. Barrow Freedman's Prince, red, 8mos., Dan—Moyse. Com., W. S. Maddock's Lad, red, 5mos., Denis—imported bitch.

Irish Setter Puppies, under 12 Months, Bitches.—1st, John J. Scanlan's Lady Glencho, red, 6mos., champion Glencho—Lulu III.; 2d, E. M. Carrington's Pattie, red, 9mos., Biz—Hazel. Very high com., Ashmont Kennel's Noreena, dark red, 9mos., champion Elcho—champion Noreen; W. H. Mason's Nett, red, 6½mos., Glencho—Fannie; W. H. Mason's Lillie, red, 6½mos., Glencho—Fannie; W. H. Mason's Rose, red, 6½mos., Glencho—Fannie.

Chesapeake Bay Dogs, Dogs or Bitches.—1st, J. H. Bradford's Rose, Lena—Bell, full pedigree; 2d, Louis C. Clark's Chess, reddish brown, 3yrs., Averill's Sport—Averill's Rose.

Champion Irish Water Spaniels, Dogs or Bitches.—No entries.

Irish Water Spaniels, Dogs or Bitches.—1st, Archibald Rogers's Irish Chief, 3yrs., champion Barney—Irish Nell; 2d, Essex Kennel Club's Wasso, 18mos., Sailor—Fannie.

Champion Field Spaniels (any color) over 28 lbs., Dogs or Bitches.—1st, H. W. Huntington's Benedict (A.K.R. 61), black, 4yrs., champion Bachelor—Negress.

Field Spaniels (any color) over 28 lbs., Dogs or Bitches.—1st, Winchester Johnson's Critic, black, 2yrs., Brush II.—Blackie II.; 2d, James Watson's Bateman, imported, lemon and white, 18mos. Very high com., Andrew Laidlaw's Toronto Jet (A.K.R. 860) imported, black, 3½yrs., Nigger—Belle. High com., Hornell Spaniel Club's Powell, black, 2yrs. 10mos., Brag—Nelly; Frank Thomson's Don, lemon and white, Bruno—Gill. Com., Herman F. Schellhass's Benedict's Boy (A.K.R. 130), black, 22mos., imported champion Benedict—imported Beatrice; Frank Thomson's Punch, lemon and white, Bruno—Gill.

Champion Cocker Spaniels (any color) under 28 lbs., Dogs or Bitches.—1st, J. P. Willey's Obo II., black, 23mos., Farrar's Obo—Chloe II.

Cocker Spaniels (liver or black) under 28 lbs., Dogs or Bitches.—1st, B. F. Wilson's Peerless Gloss, black, 32mos., Young Berwerlie—Nellie; 2d, E. W. Barker's Jumbo, liver, 18mos., Hornell Dandy—Hornell Dinah. Very high com., Andrew Laidlaw's Woodstock Flirt (A.K.R. 861), black, 14½mos., imported Tippo—imported Toronto Jet (A.K.R. 860). High com., Wm. Dunphy's Bessie, black, 15mos., champion Beau—Fancy. Com., Hornell Spaniel Club's Sam, black, 20mos., champion Bonanza—Pansy.

Cocker Spaniels (any color other than liver and black) under 28lbs., Dogs or Bitches.—1st, Hornell Spaniel Club's Rattler, chestnut and tan, 1yr., Dandy—champion Dinah; 2d, Wm. Dunphy's Fancy II., black, 15mos., champion Beau—Fancy. Very high com., Capt. J. E. Jones's Blossom, liver and white, 15mos., Charley—Powder. High com., Capt. J. E. Jones's Powder, liver and white, 4yrs., Lord Cardigan's Kennel. Com., George Miller's Clytie, liver and white, 6yrs., Watson's Shot—Hall's Lou.

Field or Cocker Spaniel Puppies (any color) under 12 Months.—1st, Winchester Johnson's Black Tournie, black, 8mos., Obo II. (A.K.R. 432) —Critic (A.K.R. 303); 2d, W. O. Partridge's Helen, black, 8mos., Obo II. (A.K.R. 432)—Critic (A.K.R. 303). Very high com., Dr. J. S. Niven's Niven's Darkey, black, 8mos., Frank—Nellie. High com., Hornell Spaniel Club's Darling, liver, 10mos., Dandy—Topsy.

Champion Foxhounds, Dogs or Bitches.—1st, Essex County Hunt's Vinegar, white and tan, 6yrs., imported.

Foxhounds, Dogs or Bitches.—1st, Essex County Hunt's Cardinal, white and tan, 5yrs., imported; 2d, Essex County Hunt's Warrior, white and tan, 6yrs., imported; 3d, Essex County Hunt's Manager, white and tan, 5yrs., imported. High com., W. Ball's Brownie, dark tan, 17mos., Sam—Flora. Com., Essex Kennel Club's Sport, black and tan, 2yrs.

Dachshunde, Dogs or Bitches.—1st, W. B. Vogelsang's Gretchen, dark brown and tan, 15mos., imported; 2d, J. B. Marris, Jr.'s Dutchy, brown, 3yrs., imported. High com., Essex Kennel Club's Waldman, black. Com., W. Schell, Jr.'s, Cora, black and tan, 3yrs., Dan—Tankell.

Champion Beagles, Dogs or Bitches.—1st, Albert H. Wakefield's Bush, white, black and tan, 2½yrs., Flute—Queen.

Beagles, Dogs.—1st, Henry Donoline's Frank, lemon and white, 2yrs. 10mos., Rud—Rose; 2d, W. H. Moller's Duke, black, white and tan, 4yrs., Ringold—Riguet; 3d, W. H. Moller's Bugle, black, white and tan, 1yr. 9mos., Deacon—Midget. High com., W. H. Ashburner's Foreman, imported 1884, tan, lemon and white, 4yrs., Bravo—Honesty.

Beagles, Bitches.—1st, N. Elmore's Chase, white, black and tan ticked, 1yr. 10mos., Ringwood—Winnie; 2d, W. H. Moller's Midget, black, white and tan, 5yrs., General Rowett's Lee—Hay's Rill; 3d, W. H. Ashburner's Deborah, imported, black, white and tan, 2yrs., Miraculous—Rachel. Very high com., A. C. Krueger's Rena, white, black and tan, 3½yrs.. Ringwood II.—Spider. High com., Chas. F. Kent's Lady Elmore, black, white and tan, 15mos., Ringwood—Queen. Com., J. Satterthwaite, Jr.'s Fly, black, white and tan, 3yrs. 11mos., Pet—Beauty.

Beagles, Puppies, under 12 Months, Dogs or Bitches.—1st, W. H. Moller's Marjory, black, white and tan, 9mos., Hunt's Duke—Hunt's Minta. Very high com., George A. Post's Judy, black, white and tan, 9mos., Racket—Fly. High com., W. F. Streeter's Keiser, black, white and tan, 6mos., Elmore's King—Mary. Com., Locust Grove Kennel's Music, black, white and tan, 11mos., Box—Lilly II.; Francis Lynch's Sally, black, white and tan, 5mos., Ringwood—Silver.

Basset Hounds, Dogs or Bitches.—1st, W. R. Chamberlain's Nemours, black, white and tan, 14mos., Jupiter (E.K.C.S.B. 12,152)—Viviern.

Champion Fox-Terriers, Dogs.—1st, Prescott Lawrence's Brockenhurst Joe, white, black and tan, 10yrs., Belgrave Joe—Tricksey.

Champion Fox-Terriers, Bitches.—1st, John E. Thayer's Richmond Olive, white, with black and tan markings, 2yrs., Olive Tart—Dickerson's Jess.

Fox-Terriers, Dogs.—1st, L. & W. Rutherfurd's Belgrave Primrose, white and tan, 3mos., Belgrave Jerry—Wasp; 2d, Clovernook Kennel's Scandale, white, black and tan, 1yr. 11mos., Joker—Ella; 3d, John E. Thayer's Raby Tyrant, white, black and tan markings, 3yrs., Bailiff II.—Peach. Very high com., John T. Cable's Vakeel, white, black and tan, 2½yrs., champion Volo—champion Spiteful; New Brighton Fox-Terrier Kennel's Marlboro Jockey, Jr., white, black and tan, 1yr., Marlboro Jockey—Twinkle; Prescott Lawrence's Buff, black and white, 8yrs., Buggett's Swan; J. B. McDewitt's Roderick, black, white and tan, 18mos., imported. High com., B. M. Cole's Terror, white and orange, 1yr., Dr. Field's Tyke—A. Belmoet's Fide; New Brighton Fox-Terrier Kennel's Grip, white, black and tan spots, 2yrs., Yorkshire Bill—Vanity. High com., R. Gibson's Belvoir Jim, white, black and tan, 2yrs., Spigot—Lily. Com., H. L. Daggett's Nip, white and black markings, 4yrs., Brockenhurst's Joe—Lady Teazel; New Brighton Fox-Terrier Kennel's Governour, white, black and tan, 1yr., Grip—Nancy; Geo. W. Haines's Tough, black and white, 2½yrs., imported. Full pedigree.

Fox-Terriers, Bitches.—1st, L. & W. Rutherfurd's Dance, white, black and tan, 18mos., Brockenhurst's Spice—Polonaise; 2d, John T. Cable's Village Belle, white black and tan, 2yrs. 9mos., champion Volo—champion Beauty; 3d, R. & W. Rutherfurd's Warren Testy, black, white and tan, 1yr., Nailer—Diana. Very high com., Alex. Taylor, Jr.'s Squeak, white, black and tan, 2½yrs., Moslem II.—Moonlight; New Brighton Fox-Terrier Kennel's Diamond, white, black and tan, 1yr., Marlbro Jockey—Twinkle. High com., New Brighton Fox-Terrier Kennel's Twinkle, white, black and tan, 2yrs., Jester II.—Thyra. Com., Neversink Lodge Kennel's Lady Gay, white, black and tan markings, 6yrs., P. Lawrence's Paulo—Nettle.

Wire-haired Fox-Terriers, Dogs or Bitches.—1st, Neversink Lodge Kennel's Tyke, white and tan, 5yrs., Tee Side Lad—Foster's Vix; 2d, Neversink Lodge Kennel's Meg, white, tan markings, 3yrs. 10mos., Hemp—Nelly II. Very high com., Howard S. Jaffray's Sweetbriar, white, black spot on eye and tail, 19mos., imported Wildbriar—imported Vixen.

Fox-Terrier Puppies, under 12 Months, Dogs.—1st, L. & W. Rutherfurd's Warren Joe, white, black and tan, 18mos., Brockenhurst Joe—Swansdown. Very high com., Alex. Taylor, Jr.'s Acteon, white, black and tan, 6mos., Rutherfurd's Joker—Squeak.

Fox-Terrier Puppies, under 12 Months, Bitches.—1st, Clovernook Kennel's Clover Belle, white, black and tan, 9mos., Rutherfurd's Joker—Warren's Bessie. Very high com., Alex. Taylor, Jr.'s, Azola, white, black and tan, 6mos., Rutherfurd's Joker—Squeak. High com., Alex. Taylor, Jr.'s, Juno, white, black and tan, 6mos., Rutherfurd's Joker—Squeak; E. A. Hawes's Betsy, white and black, 8mos., imported; Alex. Taylor, Jr.'s, Daphne, white, black and tan, 6mos., Rutherfurd's Joker—Squeak. Com., Mrs. Mary W. Herzberg's Rosa Bonheur, white, orange ears, 6mos., Peregrine Pickle—Gypsum.

Champion Collies, Dogs.—1st, Thos. H. Terry's Robin Adair (imported, E.K.C.S.B. 12,964), red, sable and white, 2yrs., Guy's Cliffe (E.K.C.S.B. 10,700)—Tyne (E.K.C.S.B. 9447).

Champion Collies, Bitches.—1st, Thos. H. Terry's Zulu Princess (imported, E.K.C.S.B. 11,896), 4yrs., champion Marcus (E.K.C.S.B. 7526)—Ruby II. (E.K.C.S.B. 10,751).

Collies, Dogs.—1st, J. Lindsay's Hiram, (A.K.R. 882) sable and white, 11mos., champion Rex—Kitty Mac; 2d, W. L. Whittemore's Duncan, black, tan and white, 2yrs. 9mos., Marcus—Flora; 3d, Martin Dennis's Brack, (E.K.C.S.B. 11,833, A.K.R. 3), black, tan and white. 4yrs., imported, champion Carlyle (E.K.C.S.B., 8,505)—Sanfoil (E.K.C.S.B, 6,513). Very high com., O. N. Boyd's Hero, black, tan white, 2yrs. 9mos., imported; J. W. Burgess's Sandy (A.K.R. 540), sable and white, 3yrs., Marcus (E.K.C.S.B. 7,526)—Daisy (E.K.C.S.B. 9,452). High com., Neversink Lodge Kennel's Laddie, black and tan, 16mos., Rob Roy—Nora; J. D. Shotwell's Rokeby (A.K.R. 1,022), dark sable and white, 3yrs., Marcus (C.K.C.S.B. 7,526)—Isle (E.K.C.S.B. 11,872) Com., J. W. Burgess's Donald (A.K.R. 533), sable and white, 2yrs., Marcus (E.K.C.S.B. 7,526)—Daisy (E.K.C.S.B. 9,452).

Collies, Bitches.—1st, Kilmarnock Collie Kennel's Winnie, sable and white, 2yrs., Gairlock—Laurie; 2d, John W. Burgess's Jean, black and white, 2yrs., Marcus (E.K.C.S.B. 7,526)—Flora (E.K.C.S.B. 11,871); 3d, J. Lindsay's Fairy (A.K.R. 147), sable and white, 11mos., champion Rex—Kitty Mac. Very high com., J. Lindsay's Jersey Lily, black, tan and white, 19mos., champion Marcus—Comet; J. Lindsay's Lizzie, black, white and tan, 3yrs., champion Rex—Topsy; James Watson's Flyaway—Jack R. (837), sable and white, 11mos., champion Rex—Burgess's Old Flora. High com., Neversink Lodge Kennel's Nora, tawny, 2yrs., Bruno—Nora. Com., Thomas H. Terry's Eirg, black, tan and white, 2yrs., imported, Gillie (E.K.C.S.B. 9,424) —Watch (E.K.C.S.B. 7,553).

Collie Puppies, under 12 Months, Dogs.—1st, John W. Burgess's Argyle, black, tan and white, 8mos., Brack (A.K.R. 3)—Dora (A.K.R. 4). Very high com., Geo. Aitken's Fritz, black and tan, white breast, 9mos., Marquis II.—Clyde; John Romaine's Robin Hood, black and white, 9mos., champion Robin Adair—champion Zulu Princess. High com., Romeyn S. Stafford's Collie, black and white, 7mos., Baldy—Zephyr; J. Lindsay's Major, sable and white, 6mos., champion Rex—Jeannie Nettles; J. D. Shotwell's Shepherd Boy (A.K.R. 1029), dark sable and white, 9mos., Rokeby—Fannie). Com., J. Lindsay's Help, fawn and white, 10mos., champion Ayrshire Laddie—Lizzie.

Collie Puppies, under 12 Months, Bitches.—1st, Mrs. F. C. Phebus's Peep o' Day, black, white and tan, 8mos., Mr. Arthur Turnbull's Roy —Mr. Thompson's Floss. Very high com., J. Lindsay's Nannie O', black, white and tan, 11mos., champion Rex—Kitty Mac; Neversink Lodge Kennel's Effie Dean, tawny, 8mos., Bruno—Nora. High com., Geo Aitken's Juno II., black and tan, white breast, 8mos., champion Carlyle (E.K.C.S.B. 11,833)—Juno. Com., Jas. M. McCullah's Laurie, black and tan and white markings, 9mos., Laddie—Lassie.

Champion Bulldogs, Bitches.—1st, John E. Thayer's Bellissima, brindle, 3yrs. Dogs—1st, R. & W. Livingston's Boz (E.K.C.S.B. 13,020), white and brindle, 2yrs. 11mos., Gamester—Browse's Betsy.

Bulldogs, Dogs.—1st, J. P. Barnard, Jr.'s Hamlet, brindle, 18mos., President Garfield—Wheel of Fortune; 2d, Monarch Bottling Co.'s Hero II. (A.K.R. 1), brindle and white, 1yr. 11mos., Livingston's Hero —Livingston's Gypsey; 3d, James Osborn's Boxer, white, 2yrs. 4mos., Farewell—Daisy. Very high com., James Patterson's Mose, brindle, 3yrs., champion Ben—Rose. Com., John E. Thayer's Moses, (A.K.R. 323), white, 3yrs., Sir Bevis—Nancy Lee.

Bulldogs, Bitches.—1st, J. E. Thayer's Rhodora, white, 3yrs.; 2d, R. & W. Livingston's Helen, white, 1yr. 7mos., Bion—Belle Helene; 3d, James Patterson's Jenny, brindle, 10yrs., imported. High com., J. P. Barnard, Jr.'s Julia, white, 1yr., imported.

Champion Bull-Terriers, over 25 lbs., Dogs or Bitches.—1st, R. & W. Livingston's Grand Duke (E.K.C.S.B. 13,503), white, 2yrs. 4mos., Hinks's Dutch—Young Magnet.

Bull-Terriers, over 25 lbs., Dogs or Bitches.—1st, Edward S. Porter's President, white, 6yrs., Randal—Minnie; 2d, Charles Mitchell's Charley, white, 1yr. 5mos., Spot—imported Lill; 3d, Hon. Edmund Sandy's Rosy, white, 2½yrs.

Champion Bull-Terriers, under 25 lbs., Dogs or Bitches.—1st, R. & W. Livingston's Little Maggie (A.K.R. 525), white, 16mos., Hinks's Dutch—Young Venom.

Bull-Terriers, under 25 lbs., Dogs or Bitches.—1st, James F. Malloy's Doodie, white, 22mos., Modoc—Nellie Bly; 2d, E. H. Hays's Venus, white, 4yrs., 3d, Locust Grove Kennel's Short, white, 2yrs., Barney—Fanny. Very high com., A. Starling's Katy, white, 3yrs.

Bull-Terrier Puppies, under 12 Months, Dogs or Bitches.—1st, J. P. Barnard, Jr.'s, Rosa, white, 9mos., President—Scarlet II.

Black and Tan Terriers, over 7 lbs., Dogs or Bitches.—1st, John F. Scholes's Bessy, 22mos., imported Nep—imported Tep; 2d, Edward Lever's Lady, 1½yrs., Vortigern—Lilly II. Very high com., John Whitaker's Brilliant, 1½yrs., Vortigern—Lilly II. High com., Miss Marion Booth's Doctor, 5yrs., Prince—Nellie. Com., Mrs. J. F. Pierson's Sambo, 4yrs.

Rough-Haired Terriers, Dogs or Bitches.—1st, John H. Naylor's Heather, brindle, 25mos., imported; 2d, John H. Naylor's Tam Glen, dark gray, 20mos., full pedigree. Very high com., G. H. Gilbert's Muldoon, gray, 2yrs., imported Tag—Tilley; Edward Lever's Sir Garnet, blue and tan, 2yrs., champion Crack—Gypsey Queen. High com., Allerton and Moss's Patsey, blue and black, 17mos.; G. H. Gilbert's Peto, gray, 2yrs., imported. Com., E. O. Richards's Clinker, red, 3yrs. imported; John Hammond's Scotche, blue and tan, 9mos.; Louis B. Wright's Vic., red, 2yrs. 10mos., Billy—Lady.

Dandie Dinmont Terriers, Dogs or Bitches.—1st, Robert Hume's Badger II., pepper, 4yrs., Badger—Rosa; 2d, Jas. P. Swain Jr.'s, Sally (A.K.R. 866), pepper, Tartar—Flo. Very high com., George Aitkens's Bob, steel gray, 14mos.

Irish Terriers, dogs or bitches.—No entries.

Bedlington Terriers.—1st, John F. Scholes's Blucher, liver, 2½yrs., Peachon—Jess; 2d, withheld. Com., Edward Lever's Vixen, liver, 7mos., Sting—Wasp.

Champion Skye Terriers, Dogs or Bitches.—1st, William Pierre Sanderson's Jim, blue, 4yrs., Burkie—Highland Mary.

Skye Terriers, Dogs or Bitches.—1st, Geo. Peabody Wetmore's Boss, steel blue, 4yrs., Monarch—Belle; 2d, Geo. Sanderson's Watty, steel gray, 2yrs., imported; 3d, Geo. Sanderson's Fanny, steel gray, 3yrs., imported. Very high com., Mrs. T. D. Burke's Bob, blue and silver, 2½yrs., full pedigree; T. D. Burke's Elfin, silver, 2½yrs., full pedigree. High com., G. H. Gilbert's Pert, pepper and salt, 2½yrs., imported. Com., Geo. B. Sealey's Gypsie, blue and silver, 4yrs; Miss Mary Grant's Nona, pepper and white, 15mos., full pedigree.

Champion Pugs, Dogs.—1st, M. H. Cryer's Roderick, fawn and black, 6yrs., champion Punch—Judy.

Champion Pugs, Bitches.—1st, W. R. Knight's Effie, stone fawn, 3½yrs., imported, Banjo—Zoe.

Pugs, Dogs.—1st, M. H. Cryer's Max, fawn and black, 1yr., champion Roderick—Dolly; 2d, M. H. Cryer's Bob, fawn and black, 9mos., Atlas——; 3d, Mrs. C. Wheatleigh's Tu Tu, fawn, 2½yrs., Young Peter—Loe. Very high com., Miss Lulu Lockwood's Wrinkle, fawn, 4yrs. High com., Miss Ada L. Gibbs's Pete, light fawn, 2yrs. Com., Peter Cassidy's Punch, Morrison Strain, 2yrs.

Pugs, Bitches.—1st, Miss Morley's Duchess, fawn, 25mos.; 2d, M. H. Cryer's Dolly, fawn and black, 4yrs., Toby—Liz; 2d, Forest City Kennels's Dolly (A.K.R. 170), apricot fawn, 3yrs., Punch—Judy. Very high com., Mrs. C. Wheatleigh's Victoria, silver gray, 16mos., Atlas —Vic. High com., Lucy Bros.'s Minnie May II., silver fawn, 11mos., Lucy's Fritz—Lucy's Minnie May. Com., W. H. Closs's Puck, fawn, 1yr.; John G. Browning's Judy, fawn, 2yrs., imported.

Pug Puppies, under 12 Months, Dogs or Bitches.—1st, G. B. Wilson's unnamed, fawn, black points, 12wks., —— —Peggie; 2d, J. F. Schenck's Chochra, fawn, 3mos.; 3d, M. H. Cryer's Puppy, fawn and black, champion Roderick— ——. Very high com., John Hammond's Minnie, stone fawn, 11mos., imported. High com., Andrew Ludwig's Punch, cream, 3mos., Punch—Plucky. Com., Andrew Ludwig's Jerry, cream, 3mos., Punch—Plucky.

Champion Yorkshire Terriers, over 5 lbs., Dogs or Bitches.—Mrs. H. A. Kisteman's Hero, blue and tan, 4yrs., full pedigree.

Yorkshire Terriers, over 5 lbs., Dogs or Bitches.—1st, H. A. Kisteman's Lancashire Star, blue and tan, 2yrs., full pedigree; 2d, John Hammond's Prince, blue silver tan, 4yrs., imported; 3d, H. A. Kisteman's Bright, blue and tan, 1½yrs., full pedigree. Very high com., Lieut. Aaron Ward's Billee Taylor, blue and tan, 3yrs., imported; H. F. Vogt's Eddie, blue and tan, 15mos., imported. High com., John Hammond's Nellie, golden tan, 3½yrs., imported; John Hammond's Ben, blue and tan, 15mos., imported. Com., Dr. Gage's Flossie, blue and tan, 3yrs.; Mrs. James B. Wasson's Muff, silver blue, 4yrs.

Champion Yorkshire Terriers, under 5 lbs., Dogs or Bitches.—H. A. Kisteman's Chickie, blue and tan, 2yrs., full pedigree.

Yorkshire Terriers, under 5 lbs., Dogs or Bitches.—1st, H. A. Kisteman's Spring, blue and tan, 2yrs., full pedigree; 2d, Mrs. Robert Lyon's Chester, blue and tan, 17mos., full pedigree; 3d, John Hammond's Nellie, blue and tan, 1½yrs., imported. Very high com., John Hammond's Nellie, blue and tan, 18mos, imported; John Hammond's Teddie, blue and tan, 2½yrs., imported; John Moore's Charley, blue and tan, 15mos., imported. High com., John Marriot's Charlie, blue and tan, 15mos.; H. A. Kisteman's Prince, blue and tan, 1½yrs., full pedigree; John Marriot's Flora, blue and tan, 1yr. Com., Wm. McGovan's Frank, blue and tan, 1½yrs., Nip—Sallie; Miss M. R. Finlay's Rags, silver grey, 4½yrs., ——Putz.

Toy Terriers other than Yorkshire, under 7 lbs., Dogs or Bitches.—1st, John Power's Daisy, black and tan, 3yrs., Dandy—Fanny; 2d, Peter Mooney's Gyp, black and tan, 2yrs, Dandy—Fly. Very high com., Tom Poleasky's Nellie, black and tan, 3yrs., imported; Miss Emily Green's Pearl, black and tan, 3yrs., Patsey—Fan. High com., Bernard Costello's Martha, slate, 14mos., imported Teddy—Rose; R. & W. Livingston's Daisy, black and tan, 2yrs. 10mos., Sam—Daisy; R. F. Wheeler's Charlie, silver, 14mos. Com., F. L. Vogt's Dan, black and tan, 2yrs., imported.

King Charles Spaniels, Dogs or Bitches.—1st, John Hammond's Charley, black and tan, white star, 4yrs., imported; 2d, John Hammond's Sankey III., black and tan, 6mos., Sankey II. Very high com., Wm. Phillips's ——, black and tan, imported, full pedigree.

Blenheim Spaniels, Dogs or Bitches.—1st, Miss Gertrude Gibert's Sir Guy (formerly Charley), orange and white, Charlie—Lucie; 2d, Josh. Geo. Browning's Duke, orange and white, 2yrs., imported. Com., Frank Mariott's Charley, liver, 18mos.

Japanese Spaniels, Dogs or Bitches.—1st, John Hammond's Ching, black and white, 3yrs., imported; 2d, James F. Larkin's Mancha, white and black, 18mos., Onaska—Otomasea. Very high com., Walter Scott's Venus, white and black, 2yrs. High com., John Hammond's Ada, black and white, 5mos., Ching—imported Nellie.

Poodles, Dogs.—1st, Miss Work's Rajah II., black, 4yrs., imported; 2d, Miss Rives's Gaulois, black, 3yrs., Mr. Lorillard's Schwartz, imported—Mr. Lorillard's Flora, imported. Very high com., Mrs. Walker Breece Smith's Figaro, black, 4yrs., Mr. Lorillard's Schwartz, imported—Mr. Lorillard's Flora, imported. Com., J. Pierrepont Edwards's Peter the Great (E.K.C.S.B. 11,016), black, 4yrs.; Prescott Lawrence's Sweep, black.

Poodles, Bitches.—1st, E. B. Wall's Mignon, 2yrs. 4mos., Work's Dog; 2d, J. R. Sergeant's Pompey, black, full pedigree. Very high com., Prescott Lawrence's Dinah, black.

Italian Greyhounds, Dogs or Bitches.—1st, Mrs. Constance A. Andrews's Queenie, golden yellow, 3yrs., imported 1882, born in Italy; 2d, E. W. Jester's Pearl (A.K.R. 758), fawn, 5yrs., Douglas—Gypsy Queen.

Miscellaneous (or Foreign Class), Dogs or Bitches, over 25 lbs., not specified in the above classification.—1st, Geo. A. Saportas's Judge, brindle, 18mos., Jones's Bruno—Unknown; 2d, Edward Dexter's Belle Tinker (English retriever), black, 3yrs., imported. King Coffee—Salter's Belle; 3d, John H. Foster's Nellie, spotted, 4yrs. Very high com., Wm. F. Smith's Bob, black, 6mos.

Miscellaneous (or Foreign Class), Dogs or Bitches, under 25 lbs., not specified in the above classification.—1st, N. Thomas's Me Too, mouse, 2yrs., Unknown; 2d, John F. Scholes's Hornet II., white, 2½yrs., Hornet—Juliet.

SPECIAL PRIZES.

The Eastern Field Trials Club prizes for dogs that have been placed at any field trials were awarded as follows:

A. Best pointer dog—Neversink Lodge Kennel's Drake.
B. Best pointer bitch—No entry.
C. Best English setter dog—C. Fred Crawford's Foreman.
D. Best English setter bitch—Dr. S. Fleet Speirs's Maida.
E. Best Irish setter dog—Max Wenzel's Chief.
F. Best Irish setter bitch—No entry.
G. Best black and tan setter—No entry.

The Westminster Kennel Club specials:

H. Best kennel of large pointers to consist of five.—The Knickerbocker Kennel Club's Knickerbocker, Lady Gleam, Jimmie, Glenmark and Lady Mac.

I. Best kennel of small pointers to consist of five.—The Knickerbocker Kennel Club's Lady Bang, Craft, Temptation, Doncaster and Jule.

J. Best Kennel of English setters to consist of five.—T. G. Davey's Dick Laverack, Belle's Pride, Glenfinlass, Genevieve and Canadian Queen.

K. Best kennel of Irish setters, to consist of five—Rory O'More Kennel's Rexford, Lady Edith, Rylla, Gay and Rory O'More II.

L. Best kennel of black and tan setters, to consist of five—No entry.

M. Best collection of five pugs—Dr. M. H. Cryer's Roderick, Max, Bob, Dolly and a puppy.

N. Best black setter—The Locust Grove Kennel's Smut II.

O. Best Clumber spaniel—Frank Thomson's Don.

P. Best basket beagle under 12 inches—No entry.

Q. For the dog or bitch that retrieves in the most stylish and obedient manner—A. C. Collins's Fritz.

R. Best champion bull bitch—John E. Thayer's Bellissima.

S. Fastest Greyhound— ——.

T. For the greyhound making the highest leap—George S. Parvin's Major.

U. Best trick dog—A. C. Collins's Fritz.

V. Best bull dog or bitch the get of Ben—Mrs. James Patterson's Bill.

W. Best pointer dog got by Sensation—R. C. Cornell's Match.

X. Best pointer bitch, got by Sensation—J. H. Swain, Jr.'s Nan.

Y. Best five St. Bernards—E. R. Hearn's Bonivard, Gertie, Duke of Leeds, Rhona and Don II.

Z. Best looking setter that has been placed at a field trial—Max Wenzel's Chief.

AA. Best looking pointer that has been placed at a field trial—The Westminster Kennel Club's Bang Bang.

BB. Best pair of pointers—J. W. Munson's Meteor and Vanity.

CC. Best brace of English setters—E. W. Jester's Dashing Belle and Dashing Jessie.

DD. Best brace of Irish setter puppies of one litter—John J. Scanlon's Pride of Glencho and Lady Glencho.

EE. Best fox-terriers.—Prescott Lawrence's Brockenhurst Joe.

FF. Best pair of bulldogs.—John E.Thayer's Tippo and Bellissima.

GG. Best dog puppy got by Sensation.—F. R. Hitchcock's Sensation Lad.

SWEEPSTAKE PRIZES.

HH. Best pointer dog over 55 lbs.—J. W. Munson's Meteor.

II. Best pointer dog under 55 lbs.—The Westminster Kennel Club's Bang Bang.

JJ. Best English setter dog.—C. Fred Crawford's Foreman.

KK. Best Irish setter dog—Dr. Wm. Jarvis's Elcho, Jr.

The Medford Fancy Goods Company's specials:

LL. Best pointer dog—J. W. Munson's Meteor.

MM. Best pointer bitch—J. W. Munson's Vanity.

NN. Best English setter—F. E. Lewis's Rock.

OO. Best Irish setter—Dr. W. Jarvis's Elcho, Jr.

PP. Best greyhound dog—H. W. Huntington's Bouncing Boy.

QQ. Best greyhound bitch—H. W. Huntington's School Girl.

RR. Best brace of greyhounds—H. W. Huntington's Bouncing Boy and School Girl.

SS. Best St. Bernard—E. R. Hearn's Duke of Leeds.

TT. Best mastiff—C. H. Mason's Nevison.

UU. Best pug dog—Dr. M. H. Cryer's Roderick.

VV. Best bulldog—R. & W. Livingston's Boz.

WW. Best Collie—Thos. H. Terry's Zulu Princess.

EXTRA SPECIALS.

XX. Best collie dog sired by Robin Adair or Tweed II.—John Romaine's Robin Hood.

YY. Best collie bitch sired by Robin Adair or Tweed II.—No entry.

ZZ. Best fox-terrier got by the stud dogs of the Messrs. Rutherfurd or bred in their kennel.—The Clovernook Kennel's Clover Belle.

AAA. Best trained setter or pointer which has been trained by the method laid down in "Training vs. Breaking"—A. C. Collins's Fritz.

BBB. Best English setter over 12 and under 18 months old.—J. J. Scanlan's Cliney Carter.

CCC. Best pointer got by Bang Bang—G. de Forest's Grant's Fresco.

DDD. Best deerhound dog—C. F. Dumbmann's Jack.

EEE. Best deerhound bitch—T. A. Blake's Lorna II.

FFF. Best white poodle—Miss Edith Jones's Mouton.

AMERICAN-ENGLISH BEAGLE SPECIALS.

GGG. Best beagle—H. W. Ashburner's Deborah.

HHH Best beagle owned by a member of the club—H. W. Ashburner's Deborah.

EXTRA SPECIALS.

III. Best American-bred bulldog—Mrs. James Patterson's Bill.

JJJ. Best cocker spaniel dog owned by a member of the A. C. S. Club—J. P. Willey's Obo II.

KKK. Best cocker spaniel bitch owned by a member of the A. C. S. Club—Andrew Laidlaw's Woodstock Flirt.

LLL. Best stud pointer—A. E. Godeffroy's Croxteth.

MMM. Best three greyhounds—H. W. Huntington's Bouncing Boy, School Girl and Begonia.

NNN. Second best beagle owned by a member of the American English Beagle Club.—N. Elmore's Chase.

OOO. Best pointer, the get of Faust or Bow.—C. H. Mason's Beaufort.

PPP. For the fastest greyhound.— ——.

PPP.A. Highest leaping greyhound.—George S. Parvin's Major.

QQQ. Best pointer got by Beaufort.—C. W. Littlejohn's Fritz.

RRR. Best Yorkshire terrier under 9 months.—Not awarded.

SSS. For the pointer or setter under 12 months best trained to retrieve—No entry.

TTT. For the best imported English setter under 12 months—F. Windholz's Princess Phœbus.

UUU. For the best five collies—Thos. H. Terry's Robin Adair, Tweed II., Zulu Princess, Effie and Meg.

The Cocker Spaniel Produce Stakes.—1st, Hornell Spaniel Club's Rattler; 2d, Andrew Laidlaw's Woodstock Flirt; 3d, Dr. J. S. Niven's Darkey.

THE PHILADELPHIA DOG SHOW.—The exhibition of the Westminster Kennel Club last week in New York, has given a great impetus to the dog men of Philadelphia, and the only topic of conversation at the rooms of the Philadelphia Kennel Club is their coming show, to be held in connection with the State Agricultural Society's fair the last of September. A special building for the dog show is to be erected, and some very attractive features never before had in connection with a canine show will be added, which cannot fail to be interesting. The list will be large and already very many valuable special prizes have been promised. A field trial for members' dogs will be had next November, and a number of farms well supplied with quail have been leased.—HOMO.

No MEDICAL EXAMINATION is required to take out an accident policy in the Travelers, of Hartford, Conn., guaranteeing a sum of money weekly while disabled from accidental injury, and principal sum in case of death resulting therefrom.—*Adv.*

Rifle and Trap Shooting.

FIXTURES.

May 20 and 21.—Illinois State Sportsmen's Association Tournament Delaware, Ill. D. G. Cunningham, Secretary, San Jose, Ill.

May 20 to 23.—Knoxville Gun Club Second Annual Tournament, Knoxville, Tenn. C. C. Hebbard, Secretary.

May 26 to 31.—First International Clay-Pigeon Tournament, at Chicago, Ill. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

June 2 to 9.—Annual Tournament Louisville Sportsmen's Association, Louisville, Ky. J. O. Barbour, Secretary, 157 Third avenue, Louisville.

ARMY RIFLE PRACTICE.

Editor Forest and Stream:

I am but little given to noticing, much less discussing the merits of any scheme of action that has for its object the overthrow of an approved system, science or industry, and that does not at the same time propose and formulate a better one for adoption, but I cannot contentedly let pass unnoticed the communication of your correspondent "C. D.," in your issue of May 8, who so persistently attacks and reattacks the army system of rifle firing, an old and well-established system, and, although admitting it to be good, in the end denounces it as "wrong and faulty, and a humbug from beginning to end." I need not remark upon the many evidently strained conclusions reached in his efforts to discredit the system that he denounces so unsparingly, and I am wondering if he has not already been reminded that it is not so much the system, but the practices that have been allowed at his station to grow upon this system, that constitutes for him his grievance, and which may have led him to declare it all a "humbug from beginning to end."

I have no wish to follow your correspondent in all the different detailed statements he makes. It would occupy too much of your valuable space, nor can this be desirable, showing as he often does, to the thoughtful reader the very practices he condemns to be almost if not quite necessary, and for which he evidently knows no suitable remedy, and but in this one—simple one as he evidently thinks it—that of targets, does he suggest a substitute for what he condemns. He would substitute an elliptical or oblong target and markings for the Creedmoor or round target markings. What superiority he claims for it seems to be this, that the new target would more nearly represent the "tactical man," that they would call for shots to be fired and counted on elliptical or oblong target markings, in homely phrase, set up on end and more nearly representing the form of a man,

and he would have the marksman taught that a shot over or under the center was of more value than one at the right or left, and all because a man, when he stands on his feet, offers a similar target. Suppose we admit this to be the case when he stands; now let him lie down, as he will in most cases if time be given him, or you, for careful aim, what then? For such cases shall we lay the elliptic on its side and practice at it a time that way? And suppose the man kneels, then what shall we do to meet such a case? We would need to make the elliptic into a circle, I guess.

Inasmuch as we cannot well make these changes at pleasure, hadn't we better use the round target marking as a good comparison? I think so. As to "C. D.'s" estimate that a shot above or below is better than one to the right or left of the center, of course that must depend upon whether the shot be fired at a man standing or not. Certainly it is easier to make line shots than others; I mean easier to put shots on, or above and below, the center than in the center. A rifleman in a bad wind will easily make fair line or vertical shots, firing with what is known as a "rising sight;" indeed, not to do such work is what he wants. We have gone far past the day of "line shots."

"Blank's" men's "fours" were of more value than "C. D.'s" men's "threes," and must always be so in our modern times. When this is reversed will not be when men take aim, but when men fire without aim and with both eyes open, as is not unusual in the heat of battle, and then not at one man but at a body of men. I am thinking that "C. D.'s" men's scores were credited for quite what they were worth. Surely the Creedmoor target gives quite completely what he claims to want, and is very easily understood and very practical, and has been selected because it possessed, all in all, the best excellence of all the many heretofore tried. No, most decidedly it has not outlived its usefulness.

The classification that gives your correspondent so much concern, will undoubtedly be regulated to the needs of the service from time to time, and it is likely that the new manual General Sheridan's orders refer to will show that full consideration has been given this subject. Making the second grade of sharpshooters is a step in that direction as established by the G. O. No. 12, that your correspondent declares to be "worthless of true results."

It is much to be wished that when riflemen like your correspondent condemn to be destroyed, that they do not do so without being prepared with something better; it is not enough to say that it is a "humbug" and "worthless." For if such sayings are intended to do good they fail to work, for as nothing is offered as a substitute for what they condemn, an intelligent discussion tending toward any assured advancement cannot be had.

I trust your readers will see that there are two sides to this question as to most all others, and that they will understand that much of your correspondent's details may have quite a different application than given by him, and that has somewhat warped your judgment and led you to the belief that the army system, declaring merit in rifle firing, is based on a system of "jugglery" and that merit goes where all has been "manipulated to the best advantage." You err greatly in this, and I fear your editorial article unintentionally gives a very mistaken estimate of the army system of rifle firing and "the defects in practice." BENTON.

RANGE AND GALLERY.

THE WHEELING CLUB.

Editor Forest and Stream:

The Wheeling Rifle Club still keep up their weekly practice at 200yds. off-hand. There are five members who shoot about even, sometimes one and then another comes out on top.

Messrs. Stewart and Dwight have lately begun using Sharps mid-range, .40 cal., 30in., 2½in. shell, and like them very much for off-hand work. The Sharps is short-range was heretofore used among our riflemen, and some good work has been done with them. With a crescent butt plate on the mid-range it holds very nicely, and the 70 grains of powder behind a 285-grain oval-point bullet gives a very flat trajectory and true flight.

Mr. Dwight has been using the open bead for off-hand practice, and has finally mastered it, although few riflemen seem to use it, either from not having given it a trial, or not being able to hold it. We would like to hear the experience of others with this sight for off-hand practice.

We have been using a new target lately, which is the design of Mr. Dwight. It is the Massachusetts target with each of the rings outside of the bullseye divided into two rings by a line drawn around between each line of the Massachusetts target; then the bullseye is divided into rings with one-half inch space between each line, and leaving the center space one inch in diameter. This latter space is numbered 25, and each ring out from that is numbered one point less. Thus the four-inch circle, which is the 12 line on Massachusetts target, is the 22 line, and the edge of the eight-inch bullseye is 18, and the Massachusetts 10 ring is numbered 17 and 16 and so on outward. The target thus arranged gives a closer count than any one used, and as the object of a target is to record the closeness of the shooting, this certainly is more correct than to have such wide spaces, even as the Massachusetts target has. The latter target has become a favorite by the fact of its spaces being divided up more than the old Creedmoor target, and this new target has the same advantages over the Massachusetts as the latter has over the Creedmoor. We have tried the German ring target, but the twelve-inch bullseye is too large for us. These targets are easily made at home, and the rings on the black bullseye may be made by a drawing pin on dividers, with thin mucilage in place of ink, and then rub over some bronze powder, which adheres to the gum and brings out the lines on the black very plain, and does not dim it for aiming.

The following scores were made on our new target last Saturday, 3d inst. As the lines of all the rings of the Massachusetts target are retained, the scores can be kept on both counts if desired, and also Creedmoor count as well. Our ring target we call the "West Va. target."

First Match.

Chas E Dwight	18	23	20	23	17	17	17	22	19	16—192*
	11	12	11	12	10	10	10	12	11	10—109†
William Cox	14	18	14	19	22	23	19	22	15	22—188*
	9	11	9	11	12	12	11	12	9	12—108†

Second Match.

Chas E Dwight	17	21	20	15	18	18	24	21	18	20—192*
	10	11	11	9	11	11	12	11	11	11—108†
R S Stewart	20	19	22	22	22	17	18	12	15	19—180*
	11	11	12	12	12	10	11	8	9	11—107†
J F Shirk	16	19	18	12	21	23	14	24	16	22—185*
	10	11	11	8	11	12	9	12	10	12—106†

Third Match.

Chas E Dwight	22	17	16	18	17	16	18	23	16	20—183*
	12	10	10	11	10	10	11	12	10	11—107†
R S Stewart	16	17	14	16	16	20	17	23	16	19—183*
	10	10	9	10	10	11	10	12	10	11—103†

* West Va. † Massachusetts.

Mr. Jaeger has made 205 on the West Va. target, counting 111 Mass., and Mr. Dwight has made 200, counting 111 Mass. also.

The club will shoot a telegraph match with any who wish amusement of that kind. WIND.

WHEELING, West Va.

BULLSHEAD RIFLE CLUB, May 1.—12-ring target, possible 120: G. Zimmermann 118, G. Holzmann 116, A. Lober 116, M. Dorrler 115, V. Steinbach 113, C. Rein 114, S. Mehrbach 111, H. Gunther 110, J. F. Schrarder 110, W. Ross 106, J. Jordon 106, D. Holland 102, S. F. C. Weber 98, H. Zubiller 98, B. Walters 106, G. Wendelken 107, G. D. Johnson 104, H. Kruger 106, D. Louitzki 102, A. Stolzenberger 110, A. Ringler 107, A. Hoesser 107, G. Augermeier 105, J. F. Campbell 102.

Thursday, May 1.—12-ring target, possible 120: G. Zimmermann 117, A. Lober 117, C. Rein 114, M. Dorrler 114, A. Ringler 112, J. Schneider 113, H. Hackmann 111, B. Walters 108, J. Schrarder 108, J. Campbell 100, L. Louitzki 98, S. Mehrbach 98, J. Weltze 96, D. Holland 94, A. Pierson 94, S. F. C. Weber 94.

THOMASTON, Conn., May 12.—At the Empire Rifle Club's shoot on Saturday, G. Canfield captured the badge with a score of 103 out of a possible 120. Following are the other scores: C. F. Williams 95, W. Dunbar 93, C. Alling 93, G. Gilbert 90, F. Carr 89, E. Thomas 88, E. Bennett 85, A. Fox 82. The weather was rather unfavorable for high scores, being alternate rain and sunshine. The "open to all shoot" is to be the 21st and 22d.

THE FRELINGHUYSENS AT NEW YORK.—Newark, N. J., May 7.—*Editor Forest and Stream:* I beg space in your columns to enter a protest, in the name of the Frelinghuysen Rifle Association of this city, against the manner in which the prizes have been awarded in the late match at the Grand Central Gallery in New York. Your last issue gives the prizes awarded for scores ranging from 333 to 305, entirely ignoring the score of 307 made by our representative, Mr. Geo. D. Weigman, who shot on or about Thursday, April 10, I think. The score was counted by the regular range scorers and placed on blackboard when made. When Mr. W. called a week later, to improve his record if possible, he found his score missing, and it was again placed in line when attention was called to the omission. On the award of prizes, however, it is again dropped and without explanation; and a man who has spent about $5 in shooting and car fares is thus debarred from receiving the trivial $2 prize he has honestly earned. We cannot believe that this is done by the connivance of men of such well-known integrity as the judges are known to be; but must say that if New York clubs wish the help of any out-of-town shooters in their free-to-all matches, we wish to be assured that we shall have what we have a right to expect—fair play in the keeping of score records.—EDWARD O. CHASE.

SAVANNAH, Ga., May 10.—The Republican Blues had a very enjoyable day at the Schuetzen Park last Thursday, the occasion of their annual picnic. The attendance was very large, and among the guests were noticed many members of the several organizations of the city. A feature of the day was the target shooting for prizes, which resulted as follows: In the first class Sergt. N. Nathans won the first prize, a silver butter dish, and was also awarded the company medal, score 19; in the second class Private S. C. Lee won a silver cake basket. Sergt. J. J. Gaudry won the prize for the best single shot, and Private John G. Butler, in the contest of the ununiformed and pay members, won the prize on a score of 19, a silver pickle dish.

The same afternoon several well-known marksmen met at the Schuetzen Park and, after the Blues had indulged in their rifle contest, they had some fine shooting. The following shows the scores made:

R R Dancy	4 4 4 4 5 4 4 5 4 4—42
J P White	4 5 4 5 4 4 4 5 4 4—43
H Kolshorn	5 4 3 4 5 4 4 4 3 5—41
R R Dancy	4 4 4 4 4 4 5 4 4 5—42
J P White	4 4 4 5 5 4 4 4 4 5—43
H Kolshorn	4 4 5 4 4 4 4 4 5 5—43
R R Dancy	5 4 4 4 4 4 4 4 5 5—43
J P White	4 4 5 4 4 4 4 4 4 5—42
H Kolshorn	4 4 4 4 4 4 2 4 4 4—38

The Savannah Rifle Association turned out a full membership at its regular practice at the Schuetzen Park yesterday afternoon, and some excellent scores were made. Among the best shots were Dr. J. D. Martin 65, J. P. White 63, R. R. Dancy 61, E. J. Keiffer 62, W. M. Mills 61. The shooting was 15 shots at 200 yards, Creedmoor range, and excited considerable interest. After the practice an election of officers was held, with the following result: President, R. H. Anderson; vice-president, J. W. McAlpin; secretary and treasurer, J. M. Bryan; executive committee, Dr. J. T. McFarland, H. M. Comer, J. D. Martin, Martin Tufts, H. A. Palmer; ordinance officer, J. P. White. The weekly practices of the association will be held during the season on Friday afternoons, cars for the accomodation of the members leaving West Broad street at 3:30 o'clock. The date of the annual prize contest has not yet been determined, but will probably be sometime during the latter part of this month. The association has an increased membership over last year, and the interest manifested in its affairs and in the practices promise some excellent records of marksmanship before the close of the season.

WALTHAM, Mass., May 10.—Following are to-day's scores of the Hillside Rifle Club, 200yds.:

Creedmoor Practice Match.

J T Foster	5545544454—44	J K Lowe	4454443444—40
E C Osgood	4444544444—41	G Strickland	4434334345—37
J O Jenison	4444444444—40	J R Monroe	3442442235—33
H L Whiting	4444434544—40		

Creedmoor Rest Match.

John Foster	5545555545—48	J R Monroe	4455555445—46
G Bassett	5455545455—47	C H Gray	5455444455—45
L O Dunson	5544554455—46	H S Whiting	4455544544—44

BOSTON, May 10.—There was a fair attendance at Walnut Hill today, and some very good shooting was done. The weather was not all that could be desired, except in the early morning and late in the afternoon, after the shower. A team match was shot between two teams of six members of the association, which resulted in a victory for Mr. Charles's team by a lead of 20 points. It should be stated, however, that Messrs. Ashmead and Brackett were shooting with open-sighted rifles. Saturday next there will be another team match, probably between the members of the M. R. A. and members of the Lawrence Rifle Club. If the Lawrence Club does not send a team there will be a match similar to that of to-day. Following is the result:

Creedmoor Practice Match.

H Cushing	4	5	4	5	5	5	4	5	4	4—45
F Chauncey	4	4	4	4	4	5	5	4	5	5—44
C B Edwards	5	4	4	5	4	4	4	5	4	4—43
J E Darmody (mil)	3	4	4	5	4	5	4	5	4	4—42
P B Smith	4	4	4	4	4	4	4	4	4	4—40
H Lewis (mil)	3	3	4	4	4	4	4	5	4	4—39
S B Perrin	3	4	4	4	4	5	4	4	4	3—39
F W Fowle (mil)	4	4	4	5	4	4	4	0	4	4—37

Decimal Match.

W Charles, F	5	10	8	10	8	10	9	9	8	8—85
A C Adams, F	10	10	9	9	10	9	8	6	7	6—84
W H Oler, F	7	5	10	9	10	9	8	8	8	8—82
W Gardner, E	8	10	7	8	7	6	7	8	7	9—77
S B Perrin, E	9	7	9	6	10	9	5	8	9	3—75

Rest Match.

W Gardner	10	9	10	10	10	10	10	9	8	9—95
W H Oler	10	10	10	9	10	10	7	9	8	9—92
S Wilder	10	9	9	8	10	6	10	10	10	9—91
P Silverstal	8	9	10	9	10	9	9	8	8	10—90

First Team.		Second Team.	
C B Edwards	4445455—31	A M Jewell	4544555—32
H Cushing	5545444—31	J P Bates	5445454—31
W Charles	5554444—31	J B Fellows	4444444—30
C H Hurbert	4455444—30	W Gardner	4444534—28
C A Hunt	4544444—29	A L Brackett	4334445—27
P B Smith	4435344—27—179	H L Ashmead	0030332—11—159

In the one-day match the prizes were won by W. Charles, O. M. Jewell, J. B. Fellows and J. P. Bates, in the order named. The spring meeting of the Massachusetts Rifle Association will occur May 29, 30 and 31. There will be two matches open to all comers, one on Creedmoor and one on decimal target, with prizes amounting to at least $350.

BOSTON, May 10.—Mammoth Gallery, 655 Washington street.—The prize list for the month of May will be $10 for all-comers' match, gold, silver and bronze badges for amateurs' matches. Also extra prize of $10 for ten consecutive bullseyes. Following are the scores as they now appear on the blackboard:

A. B. Loring...44 45 45 44 46—224 C. L. Holmes...43 43 44 44 45—219
J. J. Munroe...44 43 44 45 45—222 J. A. Wright...41 42 43 44 42—212

WHEELING, W. Va.—In reference to the scores made on April 5, during the visit of W. M. Farrow to this city, the record in FOREST AND STREAM of April 24 is somewhat in error. The account presents them as in two strings of fifteen shots each, but they were not shot in that way. They were three scores of ten shots each, and Mr. Jaeger won first match and Farrow second one, and Cox the third.—J.

MILWAUKEE, May 7.—The *Sentinel* of to-day says of Mr. Farrow's doings in town: "W. Milton Farrow, the celebrated rifle shot, who has been in the city for a day or two, visited the Soldiers' Home grounds yesterday, and participated with members of the Milwaukee Rifle Club in a competitive shoot, off-hand, at the 200yds. range. Each man had 15 shots, the possible total being 75. The weather conditions were unfavorable, a drizzling rain falling during part of the afternoon, and the trip to and from the grounds was disagreeable because of the mud. The detailed score of the shoot is as follows:

Farrow	4	5	4	5	5	5	5	5	5	4	5	5	5	5	5—72
Meunier	3	4	4	4	4	4	4	5	5	5	5	5	5	5	4—66
Drake	5	4	4	5	4	4	4	4	4	4	5	5	5	4	5—65
Wells	4	4	4	5	5	5	4	4	4	4	5	4	4	5	4—65
Pale	5	4	4	5	4	5	4	3	4	4	4	4	4	4	4—62
Hoffman	3	4	4	4	5	5	4	4	4	4	4	4	4	4	4—61
Simonds						4	4	4	3	3	4	4	3	4	4—37
Greenleaf						4	3	4	4	4	4	4	4	3	3—37

"The latter two had but 10 shots each, being obliged to return to the city. Mr. Farrow's score, as will be seen, lacks but three points of being the highest possible. The score is the highest by two points that has ever been made on the Soldiers' Home range."

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

PROPOSED NATIONAL ASSOCIATION.

To all Sportsmen of the United States:

At the coming First International Clay-Pigeon Tournament to be held at Chicago on the 26th inst., an effort will be made to organize a national sportsmen's association, whose objects will be primarily:

First—To establish a code of rules for each species of shooting—live birds, clay-pigeons, etc.

Second—To appoint an Executive Committee, whose duties it shall be: (*a*) to organize future annual tournaments; (*b*) to act as an arbitration committee to adjust all disputes; (*c*) to establish a central office or address in charge of a specially appointed secretary: (*d*) to execute the will of the association as indicated at its annual meetings.

To organize this association properly, the thoughtful consideration of all sportsmen is invited. If you cannot be there in person and desire to make any suggestions, transmit same to me, care the Palmer House, Chicago. Wherever practicable, obtain the views of your club, and if possible secure a proxy to act for the same, or a club which will have no representative present can send its proxy to me. The principal points to consider in my opinion are: (1.) The monetary question—how funds shall be raised to effect the purposes of the organization; (2.) at what point the central office (the secretary's) shall be established; (3.) what other functions, if any, the association shall assume; (4.) if the association shall be open to both clubs and individuals; (5.) for whom you will vote for president, secretary, treasurer and executive committee.

My own views in brief are as follows: The association to be open to both individuals and clubs, the initiation fee to be $1 for clubs and $1 for individuals; the annual dues to be $1 for each active member of a club, and $1 for the individual subscriber; that each member of all firms in the gun (and kindred) trade be invited to join, initiation fee $1, annual dues $1; that donations from gun (and other) trade firms be invited; that if sufficient means can thus be raised, a permanent office be rented for the headquarters of the association, with a salaried secretary in charge, said secretary to be a sportsman (not connected with any mercantile firm engaged in the gun or kindred trades) and who shall carry out the orders of the executive committee, attend to the correspondence of same, collect the annual dues (for the safe keeping of which he shall furnish proper bonds) promote all gun sports under the direction of the executive committee, conduct the office so as to make it a club room for all visiting sportsmen, form a sporting library of reference, file all sporting papers of this and other countries, etc., and that said office be permanently located at New York City or Chicago, depending upon which city, with fifty miles of surrounding country, furnishes the most cash subscriptions to the treasury of the association by Oct. 1, 1884.

J. E. BLOOM.

THE CHICAGO TOURNAMENT.

THE diamond badge for the best individual score in the clay-pigeon tournament at Chicago, will be on exhibition at Duhne & Co.'s., corner of Fourth and Walnut streets, Cincinnati, until the 18th inst., when it will be placed in the show windows of Spalding & Bros., Chicago.

Mr. J. E. Bloom, President of the Ligowsky Company, will be at the Palmer House, Chicago, on the 20th inst., to perfect arrangements for the tournament.

The following have entered teams for the first international clay-pigeon tournament. Entries close on first day of shoot;

Boston Gun Club, Boston, Mass.
Tallahassee Gun Club, Tallahassee, Fla.
Vicksburg Gun Club, Vicksburg, Miss.
Niagara Gun Club, Niagara Falls, N. Y.
Narragansett Gun Club, Providence, R. I.
Cleveland Gun Club, Cleveland, O.
Capital City Gun Club, Washington, D. C.
Knoxville Gun Club, Knoxville, Tenn.
Kirtland Gun Club, Cleveland, O.
Evanston Gun Club, Evanston, Ill.
Chippewa Falls Gun Club, Chippewa Falls, Wis.
Franklin Gun Club, Benton, Ill.
Des Moines Gun Club, Des Moines, Ia.
Parker Gun Club, Meriden, Conn.
Springfield Shooting Club, Springfield, O.
Bradford Shooting Club, Bradford, Pa.
Peoria Shooting Club, Peoria, Ill.
Oshkosh Shooting Club, Oshkosh, Wis.
Cincinnati Independent Shooting Club, Cincinnati, O.
Exeter Sportsman's Club, Exeter, N. H.
Lincoln Sportsman's Club, Lincoln, Neb.
Medfield Sportsman's Club, Medfield, Mass.
Worcester Sportsman's Club, Worcester Mass.
Algona Sportsman's Association, Algona, Ia.
Farmington Sporting Club, Farmington, Ill.

Other clubs are yet to be heard from. It is expected that the gathering will be a representative assembly of shooting men. The railroads have announced that they will issue excursion tickets from Cincinnati to Chicago at rate of fare one way.

NOTES FROM WORCESTER.

ALL the challenge badges, four in number, owned by the State Association, are now in the possession of the Worcester Club. After the individual glass ball badge was won from Mr. Moses, of Springfield, on March 1, they all rested peacefully till some time in April, when we received, almost simultaneously, three challenges as follows: From O. H. Debchmont, of Newburyport, for the individual glass ball badge; from the Springfield Club for the team glass ball badge; from the Massachusetts Rifle Association Club for the team clay-pigeon badge. The matches have been shot on our grounds in successive weeks and an account of the first two, with the scores, has appeared in the "Trap" columns of the last two numbers of FOREST AND STREAM. The last of the series was shot yesterday, the account of which we shall expect to see in this paper when the week rolls round.

In connection with these matches we have held all-day tournaments which have been largely attended by sportsmen from different sections of the State, and so far as our club is aware everything has passed off pleasantly on each occasion. We have supposed that as a club, and individually, we enjoyed the most friendly relations with the clubs of this State, and so far as acquainted, throughout the country. There appears, however, an article in the last number of FOREST AND STREAM signed "Springfielder," to which I desire to reply. I wish to say at the outset that I do not know as the article in question emanates from the Springfield Club or that it receives their indorsement. It is apparent that somebody intends to say something to injure the standing of our club among sportsmen. The article, which is apparently his own, and partly a clipping from the Springfield *Republican*, is vague and amounts to little more than a few blind insinuations susceptible of any construction, but evidently intended to convey the idea that the Springfield Club were ill-treated at Worcester, and also that other sportsmen had been shabbily treated by us, and that the Springfield shooters would now join that aggrieved party and hereafter give Worcester a "wide berth." Now as this is the first and only complaint we have ever heard, we don't feel called upon to defend ourselves, and I shall only state a few facts concerning the matter referred to by "Springfielder."

In the first place, he alludes to an article which appeared in the daily *Spy* after the match between Perry and Moses, and for which, he says, the Worcesters made "suitable apology." It is true that there was an unpleasantness on that occasion, caused by what a prominent member of the Springfield Club was pleased to call "a shameless attempt on the part of the referee to hold up the score of Moses after he had utterly gone to pieces." Our men expressed their indignation strongly, and said perhaps more than they would have said in cooler moments. Afterward an individual member of the Springfield Club held a correspondence with the secretary of the Worcester Club, in which there were mutual explanations and regrets that anything of the kind should have occurred, and this correspondence was understood to be confidential. There never was an official word passed between the clubs concerning the matter. The article in the *Spy* was incorrect and unjust to the Springfields, and was deeply regretted by the members of our club. We were, however, in no way responsible for it and never indorsed it.

So far as the late team match is concerned, we supposed every thing was satisfactory. We certainly intended to do all in our power to make it pleasant for our guests, and also give them a perfectly square deal in the race, and it is equally certain that we heard no word of complaint. The trap was changed just before the match at the suggestion of the captain of the Springfield team, and was as new to us as to them. The best of feeling seemed to prevail throughout the day, and when our friends departed, their captain shook hands with our president and remarked: "We always have a good time when we visit Worcester." Our tournaments have been well attended, many shooters coming from other States, and so far as we are aware, have always gone home happy. If there be one who has received ungentlemanly treatment from our club, let him stand forth and we will make "suitable apology." E. SPRAGUE KNOWLES.

WORCESTER, May 10, 1884.

WORCESTER, Mass., May 9.—This has been a field day at Coal Mine Range of the Worcester Sportsmen's Club. They were favored with good weather and a large attendance. There were present as guests Messrs. J. H. Cole, of Ashland, and E. P. Tinker, of Providence. The event of the day was the match for the championship clay-pigeon team badge of the Massachusetts Association, which the Worcester Sportsmen's Club has held since June, 1883, subject to challenge. The one to-day came from the Massachusetts Rifle Association. Their judge was Mr. David Kirkwood; the judge for the home club was Mr. L. J. White, while Mr. H. Gardner was referee. The position of each man with the score of each was as follows:

Massachusetts Association.

C H DeRochmont	1101110010000011100—10
O R Dickey	1110111100111111011—16
E W Lane	1101101101111111101—16
G H Wurm	0111101111111111011—17
G H Tidsbury	1111101110111111110—17—76

Worcester Team.

H W Eager	1111111101111011111—18
E T Smith	1111111101101011101—18
G J Rugg	0011010101110111110—15
George A Sampson	1111111101101111111—18
W S Perry	1111101111101011111—17—84

The club have voted to make Wednesday, May 21, the annual fish day, to be followed on the 23d, by a fish supper. The captains are: Asa R. Jacobs and R. L. Golbert. Messrs. L. G. White, Henry E Smith and H. B. Verry a committee of arrangements. Sides are to be chosen, and all men who do not go fishing will be fined $1, the prizes to be used to help the defeated ones pay for the supper.



TOPSHAM, Me., March 9.—Riverside Club's regular shoot for silver badge, clay-pigeons, 10 singles, 18yds. rise, use of both barrels, second barrel ½ bird, 5 pairs, 15yds. rise, 2 traps. Figure 2 denotes second barrel:

A Q Gould	1111001110	11	10	11	11	11—16
M C Hall	1111111221	11	00	01	10	01—14
A S Alexander	0111111111	11	00	11	11	01—16
C L York	1020210021	11	10	10	00	11—10½
G B Strout	0001101000	11	10	10	10	01— 9

Ties on 16: A. Q. Gould, 011111—5; A. S. Alexander, 101011—4.

SIZE OF SHOT FOR THE CLAYS.—Will some sportsman be good enough to give his opinion as to the best size shot to use for clay-pigeons, I have tried all sizes and cannot come to a decision.—AMATEUR.

WELLINGTON, Mass., May 10.—The Malden Gun Club had a lively time this afternoon at the traps at Wellington, with the following result:

Cup Match.

J Buffum	1 1 1 1 1 1 1 1 0 1—9	Crosby	0 1 0 1 0 1 1 1 0 0—5
H Field	1 1 1 1 0 1 1 1 1 1—9	Scott	0 1 0 1 1 0 1 0 1 0—5
A F Adams	1 1 0 1 1 1 0 1 1 0—6	Short	1 0 1 1 0 1 0 0 0 1—5

Badge Match.

H Field	1 1 1 1 0 1 0 0 1 1—7	0 1 0 1 1 1 1 1 1 1—8	—15
J Buffum	1 1 0 1 1 1 1 0 1 1—8	1 1 0 1 0 0 1 0 1 1—6	—14
Lewis	0 1 1 0 1 0 1 1 1 1—7	0 1 1 1 0 0 1 1 1 1—7	—14
Brown	1 0 1 1 0 1 1 0 0 1—6	1 1 1 1 1 1 0 1 1 0—8	—14

First taken by Field and second by Brown.

WALNUT HILL.—The Massachusetts Rifle Association will hold a practice and sweepstake shoot at clay-pigeons and glass balls, on Wednesdays, as follows: May 7 and 21, June 4 and 18, July 2, 16 and 30, Aug. 13 and 27, Sept. 10 and 24, Oct. 8 and 22, Nov. 5 and 19, Dec 3, 17 and 31. Rifle shooting every Saturday.

SCHENEVUS, May 10.—Conditions: Combination traps, 18yds. rise, 3d notch:

D Chamberlain	0110111101110111111—15
P Rickard	0101101000000111110— 9
I Roberts	0100000111010110010— 9
J Wilson	0010010110111001110—11
A Parsons	1010001000101000001— 6

Owing to the inclemency of the weather but few were present.—E. E. B.

ALGONQUIN GUN CLUB, New York, May 12.—On Thursday last the Algonquins enjoyed a visit from their old friends, the Washington Heights Gun Club who, together with some members of the Knickerbocker Gun Club, made up a team that came very near beating the more or less noble red men at the traps. The teams agreed upon were twelve members of the visiting clubs against an equal number of the home club. Twenty puff balls to each shooter, thrown from a screened rotary trap. At the close the score stood 215 hits out of 240 balls shot at by the Algonquins, to 211 hits for the visiting clubs. Sweepstakes in clay-pigeons closed the afternoon's sport, which seemed to be thoroughly enjoyed by all concerned. The clubs cheered each other until the throats of the different members were as "dry as lime kilns," and then—J. E. M. L.

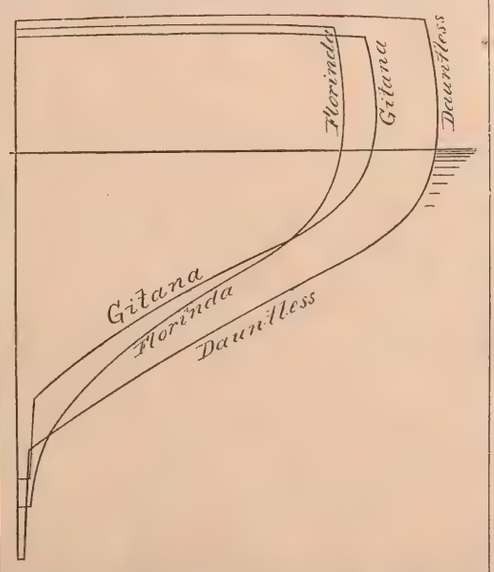
Yachting.

KNICKERBOCKER Y. C.

THIS club has shown its progressive spirit in deciding at the meeting last week to adopt the Seawanhaka sail area rule in place of length measurement, and in limiting crews for all boats to one hand per three feet of length. Thus a 27ft. sandbagger is now allowed only nine hands and a helmsman, thereby abolishing the tomfoolery of sailing open boats with unlimited crews and giving the boat some chance instead of reducing a yacht match to a trial of foolhardiness and gymnastics. In course of time we hope to see the club go one step further and prohibit all shifting of ballast with crews reduced to one hand for every five feet of length. Many new members and yachts have been added. Among these we note the Amazon, Mr. Franklin Beams, a sloop, which has at times given evidence of considerable speed, even under a meagre racing outfit. This year she is to appear with kites of all kinds in the sail room, and lead ballast, so we may expect to see her figure well at the finish. First match will be sent away at 11 A. M. May 30, for which nearly forty entries have been made. Steamer Perseus leaves East 120th street, Harlem, at 9:45, and Port Morris dock at 10:30. Club now numbers 160 members and 76 yachts. Club house at Morris Beach has been extended and renovated.

THE COLLAPSE AT NICE.

IN further illustration of the defeat of Dauntless and Gitana by the English yacht Florinda, we offer this week a sketch of the successful yawl and cross sections of the three competitors, drawn to scale. The Dauntless being considerably larger than the others, did not find the wind of sufficient strength in proportion, and was left hull down early in the race. But making all due allowance for size, there can be only one conclusion to the fiasco, that Dauntless is an excessively slow vessel in light winds, and too slow and unwieldy in stays to be ranked as a competitor in company of first-class racers. Yet at home Dauntless has the reputation of being something of a wonder, and columns have been filled in other papers chanting her fame. A truthful estimate of that schooner and the whole class of



her kind in our waters has never been made. The public has been misled from the start, deriving the impression that our large schooners were really fast vessels, from the pointless trials between the huge Sappho and Cambria, and the old-fashioned Livonia, a bluffish schooner ranking only a poor average with other English old timers across the water. Yet we have seen that same unpretentious old Livonia hold her own with our crack Columbia in one of the international matches, and which Livonia would actually have won but for the misunderstanding about turning the outer mark.

Of late we have all been falling down upon our knees in adoration of the new Montauk as a wonderfully fast schooner. Yet her reputation rests upon nothing more solid than contests with such mediocre productions as Tidal Wave and other ordinary vessels, much in the same class with the Dauntless, to say nothing of sundry small schooners differing too much in size to afford a fair chance for comparison. And even in company of our home vessels Montauk is not at all a brilliant performer in light winds, though quicker in working than the Dauntless. It is of course exceedingly unpatriotic to tell unpleasant truths, but we take it to be our business. Had any one predicted that Florinda would run and turn away from Gitana at will and make the Dauntless appear ridiculous over a thirty-two mile course in "our smooth water" and "our mild weather" such as was found in the recent Nice International, he would have raised a howl of patriotic indignation about his poor head and been accused of being a rabid "Anglophobist" and a traitor in the camp. Yet the very worst has happened.

When we now venture the prediction that in face of Wendur, Latona, Florinda or Miranda, our choice Montauk would utterly collapse in a bout to windward, and that the pretentions of our schooners would be found as mythical here at home as they have been shown to be at Nice. We expect just the kind of self-complacent indifference to such a prediction, which the faulty interpretation of the Cambria and Livonia races has served to propagate. We have been underestimating our foe all along. The modern English schooner or yawl is quite a different affair from old time arks like Livonia. If we choose to overlook the progress made abroad since the general introduction of outside ballast, the awakening from our self-sufficiency will be very abrupt and very disagreeable. The truth is, we have not progressed one iota in our schooners since the days of the America, while our cousins abroad have passed through various "revolutions," which made our defeat at Nice a foregone conclusion and point to a collapse of our remaining pretentions as a probability in the near future.

The test between Florinda and Gitana was fair and critical. Both have like displacement and ballast within a few tons. Florinda carries 54 tons on 150 tons displacement and Gitana about 60 on 165 tons. The latter has likewise about 7ft. extra length to her benefit. The only radical difference is depicted in the cross sections, Florinda being the narrower and deeper of the two, with a longer sweep to the bilge and less floor. Gitana furthermore received a concession of 15 per cent. of her tonnage for difference in rig, while on this side of the Atlantic the yawl is quite generally ridiculed as a sort of crazy piece of British nonsense. Not one in a thousand in this country but who would have rigged Florinda as a schooner in preference and laughed at the notion of expecting better results from a silly English custom, the choice of which is decried as "snobbery" throughout the truly patriotic circles. Let us hope that even the blindest patriot will catch a gleam of light from the slaughter of our schooners within sight of the attending crowds along the Promenade des Anglais. The lesson to be drawn from the Nice regatta is simple enough and has two chapters.

First, "patriotism" does not win races. Second, the old faith that beam to carry sail and floor to "slide over the water" in some impossible manner, or floor "for to stand up on," are the essentials to speed, is arrant humbug, empty words devoid of meaning, refuted a thousand times over in experience, and once more again in the disappointment at Nice. Finally, in view of the much smaller sail of Florinda, that beam contributes more potently to resistance than depth and displacement in a narrower form. Florinda's lower sail area is 5,250 sq. ft. in racing condition, though we learn that her spars were docked for cruising in the Mediterranean, with a sail area not over 4,500 sq. ft. The rig of Gitana, whether cruising or not, we cannot positively say, was large enough to attract general attention and was commented upon in the London *Field*. It could scarcely have contained less than 6,000 sq. ft.

TAPERING DOWN.

THE old mean length rule is gradually tapering down to hard pan. From mean length to one-third overhang, to one-quarter overhang, and now comes the New England Y. R. A. and announces in Rule 4, that for the measurement of length, only one-fifth the overhang aft shall be included. Where length is still to remain the standard, one-fifth the after overhang is somewhere near to common equity. The stupidity of taxing 6ft. counter as equal to 3ft. of middle body, or even 2ft. or 1½ft., is so patent to every one with a grain of mechanical conceptions in his make up, that the example of the New England Y. R. A. is sure to be followed quickly by other clubs still adhering to measurement by "simple length."

YACHTING AT BELLEVILLE, ONTARIO.

THE annual meeting of the Bay of Quinte Y. C., which was held yesterday evening, was of a character to show that the season will be quite lively in these waters. The club is in a good position financially, without a dollar of outstanding debts, and a balance in the treasury. The principal officers elected were: Commodore, W. H. Biggar; Vice-Commodore, R. M. Roy; Captain, S. R. Balkwill; Secretary, R. S. Bell; Treasurer, Wm. Pike; Measurers, Geo. N. Leavens and Wm. S. Drenary. All were re-elections except the commodore, captain and the second measurer. The secretary now enters upon his tenth year of service, having filled that honorary position ever since the establishment of the club.

The new commodore is a man of the right stamp. An enthusiastic yachtsman, one of our ablest young barristers, energetic and wealthy, his administration will beyond doubt be successful. He made a very neat speech on assuming the chair, and intimated that he will present a valuable prize for competition.

As the by-laws of the Lake Yacht Racing Association have not as yet come to hand, the formal union of the club with the association could not be made, but a committee was appointed with power t act in the matter, and the commodore, ex-commodore Clarke an

vice-commodore were appointed to represent the club on the executive committee of the association, and to endeavor to secure a change in the date fixed for the association regatta here.

Work on the fitting out of the local fleet is being proceeded with. The Iolanthe has undergone considerable alterations. Her spar has been shifted forward, her cabin enlarged and the house lowered, and she will be fitted with a wheel.

The new rule of measurement, sail area and length, as adopted by the L. Y. R. A., has been received with great favor here, as it is felt that it will equalize rating much more satisfactorily than the old length and breadth rule.

There is one proposed rule of the L. Y. R. A. which I do not like, that is, confining each yacht to her own class. For my part, I cannot see why, if a small yacht is good enough to compete with her bigger sisters, she should be debarred from doing so, the more especially as she has to accept a handicap in order to sail in the class above.

BELLEVILLE, Ont., May 8. PORT TACK.

ISIS.

THIS new cutter, built by Poillons, of Brooklyn, was launched last Saturday. She is a fine, bold, flush deck craft, with massive material in her framing and rather old-fashioned in construction and fastenings, the garboards being merely treenailed, and most of the work spiked. Built from lines by her owner, Mr. Cass Canfield. She has a long bow and short run, which, in connection with large beam and snug rig, will not be likely to result in a fast craft, though well adapted for cruising, with more room on deck and below than any yacht of her length in these waters.

Length over all	60ft. 10in.
Length on loadline	51ft. 5in.
Beam extreme	13ft.
Beam on loadline	12ft. 4in.
Depth of hold	8ft. 6in.
Greatest draft	9ft.
Displacement	41.75tons.
Ballast on keel	32,000lbs.
Ballast inside	9,000lbs.
Area three lower sails	2,325sq. ft.

Length of lead keel is 23ft.; width across top, 22in., and depth, 19in. at midships. Center of buoyancy abaft center of loadline, 1.07ft. Meta center above same, 2.517ft. Center lateral resistance abaft center of loadline, 2.02ft. Mast deck to hounds, 41ft. 6in.; masthead, 7ft.; topmast, heel to shoulder, 30ft. 6in.; boom, 47ft.; gaff, 30ft.; bowsprit outboard, 25ft. 9in.; spinnaker boom, 47ft.

LAUNCHED.—The new schooner building by Lawley & Son, South Boston, for Mr. J. Malcomb Forbes, from designs by A. Cary Smith, was launched last Saturday. Length over all, 78ft.; water-line, 65ft.; beam, 19ft. 6in.; draft without board, 6ft. 4in. Centerboard trunk of boiler plate, 18ft. long. Displacement, 68 tons, with 27 tons lead ballast inside. Built of two skins, inner skin being 1in. thick, outer of oak, with yellow pine bends, both caulked and copper-riveted together, after paying over with crude turpentine. An iron hog strap is wrought over the frames in wake of the chainplates, to take the strain from the rigging. Keel of oak, 18×20in.; frames of oak, 21in. between centers, sided 4in. and moulded 4½ at heels, tapering to 3½ at head. Floors of iron, 2×3in. and 8ft. long. Deck of 2¼ square white pine. Locust stanchions and bits and mahogany fittings. Main cabin, 16×9ft., with over 6ft. height under house beams. Two staterooms each side of centerboard. Berthing for six hands forward, the iron berth frames turning up against the side when not in use. Yacht has long cutter fantail. Schooner rig, with fore staysail and single stick standing bowsprit for one jib outboard. She is a splendid job throughout, full of new ideas which have been well executed by the builders, to whom she is a great credit.

FIXED BALLAST.—The South Boston *Inquirer* wants ballast to be sealed down in races to prevent surreptitious shifting. This does not speak well for the honesty of those it apparently addresses. In England shifting was abolished many years ago, and the rule is enforced without recourse to any penal precautions. Are we less honest in this country? The fact of a person's shifting could hardly be kept secret for any length of time, and the disgrace of expulsion from the yachting brotherhood will probably be enough to hold in check any tampering with ballast, unless in so few cases as not to require a disagreeable reflection upon all hands in assuming them to be card cheats in advance. However, anything at all to prevent shifting.

MICHIGAN Y. C.—The new club of Detroit will consider adopting the Seawanhaka rule of measurement. A gentleman writes from Detroit very pertinently as follows: "I think the length and sail area rule is what we want. The snug cruiser can stand some show with her big, over-rigged rival. It is time this "brute force" sailing should end. A boat with half a ton of live ballast on a six-foot lever beats a fixed ballast boat with three men to windward, and the boat gets credit for it, when if the same boats were to sail singlehanded over the same course and same wind, the fixed-ballast fellow would beat her blind. Now is that a test of boats and models, or is it a test of gymnastics?"

SEAWANHAKA CORINTHIAN Y. C.—The club has decided upon the following further qualification of the method for obtaining sail area, to prevent a relapse to broomstick topmasts: "But the measurement to be recorded as the height of the perpendicular, shall in no case be taken as less than the distance from the upper side of main boom to the under side of hounds with nine-tenths of the length of gaff added thereto." The club has also induced the N. Y. Y. C. and the E. Y. C. to join it in adopting a uniform signal code and system of etiquette and rules for hoisting colors, etc.

PAYING DECK SEAMS.—After caulking with cotton, pay with care with mixture of whitelead and common whiting, mixture to have consistency enough to be properly applied. See that the seams are filled thoroughly, using an ordinary putty knife. "Marine glue." an English preparation of tar, rubber and varnish, has been tried in this country, but not with success, as the glue softens in our strong summer sun. This marine glue cannot be bought on this side. Thick whitelead can also be used without admixture of whiting.

NEW SCHOONER.—Mr. Edgar Harding has had a new schooner built on lines by Dwyer, of Portland. Over all 63ft., water line 57ft., beam 14ft., draft 9ft., mainmast 61ft., foremast 60ft., bowsprit outboard 18ft., jibboom 13ft. beyond cap, mainboom 43ft., gaff 21ft., foreboom 18ft., gaff 17ft. Mastheads are 5ft. Sails by A. Wilson, of No. 5 duck. Area, mainsail 1,320 sq. ft., foresail 625, jib 426. Staysail, flying jib and two topsails 1,196 sq. ft.

MADGE.—Orders have been received to fit out this famous eye-opener, at Newport, for racing this year. Who is going to skipper her? A green hand will make a mess of it. It takes years to become an A1 cutter skipper. The sloop man has first to unlearn all he knows and then begin over again. It requires the finest touch and keenest judgment to tool a cutter for all she is worth.

PASTE THIS UP.—Rule 26 of the New England Y. R. A. reads: "Shifting ballast shall not be allowed in any race governed by the rules of this association under penalty of the boat and the owner of the boat, or any other boat belonging to him, being debarred from any further entry or participation in any race given by any club affiliated with this association."

CLUB HOUSES.—Buy an old schooner with sound bottom, build a mansard roof over her from rail to rail, keep lower masts and rigging standing. Construct large "tops" with railings at masthead. Then you will have a cheap club house, roomy, appropriate, can be shifted at will. Splendid lookout from aloft and exercise racing up and down the rigging.

STEAM LAUNCH.—Kirby, of Rye, has built a 45ft. steam launch for Geo. Mertz & Sons of Port Chester. She has 9ft. 8in. beam and 5ft. depth. Flat floor and quick bilge, as she will be required to lie on the mud at her moorings.

ALGA.—This 32ft. cutter, which has been drying in Lawley's yard for two years past, owing to Mr. Longfellow's absence in Europe, will be launched and fitted out this season. She will have English made spars and sails.

JERSEY CITY Y. C.—Will open the season with an informal cruise May 30. Spring match fixed for June 12, which is an unfortunate selection, as it clashes with the date of the New York Y. C. races.

CHICAGO Y. C.—Annual cruise fixed for July 3, sail for Milwaukee. A subscription has been raised to purchase a fine yachting library and photos from Halifax. Mr. Miles Nixon is now recording secretary.

SOUTH BOSTON Y. C.—Circular for Decoration Day races having been issued before the formation of the New England Yachting Association, shifting ballast will be allowed on that day.

ROYAL CANADIAN Y. C.—Will establish a system of junior membership, enabling young men under twenty-four to become members on an annual subscription of five dollars.

ATALANTA.—Mr. Isaac R. Thomas has bought the 27ft. catboat Abbie A., of Marion, and changed her name to Atalanta. She will fly the burgee of the Beverly Y. C.

SALEM BAY Y. C.—Has arranged for matches as follows: First championship, June 26; second, July 26; open races, Aug. 16; third championship, Sept. 4.

GALLEY FIRE.—The owner of the schooner Gaetina accomplishes all his cooking over two oil stoves swung on gimbals.

NEW KEELS.—Borden, of South Boston, is altering the centerboard sloops Ellen and India to keels,

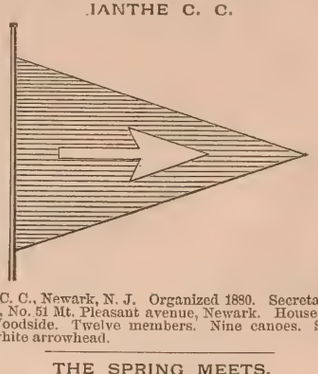
Canoeing.

Secretaries of canoe clubs are requested to send to FOREST AND STREAM their addresses, with name, membership, signals, etc., od their clubs, and also notices in advance of meetings and races, an reports of the same. Canoeists and all interested in canoeing are requested to forward to FOREST AND STREAM their addresses, with logs of cruises, maps, and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.

FIXTURES.

May 30.—Pittsburgh C. C., First Annual Regatta.
June 1.—Hudson River Meet at Newburgh.
June 1.—Connecticut River Meet.
June 14 to 16.—Merrimack River Meet.
July 9 to 15.—Chicago C. C., Club Cruise.
July 19.—Chicago C. C., First Annual Regatta.
July 24 to 26.—Lake George Meet at Lorna Island.

IANTHE C. C.



IANTHE C. C., Newark, N. J. Organized 1880. Secretary, John B. Russell, No. 51 Mt. Pleasant avenue, Newark. House on Passaic River, at Woodside. Twelve members. Nine canoes. Signal, blue field with white arrowhead.

THE SPRING MEETS.

MERRIMACK RIVER.

Editor Forest and Stream:

I noticed in a recent issue of FOREST AND STREAM that it was proposed to hold a local meet on the Merrimack, and it struck me as being a first-class idea, and, for one, I should like to attend.

If there is any canoeist in this vicinity who would like to make the cruise to the meet in company, let him ship his canoe and himself to Sterling, and I will take him to the head of canoe navigation on the Stillwater River, a tributary of the Nashua, and a cruise from here to Lowell will be very pleasant. E. H. COOLIDGE.

WEST STERLING, Mass.

NEWBURGH.

Editor Forest and Stream:

New Yorkers may find the following a good way to go up to the Newburgh canoe meet: Get afloat with everything stowed about slack low water and lay for a tow of canal boats or barges anywhere between the Battery and Thirty-fourth street. Paddle alongside one of the rearmost boats of the tow and make arrangements for a deck passage with the skipper. The crew will cheerfully lend a hand in getting the canoe on board, and you can turn in as comfortably as if you were stamped on shore. I have been treated with great courtesy on several occasions when availing myself of this means of transit; but don't try it if you are a snob, or anything of that sort. The bargees are a rough set and won't be patronized. I advise you to wear trousers over your knickerbockers and not to part your hair in the middle if you would have them regard you as a being fit to associate with them. A supply of cigars will go far to cement friendship and secure the favor of all hands. An afternoon start will secure an arrival off Newburgh at an early hour in the morning if no serious delay occurs. C. L. N.

NEW YORK CITY.

LEAKS IN BIRCH BARK CANOES.

Editor Forest and Stream:

To stop a leak in a birch bark canoe, turn her bottom up and let her get dry. Have a mixture of pitch and lard which will be just a little soft when it cools. Heat this and plaster it over the leak. By wetting the finger and rubbing the pitch therewith, a smooth patch can be made. If the crack is a large one, a few coarse stitches should be taken through its edges with string or strip of bark before applying the pitch. If very large a patch of birch bark is sewn on, and the seams paid over with the pitch mixture. C. L. N.

Editor Forest and Stream:

In answer to "What will stop leak in birch bark canoe," will say: Have made many trips in them in the Maine waters where bottom has been broken by rocks in swift waters or by a knot hole. The guides always had a small tin cup of pitch and built a light fire, melted it, and turned canoe over and had it perfectly dry. Applied the pitch hot with flat stick and wetting the ends of their fingers rubbed the pitch smooth. It sticks like a poor relation. If the break is a long one or on the bow of canoe, or at a seam in the back, take a strip of strong cotton cloth or canvas, cover it with pitch and apply it to the spot hot, then cover it outside this patch with hot pitch and rub smooth while cooling with your thumb wet, and you have no fear it will ever come off unless coming in contact with rocks. Allow me to congratulate you upon the excellence of your FOREST AND STREAM. I have bought and read every copy. J. H. W.

CORNING, N. Y.

CANOE RIGS.

THE Snake has got her new mainsail rigged after the Stoddard-Oliver plan with some modifications. It is an endeavor to get the rapid and easy reef on or before the wind, which the lug affords, with the weatherly qualities and lightness of the lateen, and it seems to be very successful as an all-round sail, not too large or heavy for cruising, being about 50ft., nor requiring too high a mast—5ft. 10in. above deck. It has besides the sheet only a combined halliard and reefing downhaul, practically one rope. Tack and jackstay are dispensed with, and a jaw or hook on boom working between two collars on mast holds the boom in position. It is detached from the mast in five seconds, and a smart flat sail not perceptibly different from the lateen.

In fact, the Snake's sail and the Marion's are both lateens by Rushton, differently mounted. The Snake found that the 60ft. lateen with spars big enough to stand the strain of her manner of working, was too heavy to be manageable with the ring and pin arrangement at masthead. The limit for that pattern seems to be about 50ft. and then the spars must be very deftly made to be light enough without weakness. Therefore advantage was taken of Gen. Oliver's and Mr. Stoddard's experiments. The Snake will come to Newburgh with 87ft. of sail, comprising main 37ft., dandy 17ft., jib 14ft. The main reefed shows about 38ft.

AIRTIGHT BOXES FOR CANOES.

Editor Forest and Stream:

As airtight boxes seem to me the best means of securing a canoe from sinking, I venture to report the results of my recent experiment in making them. The ends of a canoe are the best places for such tanks; they occupy there space that is not very available, and that ought never to be filled with baggage, if the canoe is to carry her load easily. As my new canoe is 15ft. long she gives me room enough, after filling the stern with a box 2ft. 6in. long, 1ft. 5in. wide on top, 11in. deep at its forward end, and shaped like the end of the canoe, and putting in the bow another box 2ft. 3in. long, 11½in. wide on top, and 5in. deep at the after end. This forward box is quite shallow, to allow the spars to run forward to the stem.

These boxes are made of nickeline silver No. 3, gauge 32, the manufacture of the Holmes & Wessell Metal Co., West Twenty-fourth street, New York. This alloy is so strong that even this exceedingly thin sheet is able to withstand the pressure of the water when the tanks are submerged. The larger box weighs only 4lbs. and floats 71½lbs. above the water; the smaller one weighs 1½lbs. and floats 15lbs.

They are held in place by light, removable bulkheads, screwed or buttoned to a carline and the keelson, so that the boxes may be taken out easily for repairing the canoe without taking off the deck. They were made by a tinsmith, over frames shaped like the space they occupy, but the frames were not left in the tanks. As this nickeline silver will not rust much in one lifetime, I shall henceforth feel perfect security in the buoyancy of the Allegro.

MILTON, N. Y., April 28, 1884. C. H. FARNHAM.

A NIGHT ON A LOG JAM.

ONE bright morning in early September two ardent canoeists started on a short cruise, part of which has been more pleasant in remembrance than it was in actual experience. The trip proposed was on a small stream in Northern Wisconsin, called the Waupaca, which flows into the Wolf River, then down the Wolf to Lake Winnebago, across the corner of the lake and down the Lower Fox. As we were to pass through several small towns we went in a single canoe, with a 9ft. cockpit, and trusted to find sleeping quarters for the two or three nights we expected to be out in some farmhouse, barn or tavern.

It was about 7 o'clock when we put our heavily loaded canoe into the water at the pretty village of Waupaca. The Waupaca River offers much that is pleasant for a one or two days' cruise. It runs almost entirely through a thickly wooded country, with banks varying from one or two to fifteen or so feet in height. It is as crooked a stream as can be found in the United States.

It would be impossible to make out its general direction from cruising on it, as it never keeps any direction more than three or four rods. It doubles and turns and twists until an exact map of it would look like a row of S's tied in double bow knots. As an instance of this, K., who had been on the stream before, called my attention, as we got under way, to a barn not many yards away, and ten minutes later we whizzed passed the same barn with a five or six-mile current, having made a detour of a mile.

After an hour of easy paddling, but of great progress, owing to the swiftness of the current, we were interrupted by a portage over some accumulated driftwood. As we were pulling the canoe over a log an unlucky movement at a critical moment caused her to careen so that a capsize seemed inevitable; but as she slid into the water on the other side she righted bravely, and the only thing which went overboard was a package of crackers, which floated calmly on the surface of the water for a moment and then, caught on a rock, tore open, and for as much as half a mile, as we lazily dipped our paddles, we encountered now and then swollen and uninviting looking fragments of what we had expected would go, in company with plenty of milk, in very different channels.

On we went through apparently uninhabited country, darting around bends, passing under the branches of trees which leaned almost completely across the narrow stream, now slacking up as we passed through some little stretch of rapids, and encountering occasionally a log so fallen as to necessitate getting out and drawing the canoe over it, just enough of these to afford a pleasant variation, and none requiring us to go ashore.

Toward noon we came suddenly upon a brick yard and a dam six feet high. The canoe could not shoot this, loaded as she was, but as neither of us had ever jumped a dam, K. was anxious to try. So we unloaded, and getting a good start he went over successfully, and carrying the canoe around again I also went over without accident, much to the disappointment of the workmen at the brick yard, who left their tasks and watched us with great interest.

There was here a good illustration of the crookedness of the river. The water which furnished power for the mill escaped by a tail race only a few yards long into the river again, while from the dam to the same place, as the river ran, was more than a mile. To make up for the time spent at the dam, we portaged over this neck of land.

About noon we came to an immense pond, thickly studded with tree stumps. There was a gentle breeze in the right direction, and we let the canoe drift and ate our dinner on board, occasionally interrupted by the canoe's gently bumping against a stump.

At the end of this pond, which we reached just as we finished our meal, we had our last portage on the Waupaca. From there to the Wolf we had free water with the exception of a newly fallen tree, which occasioned some delay. Toward 3 o'clock we reached the Wolf River, having come no less than 65 or 70 miles since 7 o'clock.

Here the prospect was entirely changed. The river was larger, and the current much slower, and the channel contained a great many logs. They seemed to float much faster than the current, and we were bothered considerably by them, as sometimes they took up almost all the channel, though they were loose and we managed to pick our way among them at a pretty fair rate.

We began to feel a little anxious, however, and made inquiries of some men we met, but received indifferent answers. As we went on we found the logs getting more and more numerous, and a row of piles was driven down the middle of the channel and a boom stretching past them divided the river lengthwise. All the logs now went into one side, and we rejoiced for some time in clear water. But before long we found that every half mile or so the other side of the river would be full of logs so that we were obliged frequently to pull the canoe over the boom into the clear side.

At every turn matters became worse, and gangs of river men were seen on the booms letting the logs out. Becoming now quite anxious, we made inquiries of every one of these rivermen we overtook as to the logs ahead, chances of obtaining sleeping accommodations, etc., but from these we could only learn that the logs did not extend very far ahead, that we could find several farm houses along the river, and that at the "cut" three or four miles below, there was a riverman's cabin, where we would be welcomed. One of them shouted to us, "You had better get ahead of this jam to-night. It'll be a mile and a half long before morning."

The river now ran through an immense marsh stretching away as far as we could see, through which we pushed on as fast as possible. About 5 o'clock we ran on to a large jam of logs about 40 rods long. There was nothing to do but go over the top of it. To go through it was impossible, but thinking that our troubles would be over after passing them, we went to work vigorously and pulled the canoe over the slippery rolling logs, without any unpleasant result beyond wet feet.

Believing that we were now ahead of all the logs, we took things more easily, keeping a sharp lookout for the riverman's cabin. Just as it was getting too dusky to see distinctly further than across the river, as we rounded a bend another jam met our gaze. Getting out on the edge we strained our eyes to see the further end, but in the gathering darkness it seemed to stretch away indefinitely, and no clear water was visible. We even walked along the logs a few rods, but could see nothing.

Coming back to the canoe we found that the logs had floated in from above and inclosed us in the jam, so that advance and retreat was impossible except over the tops of the logs, which in the darkness would be attended with much danger. We were left to choose between two alternatives; either to walk on the logs till we reached the riverman's cabin, providing the jam extended that far, leaving the canoe in the marsh, and trusting to find it in the morning, or else to make a night of it on the jam, where we were.

Choosing the latter, and finding two large logs on the edge of the marsh close together, we placed the canoe between them and sat down to a cold supper. When we were ready to turn in we placed an immense shawl over the whole cockpit, to keep out the mosquitoes. Besides this we had a small wolf robe which we placed in the middle, and as it extended as far as our hips, our feet at least were comfortable. As for the rest of us, he who had in his valise the greatest number of shirts or socks, slept that night the most softly. Spreading all such things in the bottom, as K. expressed it, 12 feet of canoeists crawled into 9 feet of cockpit 28 inches wide.

The dew falling on the shawl made the cockpit so nearly airtight that now and then one or the other of us would raise up a corner to get a breath of fresh air, and then the mosquitoes would come in. As to the size of these mosquitoes silence had better be strictly preserved. In these degenerate days no one can say how large the mosquitoes were on the trip he took and be believed. At any rate, they were large and numerous, and but for them the night would not have been very unpleasant. K. said they kept him awake all night, and from an incident which occurred the next day I am inclined to believe him.

Some time in the night we were startled by a tremendous noise, which we were at first unable to explain. I thought it was a steamer, but K. declared it was another band of mosquitoes. In either case our situation was unpleasant. If it was a steamer and attempted to break the jam we would be capsized; if it was another regiment of mosquitoes we would be eaten up. But, whatever it was, it made no further demonstration.

With the first appearance of dawn we got up and surveyed the scene. Up the river the logs, which had come in during the night silently and cautiously, stretched away, thousands and thousands of them, beyond the bend, and I have no doubt for two or three miles further. Down stream, not more than thirty or forty rods away, was the end of the jam, with clear water beyond, and at its edge was the riverman's cabin on a raft of logs, furnished with mosquito bars and all that a tired canoeist could desire.

There too was the steamer whose whistle had awakened us in the night. We had come the evening before to the first of all the logs, but it had been too dark to see either the open water or the cabin. Leaving the canoe we made our way over the logs to ascertain our exact whereabouts. As we were walking along the event occurred which made me think the mosquitoes had really kept K. awake all night. I was a little ahead and heard the logs behind me bumping in a rather lively manner. Looking around I saw him executing a very animated double shuffle on some small and very slippery looking logs. When he had regained his equilibrium I asked him the cause of his unwonted gayety. With a rather sheepish air he confessed

that he feared he had fallen into a doze and nearly slipped in. But perhaps he had not yet got fully awake. It was a wonder that he did not go down between the logs.

From the riverman we learned that the "cut" was full of logs, so that we would be obliged to go around by the main channel, an additional nine or ten miles. Declining his hearty invitation to stop and take a cup of coffee we bumped the canoe over the logs and dropped her into the water, hoping to reach the lake some time in the afternoon. This we succeeded in doing, passing through two small lakes on the way, but the canoe had received such rough handling among the logs, and besides was so heavily loaded with double crew and outfit, that we concluded it would be quickest and safest to go home by rail, shipping the canoe by the next steamer.

Altogether the trip had more of fun in it than discomfort. The same trip, under more favorable circumstances, would be very pleasant. We afterward learned that the jam, which was nearly four miles long, held for three weeks, and if we had not reached the point we did that night we should have been left in a very unfortunate condition. P.

THE CHART LOCKER.

IX.—WALLKILL RIVER.

CAN any one who has made the trip or heard of it, give information about the Wallkill, from Hamburg and the "drowned lands" down to Rondout? Some larger boats propose to accompany the Marion and Fior da Lice, and although some accounts have been given they do not seem to apply to the spring condition of the Kill, and it is hoped that early in June there may be water enough for Ellards. Who knows? SNAKE.

THE GALLEY FIRE.

CANOE AND CAMP COOKERY.

III.—FISH—CONTINUED.

Planked Fish.—Shad, flounders, sunfish or any other "flat" fish may be "planked." Cut off the head and tail, split open the back, but do not cut clear through the belly, leaving the fish so that it may be opened wide like a book and tacked on a plank or piece of bark. Tack some thin slices of bacon or pork to the end of the fish that will be uppermost when before the fire, and, if you like, a few slices of raw onion sprinkled with pepper and salt. Sharpen one end of the plank and drive it into the ground, before a bed of hot coals. Catch the drippings in a tin cup or large spoon and baste the fish continually till it smells so good you can't wait another instant to eat it. It is then done.

Skewered Trout.—Sharpen a small, straight stick, and on it skewer small trout and thin slices of bacon or pork in alternation. Hold over a bed of hot coals and keep constantly turning, so that the juices will not be lost in the fire. A very few minutes will suffice to cook the trout.

Fish Chowder.—Clean the fish and cut up all except the heads and tails into small pieces, leaving out as many bones as possible. Cover the bottom of the pot with slices of fat salt pork; over that a layer of sliced raw potatoes; then a layer of chopped onions; then a layer of fish; on the fish a layer of crackers, first made tender by soaking in water or milk. Repeat the layers, except pork, till the pot is nearly full. Every layer must be seasoned with pepper and salt. Put in enough cold water to moisten the whole mass well, cover the pot closely, set over a gentle fire, and let it simmer an hour or so. Cook it till it is rather thick, then stir it gently, and it is ready to serve. Tomatoes may be added as a layer after the onions.

Clam Chowder—Is made the same as fish chowder, using clams instead of fish.

Boiled Fish Roe.—Wash and wipe the roes with a soft cloth. Wrap in a cloth and boil the same as fish; or, they may be tied inside the fish with string and boiled with it.

Fried Fish Roe.—Prepared as above, dredged in meal or flour and fried exactly as fish. SENECA.

MOHICAN C. C.—Held their regular monthly meeting Wednesday evening, 7th inst. The following gentlemen were elected members: C. Winne, W. Tipping, W. L. Palmer, H. Cushman, G. H. Thacher, R. W. DeLano, W. D. Goeway and F. L. Mix, who will all be active canoeists, and, therefore, a considerable acquisition to the club. Several new boats are arriving and expected, including a Rushton Princess for Mr. Pierson, a man of proportionate size. A Rushton Ellard has just appeared, and is a beauty and evidently a good boat all round. Lansingburg boats, by Smith, are also in demand; two more are due in a few days. The boat house and club room have been rearranged and improved to accommodate the increased number of members, and the necessity of further extension is being considered. The Newburgh meet was discussed and a large attendance promised. Some prizes for open races were also offered. The new constitution was found to be working very well on the whole, but notice was given for minor amendments with regard to the election of members and to the rates for housing canoes. The Mohicans demand only a moderate subscription and an extra rent from canoe owners. After the adjournment the Executive Committee (who control racing) were called together by the captain and asked to consider a challenge prize for sailing offered by him; the prize to be a silver badge, with the word champion, and a streamer bearing the same word. Conditions: Sail limited to 75ft. area; ballast to 75lbs.; course and other regulations as determined by committee. Prize accepted. —SNAKE.

MERRIMACK RIVER MEET.—Correct dates are Saturday, Sunday and Monday, June 14, 15 and 16. Fleet leave Lowell afternoon of first day; break camp Tuesday morning. In addition to New England canoeists, two are expected from Canada and at least one from New-York. The interest is growing.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

F. E. WASSON, Cleveland, Ohio.—Letter sent to address you gave has been returned.

SUBSCRIBER is informed that we do not know the address of party who makes portable houses.

H. B., Lancaster, Pa.—Can you tell me where I can buy a buckskin hunting suit, coat and pants? Ans. See advertising columns. The gun stores keep them.

A. G., Baltimore, Md.—Will you please inform me what course to pursue to have my collie dog registered in the *American Kennel Register?* Ans. Read the notice at the head of Kennel department on page 309.

C. F., New York.—1. The expression .40-70 applied to rifle means that the rifle is .40 in caliber and the charge is 70 grains of powder. 2. Chilled shot is shot which has been submitted to a hardening or chilling process.

J. M. E., Sinclairville, N. Y.—Can you recommend to me some work on the mammalia of North America, something that will answer the same purpose that Coues's "Key" does for the birds? Ans. There is no such work.

W. S.—Sew a piece of canvas neatly over the hole, first putting a coat of shellac varnish on its inner side, the outside being painted thoroughly to match the rest of the boat. See directions for repairing a birch canoe in another column.

B., Boston.—I have bought seasoned lancewood for making a rod, one piece of which is badly warped. Is there any way of straightening it without hurting the elasticity of the rod? Ans. It is difficult to do, but you may steam it and hold it straight in clamps for some days and try it. A cabinet maker or carriage maker may do it for you.

C. L. C., Johnstown.—Will you kindly give me the name of the following bird: Head purple, back light green, breast and belly yellow, wings green with some black feathers, tail dark green, legs black, eye black, bill thick and gray color. Bird about 5½ inches long. Ans. Perhaps a young male purple finch, though your description hardly fits.

E. A. B., Blair, Neb.—Will you please inform me through correspondents' column what is the Latin, also the common name of a goose or brant that is common here. We call them here the mountain geese or California geese. They are a fac simile of the common wild geese or Canada geese in color and marking, only smaller. Length, 27 inches; length of wing, 22½ inches; length of bill, 1½ inches. We also have the snow geese or white brant, also the speckled-breasted brant or Hutchins' geese as some call them. The goose I have tried to describe is about the size of the other two. Plenty of water fowl here this spring. Ans. The goose is *Bernicla canadensis hutchinsii*, Hutchins' goose. The speckle-breast of which you speak is the white-fronted goose, not Hutchins'. Error in local name.

G. E., Chicago, Ill.—1. What is the common English name of the small gull or tern, about the size of a turtle dove, which abounds on the sandbars of the Middle Mississippi River? It has yellow bill and legs, and is dark cream-color on the back and lighter underneath, also what is its scientific name? 2. What are the English and scientific names of the creeping or trailing plant found in the South bearing a peculiarity attractive flower called by the darkies the "Maypop?" It has large dark green leaves, and the blossom is about three inches in diameter with the petals presenting the appearance of a delicate pinky fringe. Is found around old cultivated fields. 3. Has the theory of oiling the waters in a storm to break the force of the waves ever been put to a decisive practical test? Ans. 1. Your description is so vague that we cannot tell what bird you mean. 2. The flower called Maypop in the South is the *Passiflora incarnata*, one of the passion flower family. 3. The theory has never been tested by scientific men that we know of. It is safe to regard the alleged smoothing of the sea by oil as a sea captain's tale until it has some better authority.

CANOEISTS AND CAMPERS will find in another column an advertisement of the Great American Tea Co., who put up packages of convenient size and form for use in the woods.

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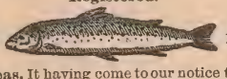
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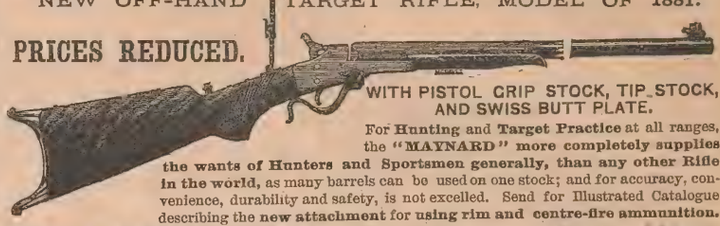
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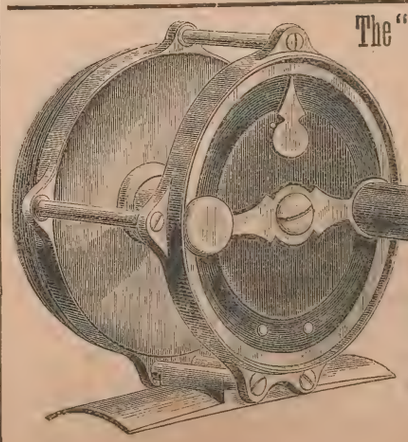
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PROPOSED NATIONAL ASSOCIATION.

OIL and water will not mix. It is just as well to remember this, and much cheaper to accept the teaching of experience than to waste good oil and water in useless and silly experiments to demonstrate an old truth.

We observe in certain quarters a foolish and ill-advised suggestion that the national association, which it is proposed to organize at Chicago next week, be made up of two elements, those who are interested in trap-shooting and those who are interested in game protection. It is suggested that the proposed association serve in a dual capacity, to encourage trap-shooting and to promote game protection.

If any of the gentlemen who are going to Chicago seriously entertain the notion that they can get up such a society with any good to themselves or the country, we beg to warn them that the project is visionary and utterly impracticable. Oil and water will not mix.

This thing has been tried once. It was undertaken after much deliberation and planning. There were influential men back of it. The initial meeting was attended with a good deal of what we nowadays call a "boom." After that it fizzled out by degrees, and was finally lost altogether in the vicinity of Wilkesbarre, Pa. The experiment cost those who made it $25,000. Such experiments are too costly to be often repeated.

A prominent official of the former association once told us that he thought the pigeon shooters were to blame for the failure of the society. Now, pigeon shooters may be (and often are) enthusiastic game protectors. But it has been proven time and again that when the attempt is made to combine these two interests, game protection goes to the wall and the trap absorbs all the attention. This was the case at the meetings of the National Association, it has been the rule at all recent State conventions. To repeat it on a national scale is simply foolishness.

Moreover, there is no call for a national association to dabble in game protection. We can conceive of no practical work for it. Game protection is just as well off without it. If any ardent game protectors are so enthusiastic on the subject that they want a national association, let them work off their enthusiasm by doing something for the game and fish at home. The country is full of men who are always ready to make a glowing speech at a sportsmen's convention, but who at home remain as mum as a dead clam shell while the waters are netted and the birds trapped all around them.

If the men who are concerned in inaugurating the new association really desire to see their project made a success, they must confine their efforts to one purpose. To establish a trap-shooting society of national scope is a much more feasible undertaking than the attempt to form a comprehensive trap and protection society. Even this can be done only by the expenditure of a generous amount of downright hard labor.

For the consideration of those who are going to Chicago, we repeat our suggestion of last week, that the success of a national trap-shooting society will be dependent wholly upon the financial strength it can show. The only way to collect club delegations from different States will be to provide generous prizes for competition. Without such inducements shooters will not be willing to spend time and money to attend the tournaments. The important question to be considered by the gentlemen at Chicago next week is the money question.

THE WORTH OF DOG FLESH.

IT is customary for the exhibitors at our bench shows to place opposite the dog's name in the catalogue a figure, which is presumed to indicate the price of the animal. Sometimes this is $25; sometimes it is $10,000. The former is what the owner would sell the dog for, if he could; the latter is only another way (and a poor way at that) of saying that the dog is not for sale. When bench shows in this country were, by eight years, more of a novelty than they are to-day, it was not unusual to see a crowd of open-mouthed visitors gathered about the stall of a $10,000 dog, mutely wondering at such a gold mine incased in dog fur. At the present day, however, the average visitor is up to snuff, and pays little attention to the fancy figures in the catalogue. It is very probable that the time will soon come when exhibitors will cease to make themselves ridiculous by affixing such prices to their exhibits.

In the catalogue of the last New York bench show, less than one-half of the dogs were priced by their owners. The values given ran from $25 to $10,000. The total sum of all the values so printed was in round numbers $318,500. It is perfectly safe to assume that the owners of the other dogs in the show thought as highly of their animals as did the exhibitors who named prices. By doubling the sum given above as the alleged value of one-half of the dogs, we find $637,000 to be the total value of all the animals exhibited. Including the puppies, there were 1,185 exhibits. The average value then would be more than $500. This is too high.

We have gone through the catalogue, and with some care have estimated the market value of each animal named in it. The owner's prices have been disregarded. One dog marked in the catalogue at $10,000 we have put at $200, another priced at $100 we have put up to $150. Here are the prices which, as dogs go, we judge to be approximately correct:

7 dogs, worth	$1,000.00 each	$7,000.00
34 dogs, worth	500.00 each	17,000.00
2 dogs, worth	400.00 each	800.00
34 dogs, worth	300.00 each	10,200.00
47 dogs, worth	250.00 each	11,750.00
46 dogs, worth	200.00 each	9,200.00
72 dogs, worth	150.00 each	10,800.00
228 dogs, worth	100.00 each	22,800.00
29 dogs, worth	75.00 each	2,175.00
266 dogs, worth	50.00 each	13,300.00
375 dogs, worth	25.00 each	9,375.00
9 dogs, worth	15.00 each	135.00
30 dogs, worth	10.00 each	300.00
5 dogs, worth	5.00 each	25.00
1 dog, worth	.25	.25
Total value		$114,860.25

This is something less than one-fifth of the sum quoted above. Nevertheless, $114,860.25 is not a total to be scoffed at. The Madison Square Garden dog exhibit, turned in as collateral at our valuation, might float a Wall street bank. The average value is only $96, a sum simply ridiculous beside the rounded $500 average claimed by the exhibitors. Still, $96 is a fair average price as dogs are bought and sold.

Figures are dry. Here is a little story to relieve the aridity of these statistics. It is, moreover, true:

One winning dog in a New York show was priced in the catalogue at $100. His owner was so elated by the unexpected decision of the judges that he at once jumped the price from $100 to $500. A customer turned up, very anxious to buy the dog; but he could not stand the inflated price, and the two began to haggle over it.

"The dog is worth it," said the owner, "every cent of it, and more too. Why, see here. He has beaten all the crack dogs in his class. They came here from all over the country to compete with him, and he just walked away from the best of them and took the prize from the whole lot. A dog that wins first is worth $500, sir, if he's worth a cent."

"Oh, well," rejoined the customer, "you ask entirely too much for him. I can buy the winner of second or third a good deal cheaper, and I guess I'll take one of them."

"Now, see here," put in the owner, "don't do it. I would advise you, as a friend, to have nothing to do with them. The dog that took second is nothing but a cross-bred duffer, anyhow; the third is worse yet. In fact there isn't a half-way decent dog in the whole class, except my own here."

The man did not buy the dog that had beaten "duffers" only.

THE FISHCULTURAL ASSOCIATION.

THE recent meeting in Washington was not only the largest, but the best in every respect, that the Association has ever held. There were fishculturists from every State between Maine and Nebraska, and Michigan and North Carolina. It was gratifying to the friends of the Association to note the return of the Commissioners from the New England States, who left it some years ago on account of difficulties with one who was then prominent in its councils. The meeting at Washington was also supplemented by a session of the different State Commissioners, at the request of Prof. Baird, and brought many new members. The character of the papers and discussions was of a broader nature, and we do not hesitate to call it the most important meeting yet held in the interest of fishculture.

Another great benefit derived from the place and time of meeting was the opportunity it gave the members to see the shad-hatching work in the central hatching station, where improved machinery is used, and the large operations are carried on in the most systematic manner. The Association has for years been gradually widening its sphere of usefulness, and taking in all subjects which may be in any way considered as connected with fishculture. One of these, which at present bids fair to become a vital question on the sea coast, is the culture of oysters, and this occupied a great deal of attention at the Washington meeting, and some valuable suggestions were made, which we will give in full.

THE ST. CLAIR FLATS IN CONGRESS.

THE people of Michigan are urging that the United States shall set aside the public lands of the St. Clair Flats as a permanent national park for the free use of the people. They have been aroused to do this by the endeavor of certain clubs to acquire exclusive shooting rights on the Flats. The result will be watched with great interest, for the territory in question is well known as one of the best wildfowl shooting districts in the country.

If a bill passes Congress giving the people this grand domain for a pleasure ground, where they may sail, fish and shoot, it is highly desirable that adequate provision be made for properly restricting the exercise of these privileges. The preservation and well-appointed public control of the St. Clair Flats will insure a long-enduring benefit to the people of Michigan and of the United States. We hope Congress will make a law to that effect.

THE ANTIDOTE.—Public attention is weekly called by some startling example to the pernicious effects of the diabolical police gazette and five-cent flash story-paper literature that is corrupting the young folks of the land. State Legislatures are enacting laws to suppress this monstrous evil by making the sale of such papers to minors a misdemeanor. This is as it should be. Another wise course is to supply wholesome literature to the boys. Give them healthy reading—the FOREST AND STREAM for instance. Let them inhale the odor of the balsams, then they will not have a taste for the reeking atmosphere of the five-cent novel scenes. Equip them with fishing rods and shotguns, then they will not transform themselves into arsenals of bowie knives and bulldog pistols to exterminate Indians, parents and schoolmasters.

THE CURSE OF POLITICS.—Elsewhere is given the full text of the Adirondack bill as passed at Albany. The measure is calculated to insure good results if honestly carried out. But there is a chance for political corruption to counteract the possible good. Let us hope that the Adirondacks may not be blighted by the curse of politics.

The Sportsman Tourist.

CAMPS OF THE KINGFISHERS.

Black Lake, Michigan.—II.

LEAVING Mancelona, a run of forty miles brought us to Petoskey, getting a sight on the way at the sleepy hamlet of Boyne Falls, of the famed Boyne River, which flows into the head of Pine Lake, six miles from the railroad. This stream was, a few years ago, noted for the numbers and size of its trout, but much fishing and the lumbermen have produced the inevitable result, and to get the good ones, the angler will have to follow it up some distance into the tangles where the waters have been little disturbed. The train stopped half an hour at Petoskey, and we had a glorious first view of Little Traverse Bay, a sheet of water that rivals in beauty its big brother, Grand Traverse Bay, further south. Here all was life and bustle. The depot platform was crowded with people, representing perhaps half the States in the Union; some going further north, many looking eagerly for friends on the train, and others looking on from idle curiosity—the latter a class that every country town is afflicted with—idlers that consider it a religious duty to be on hand, schedule time, to see the "cars come in."

As Ben said, "there's a good deal o' human natur' layin' 'round loose at Petoskey," and during the thirty minutes' stop, we amused ourselves standing on the car platform, by taking in a few of its different phases. Of course, there were the pests of the earth, the howling hackman, and the hotel runner, boiling over with impudence and lies about the merits of the respective hotels they had the honor to represent. There was the timid passenger with his gripsack, looking furtively around for a means of escape from these vultures, who were making life a burden to him. By the baggage truck was the anxious-about-his-trunk passenger, carefully looking it over to see if it had been tampered with, or a speck of the varnish scraped off.

Over there by the corner of the building was a Mossback, pure and simple, standing at rest, with both hands clasped around a long "gad" that looked as if it had done service as a persuader for a pair of sleepy oxen in surmounting a vexatious sandhill. He was taking in the whole show for nothing, and from his fixed attitude and down-hanging lower jaw, seemed to be enjoying it rather more than the expenditure would warrant. Old Ben nudged me gently, and said in his emphatic way, "That ole feller don't wear very high-toned clothes, but sich as him is jest the salt o' this livin' earth"—and Ben was right—a big truth expressed in a terse, homely phrase.

Further along the platform, was a bevy of chattering, laughing girls, bright and rosy as a summer morning, evidently on their way to the bay shore just below after sunfish, as two of them had fishing rods, and another held something wrapped in a paper that was certainly an old oyster can containing "wums." They had no doubt arranged among themselves to take turns with the rods, while two were fishing the others would do the screaming, and add their mite to the chattering when a fish was landed. They were just of an age when girls will laugh at anything and everything, and have more fun at a funeral than the average boy at a circus.

But after all, their happy laughter was good to hear, and as my thoughts wandered back to a certain "Kingfisher's daughter" left at home, I felt younger, and said to myself as the infectious melody rippled from their lips, blessed is pure and happy girlhood.

Here come three quiet, sensible looking men, each with a rod, minnow bucket and landing net, and as they file into the coach next to us we catch "Crooked Lake," and we know, without asking, that they belong to the brotherhood, and that they are going a-fishing.

"Look yander!" whispered Ben, "what kind of a thing is that? A dude fisherman, by the big bear of the Sierras," he added, nudging me violently in the ribs. [Ben spent several years in California, hence the big bear.] "Hey, Dan! get your eye on that, and then go inside and break up yer rods," with another nudge that nearly sent Dan off the platform of the car.

Making his way through the crowd, we saw a fellow heading for the forward coach, that old Ben said was "jest too sweet lookin' to live another solitary second."

He was decked out in a brand new suit of corduroy knee breeches, brown woolen stockings and a pair of laced up walking shoes. In one hand he carried an ash and lancewood rod, and in the other the indispensable landing net, while out of one of the numerous pockets of his coat we caught a glimpse of what we supposed was a fly-book, or, it might have been a cigar case. Evidently a trout killer. His head was surmounted by what Ben termed "one o' them new fangled cork lined hats, as if," he growled, "his head wasn't light enough without cork," and to finish up the outfit he wore eye-glasses, gorgeous necktie, and sported "leg o' mutton" whiskers, as Dan made them out to be. Last, Ben called our attention to a diminutive gripsack slung over his shoulder by a strap, which he remarked was, "like as not as empty as his head."

I felt a twinge of compassion for the poor devil as he passed into the car, but on a reconsideration the feeling changed into a mild form of wrath, that the gentle art should have discredit cast on it in the eyes of sensible people by such infernal idiots as this ass in knee breeches and leg o' mutton whiskers. Fortunately, however, the insect is rare, and harmless to man and fish as well. As we took our seats in the train and moved away, Ben very gravely lent us the information, "In all my travels, that's the worst case o' damfool I've ever seen on the face o' this livin' earth. Why, I'll bet he haint got the sand in him to tackle a hoss-fly, and ef he'd git into these woods five rod he wouldn't have sense enough to find his way out agin. Trout fisher!" —with supreme disgust—"put a trout and a mud turkel in a tub o' water an' he couldn't tell which from t'other, 'less the turkel would get him by the finger;" and this appearing to settle the matter in his mind, he scraped a match, and lighting the inseparable briar root, settled back in his seat in satisfied serenity. Winding around the base of the hill we passed the camp-meeting grounds, and were soon flying through a dismal-looking cedar swamp, over a narrow strip of clean sand filled in for a road bed, and after a run of six miles to Conway Springs, at the head of Crooked Lake, the train stopped two or three minutes to let off a few passengers, among the rest our three anglers and the dude. We mentally wished the brethren "good luck," and Ben echoed, I am sure, a kindred sentiment in old Dan and me when he said, in his dry way, "I hope that dude 'll get a duckin' an' lose them specs before he ketches a solitary fish," which rather uncharitable wish caused a laugh and restored, as Dick would have said, the "equibilerum" of the party.

Our original purpose had been to take the little steamer at this point and go through to Cheboygan via the "Inland Route," through Crooked, Burt and Mullett lakes, but as the boys would be waiting for us on that particular morning, the plan was changed to go on to Mackinaw City and down the M. C. R. R., in order to make our camping place the same evening, if possible. Afterward we regretted we had not made the run through by water, as Knots and Jim, who had once made the trip, were warm in their praise of the beauties and scenery of these three lakes and the rivers connecting them, but life is short, and our fingers were itching to grasp a rod and measure strength and cunning with some monarch bass or mascalonge of the lake of the dark waters, and we promised ourselves this trip "some other time."

From Conway Springs on to Mackinaw City, the road runs through as wild and utterly lonely a strip of country as ever a crow flew over. Woods, woods, and swamp and tangle so thick in places, that it looked a matter of impossibility for even a mink to make its way through the green walls that here and there line both sides of the road. And yet in this very wildness and solitude is one of the greatest charms of these evergreen and odorous north woods. To one who had gazed on nothing more enchanting than brick walls and the unsurpassed (?) forest scenery around the "Esplanade" for a year, all this wealth of wood and stream and lake, of dismal swamp and lonely tangle, of fern, and brake, and clinging mosses, was a rare treat that I thoroughly enjoyed until a prolonged whistle from the engine warned us we were approaching near to the City of the Straits.

Our traps were soon transferred to the M. C. train just across the wide platform, Frank and I carrying the "menagerie" across under a fire of questions and giggles from the idlers and loungers infesting the place. One wanted to know, "Goin' a-fishin'?" "Yes," said Frank. "What ye goin' to do with them frogs—eat em?" "No," said old Ben, as he lent a hand to hoist his camp box into the car, "takin' 'em along to keep the muskeeters off; best thing on the face o' this livin' earth fur muskeeters, black flies an' sich; eat their weight o' them insecks every day—ef you ketch 'em fur 'em."

This was said with a gravity, accompanied by an inimitable wink at Frank and me, that nearly caused us to drop the whole show, and a broad sun grin to overspread the countenance of the chump, who walked away with a new "pointer" on the use of speckled frogs for a fishing party. We were beginning to find out that Ben was a character in his way, full of dry humor and quaint sayings that made him a favorite before we were in camp a day; but more of old Ben as we go along.

We had several minutes left before the train started, which we improved in walking out toward the pier, where the ferry steamer had just left for St. Ignace, six miles across the Straits. This steamer connects with the Detroit, Mackinaw & Marquette Railroad, which runs through 150 miles of the wildest portion of the North Peninsula, a region abounding in game, and trout in nearly all the streams flowing north into Lake Superior, clear around to Duluth.

Many of the streams flowing south from the "divide" into Lake Michigan are also famous for the abundance and size of the trout in them, notably two emptying in at Gilchrist, some thirty miles west of St. Ignace. This point and many other streams along the south shore may be reached semi-weekly by steamer during the season from Mackinaw City.

I write this not from personal knowledge of the region, but from information imparted by little Charley Pike, who spent his vacation near Gilchrist two years ago, and from fish talks with "Old Bill" Hess, who, in the course of his meanderings, has kindled his camp-fire and "fit muskeeters" on half the trout streams, perhaps, of the State.

Through the misty, blue haze of this glorious July morning, we could see the dim and indistinct outlines of Bois Blanc Island off to the right, and further north loomed up out of the soft mists the grim, storm-beaten old sentinel of the Straits, the historic island of Mackinac. Here and there a sail dotted the blue waters, every stitch of canvas set and drawing, but so light was the breeze they seemed to us entirely motionless. Wrapt in silent admiration of the dreamy picture before us, hours of enjoyment were crowded into as many minutes. We took no note of time, but presently a shriek from the locomotive at the depot brought us back to the realities of life, reminding us that railroad trains wait not on individuals, and hurrying back we were soon on our way to Cheboygan and the boys. From Mackinaw City down to Cheboygan, sixteen miles, the road runs through a flat, dreary looking country, relieved only by occasional glimpses on the left of the blue waters of Lake Huron in the distance, and we were not sorry when the brakeman notified us in the musical and intelligible tone usual with brakemen that we had arrived at our destination, at least as far as the comforts of the rail were concerned.

We were heartily welcomed by the boys, who were at the depot waiting for us with the wagon loaded ready to start, and after a short stop at the Spencer House to get the gripsacks and re-arrange the loads to accommodate the additional baggage, we were off a little after 10 A. M. for Black Lake and camp.

While yet in town, we crossed the Cheboygan River, the outlet at this point into Lake Huron of all the waters west as far as Crooked Lake near Petoskey, north to the Douglass Lake region, and south for 75 miles or more, except a few small streams flowing into Lake Huron on the east. It drains the waters of Crooked, Pickerel, Douglass, Burt, Mullett, Long and Black lakes, and all the streams flowing into them, among which are the famous Pigeon and Maple rivers—the former noted for its grayling—the little Black and Rainy rivers, and scores of smaller streams that are nameless on the maps.

These lakes and streams float annually millions of feet of logs to Cheboygan, giving employment to hundreds of hardy lumbermen in the woods, and quite a little village of workmen in and around the great sawmills at Duncan City, a mile and a half down the coast from the mouth of Cheboygan River.

But "we digress." Out of town along a pleasant road, down through the little village, past the busy mills and great piles of lumber, we shortly turned off to the right into a low, swampy country, through which, however, a good road had been built, and were fairly on our way. Eighty rods, or such a matter, into the swamp, we stopped to get a drink out of a little cold trout stream winding through the tangle, as one of our drivers said it would be our last chance to take a square drink for several miles, volunteering, at the same time, the information that the waters of the brook were full of trout, a hatchery being located a short distance below, and for "two shillin'" a day permission could be had to fish the stream. Before climbing back on the wagons the Scribe, the Deacon, Mrs. Partington, our culinary artist and the three drivers proceeded to fortify themselves against a possible attack of skeeters, numerous signs of which they appeared to have discovered in the adjacent bresh, the others of us taking our chances on clear water without the addition of a qualifier. This is mentioned merely to illustrate the presence of mind possessed by the Scribe and Deacon in case of emergency, and the promptitude they display in detecting the approach of these ferocious insects and devising measures for their extinguishment.

A short distance further on we struck the "plank road," used at some time as a tramway on which to truck logs out of the woods to the water near the mills, but now falling into decay. It is made of heavy planks, a couple of feet wide and five or six inches thick, bedded level with the ground end to end, with room for a couple of horses or cattle to walk between. This led off up a low sandhill and out into the "plains" for perhaps three miles, at the end of which we dropped again into the heavier pull of a plain North Michigan country road, sand and roots and jolts, with an occasional mud hole after we got into the hard-wood forest, by way of variety. Why they are called "plains" is not quite plain to any one who has crossed the plains of the far West, where a hundred miles may be traveled without seeing a tree or bush, but they are plains, as every Michigan man you meet will tell you. As a matter of information, and to explain, they are simply tracts of country that have been ravaged by forest fires, leaving a few charred and blackened trunks and stumps of trees standing where once was a pathless wilderness. Here and there a grove of shivering, quaking aspens, a second growth of young pines and hemlocks scattered sparsely over the waste, and patches of bushes are the only evidences of life to relieve the desolation of the scene.

Some of these tracts are miles in area and are of little value only as a feeding ground for the grouse and bears in "huckleberry time." Acres and acres of this juicy and insipid fruit grow on these burnt tracts, on bushes from three to twelve inches high, so thick in many places that one may not take a step for rods without trampling them under foot. They are the large blue June berry, called blue berry by the country people, and are a source of some revenue to the lazy Indians that infest the villages and towns of this upper part of the State. They are fed to the "resorters" by the bushel; breakfast, dinner and supper, there's your huckleberry. Stop at any hostelry in the land during the season, and there is the inevitable dish of huckleberries staring you in the face, or they may be lurking at your elbow in the shape of a pie, or that breeder of night sweats, a huckleberry roll. They seem to think this particular berry a necessity to digestion, or that every tourist and angler that stops at a hotel came up there for the especial and sole purpose of eating huckleberries, and the only way to get rid of them and preserve amicable relations with the fair nymph that waits on you at table is to eat 'em (the berries) and hold your peace.

Leaving the plains, the road led into a dark shady wood of maple, beech, ash and a hemlock or pine occasionally, with here and there a wild cherry and ironwood to remind some of us of woods we had hunted squirrels in when we had more sap in our bones than now.

The change from the hot sandy plain to the cool shadows of the overhanging branches was so grateful that all but Dan and the drivers got out to walk a couple of miles and work the kinks out of our legs. Everybody was in high good humor, and many a joke and laugh and shout, smothered and pent up for a year, waked the solitudes of the old woods that day for miles around, and had our years been gauged by "how good we felt," any railroad company would have carried us at half fare rates, for verily we were as a party of boys turned loose to go a-fishing.

Even brave old Dan seemed to forget his limp and useless right arm and feeble right leg, and although unable to walk well enough to keep pace with the party, laughed and "hollered" from his perch on the wagon with the best of us.

"Wonder how fur it is to that spring one o' them drivers was talkin' about?" said Ben, as he made a pass at a deer fly hovering around his nose, "I'm so dry I feel like I could drink up a whole trout stream, trout an' all."

Two or three miles further on we unhitched to feed the horses and take a lunch, and following a path a few yards down a low hill to the left, found the promised spring, the first water we had seen since leaving the trout stream. The water was poor in quality, tasting of the marsh surrounding it, but as the Scribe said, "it served to keep us and the horses from perishing."

Here, he and the Deacon found more skeeter sign, but long practice in their peculiar line of warfare against these pests prevailed, and with the assistance of Dick, Frank and the drivers, another emergency was passed in safety.

When we returned from the spring we found Dan had established himself with the lunch basket in the shade of some bushes by the roadside, and as we approached a pair of bright-eyed little ground squirrels darted away into the thick underbrush, but soon returned, peering cautiously at us to see if we meant them harm. While we were at the spring, Dan said they had come timidly out of the woods and creeping gradually nearer had stopped within a foot of him and asked us plainly as they could with their eyes for a share of his lunch. Reaching out his hand he dropped two small pieces of bread near them, which they snatched up and, scampering back to the edge of the bushes, sat up on their haunches and ate with avidity. This was repeated two or three times, and so tame were they and such trust did they seem to place in the old Pelican's goodness of heart that had we not appeared on the scene and scared them away, Dan said he had no doubt they would have soon explored the lunch basket to see if he was not cheating them out of some of the choicest morsels. As we came up and took possession of the basket they skurried back into the woods and were not seen again, but it was a pleasing little incident that I am sure will not soon be forgotten by those who witnessed it.

KINGFISHER.

[TO BE CONTINUED.]

SHORE BIRDS.—Philadelphia, Pa., May 17.—There are many golden plover and grass plover in our Philadelphia markets. While the law allows the shooting of all the wading birds during their migratory visit to us in the spring, the first mentioned, which are of a more upland habit, are in like manner unprotected. It is a great shame that the grass plover at least cannot be allowed a short stay in May unmolested, as they are seldom, if ever, in the fine condition we find them in August on their return with their young. These birds, not long since, nested in considerable numbers in the tablelands in the elevated portions of our State wherever a meadow exists, but of late years have greatly decreased, and should not be shot before the 15th of August.—HOMO.

Natural History.

THE COUESIAN PERIOD.

Editor Forest and Stream:

With the kind permission of Dr. Coues and his publishers, I am able to send you in advance of publication a portion of the "Historical Preface" of the new "Key to North American Birds," which cannot fail to interest your readers, and respecting which I beg to say a few words.

I was present at the meeting of the Biological Society of Washington, when Dr. Coues complemented the society by laying before it a complete set of proof-sheets of the "Key," and read the substance of the "Historical Preface," in which he traced the progress and development of American ornithology from the earliest times to the beginning of contemporaneous history, dividing the time down to 1872 into six "epochs," or major divisions, and into fifteen "periods," or minor divisions, each tersely characterized in the manner which the accompanying preface shows.

In the discussion which followed the delivery of the address, Prof. Lester F. Ward proposed to carry this system of chronical classification further than Dr. Coues, of course, could have done, by recognizing the fourth quarter of the present century as a seventh "epoch," extending from 1872 to 1900, which he called the "Couesian epoch."

Heartily indorsing this proposition as I do, I beg to add a few words upon the "period" to be assigned to Coues in this epoch. In my judgment, the time from 1872 to 1884, or that between the two editions of the "Key," may appropriately be termed the "Couesian period," and I am sure that your readers will with one accord indorse the propriety of my proposition.

Prof. Ward, on the occasion referred to above, ably defined and in a few words characterized the "epoch" which he proposed, much in the same way as a thoroughly competent and broad-minded zoologist might present those strong characters which stamp a new genus when it comes within the field of his observation. Following Dr. Coues's own plan of classification, as precedented in the "Wilsonian epoch" with its "Wilsonian period," or, still later, the "Bairdian epoch" with its "Bairdian period," it devolves upon me to refer to at least some of the leading specific characters which mark the times included within the "period" I have proposed.

The old "Key," constituting as it does the initial landmark of the "Couesian period," differed in one great respect from all other works upon ornithology that had preceded it. It reached the people. The great works of Audubon and Wilson were up to that time the dream of all young American ornithologists, of which the "Key" was the realization. Its influence was both marvelous and good, and can hardly be over-estimated, for it became a living factor of the growing mind of the coming generation of men of the time in which it appeared. It fell into the hands of boys who could now "find out the names" of the birds which they saw and collected. It taught to classify, to observe, to record, and as a result of all, to appreciate and admire.

The influence of the book was scarcely more than the influence of its author who, through all this part of his life, as he has ever since been, an example of that fixedness of purpose—which honest men cannot help but esteem—added to which he has been the direct encourager of the younger workers, in a thousand ways, and in none more than the example set by himself in his cheerfulness, under many of the direst of trials which the greater share of the world's people is sure to cast across the path of such men.

The heart of the Couesian period is filled with many other noble works, familiar to all of us, and setting aside the two hundred or more minor papers by this author we see standing boldly out in relief our "Field Ornithology," "The Birds of the Northwest," "Birds of the Colorado Valley" and "The Coues Check List." These all have given an immense impulse to the advance of the science of ornithology, and all exerted an excellent influence.

It will not be possible for me to attempt in this letter even an outline of the scientific activities on foot during the mid-years of this period. It included the days of the great surveys—the Government expeditions—when many a hardy naturalist was sweeping into the general treasury the western forms of birds.

Following the digest of all this material, which had thus been collected, another feature that had been slowly growing now, in the last few years of the period, comes quite prominently in the foreground to assert itself as an additional characteristic. This is the study of the structure of birds, and as the older countries have already taught us it is the adjuster that follows in the track of the pioneer. Ornithology owes not a little to Dr. Coues for his labors in this all-important field, as many of his productions will attest.

Ah! I see the eye of every true ornithologist in the country grow brighter as he regards the picture of the triumphs for his science, that go to make up the closing days of the Couesian period.

The mere mention of the name of the center feature, here, is sufficient to bring to mind a train of thought, which if followed in all its pleasant bearings, would carry me far beyond my limits.

We all know the debt ornithology owes to Dr. Coues for his zeal and judgment during the times of the establishment of the American Ornithologists' Union, and how much this organization promises to the science in this country.

The days of the period, so full of honor and achievements, are numbered, and we have but a few more left us to enjoy the pleasures of anticipation, before its namesake will hand us the volume, that brings it to a close.

R. W. Shufeldt, Captain Medical Corps U.S.A.
Chairman Sect. of Avian Anatomy, Amer. Ornith. Union.

American Ornithologists' Union, Washington, D. C., May 3, 1884.

HISTORICAL REVIEW.

Were a modern Hesiod to essay—neither a cosmogony nor a theogony—but the genesis of even the last department of human knowledge—were he to seek the beginnings of American Ornithology, he would find it only in Chaos. For from this sprang all things, great and small alike, to pass through Night and Nemesis to the light of days which first see orderly progress in the course of natural evolution, when is first established some sequence of events we recognize as causes and effects. Then there is system, and formal law; there science becomes possible; there its possible history begins.

Long was the time during which the birds of our country were known to our inhabitants, after the fashion of the people of those days—known as things of which use could be made and studied, too, that use might be made of them. But this period is prehistoric; no evidence remains, save in some quaint pictograph or rudely graven image. There followed a period—shorter by far than the former one, though it endures—when the same birds awakened in other men an interest they could not excite in a savage breast, and the sense of beauty was felt. Use and beauty! What may not spring from such divinely mated pair, when once they brood upon the human mind, like halcyons stilling troubled waters, sinking the instincts of the animal in the restful, satisfying reflections of the man?

The history of American Ornithology begins at the time when men first wrote upon American birds; for men write nothing without some reason, and to reason at all is the beginning of science, even as to reason aright is its end. The date no one can assign, unless it be arbitrarily; it was during the latter part of the sixteenth century, which with the whole of the seventeenth, represents the formative or embryonic period during which were gathering about the germ the crude materials out of which an ornithology of North America was to be fashioned. As these accumulated and were assimilated—as the writings multiplied and books bred books, "each after its kind," this special department of knowledge grew up, and its form changed with each new impress made upon its plastic organization.

Viewing in proper perspective these three centuries and more which our subject has seen—passing in retrospect the steps of its development—we find that it offers several phases, representing as many "epochs" or major divisions, of very unequal duration, and of scientific significance inversely proportionate to their respective lengths. All that went before 1700 constitutes the first of these, which may be termed the *Archaic* epoch. The eighteenth century witnessed an extraordinary event, the consequence of which to systematic zoology cannot be over estimated; it occurred almost exactly in the middle of the century, which is thus sharply divided into a *Pre-Linnæan* epoch, before the institution of the binomial nomenclature, and a *Post-Linnæan* epoch, during which this technic of modern zoology was established—each approximately of half a century's duration. In respect of our particular theme, the first quarter of the nineteenth century saw the "father of American ornithology," whose spirit pointed the crescent in the sky of the *Wilsonian* epoch. During the second quarter these horns were filled with the genius of the *Audubonian* epoch. In the third, the plenteousness of a master mind has marked the *Bairdian* epoch.

Clearly as the six epochs may be recognized, there is of course no break between them; they not only meet, but merge in one another. The sharpest line is that which runs across Linnæus at 1758; but even that is only visible in historical perspective, while the assignation of the dates 1700 and 1800 is rather a chronological convenience than otherwise. Nothing absolutely marks the former; and Wilson was unseen till 1808.

The Archaic epoch stretches into the dim past with unshifting scene, even at the turning point of the two centuries in which it lies. It is otherwise with the rest; their shapes have incessantly changed; and several have been the periods in each of them during which their course of development has been accelerated or retarded, or modified in some special feature. These changes have invariably coincided with—have, in fact, been induced by—the appearance of some great work; great, not necessarily in itself, but in its relation to the times, and thus in the consequences of the interaction between the times and the author—who left the science other than he found it. The edifice as it stands to-day is the work of all, even of the humblest builders; but its plan is that of the architects who have modeled its main features, and the changes they have successively wrought are the marks of progress. It is consequently possible, and it will be found convenient to subdivide the epochs named (excepting the first) into lesser natural intervals of time, which may be called "periods," to each of which may attach the name of the architect whose design is expressed most clearly. I recognize fifteen such periods of very unequal duration, to which specific dates may attach. Seven of these fall in the last century; eight in the three-quarters of the present century. We may pass them in brief review.

The Archaic Epoch: to 1700.

Mere mention or fragmentary notice of North American birds may be traced back to the middle of the sixteenth century; but, to the eighteenth, no book entirely and exclusively devoted to the subject had appeared. The turkey and the humming-bird were among the earliest to appear in print; the latter forms the subject of the earliest paper I have found, exclusively and formally treating of any North American bird as such, and this was not until 1693, when Hamersly described the "American Tomineius," as it was called. One of the largest, as well as the smallest of our birds, —the turkey, early came in for a share of attention. The germs of the modern "faunal list"—that is to say, notes upon the birds of some particular region or locality—appeared early in the seventeenth century, and continued throughout; but only as incidental and very slight features of books published by colonists, adventurers, and missionaries, in their several interests—unless Hernandez's "Thesaurus" be brought into the present connection. Among such books containing bird-matter may be noted Smith's "Virginia," 1612; Hamor's "Virginia," 1615; Whitbourne's "Newfoundland," 1620; Higginson's "New England," 1630; Morton's "New England Canaan," 1632; Wood's "New England's Prospect," 1634; Bayard Theodot's "Voyage," 1632; Josselyn's "New England Rarities," 1672—and so on, with a few more, sometimes mere paragraphs, sometimes a page or a formal chapter, but scarcely anything to be now considered except in a spirit of curiosity.

The Pre-Linnæan Epoch: 1700–1758.

(1700–1730.)

The Lawsonian Period.—It may be a *lucus a non* to call this the "Lawsonian" period; but a name is needed for the portion of this epoch prior to Catesby, during which no other name is so prominent as that of John Lawson, Gentleman, Surveyor-General of North Carolina, whose "Description and Natural History" of that country contains one of the most considerable faunal lists of our birds which appeared before 1730, and went through many editions—the last of these being published at Raleigh in 1860. The several early editions devote some fifteen or twenty pages to birds—an amount augmented considerably when Brickell appropriated the work in 1737. The Baron de la Houtau did similar service to Canadian birds in his "Voyages," 1793; but, on the whole, this period is scarcely more than archaic.

1730–1748.

The Catesbian Period.—This comprises the time when Mark Catesby's great work was appearing by instalments. "The Natural History of Carolina, Florida," etc., is the first really great work to come under our notice; its influence was immediate, and is even now felt. It is the "Audubon" of that time; a folio in two volumes, dating respectively 1731 and 1743, with an appendix, 1748; passing to a second edition in 1754, to a third in 1771, under the supervision of Edwards; reproduced in Germany, in "Seligmann's Sammlung," 1749–76. It was published in parts, the date of the first of which I believe to have been 1730, though it may have been a little earlier. Volume I., containing the birds, appears to have been issued in five parts and was made up in 1731; it consists of a hundred colored plates of birds, with as many leaves of text; a few more birds are given in the appendix, raising the number to 113. These illustrations are recognizable almost without exception; most of the species are for the first time described and figured: they furnish the basis of many subsequently named in the Linnæan system; the work was eventually furnished by Edwards with a Linnæan concordance or index; and altogether it is not easy to overestimate the significance of the Catesbian period, due to this one work; for no other book requires or indeed deserves to be mentioned in the same connection, though a few contributions, of somewhat "archaic" character, were made by various writers.

1748–1758.

The Edwardsian Period.—This bridges the interval between Catesby and the establishment of the binomial nomenclature, and finishes the Pre-Linnæan epoch. No great name of exclusive pertinence to North American ornithology appears in this decade. But the great naturalist whose name is inseparably associated with that of Catesby had begun in 1741 the "Natural History of Uncommon Birds," which he completed in four parts or volumes, in 1751, and in which the North American element is conspicuous. This work contains two hundred and ten colored plates, with accompanying text, forming a treatise which early ranks among the half-dozen greatest works of the kind of the pre-Linnæan epoch, and passed through several editions in different languages. Its impress upon American Ornithology of the time is second only to that made by Catesby's, of which it was the natural sequence, if not consequence. It bore similarly upon birds soon to be described in binomial terms, and was shortly followed by the not less famous "Gleanings of Natural History," 1758–64, a work of precisely the same character, and in fact a continuation of the former. Edwards also made some of our birds the subject of special papers before the Philosophical Society, as those of 1755 and 1758 upon the Ruffed Grouse and the Phalarope. It may be noted here that one of the few special papers upon any American bird which Linnæus published appeared in this period, he having in 1750 first described the Louisiana Nonpareil (*Passerina civis*). This period also saw the publication of part of the original Swedish edition of Peter Kalm's "Travels," 1753–61, which went through numerous editions in different languages. Kalm was a correspondent of Linnæus; the genus of Plants *Kalmia* commemorates his name; his work contains accounts of many of our birds, some of them the bases of Linnæan species; and he also published, in 1759, a special paper upon the wild pigeon. As in the Catesbian period, various lesser contributions were made, but none requiring comment. Thus Lawson, as representing the continuation of a preceding epoch, and the associated names of Catesby and Edwards in the present one, have carried us past the middle of the last century.

[To be continued.]

THE BROWN THRUSH.

(*Harporhynchus Rufus*).

THE brown thrush is a shy fellow, and the greatest quiet and patience are requisite, if one would observe him at his ease. His flight, as he passes from tree to tree, is a short, jerky flutter, and it is amusing to see him "pitch himself," so to speak, into a spruce. He will dash in among the boughs with a clumsy flutter, remain perfectly silent for a moment, then with a swift run he goes out to the very end of the branch, where he will oftentimes remain quiet for many minutes, apparently lost in contemplation of the view, from his airy perch. In action he closely resembles the mocking bird, possessing in common with the latter a remarkably sweet voice, which he uses in the most artistic manner. His favorite song times are in the early morning and evening (although he does not confine himself strictly to hours), the former being the boldest and continuing longer than at sunset. He will select some high perch on the tip of a spruce, or way up in some tall poplar, and day after day, from this vantage ground, you will hear him carol his favorite melodies. As a musician, he ranks with the finest in our woods. Would you hear him at his best, though, you must find him as he crouches close in to the trunk of some dark pine or hemlock, during the heat of the day. There, as he sits in the cool shade, you will hear him extemporize, very softly, as though talking to himself, but in such an exquisite strain, that you listen enraptured. One must be close to enjoy all this, as I doubt if his notes at these times could be heard at over twenty yards distance. His usual cry of *chek! chek! whew'o!* is most frequently heard at evening, as he fusses about, in search of a perch, on which to pass the night.

The bright, fresh colors of the thrush's plumage on his arrival, and before his "good clothes" have grown rusty with use, is shown in pleasing contrast with the rich green of the young grass as the sprightly fellow hops about the lawn. He rarely ventures far from the trees when hunting for food, and is ready on an instant's notice to flirt his long tail and flutter up among the boughs out of sight, generally keeping on the further side of the tree as you approach. He has a great habit of poking about the brier tangles, and, as a general thing, you are almost sure to find him there, along the edges of woods and in the hedges. These thickets and tangles are where he loves to build his nest, although he will sometimes select a location more exposed to observation. Still, you will often find it as above, in the very thick of the thorns and briers, snug and cosy and cool, a fit abode for the sly chap. Like the catbird, the flirts of his long tail frequently serve as an index to the state of his mind. Curiosity, for example, is expressed by a quick flip of the tail from one side to the other, as he clings to some trembling vine and peers out at you from under the leaves, fancying himself unobserved. Should he find that you have discovered him, he silently disappears; quietly, mysteriously he goes, without a sound, nothing to indicate his course but the vibration of the foliage or the quiver of an alder as he noiselessly threads his way through the maze of twigs underneath. This bird, with his curious ways, is a favorite of mine, and I heartily welcome his voice again as it mingles with the evening chants rising from field and forest in the early spring.

The gray of twilight is fading into dusk, and the shadows

are deepening among the shrubbery. Out on the hill an enthusiastic robin still lingers to finish his song, which is all the sweeter as it comes to our ears subdued by the distance and accompanied by a murmur of delight from the soft green leaves around us. The music ceases, and all is quiet save the *chek! chek! whew'o! chek! chek! whew'o!* of our thrush as he calls good-night to us from the valley below.

WILMOT.

NEW YORK CITY.

THE GRIZZLY BEAR IN LABRADOR.

Editor Forest and Stream:

The reading of Stearns's "Natural History of Labrador" reminds me of the fauna of that almost unknown land as described by John McLean, in his notes of a twenty-five years' service in the Hudson's Bay Territory. Obeying the orders of Sir George Simpson, he went as a discoverer from the southeast shore of Hudson's Bay and established a fur trading post at the most northern point of the peninsula at Ungava Bay on the south shore of Hudson's Strait, and this is the way he writes of the fauna of that country where he lived for three long years, two of which the Hudson's Bay relief ship, from England, failed to reach him with supplies:

"To enumerate the varieties of animals here is an easy task. The extremely barren nature of the country and the severity of the climate prove so unfavorable to the animal kingdom that only a few of the most hardy species are to be found, viz., black, brown, grizzly and polar bears.

"Black, silver, cross, blue, red and white foxes.

"Wolverines, wolves, martins and beaver, but extremely rare here in the North.

"Otters, minks, muskrats and ermine; Arctic hares, rabbits, reindeer and the lemming."

The skins of all these animals Mr. McLean collected during his three years' life at the Ungava station, for the benefit of the Hudson's Bay Company. Speaking of the grizzly bear (*Ursus horribilis*), Mr. McLean remarks: "When we consider the great extent of country that intervenes between Ungava and the plains of the Far West, it seems quite inexplicable that the grizzly bear should be found in so isolated a situation and none in the intermediate country. The fact of their being here, however, does not admit of a doubt, for I have traded and sent to England several of these skins from the region of Ungava and many more from the eastern slope of the Rocky Mountains years before. Some time since I called the attention of the late Mr. Mittleberger, of this city, to this fact. He assured me that the grizzly was found in Northern Labrador. Mr. M. had been for a long term of years a factor in the employ of the Hudson's Bay Fur Company, and during this period had traveled over the largest portion of their possessions, handling every kind of fur animals, and was thoroughly acquainted with the fauna of the country."

DR. E. STIRLING.

CLEVELAND, O., April 24.

BIRD MIGRATION.

Editor Forest and Stream:

I inclose report of bird observations during April. The yellow-bellied woodpeckers reported were two males taken at one time, and are the only specimens we have taken, or known to have been seen here in six years, although they were formerly tolerably common.

T. V.

April 6—Brown creeper (*Certhia familiaris*).
April 10—Fox sparrow (*Passerella iliaca*).
April 11—White-throated crown sparrow (*Zonotrichia albicollis*).
April 12—Wilson's snipe (*Gallinago wilsoni*).
April 13—Golden-crested kinglet (*Regulus satrapa*)—only males.
April 14—Hermit thrush (*Turdus pallasi*).
April 14—Winter wren (*Anorthura troglodytes*).
April 17—American widgeon (*Mareca americana*).
April 17—Yellow-bellied woodpecker (*Sphyrapicus varius*).
April 17—Bufflehead duck (*Clangula albeola*).
April 26—Ruby-crowned kinglet (*Regulus calendula*)—males only.
April 30—Golden-crested kinglet (*Regulus satrapa*)—females only.

S. R.

April 6—Purple finch (*Carpodacus purpureus*).
April 7—Killdeer ring plover (*Ægialites vociferus*).
April 9—Chipping sparrow (*Spizella domestica*).
April 10—Carolina dove (*Zenaidura carolinensis*).
April 10—Bay-winged bunting (*Poœcetes gramineus*).
April 14—Cooper's hawk (*Accipiter cooperi*).
April 14—Great-crested flycatcher (*Myiarchus crinitus*).
April 14—Golden-winged woodpecker (*Colaptes auratus*).
April 18—Purple martin (*Progne subis*).
April 19—White-bellied swallow (*Tachycineta bicolor*).
April 20—Loggerhead shrike (*Lanius ludovicianus*).
April 24—Barn swallow (*Hirundo horreorum*).
April 24—Golden-crowned thrush (*Siurus auricapillus*).
April 24—Swamp sparrow (*Melospiza palustris*).
April 25—American bittern (*Botaurus lentiginosus*).
April 26—Virginia rail (*Rallus virginianus*).
April 26—Carolina rail (*Porzana carolina*).
April 28—Sparrow hawk (*Falco sparverius*).

LOCKPORT, N. Y., May 2. J. L. DAVIDSON.

USURPING SWALLOWS.—At home in Texas where we only see the white-bellied swallows during the migrating period, gracefully skimming along the ground, we consider them beautiful and innocent birds. I, however, have seen them in their true colors, and they really surprised me, they are such vicious little pugilists. Two weeks ago a pair of bluebirds took possession of a little cot, where, until this morning, they have lived in perfect happiness; but the usurper of this domestic bliss was at hand in the shape of a white-bellied swallow. This morning, while reading the FOREST AND STREAM, I noticed a pair of swallows circling over the cot, and at each approach the bluebird quailed. I paid no attention to it, nor did I notice them again till a great commotion drew my eyes from my paper toward them. Judge how surprised I was when I saw the male swallow take the bluebird fiercely by the throat and thrash him unmercifully. The poor bluebird seemingly made no resistance; still he did not seem inclined to give up. Finally, however, superior strength conquered, and he tottered away. The swallow immediately took possession of the cot, and very soon afterward was joined by his mate.—NEMO (of Texas), (Franklin, Mass.).

HARBOR SEAL.—By a slip of the pen *Phoca grœnlandica*, instead of *P. vitulina*, was given as the specific name of the harbor seal, mentioned in a recent note on its occurrence in Lake Ontario.—C. HART MERRIAM.

ARRIVALS AT THE ZOOLOGICAL GARDEN, CINCINNATI, UP TO MAY 1.—Bred in Garden—One jaguar (*Felis onça*), one bonnet monkey (*Macacus radiatus*), one axis deer (*Cervus axis*), one pony (*Equus caballus*), one cut-throat finch (*Amadina fasciata*). Donated—Two wood hares (*Lepus sylvaticus*), eight red foxes (*Canis fulvus*), one Canada porcupine (*Erithizon dorsatus*). Captured in Garden—Three cardinal grosbeaks (*Cardinalis virginiana*), one song sparrow (*Melospiza fasciata*), ten snowbirds (*Junco hyemalis*). Received in Exchange—Three European lapwings (*Vanellus vulgaris*). Purchased—One wildcat (*Lynx rufus*), two prairie dogs (*Cynomys ludovicianus*), one macaque monkey (*M. cynomolgus*), one white-collared mangaby (*Cercocebus collaris*), two moustache monkeys (*Cercopithecus cephus*).

Game Bag and Gun.

MY FIRST "HONKER."

I WAS born a sportsman. Nay, I am not quite sure that I had not a gun in my hand when my eyes first opened to take in the glories of this mundane sphere. I have been in the school-room or college halls all my life, either as student or instructor, and make it an object always to spend my vacations in the forest or by the stream, save and excepting only an occasional trip to the sea coast or shore of some sequestered lake, on whose bosom float in serene quiet myriads of water fowl, or from whose waters I may draw the finny beauties. To-day, in my forty-sixth year, I stand more erect than nine-tenths of city youth, and have infinitely more elasticity in my anatomy. Health vigorous, appetite good, eye keen, hand steady, mind active and intellect clear, while many of the companions of my boyhood are crawling round in the iron grasp of dyspepsia, with mind and body prematurely old. I need not tell the sportsman the reason of my elasticity of mind and body, or the cause of my friends' despondency, but lest some reader should accuse me of egotism let me say that I throw care to the winds and gather fresh life by forest and stream as each succeeding year rolls by.

How I pity the man who has none of the instinct of the true sportsman in his composition. Nature's true noblemen are they who are found regularly at the appointed season with rod and gun in hand, following the chase or plying the gentle art. You can rely on such a fellow wherever you meet him, and go your bottom dollar that he will prove a friend "tried and true" in any emergency. He shoots, not to kill and destroy, but for the pleasure and health it affords, and is content to let a few birds escape that the coverts may be well stocked another season, and takes more delight in exhibiting half a dozen two-pounders in his basket than the trout hog does in telling of the thousands he has slain, perhaps with only the weapon used by Samson of old when he mowed down the Philistines. The true sportsman is the most unselfish being in existence, I care not who may say to the contrary. He is fond of solitude because he loves to hold converse with nature in her softest as well as in her sternest mood, and finds a host of advisers and instructors in the world of animate and inanimate nature round him. He is never solitary for the simple reason that he never feels himself to be alone. *"Nunquam minus solus, quam cum solus."*

But I must back to myself again. Yesterday I packed "Daisy" away in her case well oiled and clean, bade her an affectionate good-bye until next season opens, and promised to look right well after her safety during her rest. A host of recollections came trooping in as I sat down after my labor of love was completed, and I determined to write up at least one incident for my favorite journal ere another sun had set.

"My First Honker"—Well do I remember the morning on which he measured his length on the grass and flopped his life out in vain attempts to rise in air. Ah, he must have been indeed a sad rake in his day, leading his harem forth to pluck up and destroy the wheat crop of the Sacramento Valley, but he proved a "tough cuss" when brought to the table, despite his twenty pounds of flesh. Some two days after the little "racket" with the boys on that snipe hunting expedition, getting an early start Jim and I found ourselves about 8 A. M. running our skiffs side by side up a narrow channel among the tules, now and then dropping the paddle to pick up the gun and drop a mallard as it rose quacking, or a bright-winged teal as it shot past with arrow-like speed.

After proceeding some three miles in this way we hauled up our boats on the levee and leaning on our arms took in the scenery and arranged for the evening sport. Just then a flock of "honkers" hove in sight, bearing directly down on us. Dropping to the ground we watched their approach with keen delight, our dexter fingers playing nervously with the triggers, at least mine did; for, dear reader, I had yet to bring down my first "honker," and if you have been there yourself you can appreciate my position. On they came, bearing swiftly down—honk, honk, honk—surely we will have a shot, that leader must be mine. "Jim, my boy, leave him to me," I said. "All right," and it was agreed upon. Fancy our disgust as they were seen to bear off to the left and pass us at about 200 yards distance, flying low and evidently bent on some feeding spot not far away. Rising again to our feet we watched their flight, and with something like satisfaction saw them lighting at about three-quarters of a mile to the eastward.

"Now, Professor," said Jim, "if you want that old chap, be off, make straight for that there high bunch of tules, crawl low then, and I think you will get him."

Off I went right briskly, notwithstanding heavy gum boots, and on approaching the bunch of tules found that I had to lie low to escape observation. However, this was no inconvenience. I had graduated in crawling long before I saw the Pacific coast, but before I had gone twenty yards found my progress stopped by a deep gut, about five feet across. Cautiously putting down my leg I found that the bottom must have dropped out, at least I could not find it, and as standing up to leap across would spoil my chance of a shot, nothing remained but to crawl along and find a crossing place. I squirmed around for nearly a hundred yards and found a place that seemed all right. Reaching over, gun in hand, I threw my weight forward, and just as I attempted to draw my legs after my body, which my right hand and gun had preceded, the treacherous "other side" gave way and down I went up to the ears in mud and slush. This mishap did not dampen my ardor, on the contrary, it added to my determination to bag that leader, who was standing so boldly up, keeping watch scarce 300 yards away.

Shaking myself as I emerged from this involuntary bath, I renewed the snake-like proceedings, lying low until I reached the bunch of tall grass that had screened me from the flock. What was my annoyance to find that instead of being only 50 or 60 yards from that old gander I was between 80 and 90. Eighty-three paces it proved to be, as I stepped it afterward. But the mind quickly makes a decision in such a case. Drawing my No. 4 shell, I replaced it with a brass one carrying 4 drams of Hazard's No. 3 and 1¼ ounces of BB. This in my left barrel I felt confident would not fail me. Then rising I gave the old fellow the contents as he spread his wings for flight, and to my intense delight over he rolled at my service. Did I fire the right at the flock? you ask. No, I did not, for the simple reason that they were over 100 yards distant, too far to kill with certainty, and I never shoot to wound or cripple if I can help it. I would rather miss half a dozen outright than wound one, to crawl away and die in agony. Did I "talk right out in meetin'?" Yes, brother sport, I did. I went into a committee of the whole then and there and gave myself a unanimous vote of thanks, which was modestly received and becomingly acknowledged, after which I took that old "honker" by the neck and, throwing him over my shoulder, wended my way back to the spot where Jim stood waving his hat in congratulation. I meditated, too, as I walked; but that wetting did not trouble me much. True, I was scarcely dressed to suit company, but then I was jubilant, and I fully realized the fact that I had killed "my first honker." I have killed many since then, but none afforded me so much real zest as did that old fellow among the tules of the Sacramento.

I have been much interested of late in the articles on the "Choice of a Hunting Rifle" and "The Performance of Shotguns." My favorite gun is a 10-bore, 30-inch barrels, 9 pounds. This I find will do all that can be reasonably expected. I use 4 drams best powder and 1¼ ounces shot—No. 4 for geese, No. 6 for ducks, No. 8 for quail and doves. I can kill my bird clean at fifty yards with average certainty, and I am content. My favorite rifle is a Winchester, 24-inch barrel, .44-caliber, full magazine. I do not want a better weapon for mountain work. I believe the 30-inch barrel gives greater accuracy at long range, but the 24-inch is handy.

I will tell you how I killed my first buck ere long; and as "The Professor" is too long for a *nom de plume*, will in future subscribe myself LEONIDAS.

THE ST. CLAIR FLATS BILL.

Editor Forest and Stream:

The question of the status and disposition, of the chief and choice part in United States waters, of that famous shooting territory, usually denominated the St. Clair Flats, is before Congress and likely to be finally determined, and a few words to you about the matter will not be out of place.

Some two years since a bill was introduced in the last Congress to authorize the Commissioner of the General Land Office to sell the same district as United States overflowed and unsurveyed lands, the possession of which was sought by some wealthy parties, the territory having become both very desirable and valuable.

The move was observed by a citizen of Michigan, who takes interest in public affairs, and set down by him for further attention. The matter apparently attracted neither comment nor even notice during several weeks which went by, when he, deeming it a doubtful policy and unjust to detach this large and noble shooting territory from the people's domain and constitute it a close, private shooting preserve, to their perpetual exclusion from all privilege therein in the midst of a public water, their constant resort, drew an earnest protest or petition against the measure, setting forth in terse and pointed statements the merits of the case, and the same was widely circulated, and signed by thousands of citizens from Detroit to Iowa and Port Huron, and then forwarded to Members of Congress. Numbers of influential citizens rendered aid, Members of Congress were conferred with and interested, and influence assured. Don M. Dickinson, a noted lawyer and politician of Detroit, appeared before the committee having the bill in charge and made protest against its passage in the interest of private claimants (himself one of them), to the same territory, a matter which somehow did not obtain publicity. The bill never passed from the hands of committee.

It may be related here that until very recently the fact of there being private claims of ownership of the overflowed and marsh district in question was little, if at all, publicly known or heard of, prominent local citizens and public men and active supporters of the bill above referred to not knowing anything of the same. However, I do not state this to assert that such claims had not already been born or made a manifest of life.

The citizen above cited as organizing opposition to the bill described, proposed to two or three different Members of Congress the plan to set the territory in question aside for the people, and suggested the merits and advisability of considering and perhaps inaugurating a like procedure with like Government territory generally, but somehow they failed to discern the magnitude of the cherished interest which exists in this field and its valued relation to a large mass of the people. Some political cigar, perhaps well lighted but of transient and comparatively insignificant importance, as appointments to office, seemed to take precedence and monopolize their attention, and they gave no sign of regarding such really national interest as possessing even importance.

The bill had fallen, but the individual mentioned, fully realizing that the St. Clair Flats would ere long in some manner be grasped by private interest and the public cease to have any rights therein if no permanent bulwark of protection was interposed, now advocated the setting aside of that territory by Congress as a national preserve for the people. Believing efficient game protection compatible with a system of national preserves, and deeming it a hardship and an injustice and a matter that in the future will be most aggravating in effect to have the extensive shoal water and marshy margins of Government waters detached from the people's domain and created close private shooting preserves, to the perpetual exclusion of the people from all right therein, the policy of setting aside such Government territory in the future for the people and the efficient protection of the same in all its interests by authority was urged. Indeed, to amplify in this view, it seems a rank impropriety for the Government, the people's instrument, created by them to subserve their wants and needs, to sell for a pittance, the benefit of which is not sensibly felt, these shoal-water districts, and shut the public out from the same forever, constituting as they do about the only territory for game preserves in the nation, and margining public waters to which the people habitually resort for health and pleasure—boating, fishing and hunting. The people, ever having been used to almost unlimited freedom in sporting fields, appear to have failed to discern the rigid enthrallment of these privileges which is fast approaching, but they will very soon see its lines and feel its bonds, when their neglected and lost interest will be irreclaimable.

The public interest in this field and the above views relative to the same were brought earnestly to attention in high quarters in the Government and received consideration and a friendly recognition. Events in their course finally led to the preparation of a bill to set aside the unsurveyed and overflowed and marsh lands of the St. Clair territory as a national preserve, and an understanding that the measure should be presented in Congress.

The looking up of the data essential to the describing and bounding of the territory to be set aside furnished a peculiar experience. The General Land Office was applied to and

directed the request to be made to the Chief of Engineers, who furnished a U. S. Government chart as the sum of its ability to contribute in this line, and the Land Office at Detroit, after long delay, reported that it had nothing which would be of help in the matter. The Government chart, of course, is an accurate survey of Lake St. Clair and river, giving location and outline of the shores and islands and carefully everywhere the depth of water.

About the time these delays came to an end, the Hon. W. C. Waybury, member from the Detroit district, introduced two bills in Congress, the objects of which were to recognize and confirm title to private claimants to Harsen's and Dickenson's islands (excepting a trifling portion of one of the same) and to include extensive marsh, overflowed or shoal water territory adjacent within certain general bounds, the latter being defined under the head of natural and alluvial accretions.

The claim to title in each instance dates back to the days of English dominion, no part of the land proper has ever been surveyed by the Government save a portion of Harsen's Island, and to the same surveyed portion the United States long ago confirmed title.

The territory included by the claims set forth in the bills consists mainly of overflowed lands, and has an area of over fifty square miles. It comprises the main bulk and the very cream of the world-wide famous shooting territory in United States waters, known as the St. Clair Flats. As is generally known, parties resort thither for shooting from the Atlantic cities to the Mississippi, and it is a possession sufficiently desirable to excite great temptation for its acquisition.

There are several notable things to be taken into account relative to the matter. The claimants are plainly asking for that which they haven't got—title; and an interest in and claim to the territory on the part of the United States is recognized to exist in the asking for the relinquishment of the same. The overflowed territory has, beyond question, largely taken on its shoalness since the claims set up profess to have been founded, and at which date it is not probable there was any thought of the same being included in the claim. Everything assures that Lake St. Clair itself will eventually fill up and become land, save the river channels; it is but a shoal water anyhow, and if this claim can be allowed in its full extent, it is difficult to see where boundaries may not extend or be set up. The United States waters of Lake St. Clair proper attain to a depth of eighteen feet only over a very limited surface, and nowhere to over twenty-one feet, and in its Canadian portion nowhere attains to twenty-three feet. Large areas have a much less depth and rushes rise freely above the water.

Besides the above two bills of Mr. Maybury relative to this territory, one has been presented by Senator Palmer, of Michigan, to have the entire United States marsh and overflowed lands within and bordering Lake St. Clair and the divisions of the St. Clair River set aside as a national preserve for the people of the United States, subject to such regulations as may be provided, thus removing it from the grasp of private parties and ownership. This measure seems eminently an act of justice and a tribute to public rights, and if carried out will probably lead to the institution of an effective game protection over the region, and all like preserves, if such shall be instituted hereafter. A petition (a copy of which I inclose to you) in support of this bill was drawn and has been extensively circulated and signed in the cities and villages of Michigan, not one citizen in a hundred being found who is not in favor of it. The foremost citizens and best minds, wherever attention has been called to the matter, not only generally, but almost without exception, express decided approbation of the measure, and many leading citizens are lending active aid.

Also, this matter is one of national interest, and expression respecting it is properly in order from any State in the Union; the bill deals with national territory only, and for a common or national purpose, and petitions for signature have been sent to several States.

PETITION:

ASKING CONGRESS TO SET ASIDE THE UNITED STATES OVERFLOWED AND MARSH LANDS OF LAKE ST. CLAIR AS A PRESERVE FOR THE PEOPLE.

To the Hon. Senate and House of Representatives of the United States:

Whereas, A bill was introduced in the last Congress to enable the United States Land Commissioner to sell the extensive marsh and overflowed or shoal water lands in the United States waters of Lake St. Clair, which lands are one of the most notable resorts for shooting and fishing in the nation and most highly esteemed for the same, the purpose of the bill being to enable private parties to become the owners of this large territory and make the same a close private shooting preserve to the exclusion of all right and privilege of the people therein, which bill was not perfected by congressional act; and

Whereas, two bills have been introduced into and are being considered by the present Congress, the purpose of which bills is to give title and ownership of the greater and most valuable part of the territory above described to private and interested individuals upon plea of old time claims to contiguous islands, which claims profess to have been founded in the days of English rule; and

Whereas, title to the islands proper, if established, should not convey ownership of the many miles in extent of adjacent marsh and overflowed or shoal water lands, which also represent much financial value and present great temptation to private greed for their possession; and

Whereas, the bills introduced to give and confirm title to the aforesaid claimants admit a claim to the territory in question to be existing on the part of the United States;

Therefore, we pray you that no title pass or be confirmed which is not unmistakably demanded by indisputable legal right and justice, and that the United States unsurveyed marsh and overflowed lands of Lake St. Clair and bordering the divisions of the St. Clair River, be set aside permanently as a National Preserve in common for the people of the United States, subject to such regulations as may be established by rightful authority.

And further, we earnestly deprecate the policy which is being extensively practiced, of Government's selling the shoal water and marshy margins of our Great Lakes and other Government waters—the peoples' patrimony—to private parties, to be converted by them into close private shooting preserves to the perpetual exclusion of the people in common therefrom, which restriction and monopoly will, in the future, be deeply felt as a standing public aggravation and outrage of magnitude, and is contrary to both good public policy and justice; such favorite grounds for game and shooting throughout the nation are fast passing, and largely have already passed, to private ownership and control; *Therefore*, we express our belief that Congress should allow such proceeding to go no further, but should set aside such territory as a preserve in common for the people, subject to appropriate and efficient provisions and regulations.

Further, Mr. Maybury, who presented the bills for the private claimants, has also recently prepared another bill for the purpose of setting the same territory aside as a national park and game preserve, placing it under charge of the Secretary of War, but is not expected to present the same until the committee having charge of the bills for private claimants have expressed their views respecting the same.

The State of Michigan has also appeared in the case as a claimant to the St. Clair territory in question, under the Swamp Lands act of Congress relating to a class of United States lands in the State. It sent one of its ex-Congressmen, Mr. McGowan, to Washington to look after the State's interest in the matter. He is reported—no doubt correctly—as having advised that the General Land Office pass upon the question of ownership, and if the United States is adjudged the owner, let Congress have a survey made and the lands sold, he evidently having embraced the whole matter with a very ordinary view. It is reported later that the State authorities at Lansing are preparing papers to forward to him showing the State's ownership of the lands.

There is no disposition on the part of the movers for a National preserve to deprive any one of legitimate private rights or show disrespect for the same. The move has proceeded upon the common public understanding, which fairly might be said to be universal, that the overflowed lands of Lake St. Clair belonged to the United States, such land, of course, being entirely legitimate and proper for such purpose. The prime movers in the matter had never heard of the claim of private ownership to this territory until Mr. Maybury introduced his bills in the interest of the same. Parties opposed the bill introduced in the preceding Congress to enable this shoal-water territory to be sold as United States unsurveyed lands, and conferred with different members of Congress respecting the same, and yet never heard of such private claims until Mr. Maybury's move.

Private claims to land of the islands proper which ought to be respected may be shown, and if so, say all let them so be. Title to the islands proper, it is claimed, carries the same right to this many miles of overflowed shoal water territory, the most of which you can sail a boat over. This claim should not be granted because the same is asked for. It should never be conceded except after the most thorough scrutiny determines that justice unmistakably demands the same.

The islands proper, in question, were not deemed essential in the plan for a national preserve. It seems like a most liberal stretch of credulity to contemplate that this large, overflowed territory should pass upon the claims set up, when the case is fairly and fully scrutinized.

Able efforts by able counsel have been made before the committee for the claimants, and it is due the people that both sides be thoroughly presented, as no doubt will be done, and then let Congress give a fair decision, dictated by intelligent justice.

* *

MICHIGAN, May 12.

THE ADIRONDACK BILL.

THE text of the Adirondack bill passed by the Albany Legislature is as follows.

SECTION 1. Within ten days after the passage of this act the Governor, by and with the advice and consent of the Senate, shall appoint a suitable person, who shall be a resident and citizen of this State, as Commissioner, who shall be known as the Forest Commissioner of the State of New York. Said Commissioner shall hold office for six years and until his successor shall be appointed and confirmed by the Senate. The said Commissioner shall receive an annual salary of $4,000. Neither said Commissioner nor his subordinates shall be liable to any person or corporation for any damages sustained by reason of want of repair of any road or bridge situated upon the forest lands of the State. Said Commissioner shall have an office in the new Capitol in the city of Albany, where all the records of said Commissioner shall be kept.

SEC. 2. It shall be the duty of the said Commissioner to cause all the forest lands now owned or which may be acquired by the State to be located, and, when necessary, to be surveyed; to procure suitable books of record and cause all said lands to be recorded; to make and publish such reasonable rules and regulations for the use of said forest lands by the public as shall give the greatest amount of liberty in the use thereof, consistent with the preservation of the forests thereon; to prevent trespass upon the said lands and streams situated thereon; to make reasonable regulations for the prevention and extinguishment of fires thereon; to prevent overflow of lands belonging to the State by the erection of dams and obstructions hereafter built or made in the streams within said boundaries; to report to the Legislature on or before the fifteenth day of January in each year his official action during the preceding year, and such information as may be useful in preserving the forests upon State lands and the forests of the State generally, and maintaining and preserving the supply of water derived therefrom; and also to report generally upon the subject of forest preservation and the utility thereof in its scientific aspects; to report to the Attorney-General trespassers upon said land and streams and furnish to him the evidence thereof. Said Commissioner shall not grant to any person or class of persons or corporations any exclusive use of any portion of said forest lands or any lakes or rivers thereon.

SEC. 3. The Attorney-General shall, upon the report of the Forest Commissioner, commence actions in any court having jurisdiction against persons who have committed trespass upon forest lands of the State, to recover the penalties prescribed by this act, or for any cause of action the people may have against such trespassers. In any action brought by the Attorney-General, under this act, an injunction may be granted upon the application of the Attorney-General restraining any act of trespass, waste, or destruction, and in cases where lands belonging to the State within said boundaries are being injured by the maintenance of any dam or obstruction which may hereafter be erected in any stream or lake, the court may order the removal or partial removal of said obstruction during the pendency of said action, provided that the owner of such dam or obstruction shall not be deprived of any legal or equitable right to damages for such removal.

SEC. 4. The said Commissioner shall have power to appoint such foresters as he may deem necessary, not exceeding ten in number, at salaries not exceeding $600 each per annum, and such clerks as he may deem proper, within the limits of the appropriation made by this act.

SEC. 5. Any person or corporation who shall cut, or cause to be cut, any tree or timber standing upon the forest lands of the State, with intent to remove the same, or any portion thereof, or bark therefrom, shall forfeit to the people of the State of New York the sum of $10 for each tree so cut, to be sued for by said Commissioner.

SEC. 6. Whenever the State owns an undivided interest with any person in any forest lands, or holds or is in possession of any such real estate as joint tenant or tenant in common with any person, within this State, who has an estate of freehold therein, any such person may, upon obtaining consent in writing of the Comptroller thereto, maintain an action for the actual partition of said property according to the respective rights of the parties interested therein, in the same manner as if the State were not entitled to exemption from legal proceedings and with the same force and effect as in other cases, except no costs shall be allowed to plaintiff therein, and no sale of said lands shall be adjudged in said suit.

SEC. 7. The sum of $20,000, or so much thereof as may be necessary, is hereby appropriated out of any moneys in the Treasury not otherwise appropriated, for the purposes of this act, payable on the warrants of the Controller to the order of the said Forest Commissioner.

SEC. 8. This act shall take effect immediately.

MASSACHUSETTS GAME INTERESTS.

ON Friday evening, the Massachusetts Fish and Game Protective Association held a very successful and enthusiastic meeting. Five new members were received, and the attendance was the best for a long time. The meeting was the last of the season, but it was decided to come together again in the fall earlier than usual. Several new and very important committees were appointed, some of which may strike poachers and law breakers with surprise.

The matter of the defeat of the game law, which was to have been generally adopted in New England, was discussed, and it appears that the stupidity and the cupidity of the country member had much to do with the defeat. Two clauses in the bill, both of minor importance, appear to have weighed heavily on the mind of the member from the rural districts, and together with the force of the market element, the bill was killed. The obnoxious clauses in the bill were the ones relating to "shore birds" and to killing birds in certain ponds in the State. Evidently the country member desires to shoot ducks and geese on the shore at all seasons, and means to have all there is left of migrating waterfowl which are accustomed to stop to rest in Massachusetts ponds.

A member from among the marketmen claims that there is an improvement going on among the game dealers, and, honest and earnest himself, he will labor in that direction, and hopes that, at least, his fellow-dealers will not meet the bill another year with organized opposition. It is also very gratifying to note that several of the lobster dealers, seeing the depletion so rapidly going on in these valuable shellfish, have declared themselves in favor of stringent protection and promise to aid in securing legislation in that direction.

The game bill came up in the House at a very unfortunate time—during the unavoidable absence of its best friends and defenders. But its loss for one season has not disheartened them in the least. Mr. John Fottler, President of the Association and than whom no man in the State has labored more earnestly for game protection and for this bill, at the time it came up in the House was performing the mournful duty of burying his business partner. All the best friends of the bill at the State House happened to be away, and consequently when the measure was attacked by its enemies, present in full force, there was nobody to defend it.

Commissioner E. M. Stillwell of Maine, says that he is not at all surprised at the defeat of the Massachusetts bill. In fact he rather expected it. His experience with the obtaining and enforcing of the excellent law in Maine has shown him the fighting qualities of the poacher and market hunter. He regards the defeat this year as but one of the drawbacks which will probably lead to success next winter. He expects a fight in his own State then, and dreads the influence of the Boston game dealers more than any other force. But efforts are already begun for the early passage of the Massachusetts bill in this State, and as the Maine and Massachusetts Legislatures next meet at the same time, the game dealers will have a double enemy to fight. Earnest work will be put in by the Massachusetts Fish and Game Protective Association, and the ultimate success of the New England protective bill without essential modifications is confidently expected. The Commissioners of the other States are neither alarmed nor discouraged at its defeat this year in this State, but will labor for its enactment at home.

BOSTON, May 18. SPECIAL.

SEA OTTER SHOOTING.

EMERGING from a nest of low sandhills, covered by stunted hemlocks and dwarf cedar, the grand Pacific Ocean, with its continuous line of white breakers extending as far as the eye could reach north and south, presented a glorious view. It was just one mile to the first breaker, directly across a stretch of level sand beach, where the lookout or derrick was stationed. A derrick is mounted on three legs, like a tripod, with an open box 4 feet square inclosed on three sides, shore side open, the upper edge of the box being cushioned for gun-rest. The box is supplied with low stools for the hunter. The derrick is 30 feet high, and placed on a line of about half tide. I take a glance at the weather vane—wind in the sou'west, good; tide coming in, better; sky clear, correct. These different conditions of wind and tide have to be closely observed to insure the drifting ashore of the otter when shot. A nor'west wind is as good as one from the sou'west quarter, but it seldom occurs in this section of country. The guns used are Sharps rifles, 12 to 16 pounds weight, .44-caliber, using from 100 to 120 grains powder and 450 to 550 grains lead, bottle-necked shells, perfectly smooth, square-butt, naked bullet. A Rocky Mountain rear sight is used with a globe sight in front, the globe being about one inch long, with pinhead. There is considerable inquiry among the otter hunters in regard to new guns, as their Sharps rifles are wearing out and they cannot secure more; the Ballard seems to be the favorite. A wooden step is made for each distance of 100 yards and laid in rotation for instant use, to avoid mistakes or confusion.

In twenty minutes we were on the derrick, glasses in hand. An otter was discovered diving for crabs. He soon came up with a large crab in his little, squirrel-like front paws, and lying on his back, with head erect, proceeded leisurely to eat it. In an instant the 700-yard sight was adjusted, the 16-pounder spoke, and a 550-grain bullet was landed three feet to windward. A good horizontal line shot. The distance was correct, but the wind not carefully noted, which was from the 10 o'clock quarter, the otter at 12 o'clock and the shooter at 6 o'clock points. In about a minute the otter appeared at the 1 o'clock point, about 100 yards to windward; the same sight was used, and at the second shot the otter turned "back up," head and flippers down, and began drifting ashore dead. It proved to be a fine silver-tipped, and $100 was received for its pelt on the beach.

It must be remembered that sea otter shooting is attended with many difficulties, viz.: All shooting must be done from 400 to 1,000 yards over the water. Generally there is a heavy ground swell, and there is more nice calculation in making a shot of this kind than the reader would naturally suppose. First you have to calculate on the force of the wind, distance, rise and fall of the otter, and last, but not least, this calculation has to be made in a moment.

TILLICUM

GRAY'S HARBOR, Wash. Ter.

FISH AND GAME IN BRITISH COLUMBIA.

As many of your readers visit the far West in quest of sport with rod and gun, perhaps a few might extend their trip to this far western isle, if they but knew the sport to be obtained in our mountains, valleys and rivers. Deer are plentiful within a few hours' drive of this city, and in the open season dozens of fine carcasses are brought in weekly to our market. Bear (black) are also plentiful, and on the mainland of the Province, but further north than this, grizzly are to be found, and I am informed that on the banks of the Skena River they are very numerous, as also game of all kinds. The game birds of the island are grouse (blue and yellow) quail, ducks and brant. Grouse are very plentiful, and good bags are made by our local sportsmen in the neighborhood of the city. Quail are abundant, and do not suffer from our winters, which are very mild. On all the rivers and creeks, bays and inlets, mallard, teal, butterball and brant, abound in large numbers. Not being much of a shot, and caring very little for packing a gun all day, I may not do this part of my letter the justice it deserves, but all that I have stated I know to be facts.

In a radius of fifteen to twenty miles from this city we have a number of small lakes called Prospect, Pike, Long, Thetis (little and big), Langford, Elk and Beaver, in all of which trout are abundant, and in the summer take the fly freely, in fact, they have been biting in Prospect Lake for the past three weeks or more, and some very fair bags have been taken (say fifty between three rods) They were taken with bait, but "oh shame, oh sin, oh sorrow," they were taken with salmon roe, which is not prohibited by our game laws But the fishing in these lakes is tame compared with that in the Cowichan and Comou rivers further north, on the eastern side of the island, and in nearly all the rivers and creeks of the mainland trout are plentiful and bite freely, and are said to go as high as six pounds in weight. Last summer myself and a friend paid several visits to Pike Lake, and caught 15 to 25 each, weighing from ¼ to 1¼ pounds, on each trip, fishing from the bank, and now we look forward to renewing our acquaintance with the fish of Prospect, Pike and Long lakes.

Salmon are about us in untold numbers, but, sad to say, they will not rise to the fly; but our Indians catch them with hook and line in salt water. From my residence I frequently see an old Siwash trolling for winter salmon, and he catches them, weighing from 16 to 20 pounds, with herring bait, and in summer they troll with spoon; but, so far, I have not heard of many white men even trying to catch them.

Should any of your readers visit this city for sporting purposes, they can outfit here at small cost, and obtain all the information they require at any of our sporting emporiums or by asking any of our sportsmen.

I may state that all the lakes I have named are accessible by horse and buggy, and the other points by steamer.

The mouth of the Frazer River is a favorite spot in the fall for ducks and brant. CANUCK.

VICTORIA, B. C., April 2, 1884.

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

Your correspondent "G.," in issue of April 17, apparently brings up many objections to the repeater, and there have been so many adverse criticisms of the "deadly rifle" that I cannot but come forward again in defense.

Some of your correspondents appear inclined to be facetious, and others unnecessarily alarmed as to the rapid killing of game by the proposed hunting rifle. The latter mistake their premises; for which destroys the most game, the accurate and deadly rifle that secures its game at every shot, or the "wild shooter," that hits, but does not hit in a vital place, and leaves a wounded head of game to escape and die a lingering death, thereby destroying one head of game with no corresponding benefit to mankind?

I think I but voice the thoughts of all good hunters and sportsmen when I say that I decry the wanton killing or destruction of game as much as any one. But to kill game is one of the main objects of hunting, for I know of no one who will persistently hunt, simply for the health-giving exercise and recreation, and come home each day with empty bag. I do know a good many, however, and I do think true sportsmen can all be included, who like to hunt, not only for this reason, but for the sake of the game they kill, and who are satisfied to kill simply for their wants, or those of their friends, and not for glory.

Now what does any true hunter want to hunt with? Does he not want a true rifle that kills, and kills every time? Will such a hunter go on piling up meat and wasting or wantonly destroying game just for the sake of killing? With such a weapon will he not be satisfied with the one deer he kills, and leave all the rest for some one else, or for another day? Will he not be able to kill that one deer with less liability of damage to the multitude? Will he have to go on shooting at now this deer and now that, wounding all but losing them, and then by destroying perhaps ten deer for the one he finally brings to bay by some lucky shot, as would be the case if he had a gun that was not accurate? I think that "Nessmuk's" return to his beloved muzzleloader was just because he wanted the most deadly weapon he knew, for just such reasons as those above, having become disgusted with a murderous weapon, such as all poor shooting rifles must be.

Having seen so much of just such work as that indicated, by murderous rifles, I among the first proposed the deadly rifle as a means of saving game. I have been sick and disgusted with the sight of wounded game escaping to die and benefit no one but the wolves, and I have longed for the time to come when sportsmen could get a rifle that would kill and not wound when they shot, although there doubtless are those who would abuse such a gun, and kill more than they needed just for the sake of killing, still I claim that in the great majority of cases good and not harm would result from the general introduction of the accurate rifles. Doubtless, also, game would still be wounded and escape at times, even with such a rifle in the hands of an expert; for luck, chance, or what not, might cause a bad shot to be made, but the proportion would be greatly lessened, and more game left uninjured and less be destroyed for the amount actually bagged.

All high trajectory rifles are murderous on game. They were never built or intended for hunting guns. As military rifles, to use against an enemy, to shoot long distances, and to wound or kill a human being, were and are their legitimate object. As such they are intended to be murderous, for "a wounded enemy is as good as three dead ones," and in battle the wounded and not the dead are what demoralize the line. But who wants to use such weapons against game? It is a lucky chance if the hunter can come on his game at a known distance, or have full time to estimate it and, with such a rifle, put his ball where he wishes. A shot too high, or too low, leaves his game with enough vitality to escape and leave him bootless, to linger and suffer and die, with only the wolves to rejoice.

I have been striving to obtain a rifle that shoots close enough to hit and kill whenever I shoot at any reasonable distance. I may find my game to-day at 50 yards, to-morrow at 150, and yet I want my rifle to shoot so flat that to-day, to-morrow or next day I can shoot with a certainty of killing and not wounding. I do not want to see a deer, an antelope, or any game go off on their legs, disappear with a wound anywhere, to leave me sick and disgusted with myself at the useless pain and death resulting from my bad shot. I go out to kill and not to destroy, and I am as sick of all the namby-pamby sentimentalism against killing game when needed as I am of all needless and useless suffering and death inflicted by murderous rifles.

But I hear the question, why should I want a repeater, when I want a gun that kills at the first shot? I answer, simply as a protection to game again, by giving one the ability to fire the second shot, and the third and the fourth if necessary, as rapidly as possible, should I by any chance fail to kill at first and thereby prevent this wounded animal from escaping. I would want the repeater as a reserve to fall back upon in cases of emergency, using it ordinarily as a singleloader and choosing my shots with it as carefully as though the one shot I had in the chamber was the one on which my life depended. It is admitted that in the hands of a nervous man, or perhaps in any one's hands under some circumstances, the repeater would be abused; but I claim a better state of affairs for the great body of sportsmen. It would be as well to condemn all horses because some are vicious and run away and smash things, as to condemn all sportsmen with repeaters because one loses his head and "throws I ad" hastily and indiscriminately.

Then again, in spite of the assertions to the contrary, in this Western country the hunter frequently takes his life in his hand while hunting. Heavy and dangerous game is not so scarce as some of your correspondents would seem to indicate, and I for one would not think of going into the mountains without being prepared to encounter ferocious and dangerous game. I might hunt for a month and never see a bear; but like the Texan and his six-shooter—when I did want a repeater "I would want it mighty bad." I have seen men of a party stop fishing and come to camp on account of the proximity of bear; and one can't tell in this country what he may find when he once is beyond civilization.

And even were I where I knew there were no dangerous animals, human or brute, I would still want the repeater, although of perhaps lighter caliber, for to me it represents the latest advance and development of firearms; and every hunter should have the best.

And now as to "G 's" criticism. He says repeating rifles are unreliable. Had he said some are so I would agree with him. But has he tried them all? Or has he seen the many improved weapons of late years all tried? His first experience was by his own statement "many years ago," and with the Winchester carbine. "Many years ago" I also owned a Winchester, and I found it unreliable and sold it, but I did not thereby lose all my faith in repeaters, nor condemn them as he now does after years have elapsed for improvement. First efforts are rarely successful, and a steady march of improvement for over three hundred years has developed our present breechloaders and repeaters from their prototypes of long ago. Breechloaders and repeaters are not a thing of to-day; but their development was slow until the introduction of the metallic cartridge, and since "many years ago" many and valuable improvements have been introduced.

Besides this, the Winchester is not the only nor the best repeater extant. Why do all refer to this as the one weapon of all on which to pin their faith or unbelief in repeaters? True it is, that it was one of the first and has led to many others, and is entitled to much credit, not only for its own excellencies, but for its good work; but also true it is, that other and better repeaters are to be had to-day, and steady improvements are being made by firms, who have new life and not the conservatism of the older gunmakers.

I cannot help but criticise "G.'s" ideas about caring for guns. The hunter, soldier or scout who does not keep his gun clean deserves to "lose his scalp" if "jumped by Indians or charged by a bad-tempered grizzly." He has about as much business anywhere near either as a first-class lunatic has out of his asylum, and such a man would probably "pass in his checks" at such a time, even if he were armed with the most perfect weapon under heaven and that in the most perfect order. After an experience of some dozen years in the camp and field, I have yet to see a similar experience to that he narrates with any class of weapons, either singleloaders or repeaters. My Winchester became unreliable because it was old and rickety, and even the best of weapons grow unreliable from such causes.

Again we have a man of the "didn't-know-it-was-loaded" class who wanted to hunt a grizzly alone. I wonder if he had ever seen one before the time mentioned, when he saw three? Lucky for him that he did not shoot at any of them—and more fool he for ever thinking of shooting at a cub unless he knew the she bear was away beyond ear shot. Had his gun even been in order, he would probably have had "his belly full" in no time. But what is one to think of any hunter, or any one else who abuses a gun in the manner described. Guns are made to use and use properly, the same as any other piece of mechanism. Governors on steam engines have broken down before now and the engine has "run away and smashed things," but are all steam engines unreliable on that account? Is the Winchester or any other repeating arm to be held up to ridicule because some one does not know how to use it? On the contrary, are there not hundreds, yes thousands, who use them, well aware that they are reliable—provided the "man behind the gun" is reliable too?

Then we are told also that repeaters are unsafe, and again because a cartridge in a Winchester magazine, one in a Hotchkiss and another in a Spencer ("G." makes it appear as a Winchester), exploded and tore things to pieces. "Accidents will happen, even in the best regulated families," but there generally is some preventable cause for each accident, and the fault in each of these cases was perhaps the fault of the man and not the gun.

I have the report of a board of officers before me, who in 1881 tested magazine guns with a view to their introduction as military weapons. Since then several new repeaters have been introduced, and that they were not tested was simply because they had not then been born.

It may be of interest to state what some of the "official tests" were:

III. *Endurance.*—Each gun to be fired 500 continuous rounds with out cleaning, using the magazine. The state of the breech mechanism to be examined at the end of each 50 rounds.

IV. *Defective Cartridges.*—Each gun to be fired once with each of the following defective cartridges: 1. Cross-filed on head to nearly the thickness of the metal. 2. With a longitudinal cut the whole length of the cartridge from the rim up, a fresh piece of white paper, marked with the number of the gun, being laid over the breech to observe the escape of gas, if any occur.

V. *Dust.*—The piece to be exposed, in the box prepared for that purpose, to a blast of sand-dust for two minutes; to be removed, fired 20 rounds, replaced for two minutes, removed and fired 20 rounds more.

VI. *Rust.*—The breech mechanism and receiver to be cleaned from grease, and the chamber of the barrel greased and plugged, the butt of the gun to be inserted to the height of the chamber in a solution of sal-ammoniac for ten minutes, exposed for two days to the open air, standing in a rack, and then fired 20 rounds.

VII. *Excessive Charges.*—To be fired once with 85 grains powder and one ball of 405 grains of lead; once with 90 grains powder and one ball, and once with 90 grains powder and two balls. The piece to be closely examined after each discharge. [Note—Pieces built to fire .45-70-405 ammunition.] Any gun failing in any of the foregoing tests will not be submitted to further tests.

Supplementary Tests.—1. To be fired with two defective cartridges, Nos. 1 and 2, and then to be dusted five minutes, the mechanism being in the mouth of the blowpipe and closed, the hammer being at half cock; then to be fired six shots, the last two defective Nos. 1 and 2; then without cleaning to be dusted with the breech open and fired four shots. The piece to be freed from dust only by pounding or wiping with the bare hand. 2. To be fired five rounds with the service cartridge (.45-70-405; then without cleaning to be fired five rounds with 120 grains powder and a ball weighing 1,200 grains; the gun to stand twenty-four hours after firing without cleaning and then to be thoroughly examined. 3 Facility of manipulation by members of the board. 4. Liability to accidental explosion of cartridges in the magazine.

Additional tests may be made to clear up doubts raised by previous trials.

* * * * * * *

Under the fourth supplementary test, in addition to the test already made of giving a jolting motion to a column of cartridges in a vertical tube with the spiral magazine spring, a column of six cartridges to be jolted in a tube without the spring, and, if there be no explosion, then the lowest bullet in the column to be replaced by a pointed steel plug—first using the spring below the plug—and in the event of it not producing explosion to be tried without the spring. Also if there is no explosion resulting from the jolting tests, the tube containing the column of cartridges heavily weighted at the lower end to insure its vertical position, and having the spring at the bottom of the tube, to be dropped from a height of twenty feet upon a pavement, and if there is no explosion to be dropped as before without the spring in the tube. Afterward a pointed steel plug to replace the lowest bullet in the column, and to be dropped with the spring in the tube; then, if there is no explosion, the dropping to be finally tried with the spring removed. These tests to be applied equally to the Frankford and exterior primed cartridges.

[Now the only wonder is that any gun should have stood these tests at all, for any one must concede that they are excessive.] Forty guns, representing thirteen models, were submitted for experiment with results as follows, omitting all of no importance to this discussion:

In safety test and rapidity, with accuracy and rapidity-at-will tests, all magazines were filled, and in safety test but one gun failed by bursting of receiver. No cartridge burst in magazines, and there were 24 failures to extract. But here were 40 guns, each fired 10 rounds in safety test, or 400 rounds, and 3,713 rounds fired in rapidity tests, making a total of 4,113 rounds, and only 24 failures to extract, and these were nearly all by guns afterward found to be poor in design or defective, and were rejected. As an average the percentage of failure to eject was but .0058 per cent.

In the endurance tests, the results were as follows: 92 miss-fires; but 72 of the 6 were by guns of one model, leaving 20 miss-fires to the balance; 18 failures to extract and cartridge exploded in magazine. And yet here were 11,948 rounds fired as a whole, among which to divide the above accidents.

Defective cartridges—Miss-fires none, 2 failures to extract, 72 shots all told.

Dust test—9 failures to extract, 7 miss fires, 920 rounds all told.

Rust test—Miss-fires 27, but 18 by one gun; no failures to extract. 420 shots all told.

Excess in charges—Miss-fires none, guns generally opened hard, six shells with head blown off, 3 failures to extract, 63 shots all told.

Excessive charges—No explosion in magazine, 6 guns tested.

In all the tests for liability to accidental explosion in the magazine, but one cartridge exploded, there being 2,750 rounds fired from 6 guns in this test.

The tests mentioned above were never carried out; but the following modifications were adopted and tried with six guns that had been found by the preliminary trials to be best adapted for military purposes: "Liability to accidental explosions of cartridges in magazine A—Magazine to be filled with each of the four kinds of cartridges on hand and shut off. Then to be fired 100 rounds as a singleloader, in the fixed rest, using the heavy Frankford cartridge (70-500 grains) in the chamber to obtain greatest recoil where practicable. The cartridges in the magazine to be examined and changed after each fifty shots. B—Same as A, except the magazine being half filled. C—Same as A, except the gun suspended by wires so as to permit greatest extent of recoil." Four kinds of ammunition were used, viz: Frankford, U. M. C., Winchester and Lowell, and the following results obtained:

First Gun.—Test A omitted. Test B—One hundred shots; magazine partly filled; no explosion in magazine. Test C—One hundred shots; magazine entirely filled; no explosion in magazine; one failure to extract shell. This was repeated with the U. M. C. and Winchester ammunition, and with the Lowell ammunition up to 52 shots in test C, when a cartridge exploded in the magazine; 752 shots all told; tube magazine under barrel.

Second Gun.—Test A—Seventeen shots fired, when gun broke down from defects, not of the magazine, and became disabled, and tests discontinued; tube magazine under barrel.

Third Gun.—Test A—All four kinds of ammunition used for 100 shots each; no explosion in magazine. Test B omitted. Test C—Same remarks as for test A (800 shots all told; tube magazine in stock).

Fourth Gun—Test A—All four kinds of ammunition; 100 shots. Test B—Three kinds used, 100 shots used, when it became apparent there was no danger of explosion, and test discontinued. Test C—Three kinds and 100 each; all successful (1,000 shots all told; tube magazine in stock).

Fifth Gun—Detachable magazine; test only a short one; 150 shots all told, as it became evident the danger was a minimum.

Sixth Gun—Detachable magazine; test only a short one—40 shots—as gun was not easily loaded as singleloader when magazine was attached, and best results of gun not to be had when used a singleloader with magazine fitted and attached; 40 shots all told.

This is all I can give from the report without occupying too much space, but from it we can see how very unlikely such accidents as "G." mentions are to happen. One of the guns that stood the test the best is the very Hotchkiss model he mentions as one of the guns whose magazine exploded.

Those who might be timid about buying a magazine rifle after reading "G.'s" article can take comfort from the above, and rest assured that so long as they use proper ammunition there is not one chance in ten thousand of their getting hurt by any magazine explosion. By proper ammunition I mean that with flat, pointed bullets; and if the cartridges are reloaded at home, see that the primer is properly seated, and the danger is reduced to a minimum—it may be said to nothing.

Upon this very point of ammunition allow me to differ from "G.," and his friend who writes to him and whose letter he gives. It is a man's duty to examine every cartridge he intends to use. There are times when there is nothing else to do, and one can very pleasantly and very profitably spend his time in inspecting his ammunition. If he reloads it himself, then his reloading, if properly done, is an inspection. Primers should always be seated down where they belong, below the plane of the rear face of the shell. Proper priming tools always put them there if the shells and primers are intended for each other, and if one finds his primers won't go "home," then either shells are defective or he is using the wrong primers for his shells, and must change to get proper results. Primers not properly seated are dangerous in any gun, either singleloader or repeater, and besides are liable to cause misfires from not being seated firmly home to take the force of the blow of the hammer. Do not use too thin or sensitive primers for repeaters; there is all

the difference in the world in this, and the mainspring should be heavy enough to explode even the least sensitive.

Then proper reloading tools are a perfect gauge as to the length of the completed cartridge. To be sure, a cartridge for a repeater needs an invariable length, the same as for any other gun; for I know of no gun that will take cartridges that do not fit it and do good work. A cartridge a little too long in a singleloader may cause as much trouble and lose a man his life from the inability to "work" the gun, as one too short or too long in a repeater; and this variation in length will not obtain if the shells are loaded properly, as the ball-seater in a proper set of tools seats the ball invariably the same. Nor will properly loaded shells shorten up under the jolting in the magazine, for the ball should be firmly seated on the powder by heavy pressure or blows by a mallet, and cannot enter any further. The lubricating disk is a thing of the past long since, and should never be used in any magazine rifle or any other to secure accurate shooting.

But what is the use of my stating this? It is all known already by the rifle shot who merits the name, and I am sick and tired of hearing the man's fault laid to the gun; or trying to teach such a man what any rifleman should know, and that is how to not only take care of himself, but also load and take care of his rifle and ammunition, so that they will take care of him in the time of need. Any man who will take the field without such knowledge deserves all the ills that befall him, and needs a guardian to keep rifles and all such out of his hands until he is competent to understand and handle them. Doubtless there are many who need such guardianship, who always succeed admirably in getting themselves into a scrape and leave their friends to get them out; but don't let us hear their faults laid on the poor gun, when the latter would have served them well with even a very small amount of intelligent attention to its wants.

It so happens that I know Jim Baker very well, having passed the winter in the same camp with him once on a time and having had him on my pay-rolls as a Government scout, and he told me exactly how the accident happened to him. It did not happen from any accident with a Winchester, as "G.'s" article would lead one to suppose from the way he quotes his friend's letter; but it did happen from the explosion of the magazine of an old Spencer rim-fire carbine, and his accident was not the only one that has happened with such guns. The accident broke poor Jim's jaw, cut open his neck and tore off his right thumb, an accident that only could have happened with a gun with magazine in stock.

Now the time was when the Spencer was considered a fine gun, and in the hands of troops during the war it caused the enemy many a heart beat, and this, too, in spite of the defects of mechanism and faulty ammunition. It is a rim-fire gun, and so were the Henry and first Winchester, hence so many accidents, and never should have been used as a magazine gun, owing to its danger; but gunmakers have "to live and learn," and its day has long since passed never to return. So we can safely dismiss Jim Baker and his accident with the Spencer as entirely foreign to any accidents likely to happen with more modern weapons.

"G.'s" friend asks whether efforts have been made since the war to arm troops with repeaters. I can tell him, most emphatically, yes. Every civilized nation, and some that are not so classed, are experimenting with repeaters, looking to their general introduction as weapons of war. England looks upon the magazine gun as the coming weapon. Our own country has adopted them for trial, and they are now in the hands of some of our troops. Our Indian police are armed with them and know how to use them, too, while the Turkish cavalry were largely armed with them in their late war with Russia. Our arms companies are mainly interested in the production of repeaters for army use, and fill large orders for foreign shipment. The Winchester—then called the "Henry"—was in the hands of our troops during the late war, and many a time did the rebels meet a surprise party when coming against them, and the Indians, when first they met them, were most gloriously "licked" before they "tumbled to the racket," and to-day you cannot make an Indian arm himself with a singleloader when he can beg, borrow, or steal enough to get the wherewithal to buy a repeater, and when gotten he treasures it as the "apple of his eye."

After the "Milk River fight" in 1879, after the arrival of the relieving columns, I picked up handfuls of Winchester shells from behind the Indian breastworks, showing that the Utes had them to use—and did use them pretty effectually—against us. But the Spencer and the old Henry, or the early Winchester, compare about as favorably with our late repeaters as do the "flint locks" with the modern "hammerless," and the good work the more modern repeaters can do will compare as favorably with the work the old ones did.

But we are not striving for a weapon for troops—let governments do that—we are striving for a weapon for the hunter to which he can "tie" at all times and in all places, and the number of repeaters thus far developed that "fill the bill" can be counted on the thumb of a one-armed man. We have many so-called "sporting" repeaters, but they each and all would prove the "murderous" and "cruel" gun, which we hear decried against game, not because they don't shoot hard enough, not because they don't shoot far enough, not because they don't shoot lead enough, not because they don't shoot true enough when the distance is known; but because they all do shoot with a too high trajectory, throw too much lead and too little powder, and one cannot plant his lead with certainty in a vital spot. But we have one class of repeaters that is bound to succeed in spite of croakings as to the danger, quoted from experience with old pattern or inferior kinds of arms.

I will conclude this article by telling what I know has been done with a repeater, where verily a man carried his life in his hand, protected only by his coolness and skill, and the rifle he carried. In Arizona I know an Indian scout, with whom I scouted many a mile of country, who, one day in an engagement, ran an Indian into a thicket in a fight. Mr. Redskin was armed and was skulking for cover to get his chance at picking off a white man. The scout knew better than to rush in or to expose himself unnecessarily to fire, so he too crept around under cover until he could see about where the Indian was hid; then, believing that the Indian did not know about repeaters (the Apaches in 1870 to 1875 knew very little about them) he deliberately fired a shot, believing that the Indian would show himself to get his shot before the scout could reload. Show himself he did, with a grin on his face, as much as to say "it's my turn now," to get a shot between "wind and water" from the scout's repeater, that had been loaded without having been taken from the shoulder. Well, there was one "good Indian" more, and he never lived to learn how that gun was reloaded so quickly. Again, another scout, armed with a repeater, held alone the only place the Indians could escape from an engagement. He rained lead so fast upon them, and they were there by the dozen, that they could not and did not face it, but turned back to try the steep rocks, where the way was steeper, but where lead did not buzz like angry hornets.

I might multiply instances and not romance in the least; but each and all know of many a time when, but for the repeater, death would have claimed the hunter, scout or soldier, and it is needless for me to dwell on this.

Believing that the new departure in rifles is in the right direction, I can only hope it will prosper, leaving, however, each to take his choice, but at the same time earnestly hoping that blame for non-success will be put by each where it generally will be found to belong—upon the man and not the gun, provided a good, late pattern and thoroughly well-made gun has been chosen, and good, properly loaded ammunition is used therein. C. D.

P. S.—The work you are now engaged in of giving a complete description of the later styles and models of rifles is to be commended, for from the information there contained, riflemen can more intelligently select the rifle best suited to their wants. Those who have the opportunity doubtless post themselves upon all models of rifles before purchasing any, but there are so many that have not the chance, your description will give wide circulation of details, ordinarily not to be found in any advertisement, giving a fair field and favor to all. C. D.

DORCHESTER BAY DUCKING.

I WAS in Dorchester, New Brunswick, and complying with an invitation from my friend, J. H. H., I joined him on Easter Monday for a cruise down the bay in his gunning boat. Dorchester Bay is at the head of the Bay of Fundy, and the tide rises and falls thirty feet. We started at 4 A. M., and launching our boat on the ebb tide sped down the bay indifferent to the huge waves that tossed our boat around like an eggshell.

The boat, built for the purpose, is about fourteen feet long, flat bottomed, and propelled by paddle wheels and cranks, the covering of the paddle boxes being carried across in front, forming a breastwork which hid all but our heads from the birds. It was my first experience in this mode of gunning and I became enthusiastic over the ease and comfort with which we proceeded with my muscular friend at the cranks. My opinion was somewhat modified later when my turn came to play the part of steam engine in a launch. If any of your readers wish to try how it feels, let them place two grindstones side by side and then sit flat on the ground between them and turn them simultaneously for a few hours. Even that would hardly give a correct idea, as you must hold your head still so as to make your shooting hat look like part of the boat while paddling up to the wary geese and ducks. My spine even yet takes an occasional kink which serves to keep the experience fresh in my mind.

It would take too long to give a detailed account of the day; suffice it to say that we bagged five wild geese and three ducks, and becoming heedless in the chase let the tide get too far away with us, and when we tried to return home against the current the futility of struggling with the Bay of Fundy bore became apparent. By herculean efforts we succeeded in beaching our boat on mud flats about a mile from shore. After a somewhat extended wait, we reached home on the flood tide at 3 o'clock the next morning covered with mud and glory, the contents of the game bag being only one of the many incidents which made the day's outing most enjoyable. D.

AMHERST, N. S., April 24.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

Having suggested some objections to the full choke system in former communications, some advocates of that system have replied pretty vigorously; striving to fortify their position with some statements that must certainly cause a broad smile to suffuse the features of every practical sportsman.

The man who can increase his pattern 100 pellets simply by using a star wad over his charge of shot, must be certainly romancing, or writing up a big boom for the star wad manufacturer.

I will give you the result of some investigations and tests my friends and self have made: A standard 10-gauge shell, using Tatham's standard shot No. 8, 400 pellets to an ounce, will chamber on the outer circle circumscribing the inner circumference of the shell 25 pellets. Filling up the center, in even and full layer of shot, we have, by actual count, about 62 pellets.

In 1¼ ounces we have a total of 500 pellets, which, distributed in even, consecutive layers, as above, of about 62 pellets to the layer, make 8 layers, forming the full charge of shot. For other sizes of shot, and for guns of different gauges, sportsmen can make their own estimates.

It is a well settled principle that, of the pellets of shot of which the charge is formed, those lying on the outer circle of the cylindrical body forming the charge, and next the inner surface of the barrel, are, by the force of the discharge in passing out of the barrel, retarded to some extent by friction and more or less jammed into an angulated form thereby, thus destroying to some extent their efficiency at the limit of the range of the gun. Hence, it has long since been demonstrated that even in cylinder barrels, the pellets of the inner circle of the charge are most efficient, have the greatest force and penetration and the most killing power.

To do away with this difficulty in some measure, wire cartridges, concentrators and other forms of shot cartridge were adopted to preserve the spherical form of all the pellets composing the charge, and to keep all alike up to the same initial velocity. That they do perform what is claimed is too well settled to admit of either comment or argument. But, it is claimed for a loose charge in a full choke gun, that the choke effects the same purpose and more too. How! Is the friction decreased? It is increased; for upon the arrival of the charge of shot at the choke, the cylindrical form of the body of that charge must necessarily be elongated in order to pass out; and then too, the wad between the powder and shot assumes necessarily at that point a surface convex to the bottom of the charge of shot, thus increasing the number of pellets that are affected by the friction up the barrel jammed into angles and their spherical form more or less injured—the worst possible conditions for a good performance.

As shown above, the number of pellets in 1¼ ounces of No. 8 shot that lie next the inner surface of the barrel is 8 times 25, or 200, a large percentage of which would be affected in the manner described above even in a cylinder-bored barrel; in a full choke a much larger percentage would be affected.

It has been admitted time and time again in the communications of numerous correspondents who have contributed to these columns upon this subject, that buckshot and the larger sizes of shot will neither give good pattern nor penetration out of a full choke. Exactly so.

Some inquire: How shall I load with buckshot for deer? You had better not load with them at all in a full choke barrel. The result will be a failure in efficacy, and if you attempt to use any of the forms of shot cartridge the result will be the same. They will inevitably jam in the choke, the force be greatly retarded, besides being so scattered as to destroy their effect on your game. Then, too, repeated jammings of this character, if your gun be a light one at the muzzle or choke, will spring the choke out of it.

Use a cylinder-bored barrel for buckshot if you desire to make long shots; use a wire cartridge (Ely's are very good), and back them with every grain of powder your gun will bear. If the gun be an average good performer, you will have no reason to complain of results. BACKWOODS.

BEVERLY, W. Va.

DOWN AN IDAHO SNOW SLIDE.

Editor Forest and Stream:

I send a few notes from letters received from Idaho, thinking they might prove interesting to some one, or serve if more entertaining matter was lacking.

"Rocky Bar, Idaho Territory.—Dear F.—The package of FOREST AND STREAMS received. We take great pleasure in reading them here in the wilds, for I can appreciate a hunting or fishing trip myself, though game is so plenty here, the majority don't care for hunting except for meat to eat. I think I should like to have one of the smart dogs I read of in the Kennel department, though we can find grouse easily without a dog. The favorite dog here is a good deerhound that can be held in check, unless game is wounded and then sent after the deer. The game law is very strict in Idaho now, and it has been enforced several times in this county. Nevertheless, I must plead guilty to taking what game I need for my personal use in or out of season, as I contend I have spent time enough making trails over the mountains to entitle me to all the game I can eat. We had a nice spell of weather a short time since, and the grouse began to come down, but yesterday it stormed again and they will stop. One of the mail carriers traveling on snow shoes ran across three deer on Boise River bottom and 'took in' two with his snow shoe pole; they had been living in the bottom and were fine and fat. When one has been living on frozen beef all winter a change is beneficial. Snow here about 5½ feet deep and coming down fast, but what comes from this out don't pile up. The other day I had quite an adventure, and as it is one that, though it might happen to many, few would like to relate, will send you a scrap cut from a local paper. Judge for yourself." The scrap reads as follows, being taken from the Wood River *News-Miner:*

"It is seldom in the career of a reporter that he is enabled to chronicle a more thrilling adventure or fortunate escape, than that which befel the well known foreman in charge of the Bonaparte Company's mines. Having occasion on Wednesday evening last, to visit the prospecting camp of Gray and Marly, some two miles distant from the Bonaparte, Mr. McK. mounted his snow shoes and began the ascent of the bleak ridge dividing the two places. Albeit the snow was as nearly slush as would conveniently lie on the mountain side, he determined on reaching the summit to have a ride down the mountain, and accordingly turned his shoes down a steep and precipitous ridge leading into Snake Creek Canyon and while descending with the speed of an arrow, he suddenly felt his footing give way and instantly discovered that the entire mountain had slid and that he was in the midst of an enormous snow slide. With great presence of mind he hastily disengaged himself from the incumbrance of his snow shoes, and by dint of much kicking, struggling and rolling, managed to keep on top of the slide, which was twisting and splintering gigantic trees in its fearful rush to the canyon below, which was filled many feet deep with the frozen element, which had by this time reached nearly the solidity of ice, and swept away everything movable in the shape of trees and rocks from the mountain side above. Yet when the tremendous mass of snow was still, Mr. McK. found himself still on top, and with the exception of a few slight bruises and a sense of suffocation, unhurt, and a few minutes later was exultingly relating his fearful snow slide in a place of safety."

To one whom the fearful power of a snow slide or avalanche is known, the above adventure and escape from death is truly miraculous. PRAIRIE DOG.

DETROIT, Mich.

QUAIL FOR THE MILLION.—Henrietta, Clay County, Tex., May 1.—It was a beautiful day. I boarded the cars at Henrietta for Bowie, to see what prospects there were for next September. Twenty-eight miles brought me to Bowie, on the Fort Worth and Denver City R. R., just into the cross timbers of Montague county. I there found as good a team as is generally found at a livery; called on a lady friend to take a drive. We started out. The first I saw of quail was a boy throwing rocks at a covey as they ran along the roadside, a mile's drive. I saw what appeared to me a continuous covey. Quail to the right, quail to the left, quail to the front, quail all around. I was astonished. I suspect my lady friend thought me a dull fellow, I was occupied thinking what a time I would have with old dog Blackmore on the first of September. I would have kept this to myself, but quail were too numerous. I went off the road and found quail behind every bush. I now heartily extend an invitation to all dog-breakers, field trial men, pot-hunters and market hunters. All come. The country is alive with Bob Whites; quail in Montague county by the millions. Open post oak shooting. What is better? Brother sportsmen, where quail are scarce, come and kill a few before something happens, but do not come till September.—ALMO.

AMERICAN AND IMPORTED GUNS.—*Editor Forest and Stream:* "Vitus" says "that a better gun can be made in America for the same price that you would pay for an English gun in the same place." But when you consider that English guns pay from thirty-five to forty per cent duty, besides a liberal profit to the importer, you will see that there is no comparison between them, and to get their comparative value, you must find what your English gun cost before importation, and then compare it with some American gun of like cost, and I think you will find the English gun is the best.—HOLLIS.

IN A COLD WATER HOLE.—North Loup, Neb., April 14.—Having had much enjoyment in reading the experiences of your contributors, I will add my mite. This is a fine place for hunting, but our one grief is the want of guns that will do sufficient execution among the geese. I read of guns that will kill geese from 80 to 110 yards with BB shot. I shot at one about thirty yards with BB shot and hit him with seven, four going clear through him. He got clear across the river and up on the bank before I got to him. Last evening I killed a white pelican that measured eight feet two inches from tip to tip and five feet six inches from point of bill to claws. I had a 12-gauge 16-pound muzzle-loader with 43-inch barrels. No geese came nearer than seventy-five yards, and I could cut out lots of feathers but kill no goose. At last a small bunch passed nearer. I picked out my bird, and when the report jarred the surrounding bluffs he fell. He lay on his back kicking for quite a while, then slowly recovered himself and started across the sandbar. I stripped and took after him. I retained my upper garment and pulled it over my head for fear the goose might be embarrassed. I stepped into a quicksand hole just six feet deep. Luckily there were three inches more to spare or I might have got wet. Just here will somebody please tell me how the water in those holes manages to maintain a temperature of 25° below zero all the year around? At least that's how it felt. Well, I just got close to him when he flew off down the river. My wife don't allow me to swear, but I quoted some forcible passages to him. Then I had to wade back, and fell in another hole. The climate of Nebraska must be mild, because the railroad documents say it is, but dressing on the bank of the river in a cold east wind don't count. Is there any gun that will shoot close enough to hit a goose with at least four OO shot at eighty yards, and hard enough to drive them through? If there is I will have it next fall.—C.

LOUISANA NOTES.—St. Martinsville, La., April 14.—The past season in this vicinity was a gamy one. One hunt I wot of by two members of the Louisiana Gun Club in company with a local shooter; sum total of bags in three days, 487 quail. One member of same club, on annual hunt, bagged 97 woodcock. I am informed he wasn't the best shot in the club either, consequently many birds got away. On the lake ducking was splendid. I shot exclusively over decoys, and made bags from 11 to 35 on each hunt. Of course, at present all game has departed hence. The fishing on the lake has been good. I've known parties already to have captured 24 fine trout through the holes in the floating prairie contiguous to Spanish Lake. The largest of trout which I refer to was five pounds, the smallest two pounds. Last summer I heard of eight and even eleven pounders being captured. Of course, you are aware these are not the "speckled beauties" that I read so much of in your columns, but the lake, or green, trout, as they are termed here. They are exceedingly delicious in flavor, as the water of the lake is clear and cold even in our hottest August days, it being fed exclusively by subterranean springs.—J. P. H.

FLORIDA GAME.—Enterprise, Fla., May 8.—The hunting for the season is over at this place, the Brock House having closed two weeks ago. Notwithstanding the many sportsmen who hunt here during the winter, and kill quantities of game, deer can be found three miles from here in large enough numbers to make a day's sport both exciting and profitable. A resident of this place bagged three while out one day last week. Quail are plenty, but do not receive the sportsman's attention as they do North. They are very tame and are caught in traps, few being shot by the residents of this vicinity. The sport most indulged in by the winter visitor is fishing, because a novice can be successful, while hunting deer requires the surest shot. Trolling is the favorite mode of fishing, and an experienced angler seldom returns from a day's fish with less than twenty, and as high as eighty-three have been caught by one man in a day. Bass are caught more than any other variety. For duck shooting come here in November, when hundreds make Lake Monroe and adjoining ponds their home for the winter.—G. G. J.

NEW YORK GAME LAW AMENDMENTS.—The amendments to the game law passed at the last session provide that non-residents of Richmond county, (Staten Island) must take out a $10 license before shooting there. This we believe to be an unconstitutional law. Woodcock open season in Oneida and Delaware counties, Sept. 1-Jan. 1; elsewhere, as before, Aug. 1-Jan. 1. Squirrels, open season, Aug. 1-Feb. 1. A third amendment, relating to power of supervisors, will be given in our next issue.

AN OLD TIMER.—Meigsville, Ohio.—I am an old man almost seventy, yet I like to shoot a good rifle. I was one of the first settlers of Morgan county. In 1815 there were deer, black bear and wolves in abundance. I used to shoot deer with a flintlock rifle.—I. R. W.

IOWA WILDFOWL.—Hastings, Ia., April 8.—I bagged over forty geese on the "Platte," near Kearny, Neb., in two days, over decoys, last week. There are millions there, but you have to hit them hard to score.—M.

WHAT THEY SAY OF "WOODCRAFT."

The little book on "Woodcraft," by "Nessmuk," is admirable in its way, going over the whole ground of outfit, food, fire, etc., with sound, practical knowledge and not a little originality. The most experienced camper-out will find something new in it, and the tyro will find it a storehouse of practical knowledge. Take, for instance, his recipe for making club bread, that we fancy no club has ever indorsed. The first ingredient is a heavy club of black birch or sassafras two feet long and three inches thick at the big end, shaved clean, and stuck in the ground, small end down, the big end over a bed of live coals, where it will get "screeching hot." Meantime the dough is mixed and kneaded, and then wound in a long strip, spirally, about the broad end, and baked for half an hour before the fire, with frequent turning. Sometimes his woodland instinct against superfluous duffle gives way with dry humor to his appetite. "I often have a call to pilot some muscular young friend into the deep forest, and he usually carries a large pack-basket, with a full supply of quart cans of salmon, tomatoes, peaches, etc. As in duty bound I admonish him kindly but firmly on the folly of loading his young shoulders with such effeminate luxuries; often I fear hurting his young feelings by brusque advice. But at night, when the camp-fire burns brightly, and he begins to fish out his tins, the heart of the old woodsman relents, and I make amends by allowing him to divide the groceries." In canoes, he recommends the light clinker-built paddling canoe, though he confesses that his ten-and-a-half pounder was rather light, and advises one twice as heavy. He also recommends, besides the regular double-blade, a small auxiliary single-blade paddle, tied with a yard of line to a boat rib, ready for use in a narrow stream, and not lost when dropped for a hasty shot, or by accident. But we must refer our readers to the book itself.—*Outing and the Wheelman.*

"I AM WELL AND STRONG, and don't need to insure." Queer logic! When you are sick or broken down you can't get insured. Now is the time to insure—in the Travelers, of Hartford, Conn., best and cheapest of sound companies.—*Adv.*

Sea and River Fishing.

SALT-WATER FISHING.

AS a reader of your paper I take the liberty of asking you how it happens that your news on fishing is all about trout and other angling, such as only a rich man can afford. Now I know of many readers of your paper who, like myself, can only afford to do salt-water fishing in the vicinity of New York, and if you would give us some talk on this subject we would feel that we "poor, but honest" fishermen were not overlooked. Now, as for trout fishing, we would enjoy also, and if you could only get your South Oyster Bay correspondent (Geo. Killian) to post us as to where we could get free fishing on Long Island, we would be doubly favored. TACKLE.

[It occurs to us that the probable answer to "Tackle's" question is to be found in the fact that fresh-water anglers are more enthusiastic than the salt-water fishermen. If the latter are not sufficiently interested in their pursuits to write about them, they will, of course, be crowded out. If "Tackle" wishes to be posted by our South Oyster Bay correspondent, perhaps the simplest way would be to write to him and ask the questions on which information is desired.]

LAKE ONTARIO SALMON.

A VERY interesting letter has been written on the salmon of Canada, and especially of Lake Ontario, by W. G. Austin, of Maple Hurst, Megantic, Quebec, to the Toronto *Globe*. The letter is much too long for reproduction in our columns, but it contains a great many good points and truths which deserve wide publication, and these we extract:

Referring to the salmon, he says: "This noble fish at one time abounded in Lake Ontario and its tributaries, as well as in the St. Lawrence, the Ottawa, the Saguenay and their tributaries, but the wasteful practices and the murderous engines planted by the greed of man in every spot where this persecuted fish wanders, have nearly annihilated the race." * * * "The Government of the Provinces, as then constituted, appointed fishery officers to regulate these important fisheries. At the time a law existed on the statute book which was all that could be desired. All fixed engines and self-acting instruments were forbidden to be used in the capture of salmon, trout and maskinonge."

After referring in commendatory terms to the action taken on this subject by the English authorities, Mr. Austin continues:

"The department found a good law on the statute book, and, wishing to change it, a committee of members of the Quebec Parliament was named to investigate the qualities of the fixed engines. They examined principally the fishermen who used mesh nets anchored to the soil, and took the evidence of these interested parties as material upon which to base their report to the House."

The report of the committee was substantially to the effect that the engines used in Canada were not so injurious to the salmon fisheries as certain amateurs had supposed, but at the same time time it recommended that their employment should be limited as much as possible. It was shown to the Government on the most undoubted evidence that wherever the fixed engines had been used salmon fisheries had rapidly declined in value. The opinions of experts was asked and they denounced the action of the department as calculated to destroy the salmon fisheries entirely.

Again Mr. Austin says: "Now we come to the brush weirs, engines self-acting, made of a kind of wicker work extending from the high water mark down to the low water mark, sometimes nearly a mile in length; covered with water when the tide is full and bare when the tide is out, with one or more pounds or receptacles into which fish of all kinds are forced by being unable to get through the tender of the weir. There are hundreds of these weirs erected on the shores of both sides of the St. Lawrence. I read in a sporting work many years ago that these weirs had destroyed the salmon fisheries of Lake Ontario, no salmon from Lake Ontario or above the tidal flow could get down to the ocean through these weirs. All these statements and arguments were contained in the representation sent to the Hon. Mr. Campbell, and that gentleman knowing that it was impossible for the fish migrating the shores to pass them, made a provision that in the lowest part of these weirs a grating should be placed to admit the passage of the fry of fish. I have visited many of these weirs, and have observed that as soon as the current begins to ebb it carries with it sea weed and other floating matter, and lodges it against the gratings and closes them completely. It happens, too, at every ebb of the tide, that the first fish swimming to this grating attempting to go through, their bodies fill up the spaces and leave no passage, so that this device of the grating is useless. I have seen fish from a full grown salmon to a little sardine caught at the same time, and I have been told by a credible navigator that he has seen eighteen bushels of young salmon caught and lying dead in a single weir at one ebb of the tide."

Mr. Austin then proceeds to point out the folly of the action of the government in spending large sums annually in their efforts to restock Lake Ontario and the St. Lawrence with salmon while the shores of the river are blocked with these weirs and other appliances which render their passage from the ocean to their breeding grounds impossible. "On their way from the sea to their breeding grounds," says an excellent authority, "the salmon never swim in midstream, but hug the shores as if they were scenting out their own rivers."

In another portion of his letter Mr. Austin says:

"Two hundred and fifty-nine thousand four hundred dollars have been spent in building and working fish hatcheries in the Dominion, and a great part of them above the tidal flow. From the great Dominion fish-breeding establishment near Newcastle, Ontario, 5,600,000 young salmon have been distributed, and not one of them has ever been known to return. How could they ever reach the sea (and to the sea the genuine *Salmo salar* must go or perish)?

"Twenty years' valuable time has been lost, besides all this money. The Fisheries Department were warned by me over and over again that their system was worse than useless, and the result is even more deplorable than I could have anticipated."

And again—"Not one of these bush weirs that have destroyed the 5,600,000 young salmon, the fourteen years' product of the great fish-breeding establishment at Newcastle had a legal right to exist; and what were our Ministers of Marine and Fisheries doing when they allowed the public use of the coasts of the St. Lawrence to be so encumbered as to commit such havoc upon the ratepayers of the Dominion? They have eleven fish hatcheries now in operation, eight of them hatching salmon eggs, with the shores around them full of destructive fixtures and anchored self-acting engines, they are going on to protect the fisheries off the face of the earth."

In concluding his letter, Mr. Austin says:

"The course to be followed is plain, but we have to beg in again and be wiser. Lake Ontario connected with the tides of the Atlantic Ocean through the St. Lawrence, with its great tributaries, the Ottawa and the Saguenay, and all their branches, forms a field for the cultivation of salmon unrivalled in capacity and extent. The river Tay in Scotland is expected to yield annually 80,000 fish of the cash value of £60,000 sterling, or about $300,000 of our money, but there are no brush weirs and mesh nets there.

LANDLOCKED SALMON IN SEBAGO.

THE season for landlocked salmon fishing in the Sebago waters is practically at an end for the year. It is true that a large fish may be occasionally taken, even as late as the last of June; but still with the return of the smelts to deep water the salmon go also, and but little is known of their whereabouts, except in spawning time, for the rest of the year. This season has been the best since this resort for sportsmen began to attract attention. There have been no very large fish taken, but the numbers are much larger than ever before, and speak a good word for what little protection has been done, and that is little enough, at best. Eleven pounds would be about the true figures for the largest specimens taken in these waters this spring, but there have been several of these, and a large number ranging from five to ten pounds. Also a much larger number than usual of "red spots" have been taken at the same time.

The fish have been very democratic in their tastes, and have been attracted by the clumsy fishing of the novice fully as often as by the most skillful angler. A good illustration of this was the case of "Biddeford," who, after furnishing sport for all hands for three days by his awkwardness, went away on the morning of the fourth day with 11 large fish, all of his own catching. Of the Maine Fish Commissioners, however, who are the acknowledged leaders of this class of sport, one was obliged to content himself with a single "red spot" of four pounds for his week's work. The other Commissioner was a little more fortunate, as he bagged two salmon and three "red spots." Supt. Hamilton, who caught the big fish of last year, served his time this year without scoring a single fish until the morning that he went away. At that time his friends gave him a half dozen fish, so that he would not go home euchred. But fishing is uncertain. This same gentleman, trolling, as he was being rowed across the lake on his way out, captured two salmon of six and seven pounds respectively.

Considerable amusement was caused by an adventure of a party fishing from a canal boat. There were six or seven men on the boat, but no one of them had ever caught a salmon, unless it was with a pitchfork or sucker spear. As luck would have it, one of the number struck a fish which proved to be a 10½-pounder. The capturer at once reeled in his prize until he had the fish at the end of his rod, where it was making a terrific swashing of the water in its struggles to get away. At this moment one of the party reached an old smelt net under the fish just in time to receive it as the hook broke. The last man then attempted to lift the fish on board with the net, but just as it was over the side, the fish, with a flop, went through the bottom of the net and struck squarely across the rail of the boat. For a moment it seemed to balance in that position, and then, by a turn unlucky for itself, slid from the rail into the boat.

Another party of sportsmen have distinguished themselves in a way rather more questionable. They used bait from the tank of live smelts which the club had put in, without asking leave, but this was allowed as the gentlemanly owners thought that there was enough for all. When the same party went away they put in their crowning act. They dipped all the smelts from the tank they could, and fried them for their breakfast. Then, to add a greater insult, they broke open one of the fish cars belonging to the club and stole a large salmon. These fellows will probably have an invitation to call and settle.

Something over one hundred fish have been taken in all, the largest catch by any one individual being "Biddeford's" 11. Sunday, May 4, was the best day, there being both the largest number of fishermen (over thirty) and the largest number of fish taken. On that day there were five boats on the bar, each playing a salmon at the same time. The accommodations at the Sebago fishing grounds are as yet rather limited, there being but one camp and that private property. The most of the comers have to shift as they can. Boats are plenty, and with a man to row, cost from $2 to $2.50 per day.

It is sheer nonsense to talk that this fishing is well protected in close time. The poaching is still carried on under the very noses of the wardens, who from fear, or more questionable motives, have thus far displayed their great ability in talk only. The services of one resolute man like Detective Wormwell, for a week, are worth more to the salmon fishing interests here than a life time of such granny ism as that heretofore displayed by the wardens.—*Portland (Me.) Correspondence Boston Herald, May 17.*

PHILADELPHIA, May 17.—Trout fishing in the many streams in Pennsylvania has been very good this year. Favorable weather and good condition of the water aided, and we hear of good catches from many anglers returning. Bass fishing is yearly attracting more and more trout fishermen, and not a few zealous fly-fishermen have confessed they as fully enjoy the struggles and leaps of a fair-sized bass as they do the rise of a trout. Some of the older members of the West Jersey Game Protective Society who were instrumental in having the head waters of the New Jersey streams stocked with fish, state they have not noticed any good results from their work, and it has now been several years since the fry was liberated.—HOMO.

TROUTING IN THE BIG BUSHKILL.—In reply to "Homo" in your issue of May 15, would say that I have several times caught large trout in the still waters of the Big Bushkill with live bait—minnows. I only have resorted to this after thoroughly going through my fly-book, most always finding some "feather" that would lure them out of those deep pools. If all this persuasion was of no avail then I offered them fin instead of feather. Sometimes even this was not taking. While whipping one of our little streams last week I saw five wild turkeys and an unusual number of pheasants. I am afraid the winter went hard with the quail. I have several coveys which I have hired kept.—SPICEWOOD.

NET FISHING IN LAKE CHAMPLAIN.—The Montpelier *Argus* says: There is considerable agitation these days relative to net fishing in Lake Champlain, caused by efforts to enforce the law forbidding it. The spring and early summer is the season when the wall-eyed pike or perch-pike and the black bass spawn. The great spawning grounds of the whole lake for the wall-eyed pike is Missisquoi Bay, or more properly the streams emptying into it. The Missisquoi river being of much more importance in this respect than all the others. The wall-eyed pike, the most palatable and most important of all the food fishes in the lake, leave the deep waters they frequent at other seasons, and seek the shoals of the bay and its tributaries, to deposit their spawn, commencing to run in February. Then these net fishermen begin their warfare upon them, the especial harm being that they catch them in immense quantities just at the time that to do so is to exterminate them. They catch them in fyke nets which stretch across every avenue whereby the fish pass to and from their spawning beds; they take them in pound nets, the arms of which reach out and guide them into these prisons; and they drag the bed of the lake with seines that reach almost from shore to shore, making it almost a wonder that a single fish escapes, to deposit its spawn. Commenting on this, the *Republican*, Plattsburgh, N. Y., says: "Is it not possible to devise some way to prevent this wholesale depopulation of the lake? If there could be a stop, or even a temporary check, for a brief season, to this wasteful destruction of the embryo fish, the inhabitants of the Champlain valley could have a plentiful supply, in the proper season, of the delicious food, fresh from its rich pasturage, and the lovers of the sport could have abundant opportunity to exercise their skill and occupy their leisure, with a fair prospect, and even some assurance, that they would not wholly lose their time in vain effort. As it is, they are not only nearly altogether deprived of the grateful nourishment, and of the excitement attendant upon the pursuit of it, for if the over sanguine do affect the hook and line they are almost certain to return with disappointed hope and sun burnt energy to ruminate upon the inefficacy of the laws and the rapacity of mercenary and reckless pot-hunters." The Rutland *Herald* also has something to say on the subject, as follows: "Fish and game protective associations seem to be the same in New York that they are in Vermont; they do not protect. Some of the most prominent members of the Vermont Association live in Franklin county, where a majority of our fish pirates lives, and skin the spawning grounds of the wall-eyed pike every spring, but these 'fish and game' fancy sportsmen never take any pains to enforce the fish law. If it was not for the zeal of Hiram Atkins, of the Montpelier *Argus*, no fish pirate would ever be brought to justice. The Montpelier *Watchman* says that 'Fish Wardens F. H. Atherton, of Waterbury, and John L. Tuttle, of Montpelier, assisted by C. E. Demerritt, of Montpelier, William Deal, of Waterbury, and Constable Rockwell and Mr. Fadden, of Alburgh, last week Wednesday seized four nets belonging to the Mitchells, of Alburgh, who, a few weeks ago drove off officers who went after their nets. Two of the nets seized were new pound nets, costing $50 each this spring, and two were gill nets. The same officers were up there again on Thursday, but nobody was fishing.' These facts tell the story. The officers of the law in Franklin county suffer fish full of spawn to be swept off their beds every spring with impunity, and Mr. Atkins has to call upon the authorities of Washington and Chittenden counties to enforce a law that the authorities of Franklin county ought to have local pride and common sense enough to enforce. Fish and game protective associations angle sometimes, eat fish dinners sometimes, but they nevor protect fish."

THE IRONCLAD OATH.—Philadelphia, Miss., May 2.—*Editor Forest and Stream:* I send you a clipping from the Neshoba *Democrat*, which shows one way to initiate members into a fishing club. This club was organized for bream fishing, and the common black crickets are the only bait used in taking the fish. It will be seen that the treasurer's only business is to take charge of the crickets, there being no money in the club to look after.—S. P. NASH. "Proceedings of the Fishing Club at Lake Burnside, April 14, 1884, 8 o'clock P. M. All members present; also the Hon. J. H. Reagan, applicant for membership. Club proceeded to business, as follows: *Resolved*, That the president of the club propound such questions to applicants for membership as he thinks proper, or such questions as may be suggested by any member of the club, with a view of ascertaining their competency to become members, or their usefulness if elected to membership, taking into considerstion their business or avocation in life. After the adoption of this resolution the Hon. J. H. Reagan, being in waiting, was introduced and prepared for admission, first by divesting him of all cumbersome wearing apparel and tieing his hands behind him substantially with a fish string. After these preparations he was placed in the end of a small canoe and a No. 2 snood hook inserted up to the beard in his upper lip, to which a line fourteen feet long was tied and attached to a pole of equal length, and the pole given to a member, who stood on the bank of the lake, in which condition the following questions were propounded to him by the president of the club: First—Are you a prohibitionist? Ans.—I am not, but object to excessive drinking. Second—Do you own a breechloading shotgun? Ans.—I do not, but expect to purchase one as soon as my pecuniary ability will permit. Third—Do you own a horse sufficiently strong to carry four skillets, eight bed quilts, one-half bushel of shelled corn, six poles, yourself, and rations sufficient to last four men three days? Ans.—I have such an animal, but his back is very sore at present, but is rapidly recovering. Fourth—If you were called upon by a member of the club and informed that the wind was from the south and that the age of the moon indicated that the sign was in the fishes mouth, would you start immediately though your father was indicted for murder, and the penalty death, if found guilty, and your service as a lawyer needed to defend him and the day set for his trial included a day that you expected to be absent fishing? Ans.—I would obey the summons unhesitatingly. Whereupon a motion was made by Bro. J. B. Parkes that he be received into full membership, which motion prevailed and the member was gently shoved backward into the river and directed to invest himself of the clothing of which he had been divested, and returned to the club, where the new member was lectured as follows: 'Bro. Reagan, you were placed on the end of the boat and the hook fastened in your upper lip, not for the purpose of inflicting physical pain, but to teach you to be perfectly quiet in case your comrade in the same boat were to make an awkward throw and hang the hook in your eye, rather than squirm and twist about and thereby disturb the waters and frighten the fish. You were asked the other questions in reference to gun and horse to ascertain whether you were sufficiently equipped to make an efficient member. You were asked the last question to see whether you were connecting yourself with the club with that degree of faith and integrity that is necessary to build up and support any institution.' The club having no treasurer Bro. Reagan was put in nomination and unanimously elected, and the crickets turned over to him for distribution among the members. A petition for membership was received from R. E. Holmes, Esq., and a committee appointed to inquire whether or not the said Holmes would be likely to make a good member—which committee, after a few minutes' deliberation, reported that he was wholly unfit in every material particular, whereupon he was duly rejected. The club then proceeded to the lake, and after having captured, cooked and devoured forty very fine bream adjourned to meet on Thursday the 16th inst.—F. M. WOOD, President."

WHITE PERCH IN FRESH-WATER PONDS.—The experiment of planting white perch (*Roccus americanus*) in Lake George by Captain E. S. Harris and Messrs. W. W. Lockhart and O. B. Lockhart, mentioned in FOREST AND STREAM of a late date, cannot fail to meet with success if the fish deposited in these waters are large enough to take care of themselves and escape the attacks of the black bass. An instance where the white perch has been taken from tide water and placed in a pond, and increased to such numbers and great size as to furnish capital sport, came under the writer's observation many years ago. Black's Pond, located near the town of Swedesboro, N. J., empties its surplus water through flood gates at its breast into Church Run, and the run into Raccoon Crek, a tide-water stream running into the Delaware River. Twenty or more years back a seineful of white perch, taken from the creek, were placed in the pond mentioned, and the fish became very numerous and were frequently taken weighing three pounds, with live bait, just as one would fish for bass. Your correspondent has had fully as much enjoyment with these large perch as with the bass, with a light rod and fine tackle, and the residents of Swedesboro well remember the catches made by the writer in boyhood, only to be equalled in number and weight by old Lev. Anders, a native of the place. The perch in this pond lost the darker shade on the back that is found on tide-water fish. They also seemed to be less robust and of a finer outline than their relatives of the creek, and notably in color of a brighter silver. We took them in the deeper parts of the pond, from a boat, under the overhanging trees wherever the shade was darkest, in the same manner bass would be angled for with live bait. Since that time a freshet has carried the dam away, and I understand the perch have disappeared, no doubt into tide water. A new dam has been built and its waters stocked with black bass by a party of gentlemen, of which your correspondent was one, but I have not learned if the bass have thriven. There is no reason why the white perch should not be placed in many of our inland ponds. They are gamy and make excellent sport, growing to double the size they do in tide water, fresh or brackish.—HOMO.

BIG CATCH.—Monson, Me., May 16.—Yesterday three young men from our village returned from Riddell Pond, which is situated in the wilderness twelve miles west of Shirley and about eighteen miles from here, with 338 spotted trout, which weighed 102 pounds. They left here Monday, the 12th, fishing Tuesday and a part of Wednesday. They caught in all, including what they ate in the camp, over 400 fish. Riddell is one of a chain of lakes and ponds, the outlet of which empties into the Kennebec River. They are so far from civilization and uncivilized poachers that trout fishing there is now in its primitive state.—J. F. SPRAGUE.

OCEANIC, N. J., May 20.—The fishing has commenced in the North Shrewsbury River. I took the first bass (striped) this morning; took four fine ones trolling.—GEO. WILD.

Fisheulture.

THE AMERICAN FISHCULTURAL ASSOCIATION.

THE annual meeting of the Association was held in the lecture-room of the National Museum at Washington on May 13, and was called to order by President Benkard, who made an address of welcome to the members and reviewed the events of the past year. The Secretary read the minutes of the last meeting and the Treasurer gave in his reports, both of which were approved. A list of papers had been prepared, but it was found impossible to follow it in the regular course, because some of them had not arrived.

Prof. Spencer F. Baird was elected an honorary member, and the following new members were proposed and elected: Charles G. Atkins, Bucksport, Me.; Tarleton H. Bean, Washington, D. C.; Prof. A. S. Bickmore, New York; Dr. H. H. Carey, Atlanta, Ga.; A. Nelson Cheney, Glens Falls, N. Y.; Frank N. Clark, Northville, Mich.; J. W. Collins, Washington, D. C.; W. V. Cox, Washington, D. C.; Hon. Thomas Donaldson, Philadelphia, Pa.; R. E. Earll, Washington, D. C.; H. W. Elliott, Washington, D. C.; W. E. Garrett, New York; A. A. Hayes, Washington, D. C.; Dr. J. A. Henshall, Cynthiana, Ky.; George S. Hobbs, Washington, D. C.; E. S. Hutchinson, Washington, D. C.; A. J. Kellogg, Detroit, Mich.; Hon. E. G. Lapham, M. C., New York; W. L. May, Fremont, Neb.; Hon. H. P. McGown, New York; Dr. J. C. Parker, Grand Rapids, Mich.; Hon. R. G. Pike, Middletown, Conn.; Richard Rathbun, Washington, D. C.; Hon. Ossian Ray, M. C., New Hampshire; Prof. J. A. Ryder, Washington, D. C.; Carl W. Schuermann, Washington, D. C.; Col. James Stevenson, Washington, D. C.; Joseph Willcox, Media, Pa.; Lieut. Francis Winslow, U. S. N.; S. G. Worth, Raleigh, N. C.

At the close of the morning session the members inspected some fine specimens of European trout from the ponds of the New York Fish Commission at Cold Spring Harbor, and then went in a body to view the national carp ponds, which have been greatly extended during the past year. In the afternoon the papers and discussions were continued. In the evening the hall was filled with people to hear the addresses of the speakers who had been announced. Senator Lapham, of New York, chairman of the Sub-committee on Fish and Fisheries, presided and introduced the speakers. Hon. Theodore Lyman, of Massachusetts, made the opening address, and was followed by the Hon. S. S. Cox, of New York, who humorously illustrated any points which he thought the audience might think obscure.

The Wednesday morning session was mainly devoted to the oyster, Dr. Hudson, Prof. Goode and Lieut. James Winslow, U. S. N., reading papers on the subject of oyster culture, and Prof. Ryder taking part in the discussions. Col. McDonald followed with an equally important paper on the natural causes influencing the movements of fish, which was regarded by fishculturists as the most valuable paper read during the whole session.

The first paper of the afternoon was a thorough and carefully written article upon "The Chemical Composition and Nutritive Value of our American Food Fishes and Invertebrates," by Prof. W. O. Atwater. This paper was the outcome of some investigations undertaken at the suggestion of Prof. S. F. Baird, United States Fish Commissioner, and promoted by the contributions of certain of the members of the Association. Prof. Atwater said that a housewife of the middle or lower classes would, for economy's sake, choose the cheaper of two pieces of dress pattern in choosing clothes for her children, but was often forced to pay an exorbitant price for nutritious food because she was not aware that there were other kinds of food which were just as nutritious and very much cheaper. He hoped that this series of investigations might be the means of changing this condition of affairs to some considerable extent. On account of the length of the paper of Prof. Atwater, only one other paper was read, that on "Some of the Causes which Limit the Survival of Fish Embryos," by Prof. J. A. Ryder.

An election of officers was then in order, and the following were elected: President, Hon. Theodore Lyman, M. C., of Mass.; Vice-Presidents, Col. Marshall McDonald, of Va.; Treasurer, Eugene G. Blackford, of N. Y.; Corresponding Secretary, R. Edward Earll, of Ill.; Recording Secretary, Fred Mather, of N. Y. Executive Committee: James Benkard, N. Y.; Geo. Shephard Page, N. Y.; Barnet Phillips, N. Y.; G. Brown Goode, Conn.; Dr. W. M. Hudson, Conn.; C. G. Atkins, Me.; S. G. Worth, N. C.

Afterward the members visited the hatching station in the Armory building and saw the operation of the McDonald fishway and the hatching. On Wednesday evening a large number of guests, including Senators, Representatives, citizens of Washington, members of the Association and their wives and friends were present by special invitation of Prof. Baird, at a preliminary exhibition of the fisheries section of the United States National Museum. The exhibit was nearly the same as that made by the United States at the London Fisheries Exhibition last season.

On Thursday morning Messrs. Rathbun and Worth read interesting papers.

The meeting adjourned to visit as a body the President at the White House. The members were received very cordially by President Arthur, recalling very strongly the sympathy he has always felt and shown for fish as well as fishermen.

After returning from the White House the Fish Commissioners of the various States met at 12 M. at the National Museum in consultation with the United States Commissioner of Fish and Fisheries, Prof. S. F. Baird. Discussions followed in relation to the propagation of the shad, cod, whitefish, and especially the need of some aid, State or national, or both, in developing the oyster resources of the country. At 1 o'clock the members assembled at Lower Cedar Wharf, on board the United States Fish Commission steamer, the Fish Hawk, Lieut. Wood, United States Navy, commanding; and the vessel was soon under way for some of the fishing stations down the Potomac. On its return trip, and during the home journey, the Association held a special session in the cabin. It was for the purpose of receiving the report of the Oyster Committee, which had been appointed at the previous day's session. The committee reported resolutions recommending the adoption of the principle of individual ownership of oyster ground. And it was likewise the opinion of the committee that an investigation of all the conditions affecting the life of the oyster was eminently desirable and should be immediately undertaken. The resolutions were adopted, and it can hardly be doubted that the latter part of the first resolution, that advising an investigation, etc., is eminently desirable, and worthy of legislative action.

The following gentlemen were elected to be corresponding members of the Association:

Capt. N. Juel, Norwegian Royal Navy, President of the Society for the Development of Norwegian Fisheries, Bergen; S. Landmark, Inspector of Norwegian Fresh-water Fisheries, Bergen; Dr. S. A. Buch, Christiania, Norway, Government Inspector of Fisheries; Prof. O. G. Sars, Christiania, Norway, Government Inspector of Fisheries; Dr. Oscar Lundberg, Stockholm, Sweden, Inspector of Fisheries; Baron N. de Solsky, Director of the Imperial Agricultural Museum, St. Petersburg, Russsia; Prof. B. Beneke, Commissioner of Fisheries, Königsberg, Pomerania; Prof. T. H. Huxley, H. M. Inspector of Fisheries for Great Britain; Edward Birbeck, Esq., M. P., President National Fisheries Association of Great Britain; Sir James Gibson, Maitland, Bart., Stirling, Scotland; R. B. Marston, Esq., Editor of the *Fishing Gazette*, London; Dr. Francis Day, F. L. S., late Inspector General of Fisheries for India; Thomas Brady, Esq., Dublin Castle, Inspector of Fisheries for Ireland; Archibald Young, Esq., Edinburgh, H. M. Inspector of Salmon Fisheries for Scotland; Arthur Fedderson, Viborg, Denmark; Prof. A. A. W. Hubrecht, Member of the Dutch Fisheries Commission and Director of the Netherlands Zoological Station; M. Raveret Wattel, Secretary of the Société d'Acclimatation, Paris; Don Francisco Garcia Sola, Secretary of the Spanish Fisheries Society, Madrid; Prof. E. H. Giglioli, Florence, Italy; M. A. Apostolides, Athens, Greece; William Maclean, Sydney, President of the Fisheries Commission of New South Wales.

After a long discussion in which Messrs. Mather, Stone, Roosevelt, Endicott, and others strongly objected, the name of the American Fishcultural Association was changed to The American Fisheries Society, and the meeting adjourned.

The papers read, and the discussions, will be given in full in our columns.

MAINE SALMON HATCHING.

AS ILLUSTRATING the noble work being done by the Maine Commissioners of Fisheries and Game in stocking the waters of that State this year, it may be stated that they have already hatched 1,400,000 salmon fry. The little fish are in fine condition and will be turned loose to thrive for themselves by the time these words are comprehended by the reader. Messrs. Stillwell and Stanley have 700,000 sea salmon and 55,000 landlocked at Enfield for the Penobscot, 300,000 sea salmon at Norway for the upper Sebago waters, 200,000 sea salmon and 55,000 landlocked salmon at Weld for Webb's pond and adjacent waters, 40,000 sea salmon at Dennysville, 50,000 landlocked at Rangeley for the Androscoggin waters. The reason of the great quantity of sea salmon for the Penobscot is that Prof. Baird of the U. S. Fish Commission, has kindly donated a surplus of eggs in the hands of the Government Commission, to the Maine Commissioners, with the understanding that they go into Penobscot waters, their natural home.

It is suggested that Prof. Baird has not much faith in the putting of sea salmon fry into inland lakes, that they may become landlocked, while the Maine Commissioners are quite confident of its success. The Maine Commissioners are certain that sea salmon fry put into inland lakes, have grown up to large fish, but to what extent they are not certain, by reason of subsequent putting of the fry of landlocked salmon into the waters where proofs might have been abundant. But the most marked success of the restocking of inland lakes and ponds these Commissioners have seen is the case of Webb's Pond, in the town of Weld. In 1875 and 1876 a few thousand landlocked salmon eggs were put into this pond, where never before a salmon had been known. Within a year or two four and five pound salmon have been taken there and larger ones seen. Last year sportsmen fished there with great success, and probably the same thing will be done this year.

SPECIAL.

BOSTON, Mass., May 18.

THE MARYLAND COMMISSION.—The Governor of Maryland has appointed Dr. E. W. Humphreys, of Salisbury, to be a Commissioner of Fisheries for the Eastern Shore in place of Thomas Hughlett.

SHAD FOR THE HUDSON.—Last week, during the session of the American Fishcultural Association, Prof. Baird offered Mr. Blackford, of the New York Fish Commission, a million and a half of shad from eggs taken on the Potomac and hatched in Washington. The transportation car left Washington on the night of the 15th, and arrived at Glens Falls the next evening, where they were met by Mr. A. N. Cheney with teams, and part were planted above and the remainder below the falls.

THE OHIO COMMISSION.—Mr. George Daniel, of Sandusky, has been appointed Commissioner of Fisheries in place of Mr. H. C. Post.

The Kennel.

FIXTURES.

BENCH SHOWS.

June 10, 11, 12 and 13.—The Second Annual International Bench Show Chicago, Ill. Mr. Charles Lincoln, Superintendent.

Sept. —. Bench Show of the Philadelphia Kennel Club. Mr. P. C. De Saque, Secretary.

Oct. 8, 9, 10 and 11.—Third Annual Bench Show of the Danbury Agricultural Society, Danbury, Conn. E. S. Davis, Superintendent, Danbury, Conn.

Oct. 14.—Non-sporting Bench Show of the Westminster Kennel Club, Madison Square Garden, New York. Mr. Charles Lincoln, Superintendent.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1213.** Volume I., bound in cloth, sent postpaid, $1.50.

THE PHILADELPHIA DOG SHOW.

IT is now fully determined upon to hold a dog show in connection with the Pennsylvania State Fair in September next and preparations have already been made to erect a special building for the canine exhibition. The premium list will be a large one both in regular and special prizes. Collie trials will make an interesting part of the show and dog racing will give those unacquainted with this sport an opportunity to learn of its operation in this its headquarter city. The racing in New York at the late show was a farce and not a single dog but the little snap or wiffet had been trained to it or knew what it was expected to do. Owing to the fact that thirty or forty acres of ground will be inclosed at the State Fair, ample opportunity will be had for properly exercising the exhibited dogs, a feature that will please many and go far toward robbing the kennel owner of the fear of disease which is so often contracted at dog shows. Some proper changes in the classification of dogs and alterations in standards were made at the last meeting of the Philadelphia Kennel Club. This may cause comment, but we are sure the majority of dog owners will be pleased when the premium list now being printed reaches their hands. A second dog show to be held this year in Philadelphia is talked of for next May, and it had been fully decided upon before it was known one would be given in connection with the State Fair in September. HOMO.

A PRIVATE FIELD TRIAL.

DURING the last week of April we met on the snipe grounds to try conclusoins between Jack, owned by B., and Mac, owned by W., according to previous arrangements. Jack is a large sized orange belton setter of unknown pedigree, lithe and active in movement, with dark intelligent eyes, under the most perfect control in the field, with a natural instinct for hunting and a thorough love of his work—just such a dog as a sportsman delights to shoot over. Mac is a fair sized black, white and tan setter, quite handsome, also lithe and active, with beautiful motion in the field, obeying more because he must than from any desire to do so, but being owned by a thorough sportsman, was also under good control, although lacking the lively cheerful obedience of his rival. He is hardly bred up to the latest discovery in the science of setter breeding, the prescription showing him to have a few grains more Laverack than Llewellin in the composition or admixture, but he is a good dog notwithstanding.

According to the terms of the match the shooters were to walk abreast of each other at a distance of about sixty yards apart, the dogs hunting and ranging the same as in an ordinary day's shooting when using a brace of dogs together, with as little interference by the handlers as possible, so that the merits of the dogs must decide which is the best, not the sharpness of those handling them. The wind was blowing freshly from the northeast, raw and cold, making the birds very wild when the dogs were turned down shortly after noon, the shooters being headed down wind, B. being on the left, four friends (two of which acted as judges) following close in the rear, anticipating some fun, as some small bets had been wagered on the result by the friends of each. On being cast off the dogs went away beautifully, Jack going straight away down wind until a blast from his master's whistle wheeled him instantly, when he, tacking into the wind, quartered quickly, still carefully, back, and pinned the first bird before he was five minutes down. Mac did not back on sight, but was stopped on nearing the other dog, and was penalized for not backing. B. sprung the bird and dropped it handsomely as it rose into the wind. Both dogs were steady to shot and Jack, when ordered, retrieved it nicely. When the dogs were again cast off, Jack going down wind like an arrow, and just passing a third to leeward, wheeled so quick as almost to throw himself over and nailed it in a crouching position. This feat was much admired by all, and some remarking to B. he had a star of a dog, he quickly replied he was no star but the full moon of the dog kingdom, although not put up by prescription so far as he knew. Mac coming up was stopped but not penalized for not backing, owing to the unusual position of the pointing dog. The bird was sprung by B. and was dropped across a slough, both dogs being steady to the gun, and when sent on Jack found and retrieved it finely. When the dogs were again sent on, Mac doing some fine ranging, and quartering beautifully, but unfortunately blundering onto first one and then another bird without noticing them at all, and evidently lacking the caution and sense of his adversary. His owner contended he had been little used on snipe, and that it was an improper way to hunt a dog down wind. His opponent replied it was certainly the best way to get snipe, but that he was quite willing to try it any way. Then a return was made over the same ground up wind, a few birds flushing wild and turning back over the shooter, and dropping toward the lower end of the beat. On returning down after those, Jack suddenly turned to a staunch point by the side of a small ditch and Mac backed firmly. Two birds got up here, B. dropping one on each side of the ditch. Jack was sent for the one on the left, and Mac across the ditch for the other, which was only winged. He mangled it badly, then dropped it and refused to pick it up. Jack had not yet found his bird, but was recalled and sent over after the other, which he brought, and then without being ordered returned after his own, which he had marked fall, and after a long search among mud and water, unaided, found and brought it in perfect form. At this point W. expressed a willingness to pay all dues, and stated he would like to get a few birds as best he could. Owing to their scarcity and wildness ten only were secured, but the amount of amusement it afforded, as the good-natured although sarcastic remarks passed between the rivals, then, and later in the evening, when with dry socks and slippers the events of the day were rehearsed around the cheerful hearth among a number of congenial spirits, was ample compensation for the labor through the mud and water during the day, and such a time was had as leaves no regretful feelings and such as is seldom enjoyed excepting among the genuine and practical sportsman. JOHN DAVIDSON.

MONROE, Mich., May 6.

POINTERS AT THE NEW YORK SHOW.

Editor Forest and Stream:

When I asked of you the privilege to write a few lines about the pointers and the judging of the same at the New York show, and when that privilege was so courteously and cheerfully accorded, I felt that the time had arrived for those who love these handsome dogs, and who have spent years of valuable time endeavoring to improve them, to come to the front and fearlessly and impartially criticise their merits and demerits. To allow mistaken views to predominate, or to permit errors of judgment to be placed on record unchallenged and unheeded, is to impede progress, shatter the standard, and stultify the very object for which dog shows were instituted.

My remarks will apply to dogs, not men, and if any of my brother lovers of pointers can show errors of judgment on my part, I shall be pleased indeed if they will do it. Impartial criticism of our pets is conducive to improvement, and improvment is the primary aim of a sportsman's journal, while it should also be the first consideration of good dog lovers.

So much has already been written and said of the judging, that I will simply add it was the worst I have ever seen during my experience as an exhibitor, either in England, Scotland, Ireland, Wales, Germany, France or America. My remarks on the various dogs exhibited will show why I arrive at such a conclusion.

Twelve months ago I alluded in these columns to the fact that pointers were degenerating. In my opinion marked improvement has been wrought during the last year, and if due care is exercised and intelligence brought to bear on breeding, I shall soon expect to see the pointer of this country take rank second to none, either on the bench or in the field. There is no earthly reason why a good dog should not also be good looking. Such dogs I have seen, and there is as good fish in the sea as ever came out of it. Mr. Price's beautiful dog Bang was not only the best looking pointer of his day, but a great field dog and the best sire ever known. The incomparable Wagg was a field trial winner, and my old favorite, Don II. (Wagg's only brother) not only won first in the field, but scored the highest honors at Birmingham and elsewhere, after which he sired that typical bitch Prude II. Hamlet and Rap were handsome and good in the bargain; Rap was the best looking, Hamlet the best workman, both were great stud dogs. I could name a score of others that have distinguished themselves in the field, on the bench, and in the stud. What has been done so often may surely be done again, but discretion must be used. It is a notorious fact that the best looking dogs have been produced from large dogs of great bone and substance, crossed on small size bitches, and breeders of pointers should bear this in mind. By your courtesy I will place before the readers of FOREST AND STREAM at an early date, a description of what I consider a typical pointer should be, and at the same time I will give a few hints to those who may not have had a long or varied experience with the breed. Without further preamble I will come to business.

Eight champion dogs make a good class, especially so when most of the cracks are out.

Tramp, the sturdy-looking son of Sensation and Psyche, is not the type of pointer I have been educated to admire. He is wanting in true pointer character, is coarse in head, faulty in back and round in barrel. He has plenty of bone, his best point.

Joe (Munhall's) has a beautiful chest to recommend him, but he is snipy, light in bone and faulty in feet—a serious defect. He carries his tail too gaily, and there is a something wanting, the absence of which is easier missed than explained.

Meteor, the winner, has a head which, if brought under the notice of such judges as Whitehouse, Price, Lort, Brierley and others, would disqualify him. His shoulders are straight and his feet not good. He is short in the back (the pointer is not a short-backed dog) and too long on the legs, and if followed behind when on the chain he will be found to be "stilty." He is not nearly so good a looking dog as his sire, Garnet, never by us considered to be a typical dog, though he was a workman. He has a fairly good neck, a good coat and a well-shaped tail, which he carries at times very badly. He is not a show dog, and all the newspapers in America cannot make one of him. Father Time will, I think, prove this opinion to be correct.

Knickerbocker is a better type of dog than the winner. He has a pointer's head, fair good legs and bone, but is faulty in back, stifles, tail and neck.

Don, the well known champion of many a hard-fought battle in the field, is too coarse throughout for a show dog. Lack of quality is his fault. He is a well bred dog, and should prove invaluable to cross on light-boned weeds.

Croxteth was looking his best. My opinion of him has often been expressed, but he is a better dog than the winner, and I told his keeper so before the class was judged.

Perth was in very bad condition. He has a fine chest, shoulders, legs and feet; also, a nice clean neck; but he is bitchy in head and has a coarse, high-carried tail.

Beaufort I must not criticise for obvious reasons. A description of him from my pen, before I owned him, appeared in FOREST AND STREAM nearly twelve months ago, and to the same must I refer your readers.

In the corresponding bitch class, my old friend Water Lily won. She was shown too lusty. Her faults are badly-carried ears, lack of bone, a low set on tail and faulty stifles. She deserved her blue ribbon. Nan is a bitch with a fair good head and abundance of bone. Faults: badly-carried ears, heavy shoulders, washy color, drooping quarters and round barrel. Old Grace was as playful as a kitten, notwithstanding her twelve years. She never was a show bitch, though she has won prizes. Her clean neck and excellent feet, however, attract attention, and she has the reputation for throwing better puppies than any other bitch in the country, besides an undeniable field record.

The open large dog class was a great improvement over that of last year, but was, in my opinion, wretchedly judged. Fritz, placed first, is a grand "little dog," and if reduced in weight a pound or so, he will show a clear pair of heels to any small pointer in America. He has a good head and ears, perfect legs and feet, lots of bone, and a well placed and well carried tail. Depth of chest would improve him. Drake, placed second, was not entitled to the honor; it really belonged to his kennel companion, Sefton, a decidedly better looking dog: he beats Drake everywhere excepting in head and neck. Sefton is a little sour in expression and light in eye, he is also throaty, but he has good quarters, and he stands on capital legs and feet; he is a better looking dog than his sire. Drake has a slack back, bad loin and faulty feet, which are failings I cannot tolerate in a pointer, or, indeed, in any sporting dog. Thurtle (Mr. Godeffroy's kennel man) indorses my opinion that Sefton is a much better looking dog than Drake. Scout, also by Croxteth, is faulty in back, loin, and feet, besides being plain in face. Pilot (Littlejohn's) is a trifle strong in head, and is heavy at the shoulders, but he is good in bone, middle and stern; he should have been third. Donald II. (Munhall's) disappointed me much, and will never do credit to his illustrious sire (Donald), being shelly and long on the legs and having bad shoulders. Danby (Rutherfurd's) has a fair good head, but is leggy and plain. Maxim (Munson's) was in luck's way to get a vhc. card; he has a coarse, heavy head, bad ears, neck and shoulders. Bang (Munson's) is a well bred dog, and one that should get good stock from certain bitches; he is a much better type of dog than Maxim, but with age he grows coarse. Guy (Stromberg's) is full in the cheeks and heavy at the shoulders; he was not well shown, but can always beat Maxim. Icicle is not a show dog in any respect.

The open large bitch class was a poor one. Miss Merryman won and was rightly placed. Faults, ears badly carried, throaty, little too wide in front, and coarse in tail. Legs, feet and head fairly good. Fan Fan (Donner's) placed second, has a fair head and tolerably good feet. Faults, throaty, wide in front, light in bone, and too round behind the shoulders. Sal is not good, neither is Lady Mac, who is very stilty behind.

In the next class for champion small dogs, Bravo (Appold's) won, and to him should have been awarded the small size sweepstakes. From eye to nose he is decidedly weak, and he is too round in the barrel. He has a good neck, splendid legs and feet, a good loin, fair back, and a good tail, which he carries well. He was the gentleman of the small size classes without doubt. Ross, in the same class, is a fair, good dog, though wanting in pointer character. He is light in bone and fine in muzzle. Dick was outclassed. He shows age, and is faulty in cheeks, neck, chest and tail.

The corresponding bitch class was not well judged. Vanity (Munson's) was not entitled to premier honors. She has a plain head, badly carried ears, is out at the elbows, and carries her tail away over her back. The judge seemed to have a weakness for ringtails, but I for one have yet to learn they are pointer attributes. Duchess and Lady Bang in this class can both beat Vanity easily. I do not like the black eyes and nose of Duchess, nor yet her shoulders and carriage of tail. Her gait, too, is not quite *comme il faut*, but she clearly beats the winner. Lady Bang shows her good breeding. She is too full on the brow, throaty, and light in bone, out of much better type than the winner.

I never have seen pointer classes handled so badly as were the next two for small-size dogs and bitches. Had the judge been asked to select the worst dog in the class he could not have succeeded better than when he placed Pride (Tallman's) first. He was absolutely the worst dog in the class, and should not have been noticed. He is wide in front, has crooked forelegs, with feet twisted out (as seen in the dachshund), splay feet, a weak back, and bad loins. Second prize was awarded to Fritz (Collins's), another grave error of judgment, in my opinion, and one which surprised nobody more than the owner. Fritz has a plain face, a light eye, bad loins, and a coarse tail. He has no pretensions to show form, though his shoulders, legs and feet are fairly good. He is a wonderful trick dog, which was possibly taken into account by the judge. Third prize went to Don (Crane's), also a mistake. He is wide in front, has a plain face, light eyes, bad quarters and tail. The best dog in the class was Heath's Dash, a nice lemon and white of good quality. He was not even commended. Second should have gone to Booths, good in body, legs, feet and stern. He has a fair head, and is a little heavy at the shoulders and wide in front. He was clearly entitled to second place. I would have given third prize to Bob (Amory's), by Bang—Princess Kate. He has fair head and ears, good body, legs and feet. He is too wide in front and carries his tail badly. Puck, owned by Dr. Wells, should have received the vhc. card, though faulty in shoulders and a little light in eyes. Match (Cornell's) is bad at both ends. He has a good neck and a fair middle.

In the bitch class, the Neversink Lodge Kennel's Jilt won, and was properly placed at the head of affairs. I cheerfully admit that I never expected to see Croxteth sire so good a bitch. She is a trifle fine in muzzle and inclined to be throaty for one so young. She is also too wide in front and a trifle slack behind the shoulders; nevertheless she is a good one, and had I been judge, she would have won the special for best pointer bitch in the show, as the winner, Vanity cannot compare with her. Vision, though by no means a bad bitch, did not deserve second prize, which was clearly won by Belle (Gregory's). Though Vision has a fair good head, neck, legs and feet, her loin is bad, as is also her tail and the carriage of her ears. Belle is a good bitch, a little weak in head and coarse in tail. Flash III., to whom third prize was awarded, is not a show bitch, and her place should have been occupied by Lyde II., winner of first at Washington, or by Rose (Williams's), who is also a much better bitch, though she does carry her tail badly. The faults of Flash III. are heavy shoulders, splay feet, crooked legs, round skull and snipy muzzle. Her ears, too, are badly carried. The skull of the pointer should not be round, and the muzzle should be long, square and blunt. CHARLES H. MASON.

NEW YORK, May 19, 1884.

BEAGLES AT NEW YORK.

Editor Forest and Stream:

I presume that the Westminster Kennel Club see the mistake they made by accepting a different judge to make the awards in special prizes for beagles, and will not allow it at future shows, but have one judge for all classes. I do not believe it was the desire of the Beagle Club to have a separate judge if it could have been properly considered, and I would like to ask the president of the Beagle Club who made the nominations?

I was not aware that the club would nominate and vote for a special judge until I received the printed nomination. Of course I did not vote, and if there had been time would have strongly opposed it, believing that the Westminster Kennel Club are competent to select and appoint their judges; and if they had considered the matter I feel certain they would have had only one judge, and hope in the future that they and other managers of bench shows will have but one judge for all beagle classes; but hope that the judge will be instructed to judge according to the standard of our club, and that our president will try to have judging at future shows governed by our standard. Perhaps it will not be out of place to say that Mr. Mortimer indorses our standard (with perhaps one exception), and I could not see why he did not follow it as well as possible in making awards except making note of points. While I will not draw any comparison between the two judges, will say Mr. Mortimer's judging was consistent, and regret that Mr. Sloan should have reversed Mr. Mortimer's decision, irrespective of the fact that Mr. Mortimer had the dogs placed right.

In your report of the show you say, "The beagle class was well filled and of better average quality than has yet appeared at any of the Westminster Club shows." Then speaking of Bush that won first in champion class you say, "The winner, Bush, is a fair average beagle." Now it is not quite clear to me how this fair average beagle (Bush) could win champion prize in a show where the quality averaged better than at any former exhibit, and when she had for a competitor a beagle that had taken first prize at Lowell, first and special at New Haven, third at Toronto, vhc. and special at Cleveland, and of whom FOREST AND STREAM had said, "He has a good head and plenty of bone," and Bush also won first at New York, 1882, in puppy class, and first and special at Pittsburgh, 1883. This fair average beagle has certainly been very fortunate, and it looks to me a little as though FOREST AND STREAM got a little of the mist that was so abundant during the first three days of the show into its brain and could not see clearly.

In regard to your comments on Chase and Deborah I will only say, that much as I dislike to say anything against my friend's beagle I cannot avoid it, but will be brief and only touch a few important points.

I agree with you in saying that Deborah has the best muzzle, being the squarest cut, but in many other points Chase is far her superior; has much better length of ear, they are hung better and fully as good in regard to width, her coat is better, Deborah's being a little too short and lying a little too close, and Deborah has very little brush on tail while Chase has plenty. The general expression of Deborah was very puggish and she lacked the hound-like expression that a beagle should possess. N. ELMORE.

GRANBY, Conn., May 19.

ENGLISH AND AMERICAN FOXHOUND.

IT is evident, judging from the specimens of both English and American foxhounds exhibited at the late show of the Westminster Kennel Club, at Madison Square Garden, in New York, as well as at the other numerous displays throughout the United States, that the two animals should not be placed in the same class or judged by the same standard. They are now as separate and distinct as are the pointer and the Dalmatian. The English hound having been crossed and recrossed with other breeds to give him both courage and speed, has lost all vestige of his former outline, and notably failed in his scenting powers. While the American dog, descending from the old Southern hound, brought to this country by the Cavaliers of Virginia and Maryland, has been kept pure without a cross and to this day shows his clear origin and typical characteristics. The several breeders of foxhounds in this section, as well as owners of working packs (I do not refer to anise-seed bag work, but the chase of the fox), who have all at different times imported the English foxhound with a view of making a fair comparison with their own dogs, and to cross them if advisable, have in every instance discarded the Britisher and declared him inferior. Mr. Howard Lewis, a prominent member of the Rose Tree Hunt, has made the experiment, and both Messrs. Shaner and John Yerkes, breeders of this section, will not allow an English dog in their kennels.

Mr. Lort, while at one of the Westminster Kennel Club shows, acknowledged to a prominent Philadelphia fancier that the English dogs had sadly degenerated and did not possess the nose the breed once had, and remarked that another cross would have to be looked for in order to recover the ground lost, and named the otter hound as the only one they could go to in England. The writer has knowledge that Mr. Lort would have taken back with him a pair of very fine black and tan hounds of Mr. Yerke's breeding, had the owner, Mr. Laudenberger, been willing to part with them. There is no pack of foxhounds in England that does not now require the whipper-in, in order to be kept on the scent of a fox. Show me an imported animal that can keep up with our own hounds on the trail of a fox which takes as his course of flight first the woods, then the swamp, and then the rocky hillside. I am told by fox hunters who have tried the English dogs here that they have seen him "show up" and lose their fox in the open field. Our own dog may not have the speed and dash of the Britisher, but he has the qualities we need for this country, a keen nose to follow and stick to his fox in all kinds of ground.

It will take but half an eye to discover that the English foxhound and the American dog are different in conformation and should not be placed in the same class at shows. The former, in my estimation, has decidedly a cur look, shows his coarse lines, rough coat and the crosses that have been resorted to, while the latter has a thoroughbred appearance, a true hound savor that has been given him by the old Southern hound, from which he is descended. We need just such a dog in this country, but the English dog is useless here and has proven such. Why, then, take him as our standard and award him the blue and red ribbon when, in my mind, at the late New York show the first prize should have been given to the exhibit of the Blooming Grove Park Association? It is hoped that the attention of foxhound breeders will be drawn to this subject and their views made known in the FOREST AND STREAM. It would be very interesting to your readers if both Mr. Howard Lewis, of Media, Pa., and Dr. Hydekopher, of Philadelphia, could be induced to write upon the subject, as I know of no persons better posted on the American breed of foxhounds. HOMO.

ENGLISH KENNEL NOTES.

THE success of the Warwick show, which closed on Friday, the 18th inst., is the chief topic of conversation in the dog world. It was not difficult to foretell its success; they had all the elements of that quality to start with.

The show presented a very pretty *coup d'œil* on entering. There was ample space to promenade between the benches without leaving samples from your tailor in the inquisitive jaws of the exhibited.

Spratts did the benching and Jeyes the disinfecting. I have one grumble against each of these firms. Messrs. Spratt by this time should surely know what space the different breeds require, and yet some of the classes were so uncomfortably situated in room that they could not turn round. With regard to Jeyes, I cannot understand why they prefer to use their liquid instead of dry disinfectant. The effect is to make the place sloppy, and most objectionable to visitors, being ruinous to their boots and dresses. The powder is equally efficacious.

I must admit that I heard more complaints than usual about the judging, especially of the collie and mastiff classes.

The judges of these classes were Messrs. Radcliffe and Portier. The first named struck me as being very painstaking and very conscientious, but I think his knowledge of the breed is hardly profound enough yet to enable him to deal with such large classes containing so many new lights. He was unconscionably long over his work, and seemed to hesitate, weigh and consider where there was really no doubt, and every collie man round the ring had made up his mind, and then when he did decide, the result was usually a surprise to the onlookers.

There is a deal in "how" one judges. You can be too careful, if you hesitate till you are lost in doubt and confusion. There are many methods and means of arriving at the best dogs, but I think the simplest and surest is the weeding out principle. If twenty dogs file into the ring, there will be at least six so conspicuously bad that you can turn them out as they come in.

Having got all the class before you, nicely round the ring, be careful that your ring-steward has not left any sitting on the bench, which is an injustice that often happens to dogs at shows unaccompanied by their owners, who are chagrined at the defeat of their dog, which may never have been led out before the judge. In your first survey you will probably see another four good enough to leave.

Now you must begin to be careful if the class was a good one. These ten will require a careful looking over, so first trot them round the ring; this will show you the halt, the lame, and the blind. If any of the exhibitors should feel his pride hurt by the circussing, and resent the walk round, promptly give his dog to a keeper to lead, and if he object to that, order him out of the ring. I would show no consideration in such a case, because if on account of the clumsy way in which his loutish owner showed the dog, you overlook him, and he turns out to be a good one, be sure no mercy will be shown to your blunder.

Well, here are the dogs walking round. "Hullo, out you go there with the broken off foreleg." "What did you say, Mr. Exhibitor, only noticed him walking stiff this morning, ah, really, what a very unobservant man you must be, take him out." "Gad, how badly that one moves, bring him here, please; let me see his teeth (always let the owner open the mouth), yes, very old, and must have been a grand dog six years ago, but every dog has his day you know, sir; I will give you the highest honor short of the coin, and of that he has won plenty at other shows—vhc." So you have got some room, only eight, and you think you can see the winner already, but don't be in a hurry, lead up to him.

Now for the individual inspection. "Fair head and coat, short in the couplings rather. Don't hit your dog, sir, I don't mind his jumping up, give me your stick. Here dog, pst! fetch it! Good cars; hullo, look at his tail right over his back, that's what you wanted the stick for; eh? to keep his tail down, sly dog, but he's worth a c. card." Seven left. "Decent all-round dog, this one a bit slack behind—trot him up there in front of me; hem! I thought so, inclined to be cow-hocked, hc." Six. Sit tight and play up, how anxious that tall man looks, and that keeper ought to have his neck screwed for the little interest he shows in the job. The very confident cocksure-looking gentleman thinks, "——, can't lose to-day." Well, we'll see, but you are looking at the wrong end of the chain.

"Whoa, there. Savage, is he? Then why didn't you say so? Coarse throughout—another hc."

Five. Yes, there's no doubt about him. "Put him up in the corner." Confident man much surprised he is not sent to follow, but affects to look unconcerned, which doesn't go far to reassure his wife, who now glares at the judge, while the keeper, with the swell of the party in the corner, listlessly converses with a pal over the barrier. Now these four. "Very characteristic dog." You like him? "What a coat; but that head. Well, you are not far out of it, sir. What is your number? Thanks—vhc."

Three and one in the corner. "Yes, he's a devilish handsome pup. Entered in the puppy class, too, is he? Ah, well, well! Well, he's hardly made up enough yet—vhc. You'll never do worse. In a few months he'll carry you into the money."

Two and one in the corner. "Here, you fellow, bring that dog out of the corner." Where's your ring, steward? All the people have got under the barrier, and are crowding round you and the three dogs in their anxiety. "Stand back, please."

"Gallop them round." What action that dog has. But the swell still leads. "Stop! Bring him on the board. Good head; something wrong about the shoulders—heavy rather; chest could be narrower, too." "Bring the other two on the board." "Feet not so good as theirs, either." "What did you say? Took first prize at Carrabas? What's that to do with me, sir? A very improper remark to make to the judge. I have half a mind to turn you out of the ring. What have I given you? Good advice, sir, but your dog I award third prize to."

And out he goes with the proverbial lively insect in his ear, which will tingle for the next half hour. Come, now, here's the tug of war. You still like the look of the swell, but take it quietly. You know the other is a famous dog, been doing a lot of winning, and you have never seen the youngster before. Well, give him extra attention, then. Head perfect, legs straight as pillars, coat flat and straight, splendid quarters. "Yes, he's a nailer." Put them alongside of one another. Not much to choose; more quality in the young one perhaps—yes, by Jove, and more character; color not so pleasant as the other, but the texture of coat—let me feel the other's—rather much better.

"Only second, sir; well, you ought not to feel ashamed of being beaten by this lovely animal." But the confident man is very much annoyed if he isn't ashamed, and sneeringly repeats your observation to his indignant spouse, who buttonholes him at the exit, and they walk away together consoling themselves by remarking that "they suppose you bred the winner or sold him; that's it, of course, what can you expect, and after all what does he know about ——s?"

All the crowd are looking at the winner. Who's this impetuous young man rushing up, elbowing his way and asking excitedly, "Where's my dog? I missed my train and they say the judging's over. Hullo, keeper! what did he do? First? no, hurrah!" and up goes his hat, and the crowd smiles, the keeper looks happy with half a sovereign in his hand which he didn't earn, and the mad-with-joy exhibitor, whose first entry this was in the show world, "bred him myself? rather, of course I did!" walks proudly out, leading the swell and feeling that every eye is on him, and so they are.

Well, but look here, this did not happen at Warwick, so adieu, imagination, and return hard facts. I was talking about the new judges. The other, viz., Mr. Portier, I have an idea has judged before, but I don't remember where. This is the gentleman who writes very long letters on black and tan terriers and mastiffs over the *nom de plume* of "Anglo American." By his accent he is French, and that may be why he was chosen to decide upon merit in the foreign classes, but why mastiffs?

Oh, wait a bit. I notice the British Kennel Association, which I understood was in difficulties, comes down handsome in prizes in the mastiff classes. Envious people might dwell on the flush. Mr. Taunton is the B. K. A.; Mr. Portier is his Fidus Achates (*Arcades ambo*). Cardinal beat Crown Prince for the stud prize.

Not one suspicion do I cast upon Mr. Portier's strict probity, and I can say more, that I feel confident that the above award was an honest, independent and conscientious one, but none the less when the atmosphere of the kennel world is so thick with sharp practice, shady doings, etc., no handle should be given to the party of "envy, hatred, and all uncharitableness."

What others and I may call courage, Mr. Portier's good-natured friends may term partiality.

I think Mr. Portier was plucky to put Mr. Beaufoy's Pontiff over Crown Prince, and I also think he was wrong. Compared to his highness the papal one is small, but very massive, he has a short square head, plenty of bone, and is fawn gray with a black mask. It is true Crown Prince has a flesh-colored nose and fleshy linings to lips and eyes, but stand him up side by side with any other mastiff alive, and see how he "towers."

Crown Prince is a grand and imposing brute, his head is full of mastiff character, and at stud I know few dogs that have so improved their breed as this splendid creature. There is the type of the sire about all his "get," and you can walk down the bench and say "that's by Crown Prince, and that, and that."

Mr. Taunton and Mr. Portier seem anxious for the preservation of brindle mastiffs. I don't see the necessity, if their color is to be all and all, for a more miserable, half-starved, under-sized lot of yard-dogs I never saw than in the two classes devoted to brindles at Warwick. I don't like the color, and think a brindle must be a very good one to win; the color makes them look mean and insignificant.

Cardinal is the best I have seen since Wolsey, but Cardinal's head is very plain and unwrinkled, and he looks light against the fawns. Orlando, who was also on view in the champion class, was out of his depth. He has a rare head and should have a lot of weak, snipy-headed bitches sent to him. He has a peculiar fault. His hind legs are very straight and he stands inches higher behind than in front. I don't know whether a dog would or could transmit such a blemish to his progeny.

The champion bitch Rosalind is by Crown Prince, and a beauty she is, on the small side perhaps, but much quality. Taken all round I considered it an exceptionally good show of mastiffs. As an Englishmen, I cannot help feeling gratified to see a native breed holding its own against foreign invasion. A big mastiff on good legs is an imposing, comforting companion, but a moderate mastiff is a wretched thing—that is where some of the other breeds have the advantage, for a moderate St. Bernard is still a handsome companion dog.

The mastiff's rival though is the boarhound, but I was not impressed with this class. Sultan II. was allowed a walk over in champions. He is a monster, but his head is weak, jaw too pointed and fine. Mr. Martin's Nero won easily in the open dog class. Nero is one of the giants, and has fulfilled the promise of his puppyhood. He is a light-yellowish color with a few stripes in it, he stands on wonderful forelegs and was shown in the hardest condition. I should describe his faults, common head for so grand a body, and an unpopular color.

Prince Charlie, second prize, is a poor "tiger" with a good head. I liked the black Thunder almost, if not quite, as well. Mrs. Hazlerigg's black bitch Peeress has a perfect long head, and well merited her honors. The puppy winner, Leal, is a splendid fellow and remarkably furnished for his age. I like his color, a deep, dark brindle. I observe that he is entered in the catalogue "age eleven months, breeder and pedigree unknown." That always puzzles me where they get the age from if they don't know who bred him, in whose possession he was born.

I noticed a case in the Newfoundland class that struck me as ridiculous and unjust. The classes are divided into black and other than black. Most of the black dogs, like all self-colored breeds, have a little white on the chest and often some on the hind feet. This is not liked, a little is tolerated, but much would be disqualification. Now mark the ingenuity of the owner of a dog named Trojan. This dog is black, but he has a lot of white on his chest, therefore he is a disqualified black dog, but his owner then enters him in the other than black class, which is unjust to the exhibitors of the Landseer type, for this Trojan has no white on his head or back. It is cute.

Mr. Mellor made a great mistake in the Landseer class when he put Seaman and Admiral Drake over the beautiful Charlemagne. Since Evan's old Dick, I have seen nothing that so nearly approached Sir Edwin Landseer's picture of a "Distinguished Member of the Royal Humane Society" as this Charlemagne.

On the whole, though, I think most dog connoisseurs prefer the blacks. Newfoundlands have suffered the most from the advent of the St. Bernard, but there are still sufficient fanciers to preserve them from extinction, and while there is Gordon Stables there is hope.

The champion deerhound prize looked a good thing for Mr. Percy Cooper's Bevis on paper, but Cuchullin won on form and condition. The winner is a dog of conspicuously aristocratic appearance, with thin, long, snaky head, and blue steel coat. Chieftain looked unkempt against the other two.

Pointers were a nice class, Devon Sam won and took the cup, I thought he looked good enough to claim at his catalogue price, 50 guineas. His owner won again in bitches with Devon Fan, priced the same.

The judge could not separate those two beautiful dogs, Ganymede, the Irish, and Sir Alister, the Laverack setter, so he divided the champion prize. As all the champion classes were on the sweepstake plan each won his entrance fee, there being only two entries. Sting, by Emperor Fred, bred by Lord Downe, won in dogs, another £50 dog. Sankey got second honors. Blue Maud, by 'Tam o' Shanter, followed up her Crystal Palace luck. In the Irish division two dogs, by the champion Ganymede, were first and second, Lismore and Tyrone.

In wavy retrievers Mr. S. E. Shirley's kennel carried everything before it. Both champion prizes, first and second in dogs, and second in bitches. His three winners in the open class being out of one litter by Zelstone ex Think, born March, 1883. Will he be able to breed another such litter from the same parents? I doubt it, have seen it tried repeatedly, and failed.

Mr. S. Darbey was, as usual, to the fore in curly-coated retrievers, a far more interesting variety, in my opinion, than the wavy, the latter have a Newfoundland air about them, whereas the curly are a very distinct and peculiar breed like no other dog under the sun. A good curly retriever is an extraordinary sight, with its short, close, springy corkscrew curls. Chicory II., first in bitches, looked cheap enough at £21.

The most extraordinary dog in the show was the Clumber spaniel Boss. He is not a year old yet, and is the finest I have seen. His body is enormous, and if you come up to him lying down you would take him for a big dog, and then to see him stand up on such impossibly short legs is quite surprising. His coloring and coat are beautiful; his coat has that peculiar appearance as if the atmosphere held it up, it looks so light. This effect is only noticeable in Clumbers and English setters. I dare say Boss was claimed. His sister Doll, also a beauty, got vhc. in the same class.

Brida II. is a grand colored golden liver, and a big one. The invincible Miss Obo was returned champion again. She is the very model of a black spaniel, quite a picture, and I don't think a mistake was made when she was claimed at Hertford for £150. She is entered "not for sale" now.

I asked a friend to go round the collie classes with me, and he says the quality was superb. Charlemagne was there, and it would take a strong-minded man to put the old champion anywhere but first. His son Eclipse was next best (he looked as if he had had a swim in the morning), and then came Rutland, a black and tan dog, rather short in the couplings and otherwise lacking freedom. Donald is not worth mention.

The open classes were so large that the judge divided them into sables and black and tans. Lord Clyde, faulty about the head, won in sables. This was a dreadful mistake, for by far and away the best sable in the open and puppy classes was Mr. Pirie's glorious dog pup The Scot, who is remarkably like his sire Eclipse in face, color and coat. He only received third prize in both classes. Red Gauntlet also, only vhc., I thought should have beaten the winner. Then there was a gray dog, Scottish Hero I think his name is, who could win in any company. Bar color, he is a very typical sheep dog.

For the bitch prize it looked "a cornucopia to a cabbage-net," as Pierce Egan says, on Mr. Krehl's Beatrix, a rich-colored sable half-sister of the same owner's Eclipse. It must have astonished the other end of the chain when she got only vhc. This was a most unaccountable decision, but I expect to see it upset when she is next brought out. Flurry won, and she is a pretty bitch, a bit wooden if anything. Miss Charlemagne (a very vulgar name, by the way) I could not stand at any price, she is only a nursery toy.

In the next class a pup, The Squire, beat Lord Clyde, the open dog winner. Mr. H. W. Thompson, the celebrated collie judge, cleared the bench with his smooth champions, Guelt and Yarrow.

I have just read an extraordinary letter in the *Field*, by Hugh Dalziel, on the Hertford distemper case last year. He makes some damaging charges against the Hertford and Kennel Club committees. But there is one sentence about a member of the K. C. committee, Mr. Percy Reid, that will require explanation or the club will have to take action, unless they want public opinion to take it up.

To return to the Warwick show. I was delighted to see so good a fancier as the Rev. A. Carter with such a grand St. Bernard pup as Plinlimmon. When full grown and made up there's not the dog born that will hold him safe. I quite expect to see him develop into as large a dog as Rector and a much finer type of the breed. Plinlimmon's head has the kind, benevolent look that is so essentially characteristic of the St. Bernard; it appears a little long and fine from the eyes to the nose, but then with age his muzzle will broaden and square up the head. His body cannot be criticized—color and markings are perfect. I much prefer his orange tawny color to the brindles.

Mr. Smith is generally in the prize list, and he was to the front again here with a new dog named Valentine. Although rightly first in this class I don't think he is quite of the first water. His head is very massive and full of expression, owing to the black under the eyes. He has no dew claws and his color is objectionable; it is a mousey gray. Faust was second; he is well known to show-goers; his expression is rather sour, and the coat curly, otherwise a fine, big dog. Valour was vhc. He lately changed hands at a stiff figure and now belongs to Mr. Sweet. I hardly think Valour fills Turk's place, and if I were Mr. Sweet I should rather see Turk back in my kennel than its present occupant. Turk now belongs to a Northern fancier, who, I hear, is doing remarkably well with him, and sees the guineas (about sixty, I believe,) he paid for him rolling back merrily in stud fees.

Turk's stock compares favorably with that of some of more fashionable competitors. Pilgrim also, who has long been at stud and must be getting an old dog now, has distinguished himself and sent up his value in begetting Plinlimmon.

Phantom is another from the kennel lately sold off by Mr. Fox. He is fit to compete in any company, and was rather unlucky on this occasion.

The open class for the fair sex contained no surprises. There is room for a good bitch. The lucky claimant of third prize, Countess of Beaufort, showed his judgment without much hesitation. Had I been a St. Bernard breeder, directly I saw her I should have broken my neck in my haste to get to the office and claim her for £31.10. If she be put to a suitable dog I would like to lay odds on her litter against anything else that may be bred about the same time. She is built to breed from.

Her brother Silva was awarded second prize in the smooth dog class. He shows lots of character, but is frightfully cow-hocked.

Mr. Kaye exhibited a dog in the puppy class called "Rt. Hon. W. E. Gladstone," I don't know if Mr. Kaye is a member of the St. Bernard club, nor what authority that body has over its members, but if it possesses any, they would be well advised in using it to give the owner of this dog a lesson in good taste by putting their veto on such vulgar nomenclature which is calculated to make a noble breed ridiculous.

Thisbe, the winner in the bitch puppy class, will credit her owner, the Rev. A. Carter, with as many winning brackets in the future as her kennel mate Plinlimmon. She comes of a rare-headed stock.

The bull bitch Rhodora walked away from her class and has now deserted her country. She will be your side of the pond by the time these notes are in print. It will have to be a good one that, during this show season, can lower the colors of Monarch III., who won very easily. Mr. Berrie (not Berril, as misprinted in my notes of the 10th ulto.) was the judge.

Cairo only beat Count by the skin of his teeth for first in over 25 pounds bull-terriers. The same fancier whose name conjures up old memories and anecdotes of his father, "Bill George," was successful again in the smaller class with Grand Duchess.

I was quite unequal to going through the fox-terrier classes. It splits your head to stand anywhere near them, their short, quick barks go through your brain. I was glad to observe more terrier character about the winners than at some shows, the very long, thin head often softens out the desirable wicked look which is altogether indispensable in a terrier.

Beagles were a very small, but still a pretty class. Mr. Hoig was not so fortunate here with Mariner as at Aston, where he won first prize to the incredulous astonishment of his owner. Nothing could beat the Brummagen winner, Abigail, but Mariner was second best.

The position of the beagle in this country is seriously threatened by the increasing attention paid to the French basset hound. With a love for all things English, I cannot help feeling sorry to see a home breed being pushed out of their position by the foreigners. Candor, however, compels me to avow that I do not wonder at it. It is the fault of our beagle masters that they for years have bred too large. A fourteen-inch beagle is now considered an average hound, and I know very few men can live with them. You must be in hard training and as fit as a fiddle if you want to see any fun with a fourteen-inch pack.

I am generally pretty tough, but I shall not forget my last day with the beagles. When they went away I was well up till they got on the flat, and then came the pace; it was a sprint speed. Excited with the ardor of the chase, I ran like a hundred-yarder till I dropped, and there I lay on my back thinking the end of the world had come. By the time I had got my breath and was able to sit up I saw the lad who was carrying my coat and flask puffing along in the field behind.

"There they are, sir," he gasped, pointing to the small bunch of white, black and tan, as they swept along in the distance, their music from afar sounding very low and sweet. But I had already concluded this hunting didn't pay. "Yes, and here am I," I said, "and those will continue to be our positions till puss is broken up or lost." So putting on my coat, I clambered with the lad's aid, up a pollard. After a long, strong pull at the flask, the land that reared Scotchmen earned its forgiveness when it produced whisky. I settled myself down to the beautiful view. From this point I saw most of the run, and as I write I almost feel the cool breeze playing round my temples and see again the peaceful landscape and the little pack merrily bowling along.

But what has become of our twelve-inch beagles? Honestly measured, I mean. Stand them on the level, hold their heads in a line with the body, and then lay a flat rule across the shoulder blades; from the point it touches the wall to the ground is the proper height. That is correct hound measurement. Where are the packs that could Indian-file past a beaver hat without topping the brim, "and you can cover them with a sheet, sir, by Gad!" Where, indeed,

"All gond avay in de Evigkeit,
Avay mit der Lager bier,"

unless you have got them in America. And where will you find a nine-inch beagle now, that is not a shivering toy?

I have one in my memory that I saw years ago. I was riding from Battle to Hastings, when I noticed sitting before a small house on the doorstep a picture. His hound markings were perfect and bright, but his face was inexpressibly sad as he sat dreamily blinking in the warm sunshine, now twitching one ear then another, as worrying insects spinning around his head alighted there for rest and inspection. I was sorry to disturb him, and still more sorry after carefully handling his symmetrical body to have to ride away without him. "Don't ask me to sell him," was all his owner said, and I hadn't the heart to do so.

I have read in old French works of a pack of little hounds that were famous in France before the Revolution. They were so small and so pretty that the people called them the "porcelain" hounds.

In my inquiries for the whereabouts of small beagles I have quite forgotten my own. So back to Warwick.

Basset hounds are next in the catalogue. Looking at these heavy little dogs on curiously short, thick, crooked legs, one can understand the favor they find with those who love to follow on foot. Their note is as deep and musical as the bloodhound's, I understand, and one can quite believe it when one observes the similarity of the head properties. The same hanging flews, the dewlap, etc.—the descriptions of the head points of these two breeds must be almost identical. I don't know the average height of these hounds; I will take the first opportunity to find out and mention it in these notes. The beagle class had six entries, the basset fifteen—this speaks for itself.

I observe the *Live Stock Journal* reporter, a Mr. Gresham, who once kept St. Bernards, says; "Fino V. had no difficulty in disposing of the Basset hound dogs," whereas a lady who was present and watched the judging tells me he was a very considerable time over this award; that he had Bourbon on the platform with Fino V., and from the anxious appearance of the judge he seemed to have a very difficult task to separate the brothers of the same litter. This shows how little value one should attach to these "hack" reports of dog shows.

Mr. George R. Krehl seemed to have it all his own way in the bitch class; in fact, looking through the prize list, he appears to own or have bred all the winners.

There was a nice show of Bedlingtons. They are a quarrelsome, hardy lot, regular miners' dogs.

Mr. Harding Cox gave the prizes in the harrier class, and being the only exhibitor, won them all himself.

He is one of the few independent and representative members of the Kennel Club Committee. A glance through the catalogues will show that he has "fancied" or judged many breeds—bulldogs, Irish terriers, fox-terriers, bull-terriers, collies, etc.

For many weeks he had a standing advertisement in the *Field*—"Wanted, basset hounds;" but the breed was too rare, and failing in his endeavor to found a basset hunt of his own, he purchased a pack of harriers, which are kenneled at his delightful Buckinghamshire residence, Missenden Abbey. Mr. Harding Cox is a good fancier, a good sportsman, and a gentleman unassuming and intelligent.

"Turn about" my pen—Warwick. Irish terriers were a poor show indeed, the only two worth notice being Pretty Lass, who could only get second, and Canteen, by Garryowen—Pretty Lass. The truffle dog class was unable to provoke a single entry.

The foreign dogs were a tremendous sight. It seemed as if all the Zoo had turned out to win prizes. The Esquimaux in particular made a fine show.

The "gate"-seeking committee last year cutely secured Lady Florence Dixie's heroic St. Bernard, Hubert, for the atttraction; this year the community who love dogs but are not "doggy" were treated to a view of another canine celebrity, the railway dog Help. This sagacious creature has collected a good deal of money up and down the lines for the railway servants' fund.

Help is a black collie with white markings. He is by no means up to show form, being coarse in head, with large heavy ears; but his coat is glossy and he has a clever, bright expression.

In reply to the charge that in his capacity as a member of the Kennel Club Committee he attended and took part at a meeting where the conduct of another body was being examined of which he was also a member, Mr. Percy Reid has made the very weak and unsatisfactory reply that though he was present at the meeting which tried the body of which he was a member, he did not assist in the judgment. He left before a decision was come to, he says, and fancies, therefore, that he is exculpated from the charge of bad taste for judicially assisting in the trial that led up to the verdict on the conduct of his colleagues and himself. After reading Mr. Joachim's letter in this week's *Field*, it will be the opinion of most on-lookers, that of the Hertford Committee, the Kennel Club Committee, Mr. Murchison, and Mr. Reid, none will emerge with credit from this affair.

LILLIBULERO.

MAY 6, 1884.

THE ENGLISH FIELD TRIALS.

THE National Field Trials, held at Shrewsbury, Eng., the 23d, 24th and 25th of April, were quite successful, except that, owing to the very dry and dusty condition of the ground, the work of the dogs was not quite so satisfactory as has usually been witnessed at these Trials.

The Pointer Puppy Stakes brought out fifteen starters. We give the entries in the order in which they were drawn to run:

POINTER PUPPY STAKES.

At 5 guineas each; first £45, second £25, third £10.

Mr. C. Thelwell Abbott's liver and white ticked Duke of Wellington (The Fop—Jane), 15mos.,
against
Mr. R. J. Lloyd-Price's liver and white Royal Puck (Royal—Mabel), 13mos.

Mr. Barclay Field's liver and white Rustic (Bow—Peach), 15mos.,
against
Major Platt's liver and white ticked Lady of the Lake (Lake—Flash III.), 13mos.

Major Platt's liver and white ticked Lord of the Isles (Lake—Flash III.) 13mos.,
against
Mr. C. J. Cotes's liver and white Sally Back (Jasper—Sal) 12mos.

Mr. A. P. Heyward-Lonsdale's liver and white Polly (Bow—Peach) 15mos.,
against
Prince Albert Solms's liver and white Luck of Hessen (Naso II.—La Vole) 9mos.

Mr. C. H. Beck's lemon and white Lingo (Bang Bang—Polly) 13mos.,
against
Mr. A. P. Heyward-Lonsdale's Jest (Jasper—Spangle) 13mos.

Mr. C. J. Cotes's liver and white Carlo (Jasper—Sal) 12mos.,
against
Mr. T. Statter's liver and white Pilot (Pax—Poll) 13mos.

Mr. R. J. Lloyd-Price's liver and white Owen Alaw (Lucky Sixpence—Co diad yr Hedydd) 11mos.,
against
Mr. H. A. Adderley's black Chloe (Sambo—Duchess), 12mos.

Mr. C. J. Cotes's lemon and white Jenny Jones (Young Dick—Di Vernon), 8mos., *a bye.*

The stake was finished Thursday morning, with the following result:
Lingo, first.
Carlo, second.
Polly, third.

SETTER PUPPY STAKES.

At £5 5s. each; first £40 and £10 added money, second £25, third £15, fourth £10.

Mr. Thomas Statter's lemon and white Ella (Coningsby—Eve), 14mos.,
against
Mr. T. Dicken's black, white and tan Frank (Brave Baron—Blue Bell), 11mos.

Mr. J. Bishop's black, white and tan Bouncing Queen (Buxton—Bonny Queen), 14mos.,
against
Prince Albert Solms's black and white Tempest (Blue Boy—Countess Kate), 10mos.

Prince Albert Solms's black and white Bandit of Braunfels (Roderick of Braunfels—May Queen), 15mos.,
against
Mr. T. Statter's black, white and tan Grist (Esqr.—Doll), 14mos.

Mr. T. Dicken's black, white and tan Satin (Bruce—Bess), 12mos.,
against
Mr. G. Shaw's black, white and tan Rose (Diamond—Minnie), 12mos.

Mr. E. Bishop's black, white and tan Ranging Moses (Blue Boy—Princess Maud),
against
Mr. E. Armstrong's lemon and white Bess IV. (King Ned—Slut II.).

Col. Cotes's black and white Wild Daisy II. (Sir Alister—Wild Daisy), 12mos.,
against
Mr. E. Bishop's black, white and tan Ranging Samuel (Sam III.—Maud).

Mr. H. Burra's lemon and white May Flower (Bend Or—Jewel) 15mos.,
against
Mr. C. J. Cotes's black, white and tan Daphne (Sir Alister—Wild Daisy) 12mos.

Mr. R. G. Mawson's black, white and tan Dinah (Ranger—Judy) 15mos.,
against
Mr. H. C. Hartley's black, white and tan Pilot (Tam O'Shanter—Gipsy Girl) 15mos.

Mr. P. Power's red Field Marshall (Count—Tilly) 14mos.,
against
Mr. E. Bishop's black, white and tan Ranging Aaron (Blue Boy—Princess Maud).

Mr. C. J. Cotes's black and white Duchess of Wales (Dick II.— ——) *a bye.*

Following is the result:
Rose, first.
Ranging Aaron, second.
Bouncing Queen, third.
Ranging Moses, fourth.

The final heat betwcen the winning pointer and the winning setter was decided in favor of the setter Rose, whose sire won first in the setter stake at Shrewsbury in 1877.

CLOVERLEY STAKES.

Braces, pointers and setters, all ages, £10. 10s. each; pointers, first prize £30; setters, first prize £30; the second best brace of either breed £20; absolute winning brace £10 added.

There were eleven entries for the brace stakes—seven pointers and four setters:

Mr. Barclay Field's liver and white Young Dick (Dick—Flame), 3yrs., and liver and white Young Di (Drake—Puss), 1yr. 10mos.—pointers.

Col. Cotes's lemon and white Duke Wind 'em (Count Wind 'em—Countess Moll), 2yrs., and black, white and tan Dashing Rose (Dash II.—Countess Rose), 2yrs.—setters.

Mr. A. P. Haywood-Lonsdale's liver and white Cassandra (Birr—Fan), 4yrs., and liver and white Polly (Bow—Peach), 1yr. 3mos.—pointers.

Col. Cotes's lemon and white Carlo (Jasper—Sal), 1yr., and lemon and white Jenny Jones (Young Dick—Di Vernon), 8mos.—pointers.

Mr. Daintry Hollins's blue and white Ragman (Rogue—Silk II.), 2yrs., and liver and white Boscobel (Rogue—Silk II.), 2yrs.—setters.

Mr. C. Thelwell Abbott's liver and white The Fop (Faust—Belle), 5yrs., and Brave Bijou (The Fop—Bonny Lanul), 2yrs.—pointers.

Mr. A. P. Heyward-Lonsdale's black and white Mar (Baron—Mailu), 2yrs., and black, white and tan Maggie (Baron—Mailu), 2yrs.—setters.

Prince Albert Solms's liver and white Naso of Kippen (Naso II.—Maggie), 2yrs., and lemon and white Bijou (Priam—Blarney), 2yrs.—pointers.

Mr. Arkwright's black, white and tan Little Bess (Blue Boy—Maud), 2yrs., and black, white and tan Ranger's Ghost (Ranger—Cora), 3yrs.—setters.

Mr. E. Armstrong's liver and white Lincoln (Bob—Jane), 3yrs., and liver and white Garfield (Bob—Jane), 3yrs.—pointers.

Mr. R. J. Lloyd-Price's liver and white Fatima (Bang—Hebe), 4yrs., and liver and white Elias (Bang—Hebe), 4yrs.—pointers.

Following is the result:
Cassandra and Polly, first prize in pointers and first in stake.
Little Bess and Ranger's Ghost, first in setters.
The Fop and Brave Bijou (pointers) prize for second best of either breed.

The Kennel Club Field Trials.

THESE trials were held near Stratford-on-Avon. There were twenty-six starters out of the 159 entries for the Derby, fourteen pointers and twelve setters, as follows:

TENTH FIELD TRIAL DERBY.

For pointer and setter puppies, bred in 1883; £50 for the best pointer, £50 for the best setter, £20 for the second best of each breed, and £50 extra for the absolute winner; 159 subs.

POINTERS.

Mr. C. T. Abbott's liver and white dog Duke of Wellington (The Fop—Jane) Jan. 28,
against
Mr. C. H. Beck's lemon and white bitch Lingo (Bang Bang—Polly) March 30.

Rev. W. J. Richardson's liver and white bitch Milton Rita (Young Bang—Nina) March 2,
against
Mr. Barclay Field's liver and white bitch Rustic (Bow—Peach) Jan. 8.

Major Pratt's liver and white dog Lord of the Isles (Lake—Flash III.), March 31, *a bye*, (owing to error in entry of competitor).

Mr. J. H. Salter's white and black bitch Paris (Priam—Hops), June 30,
against
Col. C. J. Cotes's liver and white Carlo (Jasper—Sal), April 14.

Major Pratt's liver and white bitch Lady of the Lake (Lake—Flash III.) March 31,
against
Prince Solms's liver and white dog Luck of Hessen (Naso—La Vole), July 31.

Sir T. B. Leonard's liver and white bitch Maud III. (Priam—Nell), May 31,
against
Mr. G. Pilkington's liver and white dog Lymm (Lake—Norah), June 11.

Mr. R. J. Lloyd-Price's liver and white dog Owen Alaw (Lucky Sixpence—Golden Guinea), May 4,
against
Sir T. B. Lennard's liver and white dog Plover (Tory—Crystabel), May 5.

Mr. Heywood-Lonsdale's liver and white bitch Polly (Bow—Peach), Jan. 8, *a bye.*

SETTERS.

Mr. Elias Bishop's black and white dog Ranging Aaron (Blue Boy—Princess Maud), Feb. 27,
against
Mr. E. W. L. Popham's black, white aud tan bitch Penelope (Count Dan II.—Pallas), March 9.

Rev. S. East's orange and white dog Count Dazzle (Count Dan II.—Duchess of Orange), April 15,
against
Mr. Edwin Bishop's black and white dog Windham (Rake of Weedon—Daisy), Jan. 15.

Mr. T. Dicken's black and white dog Frank (Brave Burton—Blue Bell), May 27,
against
Mr. E. W. L. Popham's black and white dog Pan (Count Dan II.—Pallas), March 9.

Prince Solms's black and white dog Bandit of Braunfels (Roderick of Braunfels— ———), Jan. 10,

against

Mr. H. C. Hartley's black and white dog Pilot (Tam o' Shanter—Gipsy Girl), Jan. 9, withdrawn.

Mr. E. Armstrong's lemon and white bitch Bess IV. (King Ned—Slut II.), April 1,

against

Mr. Elias Bishop's black, white and tan dog Ranging Moses (Blue Boy—Princess Maud), Feb. 27.

Mr. J. Bishop's black, white and tan bitch Bouncing Queen (Buxton—Bonnie Queen) Feb. 24,

against

Col. C. J. Cotes's black and white bitch Duchess of Wales (Dick II.—Grace) Feb. 15.

Mr. J. H. Salter's Paris was the winner of the pointer prize, but was absent when called to run the final tie with the setter for first place, and Mr. Elias Bishop's Ranging Aaron was declared the absolute winner of the Derby.

ALL-AGED STAKE.

A sweepstake of £6 10s. for sixteen all-aged pointers or setters, dogs and bitches, £50 for the winner, £25 for the second, and the third and fourth £10 each. If the stake does not fill the prizes to be given in proportion to the number of entries.

There were fifteen in the All-Aged Stake, nine pointers and six setters, as follows:

Mr. Fauntleroy's black and white setter bitch Piff (Penn II.—Philo), 3yrs.,

against

Mr. Elias Bishop's black and white setter dog Ranging Aaron (Blue Boy—Princess Maud), Feb. 27.

Mr. H. C. Hartley's black, white and tan setter dog Bevis (Buxton—Pearl II.), Jan. 25, 1881,

against

Mr. T. Armstrong's black and white setter dog John Anderson (John o' Groat—Wise), about 2yrs.

Mr. J. F. H. Harter's liver and white setter bitch Rhine III. (Lord Downe's Sam III—Rhine II.), about 1yr. 9mos.,

against

Mr. W. Arkwright's black, white and tan setter bitch Little Bess (Blue Boy—Maud) 2yrs.

Sir T. Barrett Lennard's liver and white pointer dog Priam (Young Bang—Teal),

against

Mr. R. Lloyd-Price's liver and white pointer dog Ruler (Little Ben—Bow Bell), Jan. 11, 1882.

Mr. Barclay Field's liver and white pointer dog Young Dick (Dick—Flame), about 3yrs.,

against

Mr. C. T. Abbott's lemon and white pointer dog Brave Bijou (The Fop—Bonny Laurel), 2yrs.

Mr. Edward Armstrong's liver, white and tan pointer dog Garfield)Lord Downe's Bob—Lord Downe's Jane),

against

Mr. R. J. Lloyd-Price's liver and white pointer dog Elias (Bang—Hebe), April 9, 1880.

Mr. Pilkington's liver and white pointer bitch Dingle (Druid—Bess), 2yrs.,

against

H. S. H. Prince Solms's pointer dog Naso of Kippen.

Mr. J. H. Salter's pointer bitch Malt (Mike, 4215—Romp, 4245), born in 1881, *a bye.*

Mr. J. H. Salter's pointer bitch Malt won the first prize. Mr. R. J. Lloyd-Price's pointer dog Elias won second prize.

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, of breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Rory O'More. By Mr. W. Clinton Mumford, Brooklyn, N. Y., for red Irish setter bitch, whelped Jan. 1, 1884, by Rory O'More out of Sybil (Larry—Anne Boleyn).

Count Ranger, Prince Ranger, Bang Ranger, Drake Ranger, Minnie Ranger, Drab Ranger and Nell Ranger. By Mr. S. B. Dilley, Roscndale, Wis., for lemon and white pointers, four dogs and three bitches, whelped April 3, 1884, by his Ranger Croxteth out of his Fanny Faust.

Mayflower Belton. By Mr. W. S. Cornell, Waterbury, Ct., for liver and white English setter bitch, whelped March 5, 1884, by Yale Belton (Belton—Blonde) aut of Gipsy (Sport—Belle).

Dan. By Mr. C. E. Sweet, Malden, Mass., for red Irish setter dog, whelped Feb. 25, 1884, by Watts (Berkley—Rose) out of Skip (Max—Fannie).

Dashing Primrose. By Mr. G. R. Nichols, New Haven, Ct., for black, white and tan English setter bitch, whelped July 20, 1883, by Dashing Monarch out of List (Lincoln—Petrel II.).

Lady Pearl. By the Detroit Kennel Club, Detroit, Mich., for white, with black ears, English setter bitch, whelped June 3, 1883, by Nixey (A.K.R. 177) out of Princess Alice (A.K.R. 116).

Creole Belle. By Mr. E. D. McConnell, Madison, N. J., for black and white English setter bitch, whelped March 29, 1884, by Prince (Pride of the Border—Petrel) out of Lorna Doone (A.K.R. 39).

Rebel King, Rebel Jack, Rebel Mua and Rebel Juno. By Mr. R. M. Brown, Jr., Amherst Court House, Va., for lemon and white English setters, two dogs and two bitches, whelped April 22, 1884, by Rebel Wind'em out of his May (Lincoln—Daisy Dean),

Rebel Dick, Rebel Fritz and Rebel May. By Mr. R. M. Brown, Jr., Amherst Court House, Va., for English setters, whelped April 22, 1884, a black and white dog, a black, white and tan dog, and a black, white and tan bitch, by Rebel Wind'em out of his May (Lincoln—Daisy Dean).

Sport, Beau, Mattie Croxteth and Bessie. By Mr. R. W. Shaw, Galveston, Tex., for liver and white pointers, two dogs and two bitches, whelped March 5, 1884, by champion Faust out of Ruby Croxteth (Croxteth—Lass).

Maude Croxteth. By Mr. R. W. Shaw, Galveston, Tex., for lemon and white pointer bitch, whelped March 5, 1884, by champion Faust out of Ruby Croxteth (Croxteth—Lass).

Game. In claiming the name Game for my pointer puppy I said (by mistake) that the dam, Grace, was owned by Mr. A. Collins. She is owned by Mr. N. Elmore.—E. W. BEARDSLEY.

BRED.

☞ *See instructions at head of this column.*

Lassie—Don. The Westminster Kennel Club's pointer bitch Lassie (A.K.R. 208) to Mr. R. T. Vandevort's Don (A.K.R. 165), March 29.

Bell—Don. Mr. J. W. Murnan's (Keeling, Tenn.) pointer bitch Bell (Hick—Peto) to Mr. R. T. Vandevort's Don (A.K.R. 165), April 7.

Lady Romp II.—Don. The Moorfield Kennel's (Philadelphia, Pa.) pointer bitch Lady Romp II. (Francis's Prince—Leache's Belle) to Mr. R. T. Vandevort's Don (A.K.R. 165), April 25.

Shultz—King Bow. Mr. M. F. Myers's (St. Joseph, Mo.) pointer bitch Shultz (Clipper—Bow Queen) to the Detroit Kennel Club's King Bow (A.K.R. 83).

Sue—King Bow. The Detroit Kennel Club's (Detroit, Mich.) pointer bitch Sue (Hindoo—Princess Bow) to their King Bow (A.K.R. 83).

Leah II.—Zanzibar. Mr. S. B. Foard's (Elkton, Md.) English setter bitch Leah II. to Mr. E. W. Jester's Zanzibar (A.K.R. 1182), May 12.

Nancy Rake—Buckellew. Mr. Thos. F. Connolly's (Flatbush, L. I.) English setter bitch Nancy Rake (A.K.R. 42) to Mr. W. A. Coster's Buckellew (A.K.R. 30), May 14.

Woodstock Flirt—Hornell Silk. Mr. Andrew Laidlaw's (Woodstock, Ont.) cocker spaniel bitch Woodstock Flirt (A.K.R. 661) to Hornell Silk (Obo—Chloe II.), March 28.

Snowball—Prince. The Millbrook Kennel's (New York) smooth-coated St. Bernard bitch Snowball (A.K.R. 416) to Mr. Amasa J. Parker, Jr.'s, Prince (A.K.R. 1033), April 19.

Fan—Zanzibar. Mr. Geo. Bennet's English setter bitch Fan to Mr. E. W. Jester's Zanzibar (A.K.R. 1182), April 30.

Bizorah—Nimrod. Mr. J. H. Child's (Milton, Mass.) red Irish setter bitch Bizorah (Biz—Flora) to the Ashmont Kennel's champion Nimrod (A.K.R. 631), April 27.

Snipe—Suil-a-Mor. Mr. Edward Lawrence, Jr.'s (Boston, Mass.) imported red Irish setter bitch Snipe (Palmerston—Quail) to Mr. Jos. Hayes's Suil-a-Mor (Claremont— Dido), May 10.

Myrtle—Mingo. Mr. Will Davidson's (Chatham, Ont.) English setter bitch Myrtle (A.K.R. 114) to Mr. William Wells's Mingo (Druid—Star).

Nina—Coin. Mr. J. Dobson's (Hyde Park, Mass.) English setter bitch Nina (Lelaps—Jessie) to Mr. F. B. Fay's Coin, May 2.

Bird—Beaufort. Mr. J. R. Trissler's pointer bitch Bird (Harry—Nell) to Mr. C. H. Mason's Beaufort (A.K.R. 694), April 24.

Flora—Black Prince. Mr. H. Reiche's (New York) cocker spaniel bitch Flora (Flake—Lady) to Mr. A. C. Wilmerding's Black Prince (A.K.R. 62), May 10.

Queen Maud—Count. Mr. E. S. Hawks's (Ashfield, Mass.) English setter bitch Queen Maud (Racket—Kelp) to Mr. P. H. Foster's Count (Count Noble—Rosalind), April 30.

Nellie—Peter Black. Mr. Henry S. Wood's (Greenfield, Mass.) pointer bitch Nellie to Mr. D. W. C. Parker's Peter Black, April 28.

Marchioness—Diavolo. The Ashmont Kennel's (Boston, Mass.) imported mastiff bitch Marchioness to their Diavolo (A.K.R. 543), May 7.

——*Beaufort.* Mr. Rutherford Stuyvesant's imported pointer bitch to Mr. C. H. Mason's Beaufort (A.K.R. 694), May 7.

WHELPS.

☞ *See instructions at head of this column.*

Folly. Mr. W. A. Walker's (Nyack, N. Y.) pointer bitch Folly, April 19, seven (four dogs), by Mr. A. E. Godefroy's Croxteth.

Flick. Mr. Frank Huckins's (East Boston, Mass.) black and tan setter bitch Flick (A.K.R. 293), May 4, seven (five dogs), by Dinks (A.K.R. 1077); one dog since dead.

Hadie. Mr. J. Dobson's (Hyde Park, Mass.) English setter bitch Hadie (Frank—Jessie), March 20, nine (three dogs), by Lelaps.

Bow Queen. The Detroit Kennel Club's (Detroit, Mich.) pointer bitch Bow Queen (A.K.R. 558), May 6, three (two dogs), by their King Bow (A.K.R. 83).

Lassie. Mr. Fred. W. Rothera's (Simcoe, Ont.) imported Scotch collie bitch Lassie (A.K.R. 445), April 30, nine (four dogs), by his Lorne (A.K.R. 446).

May. Mr. R. M. Brown, Jr.'s, English setter bitch May (Lincoln—Daisy Dean), April 29, nine (four dogs), by Rebel Wind'em.

Beulah. Hon. John S. Wise's (Richmond, Va.) pointer bitch Beulah (Flake—Lilly), April 25, five (two dogs). by his Tom (Sensation—Colburn's Belle); all lemon and white.

Spot. Mr. E. W. Jester's (St. George's, Del.) beagle bitch Spot, May 8, five (three dogs), by his Lead (Sailor—Rose).

Smut. Mr. H. C. Bronsdon's (Boston, Mass.) black cocker spaniel bitch Smut (A.K.R. 858), April 29, five (three dogs), by Obo II. (A.K.R. 432); all black; one dog dead.

SALES.

☞ *See instructions at head of this column.*

Midnight. Black cocker spaniel bitch (A.K.R. 656), by Mr. Andrew Laidlaw, Woodstock, Ont., to Mr. Geo. McBride, Hamilton, Ont.

Bub—Toronta Jet whelps. Cocker spaniels, whelped March 12, 1884, by Mr. Andrew Laidlaw, Woodstock, Ont., a black dog to Mr. J. C. Fox, Orangeville, Ont.; a black dog to Mr. W. W. Blair, Toronto, Ont.; a black bitch to Mr. W. Morris, Toronto, Ont., and a liver dog to Mr. A. Hardheimer, Toronto, Ont.

Newton Abbot Lady. Imported liver and tan cocker spaniel bitch, whelped 1883 (Bend Or—Ladybird), by Mr. Thos. Jacobs, Newton Abbot, Eng., to Mr. Andrew Laidlaw, Woodstock, Ont.

Bessie. Liver and white pointer bitch, whelped March 5, 1884 (champion Faust—Ruby Croxteth), by Mr. R. W. Shaw, Galveston, Tex., to Mr. Benj. Calhoun, Bryan, Tex.

Sport. Liver and white pointer dog, whelped March 5, 1884 (champion Faust—Ruby Croxteth), by Mr. R. W. Shaw, Galveston, Tex., to Dr. Morgan Price, Montgomery, Tex.

Beau. Liver and white pointer dog, whelped March 5, 1884 (champion Faust—Ruby Croxteth), by Mr. R. W. Shaw, Galveston, Tex., to Mr. T. C. Buffington, Anderson, Tex.

Kittimari. Red Irish setter bitch (A.K.R. 1087), by Dr. Wm. Jarvis, Claremont, N. H., to Mr. Chas. Parsons, Jr., New York.

Megora. Red Irish setter bitch, whelped Aug. 4, 1883 (Elcho, A.K.R. 296—Rose, A.K.R. 298), by Dr. Wm. Jarvis, Claremont, N. H., to Mr. J. A. J. Sprague, Englewood, Ill.

Little Kate. Tan and white English setter bitch, whelped Dec. 12, 1883 (Dash III.—Katydid), by Mr. E. H. Fisher, Jr., New Bedford, Mass., to Mr. J. L. Motley, Danville, Va.

Don. Lemon and white pointer dog, whelped April 27, 1883 (Jim, A.K.R. 35—Dione), by Mr. Jas. K. Heyde, Bronxville, N. Y., to Mr. Ernest F. Thomas, Hoboken, N. J.

Lady Pearl. White, with black ears, English setter bitch, whelped June 3, 1883 (Nixey, A.K.R. 117—Princess Alice, A.K.R. 116), by Mr. C. A. LaTour, Detroit, Mich., to the Detroit Kennel Club, same place.

Guido. Italian greyhound dog (A.K.R. 906), by the Strawberry Hill Kennel, Leicester, Mass., to Mr. C. W. Barnum, Lime Rock, Ct.

Forest Royal. Blue belton English setter dog, 15mos. old (Prince Royal—Forest Queen), by Mr. C. A. Stone, London, Ont., to Mr. Wm. Tallman, Worcester, Mass.

Crisp. Irish water spaniel dog, whelped Jan. 11, 1884 (Irish Bob—Irish Bess), by Mr. W. A. Curtis, Bethel, Me., to Major Lovejoy, same place.

Burt, Scott, Crisp and Jennie. Irish water spaniels, three dogs and one bitch, whelped Jan. 11, 1884 (Irish Bob—Irish Bess), by Major Lovejoy, Bethel, Me., to Mr. Charles A. Boxer, Winnipeg, Manitoba.

Lady Madelon. Mastiff bitch (A.K.R. 547), by the Ashmont Kennel, Boston, Mass., to Mr. J. H. Child, East Milton, Mass.

Rory O'More—Lady Sybil whelp. Red Irish setter bitch, whelped Jan. 1, 1884, by the Rory O'More Kennel, Albany, N. Y., to Mr. W. Clinton Mumford, Brooklyn, N. Y.

Forest Dora. Blue belton English setter bitch, 2yrs. old (Dick Laverack—Forest Fly), by Mr. C. A. Stone, London, Ont., to Mr. Wm. Tallman, Worcester, Mass.

Gus Bondhu—Countess Mollie whelps. English setters, whelped Feb. 27, 1883, by Mr. P. Moeller, Nyack, N. Y., two dogs to Mr. John D. Ladd, Cairo, Ill.; two dogs to Mr. B. Moeller, Nanuet, N. Y.; one dog and one bitch to Mr. D. A. Goodwin, Jr., Newburyport, Mass., and one dog to Mr. Eikhoff, Nanuet, N. Y.

Spark. Fawn mastiff dog, whelped Jan. 26, 1884 (Diavolo, A.K.R. 543—Madge, 548), by the Ashmont Kennel, Boston, Mass., to Mr. G. Nicholas Jacobi, Baltimore, Md.

Queen Bess. White, black and ticked English setter bitch (A.K.R. 372), by Mr. L. T. Field, Fall River, Mass., to Mr. E. H. Fisher, Jr., New Bedford, Mass.

Dashing Primrose. Black, white and tan English setter bitch, whelped July 20, 1883 (Dashing Monarch—List), by Mr. J. C. Higgins, Delaware City, Del., to Mr. G. R. Nichols, New Haven, Ct.

Joy—Nelly whelps. White, black and tan beagles, one dog and one bitch, whelped Feb. 21, 1884, by Mr. Oscar Green, Somerville, N. J., to Mr. A. K. Fowler, Caledonia, N. Y.

Pete. Red Irish setter dog, whelped March 14, 1884 (Ned Elcho, A.K.R. 984—Bridget O'More, A.K.R. 964), by Major Lovejoy, Bethel, Me., to Mr. Gardner Crane, Brunswick, Me.

Rakewell. Black, white and tan English setter bitch, age not given (Rake—Mellissa), by Mr. Chas. Rule, Cincinnati, O., to Mr. J. A. Oskamp, same place.

Essex. Smooth-coated St. Bernard dog (A.K.R. 931), by the Essex Kennel, Andover, Mass., to the Strawberry Hill Kennel, Leicester, Mass.

True—Daisy whelp. Black, white and tan beagle dog puppy, by Mr. J. S. Cassen, DeKalb, Ill., to Mr. W. J. Percival, Stanton, Mich.

Racer—Maud II. whelp. Black, white and tan beagle bitch puppy, by Mr. W. H. Todd, Vermillion, O., to Mr. W. J. Percival, Stanton, Mich.

Myrtle. Black and white ticked English setter bitch (A.K.R. 114), by the Detroit Kennel Club, Detroit, Mich., to Mr. Will Davidson, Chatham, Ont.

Village Belle. Fox-terrier bitch, 2yrs. 9mos. old (Volo—Beauty), by Mr. John T. Cable, Toronto, Ont., to Mr. Frank C. Wheeler, London, Ont.

Bernardo. Rough-coated St. Bernard dog (A.K.R. 930), by the Essex Kennel, Andover, Mass., to Mr. Geo. N. Gardner, New York.

Lopez. Mastiff dog, whelped Jan. 26, 1884 (Diavolo, A.K.R. 543—Madge, A.K.R. 548), by the Ashmont Kennel, Boston, Mass., to Mr. G. H. Jacobi, Baltimore, Md.

Hero II. Mastiff dog (A.K.R. 545), by Mr. J. W. Burgess, East Orange, N. J., to Dr. J. Frank Perry, Boston, Mass.

Jill. Liver and white pointer bitch, 2yrs. old (Joe—Fan Fan), by Mr. J. N. Lewis, Mahwah, N. J., to Mr. F. R. Hitchcock, New York.

Brant F. Blue belton English setter dog, 17mos. old (Dashing Monarch—Mollie Bawn), by Mr. S. B. Foard, Elkton, Md., to Mr. G Edward Osborn, New Haven, Ct.

Black Tourmie. Black cocker spaniel bitch (A.K.R. 648), by Mr. Winchester Johnson, Boston, Mass., to Mr. I. N. Phelps Stokes, New York.

PRESENTATIONS.

☞ *See instructions at head of this column.*

Duke of Orange. Orange and white pointer dog (A.K.R. 1156), by Mr. Louis B. Wright, New York, to the Westminster Kennel Club.

Tom—Beulah whelp. Lemon and white pointer dog, whelped April 25, 1884, by Hon. John S. Wise, Richmond, Va., to Mr. Jas. G. Wintersmith.

Maude Faust. Lemon and white pointer bitch, whelped March 5, 1884 (champion Faust—Ruby Croxteth), by Mr. R. W. Shaw, Galveston, Tex., to Mr. M. P. Yarborough, Navasota, Tex.

Mattie Croxteth. Liver and white pointer bitch, whelped March 5, 1884 (champion Faust—Ruby Croxteth), by Mr. R. W. Shaw, Galveston, Tex., to Mr. M. P. Yarborough, Navasota, Tex., who has presented her to Dr. A. H. Ketchum, same place.

DEATHS.

☞ *See instructions at head of this column.*

Trim. Red Irish setter dog (A.K.R. 880), owned by Mr. John A. Smethers, Berwick, Pa., April 21, from distemper.

Dashing Primrose. Black, white and tan English setter bitch, whelped July 20, 1883 (Dashing Monarch—List), owned by Mr. G. R. Nichols, New Haven, Ct., from distemper.

Crix. Irish water spaniel dog, whelped Jan. 11, 1884 (Irish Bob—Irish Bess), owned by Major Lovejoy, Bethel, Me.

Othello. Newfoundland dog (A.K.R. 763), owned by Mr. W. H. Tuck, Wilkesbarre, Pa., from distemper.

Obo II.—Hornell Ruby whelp. Black cocker spaniel bitch, whelped Feb. 4, 1884) owned by Mr. Andrew Laidlaw, Woodstock, Ont., from distemper.

Colonel Stubbs—Yolande whelp. Cocker spaniel dog, whelped March 27, 1884, owned by Mr. W. H. Tuck, Wilkesbarre, Pa.

ANOTHER LEGAL DECISION.—Judge Van Vorst and a jury, in Supreme Court, Circuit, were occupied during the entire session yesterday in settling a dispute as to the ownership of a diminutive Skye terrier. The dog disappeared from Mr. Kane's residence at Newport, R. I., and was found in a New York stable. John Thearl, a coachman, said he had purchased the dog of John Darling, another coachman, who said he had brought it from Newport. The question whether Kane or Thearl owned the dog was to be passed upon in that suit yesterday. Mrs. Kane declared that the dog she saw in Thearl's possession was the pet she had lost, and, on cross-examination, was positive she could now recognize it among any number of dogs. Then five Skye terriers, apparently exactly alike, were brought into court, and each in turn was taken before her while on the witness stand, from behind the jury box. She quickly answered as to each of the four first produced, "That is not the dog," but instantly the fifth appeared she said, "That is my dog." Experts testified for the defendant that it was impossible to indentify one Skye terrier, after the lapse of two years, from any other Skye terrier: that the dog in controversy was but four years old, as appeared by its teeth, while the age of the dog Mrs. Kane lost would now be nearly five years, and that this was not, therefore, Mrs. Kane's dog. Darling, of whom Thearl bought the dog, could not be produced, as he had a few days ago suddenly left his employment here and gone to Oregon. It was shown that he was in Newport in the summer of 1881. Mr. Simon Sterne claimed on behalf of the defendant that a dog was not property in the sense that a replevin action could be maintained for its recovery. Judge Van Vorst held that this was no longer so in this State, the common-law rule having been abrogated, and charged the jury that the only question to be determined by them was whether the dog was Mrs. Kane's property at the time Thearl claimed to have bought it. It did not matter whether the dog had strayed or been stolen, and was then sold by the thief or person who took it up. A purchase from such person did not give title as against the owner of the dog. The jury gave a verdict for plaintiff, assessing the value of the dog at $75, and awarding $25 damages in addition.—*N. Y. Sun.*

BOY AND DOG.—James Gessner and his wife called at several police stations yesterday for news of their 14-year old boy Cornelius, who has been missing since May 1. His mother had turned his little black dog out of the house, and Cornelius said he would go with the dog. "I met some boys up town," Mr. Gessner said, "and they told me that they saw him near Twenty-third street and Second avenue last Saturday. He was cuddled up in the doorway of a big building asleep with the dog. They said they tried to get him to come home, but he ran away. Mr. Doherty, my neighbor, saw him upon Second avenue on Monday with the dog. A policeman had a talk with him on Tuesday, and the dog was with him."—*N. Y. Sun.*

ROYALIST.—*Editor Forest and Stream:* Please note in your paper that the Millbrook Kennel's smooth-coated St. Bernard dog Royalist, second prize at the New York show, had only arrived from England the Friday previous, after a fourteen days' passage. He was seasick all the time, and did not eat more than five meals on the voyage. His weight when in good form is 170 pounds. He lost some 35 pounds coming over. He is very big-boned and massive, and will not be "lanky" in a month from now.—W. W. TUCKER (New York, May 15).

THE CHICAGO DOG SHOW.—The second annual bench show to be held at Chicago June 10, 11, 12 and 14 promises to be the largest show ever held in the West. There will be extra champion classes for setters, pointers and spaniels. The show will be held in the armory of Battery D, the same building that was used last year. Entries close May 31. Premium lists may be had by addressing Mr. Charles Lincoln, Box 384, Chicago, Ill.

SPANIEL IMPORTATION.—Mr. Andrew Laidlaw, Woodstock, Ontario, has received the liver and tan cocker spaniel bitch Newton-Abbot Lady from Jacobs's Kennel, Devonshire, England. She is by Bend Or, a noted prize winner, out of the celebrated Ladybird, and should be an acquisition to the spaniel stock of the country. She was bred to Farrow's Obo before being shipped.

FASTEST GREYHOUND PRIZE.—Mr. J. McMaster's Scotty won the special for the fastest greyhound at the New York show. We were unable to obtain the information in season to publish last week.

SPECIAL SENSATION PUPPY PRIZE.—The winner of this prize at the New York show was Mr. F. R. Hitchcock's Prince Hamlet (Sensation—Lass).

BLACK VICTOR.—*Editor Forest and Stream:* Can you or any of your readers give me the pedigree of the cocker spaniel Black Victor?—K.

PUBLISHER'S DEPARTMENT.

The small boy in front of the organ grinder is no more inevitable than that the pen in the penholder you are using should be Esterbrook's.—*Adv.*

The Clinton Manufacturing Co., 32 Vesey street, New York, offer a gold watch to the person sending them the largest number of English dictionary words contained in "Bayberry Glycerine Soap" (proper and geographical names excluded). The list will close on July 4, 1884.—*Adv.*

BOOK OF THE DOG.—We have received from the Philadelphia Kennels, 237 South Eighth street, a copy of their Dog Buyers' Guide. It contains a finely executed colored frontispiece; well drawn engravings of nearly every breed of dog, and all kinds of dog furnishing goods. We should judge that the book cost to produce a great deal more than the price asked—10 cents—and would advise all our readers who are interested in dogs to send for the book.—*Adv.*

Rifle and Tray Shooting.

FIXTURES.

May 20 to 23.—Knoxville Gun Club Second Annual Tournament, Knoxville, Tenn. C. C. Hebbard, Secretary.

May 26 to 31.—First International Clay-Pigeon Tournament, at Chicago, Ill. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

June 2 to 9.—Annual Tournament Louisville Sportsmen's Association, Louisville, Ky. J. O. Barbour, Secretary, 157 Third avenue, Louisville.

RIFLES OF TO-DAY.

THE WINCHESTER REPEATING ARM.

THIS rifle is one of the best known of the many repeating arms which have followed each other into public attention within the past twenty years. It has lived down much opposition, and is a favorite with many expert hunters in every section of the world.

The present form of Winchester gun is to be credited to several different inventors. In 1854 the Messrs. Horace Smith and D. S. Wesson (of the firm of Smith & Wesson, pistol makers) invented the arrangement of finger lever, links and breech bolt now used in the Winchester gun. These they made use of in what was known at that time as the "Volcanic Repeating Pistol." In this form it came into possession of the Volcanic Arms Company, a corporation organized for its manufacture at New Haven, of which Mr. O. F. Winchester was a very large stockholder. This concern failed immediately, the pistol proving to be a very imperfect invention, defective in the form of cartridge which it used, and in other respects, more by reason of the state of the art at that time than through fault in design. The assets of the bankrupt company were purchased by Mr. O. F. Winchester and a new company was organized for the manufacture of the same arm, improved by Mr. B. Tyler Henry, of New Haven, and the new gun was known as the Henry rifle. Mr. Henry's improvement permitted the use of a metallic cartridge, and added to the gun the form of extractor and arrangement of firing pin used in the present gun. The Henry gun was successfully manufactured for several years, during the war and afterward. Several Western regiments were armed with it and it speedily acquired reputation. As the demand increased, the manufacture of the gun, which had been carried on at New Haven, was transferred to Bridgeport, Conn.

The defects which had been found to exist in the Henry gun were remedied chiefly by the improvement of Mr. Nelson King, at that time (1866) in the employ of the company, which had again changed its name and become the Winchester Repeating Arms Co. Mr. King's improvement consisting in the side loading arrangement, which has, since the expiration of his patent, been adopted in all repeating arms which have the magazine under the barrel. As the gun had accumulated many improvements, so that its origin could be attributed to no one individual, it gradually lost its name and acquired to itself the name of the company manufacturing it, becoming known as the Winchester gun. In 1870 its place of manufacture was changed from Bridgeport, Conn., to New Haven, in the same State, where it has since been made. About four hundred thousand of all kinds have been made and sold. It is now offered in many different forms. The model of '66 is a rim-fire gun. The model of '73 and '76 are center-fire guns. The model of '73 is made for 32, .38 and .44 caliber cartridges. A .22-caliber of this model will soon be put upon the market. The model of '76 is made to carry two different cartridges of .45-caliber, one of 75 grains and one of 60 grains, and a .50-caliber cartridge of 95 grams of powder.

The Winchester gun is universally used, the foreign demand being about as large as the domestic. About one hundred thousand guns are in the hands of the Turkish army, and the celebrated "leaden rain" at Plevna came from them. About twenty-five thousand are in the hands of the Chilian troops and were used against the Peruvians in the late war. The Northwestern mounted police are armed in large part with carbines, model '76, which have been bought from time to time in small lots during the last few years.

No attempt has been made to advertise the Winchester gun at targets or upon the different ranges of the country. The sale and reputation of the gun has made this, in the opinion of its makers, entirely unnecessary. The following score of the rapidity and accuracy match at Creedmoor of 1876 shows what the Winchester has accomplished on the national range.

The match was for the Schuyler, Hartley & Graham medal, which, according to the conditions, was open to all comers. Distance 200yds. Position, standing. Any rifle. Magazine guns to be used as single-loaders only. Two sighting shots, to be fired consecutively. Competitors may fire as many shots as possible within half a minute, and to have two chances; the aggregate score made in both rounds to be counted. Entrance fee, 50 cents; half the entrance money to be divided among the three highest scores, as follows: The first taking the badge and half the money, the second two-sixths, and the third one-sixth. No restriction as to the manner of taking cartridges. Badge to be won three times (not necessarily consecutively), before becoming the personal property of the winner. Competitors will stand at firing point with rifle loaded and cocked, butt below elbow, until the command "Fire." The scorer will command: "Are you ready? Fire!" and invert a half-minute sand glass; at the end of thirty seconds he will call "Time." A bullseye will be deducted from the score for every shot fired after "time" is called.

WINNERS.

Date—1876.	Number of Competitors.	Name.	Rifle.	Score.
1—July 22.....	19	Wm. Robertson....	W.-B.	37
2—August 19.....	6	Geo. W. Wingate...	Spr.	34
3—September 16...	10	J. E. Stetson.....	Win.	52
4—October 21.....	5	J. E. Stetson	Win.	73
5—November 18....	6	J. E. Stetson.....	Win.	63

Finally won by Capt. J. E. Stetson, who entered only on the last three days, using a Winchester rifle as a single breechloader only, in competition with Ward-Burton, Remington, Springfield, Sharps and Peabody rifles.

The cuts show the general features of the arm in Fig. 1, while in Figs. 2 and 3 may be seen the interior workings of the breech mechanism.

The magazine is charged while the system is closed, in the position shown in Fig. 2, by pressing down the spring cover, found on the right hand side of the receiver, with the point of the cartridge, and inserting the latter through the opening thus made. This last is closed by the spring cover as soon as the cartridge is inserted. The operation is repeated until the magazine is filled.

When it is desired to load, the finger-lever, B, is thrown forward to the position shown in Fig. 3, and then returned to that shown in Fig. 2. This motion throws out the shell or cartridge in the chamber, transfers a cartridge from the magazine to the chamber, cocks the hammer, and leaves the arm ready to fire by pulling the trigger.

This motion may be executed while the gun is at the hip or at the shoulder, without taking the eye from the sights, thus enabling the firer to discharge two or more shots without removing the gun from the shoulder or losing sight of the object which it is desired to hit.

The model of 1866, now regarded in many quarters as little better than a pop gun, was first introduced in 1866 to supercede the Henry rifle, which had from 1860 been manufactured by the New Haven Arms Company, which was succeeded in 1866 by the Winchester Repeating Arms Company. It remains, in the mechanism for loading and firing, precisely the same as the Henry, the improvements consists in an entire change in the magazine, and the arrangement for filling it. This gun uses a rim-fire metallic cartridge, .44-caliber, with 28 grains of powder and 200 grains of lead. The receiver, or lock frame is of gun metal; the other parts, except the stock, of steel and wrought iron, of the best quality; no malleable iron being used. Up to the limit of range that is possible with the small amount of powder and ball used, it to-day remains unexcelled as a weapon or hunting piece; and, contrary to the expectation of the manufacturers since the introduction of more powerful arms, it is still in active demand in many markets, and about 160,000 are now in use.

In the model of 1873, the first and most important improvement consists in adapting it to the use of a longer and center-fire cartridge, holding a charge of 40 grains of powder instead of 28 as in the model of 1866, retaining the same caliber, .44, and the same weight of ball, viz., 200 grains. The effect of this change is to increase the initial velocity of the arm from about 1,125 to 1,325 feet per second, reducing or flattening the trajectory, and increasing the power and accuracy of the arm, and giving it a penetration of about four inches in pine board at 1,000yds. The cartridges can also be reloaded. A second improvement in the sporting arm is the addition of a set, or hair-trigger. This differs from the ordinary hair trigger, in that it can be used precisely as if this trigger were not on the gun, if, as in hunting, it is not wanted. For fine shooting, as in target practice; it is made available, thus: After setting the hammer at full cock, the trigger should be pressed forward slightly, and it is thus set. If it is found too delicate, or not delicate enough, it can be adjusted to suit the wishes by turning a set screw in or out. This screw will be found by the side of the trigger.

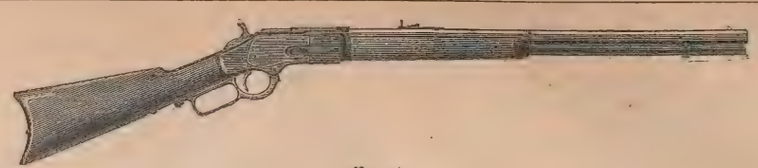


FIG. 1.

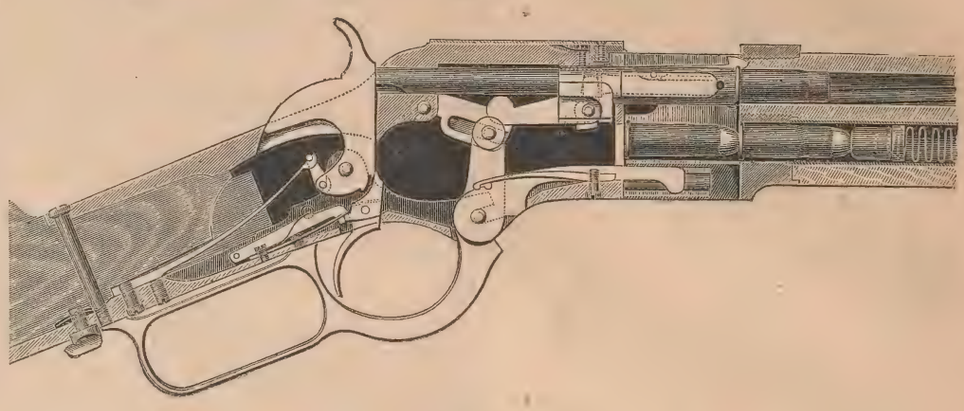


FIG. 2.

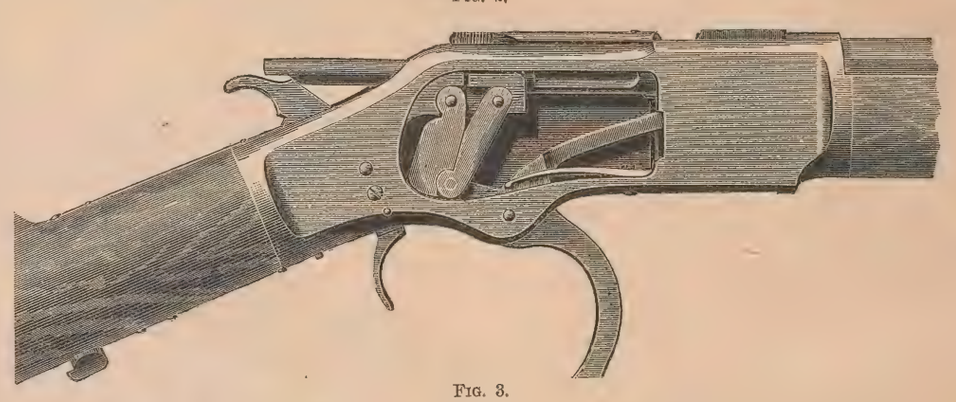


FIG. 3.

A third improvement consists in a sliding lid, which covers the opening in which the carrier block moves up and down. This lid, by the action of the finger lever, opens automatically when the gun is loaded, and should always remain open until closed by hand after firing. The object of this lid is to keep dirt and snow out of the lock.

A fourth improvement consists in the substitution of iron, in place of gun-metal or brass, in the manufacture of the lock-frame, butt plate, and other parts, thus increasing the strength of the arm and reducing its weight. The gun-metal is, however, retained in the carrier-block and the lid in the butt-plate, opening into the receptacle for the cleaning-rod, the object being to avoid the liability to rust, so as to impede the movement of these parts, which would exist if made of iron.

A fifth improvement consists in a device which, it is, claimed, absolutely prevents accidental or premature explosions. In most breech-loading firearms the firing pin, after the explosion of a cartridge, depends upon a spiral spring to be thrown back even with the face of the breechclosing bolt. If this spring is very strong, so as to insure its operation, it tends to break the force of the blow of the hammer; but if not strong enough for the purpose, it soon gets so foul as not to work; and the firing-pin then projects, and if the breech is closed with a quick motion, the cartridge is exploded prematurely. To obviate this, no spring is used; but the firing-pin is carried back by a positive motion retractor.

There is made also of this model a .38-cal. to meet the demand for a small-bore repeater. It employs a bottle-neck shell holding 40grs. powder and 180 of lead, and is accurate up to 300yds., and for glass ball shooters is a convenient arm. To meet a demand for a repeater of still smaller caliber, the .32-cal. arm was made, also carrying a center-fire cartridge, having 20grs of powder behind 115 of lead. Like the preceding arm, it is made with full and half length magazine.

The success attending the sale and use of model 1873, and the constant calls from many sources, and particularly from the regions in which the grizzly bear and other large game are found, as well as from the plains where the absence of cover and the shyness of the game require the hunter to make his shots at long range, made it desirable for the company to build a still more powerful gun, and the model of 1876 was introduced.

Retaining all essential mechanical elements of the former model, and adding such improvements as seemed possible, the result has been a gun carrying a central-fire cartridge, capable of reloading, caliber .45 with 75 grains of powder and 350 grains of lead, being nearly double the charge used in model 1873, and giving an initial velocity of 1,450 feet. The materials used in the construction of the gun are the same in kind and quality as the model 1873. Both set and plain trigger rifles are made; and all guns with plain trigger are provided with an attachment which renders premature explosion of the cartridge, even from carelessness, absolutely impossible. In both infantry musket and carbine, the magazine is covered by the forearm its entire length. Sporting rifles may be had with pistol grip stocks, vernier and wind gauge sights, if ordered.

The .45-60-300 form of the model of 1873 has been put on the market to meet the wants of those who desire an arm using a lighter charge than 75 grains of powder and 350 grains of lead, which is the amount used in the regular model 1876. It is the same in every particular as that arm, and differs only from it in that it is chambered to use a .45-caliber straight shell, with 60 grains of powder and 300 grains of lead.

The express rifle is a modification of the model 1876, and differs from it only in caliber, .50, and in the cartridge to which it is adapted. This last contains 95 grains of powder, and a hollow-pointed bullet weighing 300 grains. The bullet contains no explosive material. The inserted copper tube is simply put in to stiffen the bullet. It contains no powder or explosive of any kind.

Cartridges for this model are loaded with hollow-pointed, solid, or split-pointed bullets, as may be desired. All these bullets weigh 300 grains each, and their shooting qualities are about equal.

The bullet having a high initial velocity, a very flat trajectory is obtained; and no change in sighting is required up to 150yds., thus enabling the hunter to avoid missing the game through error in calculating distances, while the recoil is not much greater than that of a 12-gauge shotgun using ordinary charges. This model, as made up for the English market with a 22in. barrel and with full length magazine, weighs but 8¼ pounds.

The rifle is considered an easy one to keep in good repair. After using the rifle, before putting it away, it should always be well cleaned and oiled, inside and out; for this purpose a cleaning-rod will be found in the stock of the rifle, and is got out by opening a lid in the butt-plate.

To take out the barrel.—Take out the two tip-screws, the magazine ring-pin, pull out the magazine tube, and take off the fore-arm; then, before unscrewing the barrel from the frame, the breech-pin must be thrown back by moving the finger-lever forward; otherwise the attempt to unscrew it will break the spring-catch that withdraws the cartridge, and ruin the breech-pin. The only spring in the gun that is liable to lose its strength from long use is the main-spring, which will be discovered by the gun missing fire. Should this occur, it may be strengthened by turning up the strain screw, which will be found directly under it, on the under side of the frame.

To remove the breech-pin in the model of 1866.—After removing the side plates and links the spring-catch must next be taken out, which is done by moving the breech-pin back so that the pin that holds the spring-catch will be in a line with a corresponding hole through the frame; then with a small steel wire punch out the pin, then move the breech-pin forward and take out the spring-catch; the piston can then be unscrewed from the breech with plyers or hand vise, first setting the hammer at full cock, or taking it out.

To remove the breech-pin in the models of 1873 and 1876.—After removing the side plates and links, take out the link-pin and retractor; the piston can then be pulled out with the fingers, first removing the hammer or setting it at full cock.

The price list of the Winchester arms varies with the different models, and care should be taken in ordering to specify the model as well as the caliber if any special form of arm is desired. The 1867 model sporting rifle costs $22 with 24in. round barrel, carrying 15 shots and weighing 9 pounds. Octagon barrels cost $1 more. Muskets for the same cost $22, and carbines $20. The 1873 model sporting rifle carries 15 shots, .44-cal., and costs from $25 to $27 according to the barrel. Muskets and carbines cost respectively $26 and $24. This model is chambered for the .44-40-200 cartridge, for the .38-40-180 and for the .32-20-115 cartridge. The model of 1876 is a much heavier rifle, and costs from $27 to $29, having a 12 shot magazine and a 28in. barrel. The musket with a 32in. barrel costs $27, and the carbine 22in. long in the barrel costs $25.

The weapons of this class call for a .45-cal. bullet and the cartridge made for it is a .45-75-350. The largest rifle of the company is the express of .50-cal. The cost is from $35 to $38 according to shape of barrel, all being 26in. long or under. The target rifle, which belongs to the 1876 model class, costs with pistol grip $45, and with vernier and wind gauge sights in addition $63.

AIR RESISTANCE.

Editor Forest and Stream:

Before answering categorically the article on "Air Resistance," by "P.," contained in your issue of May 1, I wish to call attention to his fifth paragraph, commencing "I take it for granted, etc.

He has made a mistake in taking it for granted. The facts being that I have been a reader of FOREST AND STREAM for but little over a year, and that the article I criticised last fall was the first of his that I had ever seen. Thus the implied charge of plagiarism falls to the ground. A careful perusal of his article and of the authorities quoted (not "P.'s" quotations, for he has selected these to suit his end) will convince any unbiased reader.

First—That in making my criticism I have not fallen into any error or discovered any "mare's nest," but that my conclusions were absolutely correct. Compare my article in FOREST AND STREAM, Aug. 9, with "Motion of Projectiles," also with section four of the article under discussion.

Second—That "P." was wrong in saying that "Taking the element of velocity into account, the air resistance proved from these experiments to be greatest between velocities from 1,100 f.s. to 1,350 f.s."

Third—That he knows that he was wrong. See his fourth paragraph in which he says, "But there has been nothing written by me that in the remotest manner can bear the construction that a ball for instance at 1,000 f.s. has greater resistance in pounds, avoirdupois, than the same ball at 200 f.s., for it is very evident that at the latter velocity the actual resistance in pounds is eight times greater than at the former velocity." In other words the resistance varies as the cube of the velocity. (This is not strictly correct, as the variable coefficient K has been omitted, taking this into account the ratio becomes 1 to 7.34 instead of 1 to 8 as above).

Referring to the above quotation I claim that what was written by him last summer could bear the construction he now wishes to disown and no other. The fact of the resistance being expressed in pounds, avoirdupois, makes no difference whatever. If it had been expressed in kilogrammes or in any other unit the principle involved remains the same. Attention is also called to the fact that his fourth paragraph flatly contradicts his third.

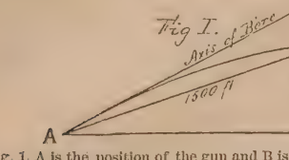
Fourth—That he tries to escape from his position by a quibble utterly unworthy of him, when he attempts to confound "resistance of the air" with the "co-efficient of air resistance"—K.

Now, what is this K to which "P." seeks to give undue prominence? It is simply a variable empirical co-efficient, representing no general law, and is only introduced to effect an agreement between the results of experiments and the so called "cubic law of resistance." The same agreement might have been effected, less conveniently perhaps, by employing a variable exponent of V instead of the cube in place of this variable co-efficient.

The next paragraph that calls for an answer is the one in which he calls my attention to another error. My statement that the trajectory would be 2in. higher (theoretically) than for a level range, was inferred from a calculation contained in the report of Chief of Ord-

nance, 1882, pp. 455-456, where it is deduced that a Springfield rifle being fired at a range of 500yds. with the normal elevation, but at an object 100ft. higher than the gun, the bullet will strike 2 87ft. below the point aimed at. I did not check this calculation, but took it on trust. This, I am willing to admit, was a wrong course to pursue, as we should never accept as true any proposition that we can verify for ourselves.

The following considerations would seem to show that the calculation above referred to is wrong:



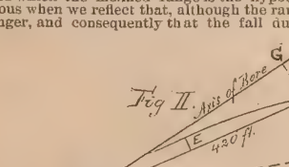
In Fig. 1, A is the position of the gun and B is the point aimed at. The normal angle of elevation for a level range of 50 yds. or 1,500ft. is given at 1° 11′. Thus the fall in feet due to gravity is evidently equal to 1,500 × tan. 1° 11′, or 30.984ft.

In the case under consideration the axis of the bore makes an angle of 5° 00′ 2″ with the horizontal, and if gravity did not act the bullet would strike at D, at an elevation above C=A C×tan. 5° 00′ 21″= 131.095ft. But we have already seen that under the influence of gravity the bullet will fall 30.984ft. Thus it will strike the vertical line C D at a point above C=131 09 −30.984 or 100.111ft. or 0 111ft above B instead of 2.87ft. below it, as given in the text. That it strikes above is due to the fact that A C is some 4ft short of the assumed 500yd. range and also that the angle of elevation probably is slightly greater than 1° 11′. In stating that the trajectory would be higher, I referred to the point B and not C, as "P." seems to suppose. See his sketch.

Though 2″ is considerably in excess of the truth, yet the curve will always be higher at mid range than for a level range, as will be shown further on, and my error was one of amount rather than of principle.

Figs. 2 and 3 embody the substance of "P.'s" remarks on mountain shooting.

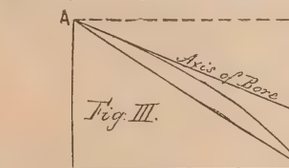
It will be seen that he is practically correct in stating that the angle of elevation in either case is the same as that corresponding to a level range of which the inclined range is the hypothenuse. The reason is obvious when we reflect that, although the range and time of flight are longer, and consequently that the fall due to gravity (B D) is



C B = 293.937ft. TRAJ. = 293.934ft.

greater, only the component of this force, G B (Fig 2), acting at right angles to the axis of the bore, produces deflection.

The other component of gravity acting in the direction of the axis



C B = 293.937ft. TRAJ. = 293.932ft.

produces either retardation (Fig. 2) or acceleration (Fig. 3), according as it acts in opposition to the motion or with it. In Fig. 2 let

R = the inclined range A B.
r = the corresponding horizontal range A C.
H = space described by gravity corresponding to R or B D.
h = space described by gravity corresponding to r or K C.
A = angle made by inclined range with the horizontal.
B = angle of elevation.

Then the deviating component of gravity G B = H×cos (A+B) and r = R×cos A.

From these relations and the equation to the trajectory, it may be proved that the triangle G A B is similar to K A C, or, in other words, that the angle of elevation for the inclined range is equal to that for the corresponding level range.

This is only approximately correct, as it is based on the supposition that cos (A+B)=cos A cos B. This will obtain very nearly when A is large and B is small, or when B is large and A is small, or when both A and B are small. If A and B are both large the above will not apply. This reasoning is equally applicable to the depressed range Fig. 3, except that the difference of the angles A and B must be employed instead of their sum.

The trajectories shown in the figures are calculated for a .40-cal. gun, shooting a 287-grain bullet with an initial velocity of 1,425 f.s.

At the elevated range the bullet strikes .038in. below the point aimed at, and at the depressed range .06in. above it. This is due to the retarding and accelerating components of gravity mentioned above. Another point of interest is that, though the bullet strikes very near the point aimed at, it will make a much higher curve in getting there than for a level range.

Thus in Fig. 2, the height E at mid range, measured at right angles to the range is 3.792 inches, while the height F for the level range is only 2.688 inches or 1.104 inches lower If the range were extended to 200 yards, the difference would be about 5 inches. At mid range though, the bullet would still strike within a fraction of an inch of the place aimed at. These results are of general application and are nearly true for any angle and range, provided that a practical equality exists between the cosine of the sum of the angles and the product of their cosines. (If the range is depressed, the difference of the angles is to be taken. See Fig. 3).

I have gone into this subject of inclined ranges at considerable length as the question is one of considerable importance, and one that I believe is not very generally understood. The algebraic computations have been omitted, as they were hardly within the scope of this article. Any one, however, who wishes to check them, may do so by referring to works on the subject. "Rational and Practical Ballistics," Captain Siacci, seems as satisfactory as any.

As to Maj. Merrill's argument that the muzzloader would give a flatter trajectory than the breechloader. He stated his case clearly enough, and I do not think that his position has been misunderstood as might be inferred from what "P." says on the subject. The Major said in substance: First—That the muzzleloader would take more and quicker powder for equal bores. Second—It would take a lighter bullet and the lightest of any for equal bores. To which I replied that the breechloader will take as much powder as can be consumed in the length of the barrel and as quick powder as is desirable having the best results in view. Since writing the above the breechloader has been adapted to greatly increased charges and the only practical limit is that of the endurance of the man behind the gun. As to the bullet, the breechloader will shoot acurately the lightest bullet conforming to the flattest trajectory at 200yds., the range under discussion, and there is no practical reason why it should not shoot a lighter one if it were desirable. That a heavier bullet has been generally adopted is due to the fact that we are not willing to sacrifice accuracy and energy to a flat trajectory. See what has been written by myself and others on this point.

The comparative merits of the two systems as to accuracy may be considered as settled. But there is one point of superiority in the breechloader that has been barely touched on in your columns. Capt. Mackinlay's "Text Book of Gunnery" states this so clearly that I need hardly apologize for quoting from him here. After showing, from Capt. Noble, the great difference in energy imparted to a projectile by varying ratios of expansion, obtained by dividing the volume of the bore by the space occupied by the powder charge, he says: "The rifled muzzleloading guns which replaced them [the early form of R. B. L.] were less accurate, chiefly because some gunners ram home with more force than others, and, as the cartridge is slightly compressible, different charges occupied different spaces, according to the strength of the gunner who happened to be ramming home; the velocities of the projectiles, and consequently the ranges, varied, and the accuracy was impaired."

That this cause of inaccuracy is liable to occur in all muzzleloaders seems to me self-evident, and it is equally evident that it need never occur in a breechloader with ordinary care. JAMES DUANE.

NEW YORK, May 11, 1884.

RANGE AND GALLERY.

"FRELINGHUYSENS AT NEW YORK."—*Editor Forest and Stream:* Under the head of the "Frelinghuysen's at New York," your issue of the 15th inst. contains a communication from Edward O. Chase, taking exception to the manner of keeping the scores in the late tournament at the Grand Central Rifle Gallery. That some errors should necessarily occur in a match when there were some fifteen hundred targets shot could hardly be avoided. In this class must be considered the omitting from the score record the names of Messrs. Neil and Sneller, whose targets were inadvertently tied together by the attendants and put among the inspected targets without in any way coming under the notice of the umpires. In the case of Mr. Weigman the communication is positively unjust. This gentleman's score got out originally through an oversight. The number of shots on the targets were not counted, and on a revision it was found that only six could be found. The targets were submitted to several riflemen thoroughly conversant with gallery shooting, namely, Henry Oehl, P. G. Fanning, Chas. Overbaugh, etc., and by all pronounced not to have the requisite number of shots, and as a consequence were rejected. That there was no "connivance" in the award is sufficiently apparent when it is considered that placing the name of Mr. Weigman as a prize winner would only result in dropping that of Mr. Sneller, also a Newark rifleman. From the committee of the N. Y. Rifle Club.—J. H. BROWN, Capt.

"W. M. F." IS NOT FARROW.—Grand Haven, Mich., May 3, 1884. —*Editor Forest and Stream:* Mr. Duane probably thinks as scores of others do, that I am the author of contributions appearing in FOREST AND STREAM signed W. M. F., on rifle matters. Would it be asking too much to let him know to the contrary?—W. MILTON FARROW.

MANCHESTER, N. H., May 13.—Regular shoot of the Manchester Rifle Association, Creedmoor practice match:

J Barnett	26	29	29—84
M Wadleigh	26	20	—55
E Partridge	25	26	—51
C Norman	20	25	—45
A S Brown	28		—28
George Stevens	24		—24

Creedmoor Prize Match.

G A Leighton	4455545445—45	C M Henry	4544454444—42
Re-entry	4545455445—45	F J Drake	4444454444—41
C D Palmer	5555544444—45	Re-entry	4343555445—42
John Lawrence	4454554444—43	E C Paul	5545553444—42
Re-entry	4444555355—44	Re entry	5344553454—42
Frank Bennett	4534545544—43	J Hodge	4555343444—41
Re-entry	4555543544—44	Re-entry	4445444414—41
A B Dodge	4545444444—42	A S Brown	4244543443—37
Re-entry	4445544445—43		

Bixby Prize Match.

F J Drake	29	30	31—90
A B Dodge	29	33	—62
A S Brown	28		—28

The annual meeting will be held May 28–30.

BOSTON, May 17.—Not a first-class day for rifle shooting, but still the gentlemen at Walnut Hill had quite a pleasant time. Carrying out the innovation of last week, a team match was shot. This was a close fight, and resulted in a victory for Mr. Charles's team by one point. Following is the result of the team match:

W. Charles' Team.		J. B. Fellows' Team.	
W. Charles	4 4 5 5 5 5 5—43	L. F. Richardson	5 4 5 5 5 4 5—33
W. Fisher	5 4 4 5 5 5 5—32	C. B. Edwards	4 4 4 5 5 5 4—31
E. Adams	4 5 4 4 4 5 3—29	J. B. Fellows	5 4 5 4 5 4 4—31
W. C. Eddy	4 4 5 4 3 4 4—28	P. B. Smith	3 4 3 5 4 4 3—26
	122		121

In addition to the team match, the regular matches were on, and filled quite well. Following are the scores:

Creedmoor Practice Match.		Creedmoor Prize Match.	
C B Edwards	5555555454—48	E F Richardson	4555555455—48
J E Darmoddy	4445544354—42	B D Curtis	5555545543—46
E Edgar	5543834444—39	W Fisher	5545444545—45
H J Foster	4434453454—39	H Cushing	4554554445—45
P B Smith	3443444543—38	J P Bates	5435445544—43
S H Sturgis	4434544423—36	C J Darrington	4444444444—40
C C Cates	4444043445—36		

Rest Match.

H J Foster	10	9	10	8	10	9	10	8	7	8—89
C L Cates	9	9	9	9	8	7	9	10	9	9—88
H Cushing	6	10	9	10	6	10	9	8	7	9—84
B C Billings	3	5	9	8	8	8	6	8	9	10—74
R Reed	8	9	6	8	6	5	8	6	6	10—72

THOMASTON, Conn., May 19.—At the shoot of the Empire Rifle Club on Saturday last, E. Bennett won the badge with a score of 105 out of a possible 120. Following are the other scores: W. Dunbar 104, G. Canfield 98, A. Fox 94, C. F. Williams 92, F. Carr 85, G. Lemmon 85, G. Gilbert 83, C. Alling 77.

MANCHESTER, Mass.—Following is the programme for the spring meeting of the Manchester Rifle Association for May 28, 29 and 30: 200yds. match, Creedmoor target, open to all comers; position, standing; rifle, any within the rules; rounds, 7; entries unlimited; entry fee, $1: re-entries, 25 cents each. Winners decided by the aggregate of the best three scores counted as one continuous score.

BOSTON, Mass.—The directors of the Massachusetts Rifle Association, have decided on May 29, 30, and 31, for the spring meeting at Walnut Hill, and have issued the following programme:

First—200yd. match, Creedmoor target, open to all comers, distance 200yds.; position, standing; rifle, any within the rules; rounds, seven; entries, unlimited; entry fee, $1; re-entries, 50 cents each. Winners to be decided by the aggregate of the three best scores counted as one continuous score, the winners to select prizes in order of their scores.

Second—200yd. match, decimal target; conditions same as in match No. 1.

Third—600yd. carton match; conditions as in match 1, except as to position, which may be any within the rules.

Liberal prizes are offered in each match.

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

CHICAGO TOURNAMENT.

THE first international clay pigeon tournament will begin at Chicago next Monday, May 26. For list of entered clubs see last issue. The Chicago Musical Festival will be held on same date, and local excursion tickets will be sold on railroads. The address of the manager, Mr. J. E. Bloom, is Palmer House, Chicago.

CAPTAIN STUBBS, who is pretty confident that he can whip all creation with the shotgun, is out with the following challenges, preparatory to his exhibition tour through the country:

"Challenge No. 1—I will shoot a match against any man (Dr. W. F. Carver preferred), from standing positions and from horseback in full run, with shotgun, rifle and pistol, at still and flying objects, in any match or consecutive number of matches, and under any equal terms and conditions that may be named, for the championship title and $2,500 to $5,000 a side and gate money. (Signed) CAPTAIN E. E. STUBBS, Champion Endurance Shot of the World (Gainesville, Ark., May 15, 1884). Challenge No. 2—As a test of endurance and skill, I will shoot a match against any man (Dr. W. F. Carver preferred) with rifle and solid bullets, and with shotgun, at 1,000 composition or clay balls each, thrown in the air by two assistants standing 10 feet apart, for the championship title and $2,500 to $5,000 a side, the contestant making shortest time and greatest number of hits to be declared the winner of stakes and owner of gate money. (Signed) CAPTAIN E. E. STUBBS, Champion Endurance Shot of the World (Gainesville, Ark., May 15, 1884). Terms and conditions—Notified of the acceptance of either of the above challenges, or both of them, I will deposit within ten days from date of such notification, with the *Spirit of the Times*, $1,000 as forfeit money (the party accepting to do likewise)—the stake or challenge money to be deposited in the same hands ten days before the date fixed for the match or matches (the party failing to comply with this condition to forfeit the deposit already mad), said match or matches to be shot in New York within six months from date, in fine weather only, and according to the rules governing such contests. (Signed) CAPTAIN E. E. STUBBS, Champion Combination Wing Shot of the World (Gainesville, Ark., May 15, 1884)."

NEW HAVEN, May 14.—The State clay-pigeon medal, which was held by the New Haven Gun Club, and the individual State medal, held by J. F. Ives, were shot for on the grounds of the New Haven Club to-day. The day was fine with the exception of a strong wind, which made the shooting difficult and reduced the scores of the different clubs. Before the match a sweepstake was shoot, with 35 entries, which resulted in Langdon, of the New Haven Club, and J. F. Ives, of the Parker Gun Club, dividing first, Talcot took second, E. A. Folsom third, and E. Boon fourth. Eleven teams from the different clubs shot for the State medal, with the following result, 4 men each team, 100 pigeons: New Haven 61, Meriden 66, Winsted 58, Winsted No. 2, 53, Derby 53, Bridgeport 51, Wallingford 56, Milford 51, Milford No. 2, 47, New Haven No. 2, 57, Meriden No. 2, 41. Over 30 men shot for the individual State medal, at 50 pigeons, and it was won by Tousey, of Bridgeport, with a score of 47; J. F. Ives, 40; the others withdrew. Next State shoot in Meriden, June 11.

MINNEAPOLIS GUN CLUB.—At their annual meeting held Monday, April 21, the following officers were elected: L. Harrison, President; Frank Gruglas, Vice-President; Chas. A. Russell, Secretary and Treasurer. Board of Directors: L. Harrison, F. W. Caulkins, James Marshall.—L. H.

ACME ROD AND GUN CLUB, of Brooklyn, N. Y., Dexter's Park, Cypress Hills, L. I., Tuesday, May 13. Glass balls, revolving trap, for a gold badge.

Keppler	1111111011111111111—19
Schot ler	1101111111111011111—18
Knebel, Jr.	1111111101110110101—16
Short	1001111101011111011—16
Munck	0111111101110111100—15
Stark	0101101111100011111 —14
Field	1010010011111111101—14
Boss	0010111101100100111—12
Schmidt	0001001111100001111—11
Buckman	1011101001000100111 —11
Pope	0101010101010010000— 8
Bitz	1000100000000100111 — 6
Sietz	0000000001001001000— 3

PITTSBURGH, May 13.—The annual shoot of the Allegheny Sportsmen's Association was held at Idlewood, on the Panhandle Railroad, to-day. The weather was good, and notwithstanding a strong wind was blowing from the west, some remarkable shooting was done. Twelve members of the club took part in the pigeon match for the Hague silver cup and the prize offered by the club. The conditions were 26yds. rise, plunge traps, 5yds. apart and 80yds. boundary, both barrels. Mr. Heilwig was chosen referee, and Messrs. Grogan and Sharp judges. The match was very exciting. Many excellent shots were made, several birds being killed at 70yds.

Mr. C. G. Donnell made a clean score, killing 15 birds in 21 shots. Messrs. G. E. Painter and R. S. Hartrick made a score of 14, one bird of the former dropping dead ten feet out of bounds. C. G. Donnell 15, G. E. Painter 14, R. S. D. Hartrick 14, C. B. Lovatt 13, W. H. Bown S. S. D. Thompson 11, C. M. Hostetter 11, John Lovatt 13, C. H. Voigt, M. D. 10, W. S. Bell 8, E. Gregg 9.

MONTGOMERY, Ala., May 14.—The Montgomery Shooting Club's annual election and dinner at Jackson's Lake to-day was a recherche affair and largely attended. They elected Col. W. S. Reese, President; John L. Cobb, Vice-President; Henry C. Davidson, Secretary and Treasurer; C. E. Wallin, H. D. Long and W. S. Hutchins, Directors. Their model secretary was presented by the club in very appropriate remarks with a handsomely engraved mammoth silver pitcher, inscribed "Montgomery Shooting Club to Henry C. Davidson, May 14, 1884."

WASHINGTON, D. C., May 14.—The two concluding matches for positions on the team which will represent the Capital City Gun Club in the international tournament at Chicago, commencing May 26, were shot yesterday afternoon. Conditions: Ten double and ten single clay-pigeons per man, from five traps, set three yards apart, 15yds. rise for double and 18yds for single birds.

First Match.

Mills	11	11	11	11	1111111111—20
Wagner	11	11	11	10	01 1101111111—17
Smith	10	01	11	11	11 0010101111—14
Bailey	01	00	01	11	11 1101101011—13
McKelden	10	00	11	10	01 1111110011—13
McLeod	01	10	11	10	10 1110001111—13
Jones	00	11	11	10	10 0110101111—13
Magruder	11	00	11	10	10 1010001001—11
Laird	00	10	00	01	11 1010111001—10

Second Match.

Mills	11	10	11	11	10 1111011111—17
Bailey	01	11	10	10	11 1110111111—16
McKelden	11	01	11	11	11 1111010110—16
LeLeod	11	10	11	01	01 1011111111—16
Jones	10	00	11	10	11 1111111 0—15
Smith	01	01	11	01	11 0101111110—14
Wagner	01	11	10	10	11 1100011001—12
Laird	11	01	11	10	00 0111010011—12
Magruder	10	10	10	10	10 1101010001—10

Re-entries on account of matches missed:

Wagner	10	10	11	10	10 1111110111—15
Laird	11	11	11	01	00 1111011011—19

The final result of the eight matches gives the contestants standing in the following order, each selecting his best six scores, out of a possible 120: E. L. Mills 105, William Wagner 93, William B. McKelden 90, James Smith 85, E. M. McLeod 84, James Bailey 83, R. L. Jones 80, C. H. Laird 72. The shooting has been done under most unfavorable conditions, many days being dark and cloudy, and it is expected that with fair conditions, the team selected, which will be the highest five on the list, will do much better shooting at Chicago.

ANDROSCOGGINS vs. RIVERSIDES.—The second challenge shoot for the Ligowsky championship medal between the Androscoggins, of Lewiston, and the Riversides, of Topsham, came off at the Androscoggin's grounds, in Auburn, May 16, Riversides being the challenging club. A heavy rain prevailed during the entire shoot. Conditions—5 traps, 10 singles, 18yds. rise; 5 pairs, 15yds. rise. The following are the scores. (Figure 3 double shotgun second barrel):

Androscoggins.						
Nason	1011110111	10	00	00	11	11—12
Donovan	1111211111	10	11	01	01	11—16½
Curtis	0111111110	00	11	10	00	10—12
Fickett	0200201101	10	00	01	10	11— 9
Shaw	1111111112	01	11	11	11	11—18½—69
Riversides.						
Goud, A Q	1011101111	11	10	10	11	11—16
Keay	1011011011	01	01	01	11	11—14
Goud, G H	1101110111	10	10	11	11	00—14
Hall	0111122211	01	01	01	10	00—11½
Alexander	1122212211	11	10	11	00	11—15 —70½

TORONTO, Ontario, May 16.—The first match by the Toronto Gun Club for the President's gold medal opens at the Woodbine to-day, commencing at 2:30 o'clock sharp. The conditions are 15 target balls each, 18yds, rise from a rotary trap, use of one barrel only; five members to compete or no score; to be won three times by any competitor before becoming his property. The following days have been set apart for the matches: May 16 and 30, June 13 and 27, July 11 and 25, Aug. 8 and 22, Sept. 5 and 26, Oct. 10 and 24, Nov. 7 and 21, Dec. 5 and 19.

MENOMONIE, Wis., May 17.—Following is a detailed score of a practice shoot indulged in by the members of the Menomonie Gun Club, on May 15. First shoot—ten clay pigeons each, 18yds. rise, fourth notch:

E F True	1111111111—10	L J Seamans	1111101110—8
E A Benjamin	1111111111—10	S J Bailey	1010111011—7
J R Matthews	1111110111— 9	G H Seely	0011111001—6
G R Brewer	1111111110— 9	R J Flint	1101101103—6

Messrs. True and Benjamin divide first; Matthews and Brewer divided second, and Seamans took third.

Second shoot—Ten glass balls, rotary tray, 18yds. rise:

Bailey	1111111111—10	Brewer	1101111011—8
Benjamin	1111111111—10	Mathews	1010110111—7
True	1111111111—10	Flint	0110110011—6
Seamans	1110110111— 8		

Messrs. Bailey, Benjamin and True divided first, Seamans and Brewer divided second, and Matthews third.

Third shoot, ten clay pigeons, 18yds. rise, fourth notch.

Seamans	1111111011—9	Bailey	1060111111—7
Benjamin	0111111111—9	Brewer	1001111010—6
True	0101111111—8	Flint	1001010101—5
Matthews	1101111101—8	Seely	1010100001—4

Messrs. Seamans and Benjamin divided first, True and Matthews divided second, and Baily took third.—B.

LOUISVILLE TOURNAMENT.—Louisville, Ky., May 17.—Owing to the limited supply of wild pigeons, the Louisville Sportsmen's Association has decided to postpone the tournament until the 23d of June, at which time the original programme will be carried out.—J. O. BARBOUR, Secretary.

Yachting.

FIXTURES.

May 24.—Oswego Y. C., Opening Cruise.
May 24.—Boston Y. C., Opening Cruise.
May 23.—Quincy Y. C., First Match.
May 30.—Knickerbocker Y. C., S. ring Matches.
May 30.—Atlantic Y. C., Opening Cruise.
May 30.—Newark Y. C., Spring Match.
May 30.—South Boston Y. C., Spring Match.
May 30.—City Point Mosquito Fleet, 18 and 15ft. boats.
May 30.—New Haven Y. C., Opening Cruise.
May 31.—Boston Y.C., First Match, Connor and Commodore's cups.

A RIVER CRUISE IN THE HORNET.

SUNDAY, Aug. 5, 1883.—A most beautiful day. The members met on the corner of West Broadway and Canal street. All hands went to church. Boarded an Eighth avenue car to Eighty-fourth street, then walked to the Columbia Y. C. Though we are not members of the said club, we keep our boat at their club house. After some confusion got under way, with a fair wind and tide in our favor. Had a brush with a small jib and mainsail boat, passed her; but she made up for lost time when the wind slacked up. Got as far as Dobbs Ferry, when the tide turned, and we anchored on the west bank of the river, packed the provisions, and all hands went in swimming. Conlague, the invited guest, got stuck in the mud. Met a party in a small cat from Nyack; they, after drifting for about five miles, thought they would anchor. Had a good time together, they promised to keep company as far as Nyack. About 6 o'clock the tide turned, and we got under way with a fair wind on our starboard quarter. Hung our lantern in the stay (did not have side lights) and sailed in company with our Nyack friends. Got very dark, no moon; kept as near shore as possible, sailing along nicely, when we were hailed by our Nyack friends, who told us we had better take soundings. One of the crew shoved the boat hook over and found we were sailing in about three feet of water. Just then the mile pier at Piermont loomed up and gave us a good scare. Went about and thought we would never get to the end of that pier; sailed for about half an hour and the wind got too strong for us, so we put in for shore and anchored for the night; lost sight of our friends. Put up our cabin (forgot to say that we had a home-made cabin, out of an old sail) tried to make ourselves comfortable, but I must say it was not a success. I had a coil of rope and a coffee pot for my bed, the invited guest had a cheese box and a fryiny pan. We were to leave invited guest at Iona Island, to return home by the "Col. Burns excursion" from New York. Was very cold during the night.

Monday, Aug. 6.—Awoke about 4 o'clock. Weather clear and bright with no wind; found we had anchored below Nyack; cooked our coffee on the oil stove, had breakfast of bread, butter and canned beef. The oil stove was a nuisance; blackened everything up. Tide running up the river, got under way and drifted about six miles up. Wind sprung up from the north, and being amateur sailors did not make much time beating. Were passed by the Col. Burns excursion, and became afraid we could not get to Iona Island in time to leave our guest. On getting into Haverstraw Bay the wind had increased to a gale. We took in a reef and had a hard time of it; were nearly run into by a schooner. Reached Iona Island two hours later, and having friends on the excursion we had a good time. Conlague, the guest, was loath to part with us, notwithstanding his uncomfortable couch. Drifted a half mile below the steamboat landing and anchored for the night. All hands turned in for a good sleep.

Tuesday, Aug. 7.—Awoke late, about 7 o'clock (had no watch on board, so had to guess the time by the sun). Head wind still blowing. Cooked breakfast on that oil stove (more misery), got sail up and went across to Peekskill. The boys went to the city and posted some letters and bought some fresh bread. Ran on the beach, and built a rousing fire and cooked a good dinner of bacon and boiled potatoes, which all hands did justice to. Tried to make some headway up the river, but after fooling around for about two hours went over to Iona Island and anchored above the steamboat dock. The boys picked about three quarts of blackberries on Iona Island, and they made a nice dessert for supper. Fished for a while, but soon gave up in disgust. Steam yacht Cadet, from West Point, passed and gave us a salute, which we returned with our fog horn; put up our cabin and turned in.

Wednesday, Aug. 8.—Awoke about 7 o'clock. Cooked breakfast on shore—bacon, potatoes and coffee. Expected to go to Newburgh. Wind and tide against us. Made about five miles, anchored, picked some more berries, killed a small snake. Met a party from Peekskill, who were camped near our old camping place. Turned in early.

Thursday, Aug. 9.—Awoke late. The boys are all getting lazy. All out of fresh water; had to tramp about a mile to a well. Got under way with a head wind; could not hold out against the tide. Laid to till tide turned. Went ashore and cooked our dinner. Got under way again with a light, fair wind from the northwest. Ate dinner on board. A large steamer, with a party of picnikers from Newburgh, passed us, bound for Iona Island. The pilot came very close to us to see who we were. Just as we were running for a dock in Newburgh our throat halliards gave way and the gaff came down on our heads. However, we soon repaired damages and landed at Newburgh. Visited Washington's headquarters and other places of note, bought some bread, got under way and sailed about five miles to Mud Hole, and cooked supper on the oil stove. Turned in about 7 P. M.

Friday, Aug. 10.—Ran the Hornet ashore, cooked breakfast and went to visit the beautiful city of Mud Hole, on the West Shore road. Said town consisted of two houses and a railroad station. Tried in vain to buy some milk. Got under way with the tide. We had to get the aid of some Italian laborers to shove our boat off the rocks. The Clarita, of the Columbia Y. C., passed us, bound up. Cooked dinner on the oil stove. One of the crew tried to clean the stove by hanging it on the boat hook, and lost it overboard. We were glad to get rid of it. Broke one of the oarlocks. Were saluted by the steamboat Eagle. Landed at Poughkepsie about 8 o'clock. Had to skirmish around with a lantern to find wood. Cooked supper and turned in about 10 o'clock.

Saturday, Aug. 11.—Awoke about 8 o'clock, cooked breakfast. While eating, I saw a large muskrat swimming and fired at him, but he dived and we saw him no more. Sailed up to the city, posted some letters and bought some stores; also, got a sail mackerel to fish with, it is good bait for catfish. Inquired where to buy a skiff; but could not find the place. Got under way and sailed about two miles up the river, where we were hailed by some men on a sloop, who told us where to buy a skiff. We found the place this time and bought a small skiff for $3. We were very well treated. The young man also repaired our pump—(if he should happen to read this he will accept our sincere thanks). All the boys were pleased with the new skiff. We got under way and sailed about three miles, and then anchored for the night. A party of young men from the Albany Y. C. were camped opposite us; said they would spend Sunday with us. Turned in about 10 o'clock. Our Albany friends made a great deal of noise.

Sunday, Aug. 12.—We camped in a beautiful place. Breakfasted on ham and eggs, coffee and bread. Bender and I went out for a pull in the skiff and upset. The boys had a good laugh on us. We intended to stay over, but our Albany friends invited us to a race with them. We accepted their challenge, but we got left. Landed at Esopus Island to cook dinner. Went fishing and caught a good mess of catfish. Intended to camp at the island, but the crew wanted to go up the river. Saw a setter belonging to a party of gentlemen from Hyde Park swimming across the river. We ran in to cook supper. The boys were about to land when they heard a rattle, which they claim to be a snake, but I think it was a locust. At any rate, it scared us out of our coffee. We turned in on bread, canned salmon and river water, which I may add is very good drinking water.

Monday, Aug. 13.—Woke about 8 o'clock. We and we were camped just below Staatsburgh. Cooked a good breakfast of catfish and bacon, fried potatoes, bread and butter. Two gentlemen got us some ice. All were sitting in the cabin when a steam launch struck us. I got on deck and was about to ask the captain if he was blind, when he sung out in a loud voice, "Want any milk?" We bought some soda crackers and clams from the captain, then got under way, with the wind and tide in our favor. Sailed about five miles when the wind got too strong for us and we put into Rhinecliff. Bought some sugar, then took in a reef and sailed up about ten miles; all went ashore to cook dinner; argument about how we would cook the clams. My brother and I wanted a roast, Messrs. Bender and Laug wanted chowder, so we divided up and cooked them to suit ourselves. We spoiled our roast and the others emptied about one ounce of pepper in the chowder, which made it rather hot. One of the boys went to masthead to fix our flyer. Got under way and sailed a few miles when the wind died out and we anchored opposite Barrytown, Bender and Lang went rowing. Waited till darkness settled and they could not find the boat; we gave up all hope of seeing them that night when we spied them coming up the river at 11 P. M. Blowing very hard, afraid our anchor will not hold.

Tuesday, Aug. 14.—Awake late. Wind still blowing very hard do not think we can sail much to-day. A Sunday school excursion passed up the river and we were saluted by the captain and the young ladies on the barge. Sailed under a reef for a couple of miles, went ashore to cook dinner. I cooked a splendid dinner of beef stew, and stewed tomatoes. Sailed to Tivoli, where we bought some butter in the post-office. Put Bill ashore to cook supper, and he had to swim to the boat as the boys were up to Tivoli with the skiff. Very high wind; got very rough; we had to row to the flats to anchor for the night, which proved very cold.

Wednesday, Aug. 15.—Found we had anchored near the body of a cow which had probably lain on the beach for a few years; the stench was horrible. We got up anchor and drifted to Cruger's Island; after we got the coffee cooked, found we were again out of bread. We had to row across the river to Glascow in the skiff and had a narrow escape from a ducking. Bought some bread in the hardware store. Got under way with a fair wind and started for home. Made good time down the river. About noon we saw a camping party and I went ashore and had a good dinner with them; they were from Peekskill. Spent about two hours with the party and had to row about five miles to catch the yacht. We made Rondout about 2 o'clock and went to the post-office for mail and laid in some fresh provisions. Saw the sloop Corinne of the Jersey City Y. C. Got under way and sailed to Port Ewen; here it was very rough, so we ran behind a breakwater and anchored, going ashore to cook some beef stew with stewed corn and then turned in. It was very rough during the night.

Thursday, Aug. 16.—Awoke about 5 o'clock this morning, and had a hunt after a wounded duck (bell-diver). Fired ten shots at him with my revolver, but did not hit him, but had the whole town out looking at us. I was foolish enough to try and catch him by swimming, but soon gave it up, he was a better diver than I. Got under way about 10 o'clock, and stopped at Esopus Island for dinner. Just as we got dinner cooked saw a tow coming down the river, and started to catch it, but after rowing about five miles we thought we would stop, and stop we did, and ate our dinner. Got under way once more and sailed till about 9 o'clock in the evening, and then anchored just above Poughkeepsie. Saw a large building and thought it was the Vassar College, and proposed to stop and see the girls, but our college proved to be the insane asylum.

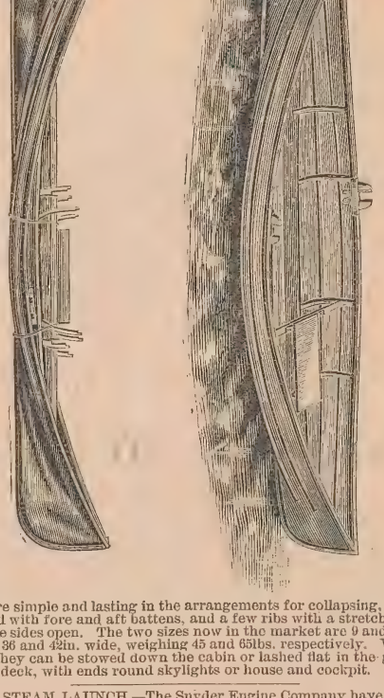
Friday, Aug. 17.—Awoke late. Rowed to the city to get the mail and bought bread enough to last till we reached home. Made sail about noon and caught a tow. Found our friends on the Corinne had towed from Rondout. The captain of the ice barge Indian invited us to dinner; and such a dinner! It was fit for a king. Fried ham, green corn, boiled potatoes, hot biscuit, tea and a splendid bread pudding. We complimented the captain on his cooking, for it was good. We agreed to stand watches during the night, but got very cold and all hands went to sleep.

Saturday, Aug. 18.—The captain woke us this morning. Found we were opposite Edgewater. Let go our towline and bade our friend the captain good-bye. Sailed up to Manhattanville and turned in to finish our sleep. Awoke about 9 o'clock, cooked breakfast, had a swim, packed our things and got under way. Arrived at the club house about 3 o'clock. All hands agreed it was the best two weeks we ever spent in our lives. Cost of cruise all told, $24.

CHRISTOPHER HOLDERMAN.

NEW FOLDING BOAT.

THE Ontario Canoe Company, of Peterborough, have brought out a new folding boat of canvas, suitable for service aboard small yachts. They are light and portable, and when expanded are quite stiff and good carriers. Invented by Dr. C. M. Douglas, Brigade Surgeon in the British Army. They are now manufactured to various sizes by the company, and patented for the United States.



They are simple and lasting in the arrangements for collapsing, being supplied with fore and aft battens, and a few ribs with a stretcher to keep the sides open. The two sizes now in the market are 9 and 12ft. long by 36 and 42in. wide, weighing 45 and 65lbs. respectively. When folded they can be stowed down the cabin or lashed flat in the gangway on deck, with ends round skylights or house and cockpit.

NEW STEAM LAUNCH.—The Snyder Engine Company have built one of their standard launches for Messrs. Wyckoff, White & Foley, of New Brunswick, N. J. She has proved a splendid success. Length, 30ft.; beam, 6½ft.; depth, 3ft.; draft, 26 to 34in.; forward cockpit, 8ft. long; after cockpit, 10ft. long; engine space, 5ft. long; after deck, 4ft. long; forward deck, 3ft. long. Frame, keel, stern post, stem and dead woods of white oak; planking of selected white cedar in longest possible lengths; whales and clamps, Georgia pine in one length; bilge keelsons, Georgia pine in one piece, thoroughly secured to frames; ceiling and decks made of narrow white cedar, a strong oak thwart or beam abaft of engine is properly secured to sides with oak knees, which are bolted to sides; and main beams of deck forward and aft are kneed in same manner. An oak coaming runs entirely around cockpits 4½in. above decks. Planksheer and moulding are made of oak. Large coal bunkers are placed on each side of the boat, abreast of boiler. Extra wide seats extend around forward and after cockpits; cockpits are nicely floored and sides sealed with cedar. Fastenings of galvanized iron and copper; stem band galvanized iron. Rudder, iron, with spare tiller. All work smoothly finished. Hull below water-line has two coats red copper paint; above water-line two coats glossy black; interior, two coats drab. A mahogany and locust steering wheel is erected on walnut frame in forward cockpit and properly connected to rudder with manilla and wire rope. A blue and white canvas awning with wide border, trimmed red, extends over entire length of cockpits. Side curtains are furnished, which button down to the oak coaming, completely closing in the cockpits and machinery. This awning is properly supported by a framework securely erected on turned ash stanchions. These stanchions are held in place by wrought iron brackets. The entire arrangement is portable, and may be taken down or put up in a few minutes. The machinery consists of a Snyder "Little Giant" vertical launch engine, having cylinder 4½in. bore by 4½in. stroke. The boilers are vertical tubular, 30in. in diameter by 50in. high, and are complete with finest fittings. These boilers are of sufficient capacity to generate an abundance of good dry steam for the engine, with moderate firing and little attention. Propeller wheels are two-bladed, 24in. in diameter for the light draft boats, and 28in. for the 30 to 34in. draft. The shafts are of steel, 1½in. diameter. A Hancock inspirator is furnished which heats the water to a high temperature and forces it into boiler either when engine is running or standing still (a decided advantage over the force pump). For use in salt water a keel condenser, made of 2in. brass pipe, which extends from exhaust of engine through bottom of boat along keel, to and around stern post and back to engine room, where it discharges into hot well. A three-way cock in exhaust pipe shuts off the condenser and allows the engine to work non-condensing. This condenser affords constant supply of fresh water and prevents the disagreeable noise which always accompanies the discharge of exhaust steam into the air. A hot well, made of heavy galvanized iron, is located conveniently to take discharge from condenser and furnish inspirator with feed water for boiler. A bilge water ejector is provided and properly connected with steam and outboard for quickly discharging accumulations of bilge water. A jet blower is arranged for use in quickly starting fires.

MONTREAL Y. C.—Officers for the year: Commodore, A. J. McIntosh; Vice-Commodore, C. P. O'Connor; Secretary, G. L. Sait; Treasurer, Walter Jones; Measurer, T. A. Adkins; Sailing Committee, W. H. Stanley, J. J. Roberts, and A. W. Glassford; Club House Committee, W. H. Kirby, W. Bruce, G. N. Roberts, P. C. Falconer, C. A. Lillton. The club has $150 in the treasury, is prosperous, and talks of a new club house. The first cruise takes place on the 24th.

TORONTO Y. C.—Mr. Geo. E. Evans has been elected Captain, vice Mr. G. H. Durgan, resigned. The old time iron cutter Rivet will be out soon with new sails, and add much interest to the racing.

THE NEW ERA.—Says the Brooklyn Sunday *Eagle* very truly: "The inauguration of the Corinthian open sea yachting has caused our amateur sailors to grow more and more venturesome in laying out the courses for their races. Smooth-water sailors are at a discount, and little sloops of thirty-four feet and under now go poking their noses through the big waves off the Sandy Hook Lightship with as much assurance as the largest schooners. This tendency toward open sea work is having its natural effect. There is a larger demand than ever this year for deep keel boats in preference to the centerboard light draft craft, so dear to the hearts of the American yachtsmen for many years. Winter cruising is becoming fashionable, and even the hurricanes to be met and conquered along the Southern coasts only add zest to the sport of the thorough-going yachtsmen of to-day. During the past month a number of yachts have returned from long trips South, the crews telling of storms safely passed through and trials of every kind known to rough old ocean overcome by the staunch little vessels. There seems to be a tendency among yacht builders and designers to strike a happy medium between the light draft, broad-beamed American model, and the deep, narrow English cutter model. The great problem is to obtain lines which will insure both speed and seaworthiness. The Bay Ridge Construction Company and other builders report that the demand for keel boats was never so large as at present. A number of centerboard crafts are lying idle in their yards waiting for purchasers. Ginger bread work in the interior fittings of new yachts is far less indulged in, the preference being for substantial hard wood finishing of the kind that can successfully withstand an occasional salt-water drenching. Heavier spars are the rule among the new yachts, and in fact the yachtsmen are evidently prepairing for what they would call an active outside season of races."

ON SPECULATION.—Several inquirers are informed that the address of Michael Horton is Maverick street, East Boston, and that the cutter he is building for the market is 25ft. long, 9ft. beam and 4ft. 6in. deep. Davis, of East Boston, is also building a small cutter for which A. Wilson is making the sails.

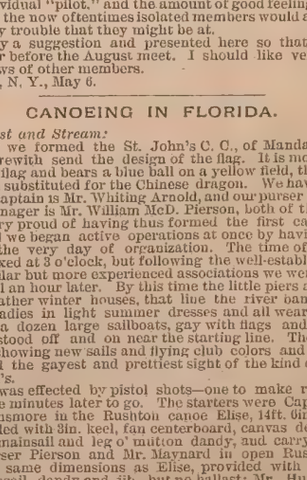
Canoeing.

Secretaries of canoe clubs are requested to send to FOREST AND STREAM their addresses, with name, membership, signals, etc, of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to FOREST AND STREAM their addresses, with logs of cruises, maps, and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.

FIXTURES.

May 30.—Pittsburgh C. C., First Annual Regatta.
May 30 to 31.—Hudson River Meet, Newburgh.
May 30 to 31.—Connecticut River Meet.
June 14 to 16.—Merrimack River Meet.
June 19.—Rochester C. C., Summer Regatta, Irondequoit Bay.
July 9 to 15.—Chicago C. C., Annual Cruise.
July 14.—Allegheny C. C., Cruise at Conneaut Lake.
July 19.—Chicago C. C., First Annual Regatta.
July 24 to 26.—Lake George Meet, Lorna Island.
Aug. 1 to 12.—A. C. A. Meet, Grindstone Island.

TOLEDO C. C.



TOLEDO C. C., Toledo, O. Organized March 1884. Commodore, J. W. Hepburn; Vice-Commodore, Chas. O. Phelps; Secretary and Treasurer, G. G. Keip. Nineteen members. Signal 10×15, red diamond and two blue triangles.

CANOE PILOTS.

Editor Forest and Stream:

For some time I have been thinking over the laying before you and all canoeists, and members of the A. C. A., the following suggestions, which, if approved of, can be acted upon at the next meeting of the Association at Grindstone Island.

Our bicycle friends have a system of locating at different points throughout the country, certain specified members of the League of American Wheelmen (which I believe, occupies the same place in the bicycling world that the A. C. A. does in the canoeing), to act as general informants for all bicyclists in giving all the details as to the condition of the roads, situation of hotels, etc., and whom they call "consuls." Why would not the appointment of similar members of the A. C. A. be a great advantage to our paddlers?

The "consul" or representative by whatever name known, if located on any stream could give valuable information to any man cruising in his vicinity as to good camping places, distances, location and extent of rapids, and other facts which if known before starting on a trip, would prevent the occurrence of many unpleasant happenings and save for full enjoyment much time.

Our Association, numbering as it does over 600 members who are scattered over the United States and Canada, could have a "consul" or "pilot" at or near all the canoeable waters and the problem which was discussed sometime since as to the best plan to conduct a "canoe pilot" will be solved. I would have the "pilot" who was located at New York, for instance, have all the maps and information about the waterways near that city, which he would be expected to explain to any member of the A. C. A. who was about to cruise in his vicinity, and so on.

The expense of the maps, etc., would, I feel certain, be gladly met by each individual "pilot," and the amount of good feeling that would arise among the now oftentimes isolated members would amply repay them for any trouble that they might be at.

This is only a suggestion and presented here so that it may be thought over before the August meet. I should like very much to hear the views of other members. TIP.

BROOKLYN, N. Y., May 6.

CANOEING IN FLORIDA.

Editor Forest and Stream:

Yesterday we formed the St. John's C. C., of Mandarin, Fla., of which I herewith send the design of the flag. It is modelled after the Chinese flag and bears a blue ball on a yellow field, the blue ball having been substituted for the Chinese dragon. We have ten members. Our captain is Mr. Whiting Arnold, and our purser and general business manager is Mr. William McD. Pierson, both of this place.

We are very proud of having thus formed the first canoe club in Florida, and we began active operations at once by having a sailing race upon the very day of organization. The time of calling the races was fixed at 3 o'clock, but following the well-established precedent of similar but more experienced associations we were not ready to start until an hour later. By this time the little piers and summer houses, or rather winter houses, that line the river bank here were filled with ladies in light summer dresses and all wearing the club colors, and a dozen large sailboats, gay with flags and laden with spectators, stood off and on near the starting line. These with the canoes, all showing new sails and flying club colors and private signals, formed the gayest and prettiest sight of the kind ever seen on the St. John's.

The start was effected by pistol shots—one to make ready, and a second three minutes later to go. The starters were Captain Arnold and Mr. Dinsmore in the Rushton canoe Elise, 14ft. 6in. long 42in. wide, provided with 3in. keel, fan centerboard, canvas deck, balance lug racing mainsail and leg o' mutton dandy, and carrying 150 lbs. ballast; Purser Pierson and Mr. Maynard in open Rushton canoe Fire-Water, same dimensions as Elise, provided with fan centerboard, mainsail, dandy and jib, but no ballast; Mr. Huntington in Everson Shadow canoe Sunbeam, no ballast, leg o' mutton sails; and Mr. Munroe in Nautilus canoe Psyche, N. Y. C. C., balance lug sails, 50 lbs. ballast.

At this point the river is about three miles wide, and general direction is north and south; the breeze was from S.W. and fresh enough

to put white caps on the considerable sea running, and the course, laid out with reference to it, was one mile and a half close hauled around a stakeboat and return with lifted sheets.

At the start Firewater was first off, followed by Elise, Psyche and Sunbeam in order named. Five minutes later Psyche was leading the fleet, with Elise second. At the stakeboat Psyche had put a dozen lengths of clear water behind her, and rounding with one tack reached the finish an easy winner about the time that the Elise, which was second boat, succeeded in turning the mark. This victory, however, reflects but little credit upon Psyche, as the Rushton boats showed such a height of freeboard that they found it almost impossible to work to windward, and the Shadow was handled by a novice.

As there were not enough paddling canoes on hand to make a race, the sailing match was followed by one in which were eight contestants, and which was won by Mr. J. D. Mead.

We have already seven canoes in the club, and, as several more are to be bough this summer, an interesting season is promised for next winter. O. K. CHOBEE.

MANDARIN, Fla., May 10.

CANOE TRICKS.

ON regatta day the event that interests the average spectator most is the upset race. This little trick, though, has been worked down to such a fine point that the upsetting of a canoe does not seem to impede its speed much, or embarrass the paddler.

In former times, when every man got in over the end of his canoe—if he succeeded in getting in at all—it was an interesting sight to see him crawl along deck, and to bet—if you ever bet at a canoe race—on the chance of his reaching his seat or not.

Now that every one going into an upset race has practiced so frequently that it takes but five seconds to upset, turn the canoe over, and get into place again over the side, the excitement of watching the contest has lost much of its charm, though it still cannot be said to lack a certain kind of entertaining quality.

This upset business is a trick—a knack—and it is but one of many, though by far the best known, as it often is practiced unintentionally. Upsetting a canoe and turning her completely over right side up again, has been accomplished by an A. C. A. member without even getting out of his canoe. To be sure his family have several times realized the insurance on his life while learning the trick. It is quite possible in a canoe as large as the Shadow to walk on deck (minus the shoes) from stem to stern, and it also has been done. Standing up is comparatively easy, even in a Rob Roy, and paddling. It is more difficult to stand, a foot on deck amidship on either side of the well and paddle.

Place a mast in either mast step, crawl out on deck and go round it without getting overboard or upsetting the canoe. It is much more difficult to do than it looks to see it done. Go round head first once then feet first. Ship the rudder from deck after leaving shore. Take two canoes, a foot in each, and paddle without splitting yourself in two parts. Try an upset race with the condition that each man contesting shall get in from the end. Try some of these tricks tandem if you become very expert.

Lots of clever performances can be arranged by stowing costumes below deck, upsetting the canoe, putting your head out of water up into the well, changing your dress and coming up again to view perhaps with a high hat on and a pipe, lit, in your mouth. Some very comical effects can be got in this way. A canoe upset carefully will float on her deck with the bottom well out of water, and will so remain for a long time, keeping the air in. Upsetting with sail aboard is lubberly and usually has no point unless the canoe can be righted again—Dr. Heighway's admirable knack.

Somersaults from deck or well floor into the water, leaving canoe right side up, are very easy and effective; standing on one's head in the well is tolerably simple to accomplish, but it is another matter to do it with the deck hatch for a head rest. Paddling races, using hands for paddles, are usually won by the largest palm—to whom the palm is awarded. Using the paddle on one side only amidship also requires skill to make a "go" of it.

There are many other tricks that suggest themselves to the interested. It is not proposed to have these performances on the A. C. A. programmes, but they certainly lend a charm to scrub matches and club regattas, and are sure to interest your cousins and aunts if they do not feel too much anxiety for your personal safety. The skill in handling acquired by practicing these maneuvers is an excellent argument in their favor; and there is no knowing when a demand will be made on you for some special knack, which if you have acquired will bring success instead of failure to your venture.

The cleverest trick perhaps yet thought of is for two skilled paddlers to give an upset race exhibition, and then suggest to two novices to take the canoes and try their luck, furnishing them with bathing suits. The mule trick at the circus does not hold a candle to it. Cases have been known where persons were made temporary ill by excessive laughter by the attempts to right an overturned canoe. It looks so easy, you know.

I pass. Who trumps this card and takes the next trick?

SEA BEE.

LEAKS IN BIRCH BARK CANOES.

Editor Forest and Stream:

In response to inquiry regarding leaks in birch bark canoes, let me recommend rosin with about one-eighth its weight of lard. A little beeswax will render its consistence more constant under changing temperature, but it sticks better without it. Apply hot to seams with a stiff "sash tool." In case a hole is "stove," cover with a piece of birch bark well smeared with the warm gum. In case no bark is to be had, an old handkerchief, coat lining, or shirt will do. A woodsman is never at a loss.

Don't leave the birch bottom up in the sun to dry, nor yet try the so-called Indian method of drying it with a torch. The sun will cause the gum already on to run off, and unless the torch is used cold, it will blister the bark. Wipe as near dry as possible with a cloth, and in ten minutes it is ready for the gum. Never leave the gum tins behind. NANCY BELL.

Editor Forest and Stream:

Having been troubled some to get the right mixture of pitch, etc., for bark canoes, I am satisfied that made with the following proportions it will do good service: 11 ozs. of resin, 1 oz. of prime tallow, 1 oz. of boiled linseed oil. Melt over slow fire and mix thoroughly. This will be firm but not brittle. WENONAH.

BIDDEFORD, Me., May 16.

MY FIRST CANOE CRUISE.

THIS was made away back in the forties. My craft was 11ft. long by 15in. beam, was built of three pine boards, was sharp at both ends, and propelled by a paddle, so of course might be classed as a canoe. It was rather uncouth, both in shape and workmanship, being made of 1in. stuff, besides being the work of a boy of eight years, whose tools consisted of an axe, hammer and common wood saw, supplemented by the ever handy jack knife to finish with.

The bottom was first hewed into shape with the axe, then the sides, after being sawn nearly through and clear across, so as to bend readily, were nailed to the bottom with such nails as could be picked up, pulled out of boxes, etc. To make it tight, I used strips of cloth saturated with roofing tar (pilfered from a mill which was building hard by). When finished, my craft would weigh probably some two hundred pounds, and to my eye was the finest piece of work in the country.

My paddle was a single blade, made from 1in. pine board. When all was completed my craft was launched on the mill pond, and made its trial trip in about an equal mixture of water, sawdust, eel-grass and lily pads. It proved a success, and I was as proud as a commodore.

But the mill pond was too small, and so when a neighbor, who was going up river with a team, offered to carry my craft and myself to Fitchburg, some fifteen miles, I took advantage of the offer, and the next morning, bright and early, saw me perched on my cherished boat, which was stowed bottom up in a large lumber wagon, and all rattling away up river.

My craft was unloaded beside a small stream, a tributary of the Nashua, and I was soon paddling down the swift current. My outfit was very simple, consisting of a roll of tea matting, a pocket knife, a small tin pail filled with bread, butter, and a fair share of that pride of the New England boy's heart, doughnuts, and the clothes I stood in. How I worked on that cruise, pulling over shoal water, tugging around dams, and fighting the mosquitoes, for it was the sweet summer time, and I slept in my boat drawn up on the shore, where had a fair chance at me.

I had some troubles, was picked up for a truant once, and jumped one dam; but not because I wanted to. My trip lasted a week, and ended at Lawrence on the Merrimack, where my father found me and urged me strongly to go home with him. I went. My next cruise was around the "Horn," and in the course of which I wished several times that my father would come and take me home, but he didn't, and by the time I got back I was used to it all, and had become very, very salt.

I am fresher now, I sometimes go over the ground again in fancy, and as the two cruises are always connected (in my mind), that looking back at them they are but one. The whole course of my life seems to have been decided by that little trip down the Nashua and Merrimack rivers. Ah, me! What possibilities if I had not been born web-footed.

But to change the subject before I get sentimental. Have been out in my canoe all day; paddled some twenty-five miles; caught a dozen sea trout and one duck, a moist one. Having a howling norther here to-night. Am very glad I am so near the equator. The next move I make will be south. TARPON.

TARPON SPRINGS, Fla., May 9.

PERSONAL.—Mr. C. K. Munroe, N. Y. C. C., returned to New York on Monday last, after spending the winter in Florida. Mr. Chas. L. Norton, N. Y. C. C., in company with Mr. H. B. Howard, started from Philadelphia on Monday last for New York in the tandem canoe Kittiwake.

CLUB SIGNALS.—We have received sketches of signals from the Howard C. C. of Cambridge, the Hub C. C. of Boston, and the Potowonok C. C. of Fort Madison, Iowa.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

E. C.—We are unable to give you the address.

H. v. L. New York.—Is a man shooting in sweepstakes or for mon prizes termed a professional? Ans. No.

S. J. B., Philadelphia, Pa.—Lapstreak is lighter and better. The cost will be from $5 to $7 per foot length, according to quality.

J. J., Pine Plains, N. Y.—The pointer bitch Cara C. is registered the first number of the *American Kennel Register*. Her number is 18.

T. B. D., Ellicott City, Md.—Ruby is by Woodruff's Dick out of Fawn. We know nothing of the collie Eske; perhaps some of our readers can give his pedigree. The fox-terrier is a sporting dog.

H. W. G.—Would you kindly inform me if there is any black bass or trout fishing near Saratoga Springs, and when the season begins in your State for fishing? Ans. Yes, both. Season begins on June 1.

C. J. V. A., Albany.—Can you tell me when is the best time to fish for carp, and what kind of bait or flies to use? Ans. Morning and evening. Use worms, dough, boiled peas or fresh beef. We do not know that they will rise to the fly.

C. J. W.—I have a new rod, all lancewood, weight 3¼ ounces. Is it too light for bass? I am not a very expert angler with such light tackle. Had I better exchange it for a heavier one, say about 10 ounces? Ans. The rod is too light; we would exchange.

C. L. W.—Will you kindly inform me what make, weight and length split bamboo fly-rod you would advise for Rangeley Lake fishing? Ans. A rod 10½ to 11 feet and weighing 9 to 10 ounces. We cannot recommend any particular maker. See our advertisements.

TEACHER, Cadiz, O.—Where and when shall I go during the summer months to find excellent bass fishing in Lake Erie and Lake Huron? 2. Can we find camping ground? 3. Can you give address of sportsman's hotels? Ans. There is good bass fishing at Kelley's Island in Lake Erie, and also at St. Clair Flats. 2. You can camp at the Flats. 3. No.

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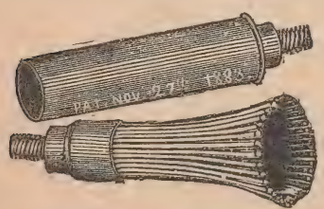
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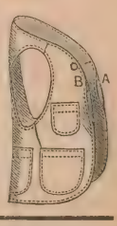
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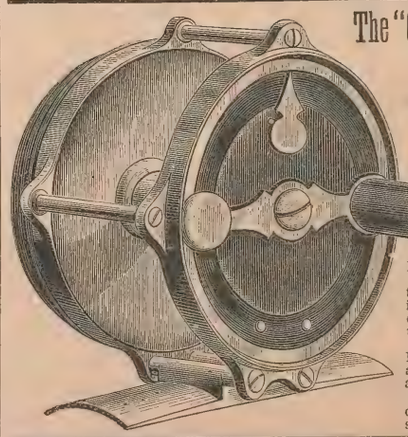
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RATTLERS AND RATTLING.

THE lying proverb that all is fair in love and war has been a convenient excuse for all sorts of rascality ever since it was first uttered. A fair stand-up fight has no tricky features about it, and every move of either contestant in a battle is fair according to the rules of equal opportunity or it is the unfair advantage sought by an antagonist who stands in self-confessed inferiority. It matters not whether the game at stake be a crown and its dependencies and the subterfuge the deceitful approach of an armed force under cover of a flag of truce, or whether it be a match before the trap for a medal bauble and the trick of the beaten team be one of an hundred well-known devices by which one marksman seeks to "rattle" or confuse another.

We recall with pleasure the stately courtesies which marked the opening series of matches between the American and Irish teams of riflemen. It was one company of gentlemen working with another company for a common aim. Each was intent on making as big a score as it was possible with the arms and experience at its command, and each expected the other to do the same. Defeat came to one side, but it did not bring with it any feeling of vindictiveness. Those who failed to make the better score knew that they had done their best, and they knew, too, that they had received the best wishes of their antagonists, and they were the first and most sincere of those who heaped congratulations upon the winners. It was not a match in which the utterance of such a word as "rattling" was heard. Instead, the match at Creedmoor and again at Dollymount was made the vehicle for the conveyance of many expressions of good will. It was, in short, a match conducted strictly according to the conditions laid down for it, yet without for a moment losing sight of the gentlemanly courtesy due at all times from one individual to another. There was no sinking of the gentleman in the sportsman, or rather, there was a proper blending of the two, as there always may be and should be, if the greed for victory does not crowd out of sight the natural instincts of fair play, which every true sportsman feels.

In many trap contests we have seen the same regard for the rights and feelings of the antagonists manifested that marked the rifle matches to which we have referred. Visitor marksmen or a team from a distance were treated as guests of the home team rather than foes to be beaten at any cost. It was recognized on both sides that there was to be a trial of skill and that with equal opportunity and barring mishap, the most skillful among the group of contestants was sure to win. Such meetings were of good effect in so far as they encouraged the patrons of trap-shooting to seek their own advancement through honest endeavor and diligent effort. Each man sought to improve his own style and accuracy because he was sure that success would follow such attention to detail. It was, in short, an exercise where there was improvement in real merit because such merit was recognized at the scoring point.

There is another side to these pictures, however, and too frequently they are brought to public attention, to the disgrace and scandal of true sportsmanship. In these contests the only criterion is that of victory. It matters not how it is gained only that the final showing gives at least a nominal success. There comes in then the fine art and low cunning of the "rattler." Professionalism in the worst meaning of that much-abused term comes out in all its force, and while perhaps the letter of the conditions may be strictly observed, the spirit of the conditions, which is after all the spirit of fair play, is completely thrown to the winds. The intention of each side is not for a trial of skill or victory founded upon superior merit, but rather for a test of subterfuges, for such a series of surprises for the enemy as shall snatch victory from his grasp. There are surprises which may be perfectly honest. If A, by putting thought and brains into his work, shall produce a gun, closer shooting, harder hitting and surer in its fire than any that have heretofore been used, and shall introduce it to the attention of B, through a match, he is entitled to all that his brain work shall bring him. He has earned his victory, not perhaps by being content to do better work with an inferior gun, but by producing a better gun and thereby insuring better work. Such a step is fair and honest; but it is quite another matter to snatch victory, at least on paper, by resorting to the many confusing tactics of the professional "rattler."

It would be a waste of space and time to go into all the unpleasant details of the progress of a match in which the arts and devices of those who win by trickery are brought to play, and once this sort of thing is countenanced there is no limit to the extremes to which it may be carried, and a match ceases to be more than a measure of rascality.

In the past the FOREST AND STREAM has found occasion to administer some sharp rebukes to the mug-hunting, mercenary spirit which in large measure lies at the foundation of the evil under consideration. Rivalry is the life of all such gatherings as those before the trap and the butts; but that spirit of rivalry is quickly quenched when the spirit of greed comes in and is allowed to run full sway without the control of gentlemanly courtesy, and that observance of the intent as well as the mere letter of formal conditions.

A gun club may organize pretty much as a band of pirates is drawn together, by a common motive of plunder. It may for a time carry its own by sheer dint of worrying its opponents; but in the end it kills by the mere crushing out of all the true sportsman's feeling, which is, that the reward of sport is in the exercise itself and not in such results as may be turned to base material advantage.

NATIONAL BENCH SHOW ASSOCIATION.—The Westminster Kennel Club have taken the initiatory step toward the formation of a National bench show association. They have sent to all of the prominent kennel clubs a circular letter requesting the attendance of some of their members at a meeting to be held in New York on June 21, for the purpose of consultation regarding the formation of such an association. That the call will meet with a hearty response there is not the slightest doubt. We look forward with much interest to the meeting, believing that its action will result in great benefit to the breeder and exhibitor, and in increased usefulness and popularity of our bench shows.

LUCK.—It is reported that a rich vein of coal has been discovered on the lands owned by the Woodmont Rod and Gun Club, on the Potomac. If the prospector is right about the find, there will be millions in it for the club members. This is an instance of virtue rewarded, as it should be. The club's motto is "Protect and Enjoy." The usual motto is, "Enjoy, and if anything is left let it protect itself." The Woodmont anglers deserve their luck. They have demonstracted beyond all question that game protection—with a coal mine, an oil well, or a gold reef thrown in—pays.

PISTOLS AND CHILDREN.

AN arrest made Monday in this city was the first under a recently enacted ordinance, which prohibits the sale of pistols to minors under the age of fifteen years. A boy had been sent on an errand to purchase a pistol, and the fact coming to the notice of the police, an arrest followed. There has been in the past a great deal of trouble over the firearm question as affecting children. There would seem to be a natural fever on the part of every boy at some time to own a pistol. It may be the most dangerous possible contrivance, and the very fact that this danger is unforeseen only makes it the more to be dreaded. To meet this demand of the lads and the measure of their pockets, the firearms companies have sent out a series of alleged pistols which have only cheapness to recommend them. They have neither strength nor accuracy nor beauty in their favor, and there exists no pretense of a reason to justify their manufacture.

In this city, where the evils which naturally follow in the train of such deadly contrivances are so manifest, there have been many ordinances and local laws aiming to reduce the disastrous consequences which follow this pistol-carrying mania. There are laws which make it necessary to secure a permit for the habitual carrying of a pistol; but still the boy nuisance remained, and the more recent ordinance naturally followed to reach this trouble. Rigidly enforced, it will do much toward reducing the trouble to a minimum, but the real remedy is to be found in a complete suspension of this useless class of arms. If this be brought about by a general prohibition of their sale, good. An arm of service is one thing, but a dangerous toy, placed by mercenary manufacturers in ignorant, innocent hands, is quite another.

LARGE TROUT.

ACCOUNTS of the capture of large trout are now in season, and in reading them one must always consider the locality where the fish are taken. For instance, a trout of five pounds taken in the waters of Maine or of the Sault Ste. Maria would not be a remarkable fish, while, if taken in the waters of New York, Pennsylvania, or Vermont, it would be considered a monster. New Hampshire papers chronicle a catch of 127 trout, taken by Eugene Batchelder and John Lynch, of Claremont, which contained many fish of six to eight ounces, as the finest catch in years.

From Pennsylvania comes the account of the largest trout taken in Pike county in ten years. It was taken by Thad. Mercer in the Little Bushkill, below the lower falls, last week, and weighed four and a quarter pounds. Previous to this the largest trout taken in Pike county was taken a dozen years ago at the mouth of the Sawkill, and was a quarter of a pound heavier than the one mentioned above. Both these fish were taken with the worm. This region has furnished several large trout. One came out of the Beaverkill and was exhibited in Barnum's Museum before it was burned, and as it was said to weigh six pounds, there were many in those days who doubted that a brook trout ever reached that weight.

The largest wild trout that we know of being taken in the State of New York, was taken by A. R. Fuller, of Meacham Lake, Franklin county, in Clear Pond, near Meacham, and weighed five pounds.

From Maine come the largest trout taken in America. The great fish taken by Mr. Geo. Shepard Page, of ten and a half pounds, weighed after being out of water for two days, and the eleven and a quarter pound fish sent to the Smithsonian, have never been beaten. Last year a trout was taken in the Rangeley Lakes that weighed nine and a half pounds.

RAILROADS IN THE NATIONAL PARK.—There are abundant reasons why no railroads should be allowed in the Yellowstone National Park, but the Cinnabar and Clarke's Fork Railroad Company are untiring in their attempt to lobby a bill through the Senate at Washington, giving them permission to construct a road through the Park. Government officials, paid liberal salaries, are found, who shamelessly lend themselves to helping on the nefarious scheme, and only the vigilance of honest Senators can thwart the job. The subject came up in the Senate last Monday. Messrs. Vest, Logan and Voorhees spoke in opposition to the bill, and Mr. Sawyer would have shown what a fine thing this road must be to the dear people, but he was not given a chance to deliver himself. The monopoly granted to the Hatch concern was a national disgrace; to permit this railroad company to grab what they have the presumption to demand, would be another cause for humiliation among right-thinking citizens.

A NEW FLORIDA BOOK.—Dr. J. A. Henshall's new book, "Camping and Cruising in Florida," is now in press and will be issued shortly.

The Sportsman Tourist.

A STORY FOR DECORATION DAY.

IT was midwinter in war times; the scenery mountainous; the weather cold, dark and cloudy; time, about 6 P. M. The battle had been fought and victory perched on our banners; roll call was over, and the weary troops had gathered around newly-made camp-fires to prepare their scanty suppers of coffee and hard biscuit. The camp kettles, suspended on rails resting on forked sticks, were beginning to steam. The dark clouds that had gathered over the battlefield, heavily charged with chilling rain, became threatening and might at any moment pour down their unwelcome floods on the unsheltered heads of the devoted men who were scattered around and trying to draw some comfort from the cheerful blaze and the prospect of a cupful of hot, strong coffee. Some of them had taken off their shoes and were rubbing their sore feet; others were sitting on rocks and rails talking in low, broken murmurs, as they recalled the conflict and spoke the name of some fallen comrade who had dropped by their side; others lay prone on their backs, silent, their right arms drawn across their eyes, their minds, no doubt, wandering back to their peaceful homes on the broad prairies or sheltered woodlands of the Northwest. A little in the foreground stood long lines of stacked rifles, along the further side of which paced the sentinel, weary but watchful, guarding those trusty weapons that had done such good services during the day. Still further in front was a different, but more sad spectacle; long ranks of dead soldiers lay side by side, wrapped in their blankets, ready to be laid in the shallow trench then being prepared for their reception. Still further to the right appeared the flickering lights at the field hospital, where the faithful surgeons were doing all, by their skill and goodness of heart, to allay the sufferings of the wounded. Such were the scenes that passed in quick review before the eyes of the writer as he sauntered around to see how the boys felt after their hard fight, and to make inquiries regarding the fate of true and trusted comrades.

But the kettles begin to bubble and boil, while a pleasant aroma floats around the camp-fire, arousing the boys, who bestir themselves, and hunt for haversacks and tin cups preparatory to dipping in and soaking their hard biscuit. All is now animation; jokes and banters pass around, gloom is dispersed, and cheerfulness asserts her ever potent power for good.

But I must return to duty, and find Black Tom, who is neighing for me at a short distance. On my way I pass regimental headquarters, established around a large brush heap, then burned down to a bed of burning, glowing coals. No tents, no camp stools, nothing but an orderly holding some horses by the bridles, and the mess cook and major trying their best to make some coffee without scorching their faces. The colonel is sitting at the foot of a tree, the other officers, among whom there are several captains, are scattered around, some sitting on the ground, others lying flat, all holding an animated discussion regarding the fight, the sulphurous smoke of which yet adulterated the air. Leaning against a tree, I stood a silent spectator of the picturesque scene. One of the group, a tall, handsome officer, wearing a captain's uniform, remarked, rather emphatically, "I don't understand why the General does not follow up the advantage and capture the last d—d man of them." The words had scarcely passed his lips when an orderly rode up, jumped from the saddle, ran his eyes around the group, advanced to the colonel, saluted, pulled from his belt a bunch of orders, handing one over, turned on his heel, mounted, and was off. That officer read the order, jumped to his feet, remarking, "The fight is not over yet, your wish is gratified." The order, in brief, was a call for four companies under a field officer, provided with three days' rations, eighty rounds of ammunition, in light marching order, nothing to be carried but pouches. The battalion to march at once to the rendezvous, where the ammunition and cracker wagons awaited them.

This meant fight, and all was bustle in a moment; "get ready," ran down along the camp-fires. The men gulped down their scalding coffee, hardly taking time to wet the flinty bread. No detail was made, but volunteer companies called for. The order to fall in was promptly obeyed, and the officers in charge put the question, "All you that are in favor of a three days' force march on hard tack, and plenty of fighting, will hold up your right hands." Every hand was up in a moment; and the captain without as much as "rest" or "break ranks," turned on his heel and reported his company ready. This was all done in far less time than it takes to write it, and the first four companies reported were accepted, while the others, every one of whom had promptly responded, were chagrined and disappointed at being left. These brave fellows, footsore and battle-weary, were ready to start off on a three days' forced march, loaded down with dry bread and double allowances of cartridges, in the dead of winter without a blanket or overcoat, with every indication of fallen weather, to fight against heavy odds with a fair prospect that it was the last march they would ever make, for they knew not what they were to be dashed against. Yet these self-sacrificing heroes, all actuated by the same spirit of tenacious bravery, self-sacrifice and lofty patriotism, were striving for places in that forlorn hope, cheerfully offering their lives as a willing sacrifice in the protection and upholding of our dear flag and country. Of such was the material composing our volunteer army. May every American boy, be his home in the North or South, East or West, be inspired by the same noble principles. But I am digressing.

Catching the spirit of reckless adventure that took possession of all, and although my duties led me in a different and safer quarter, yet I hurried to headquarters and offered my services as commissary and quartermaster of the expedition. The General looked at me incredulous; his eyes seemed to read my very soul; he answered, "No train accompanies them," but after a little reflection he continued, "however, you may go, although they will have no use for your services," and pencilled a brief order to that effect. Grasping the order I hurried to my horse, sending an orderly to the train informing my assistant of my detail for three days, then turned Tom's head toward the rendezvous.

A few days previous the cavalry had brought in a company of mountaineers as prisoners. They were brought past the train to be disarmed. These men carried long, ancient rifles of the old frontier pattern. The officer captured with them was a young, handsome, dashing fellow, dressed in a suit of home-made gray jeans, no doubt the handiwork of his mother or sister or wife. It was cut in the Confederate regulation style, with three gold bars on the collar; it fit to perfection, and he looked every inch a gentleman and soldier. His arms consisted of a rifle, supported across his back by the sling, and a deer-skin pouch well filled with cartridges. I was standing a short distance from him, and noticed him beckoning me to approach. When close up he said, "I am in for the bull pen" (meaning the military prison); "this is my private property" (disengaging his rifle); "I make you a present of it. It is the best piece you ever handled; take care of it." The command, "Right face, forward march," was given, and he disappeared. I examined the piece minutely. It had a 30-inch barrel, about .35-caliber, weighed 7½ pounds, silver-mounted; in fact one of the neatest rifles I ever handled, and after trial proved to be the finest rifle I ever shot. The pouch contained a quantity of hand-made cartridges, with extra large charges of powder, no doubt intended to kill Yanks, but afterward used for the better purpose of saving them. This rifle and pouch were strapped to my saddle when I mounted to join the rendezvous.

Reaching the place I found four battalions of infantry, and two small mountain howitzers, and two ambulances. The fighting force was about one thousand strong, quite a small detail to tackle a whole division of the enemy that had been cut off and were then in full run for the river, some eighteen miles distant. The men having filled their haversacks with crackers, and their boxes and pockets with cartridges, the line was formed and we started south at a swinging gait. The colonel in command, with whom I was riding, enlightened me as to our destination. We were to make straight for the ferry or ford, and if in time, to dispute the passage, and to hold the same until reinforced; but if too late, then we were to push down the left bank and prevent a recrossing, and harass the retreat as much as possibe. In passing along the line to the front, one of the officers jokingly asked me, "What are you going to do with your popgun?" I answered, "Keep the boys in meat." The men caught my answer and hoarded it up for future use, and paid me back in double measure.

The march was silent, rapid and unbroken. Sunrise found us at the river, the last of the "Johnnies" disappearing on the opposite side, and the ferryboat, a trap run by horse power, putting down stream at her top speed. A few shells were sent after the broken and retreating foe, there was a brief rest, and then the head of the line was turned down stream. By this time the long threatened rain had broken loose, and poured down in torrents; but there was no rest nor shelter for us. On we went the whole day. A little before dark, on turning an abrupt bend in the river, camp-fires were seen on the other side, and the ferryboat tied to the bank. To place the guns in position and throw a dozen shells into the midst of them was the work of a few minutes. They thought the whole Yankee army was on them, and off they went, wagons, boat and all, soon disappearing beyond the woods. With brief intervals of rest, the chase was kept up for three days and nights, several times frustrating the enemy's attempt to recross and join the main column then on the retreat further north.

On the second day out, I was riding along the line, when the boys noticed me and called out, "Hallo, Crackers, where is our meat?" the chorus being taken up by all, and "bring on your meat," met me on every side.

When starting I had been told, and had expected that my position of commissary and quartermaster would be a sinecure, but alas, here I was face to face with more than a thousand hungry mouths to fill, and scores of miles from our base of supplies, and still marching further. What was I to do? I felt for the boys, and their repeated calls of "bring on your meat," were prompted by a deep-seated feeling of necessity. I went to the colonel and told him that I would ride ahead and see if I could find some stray cattle or hogs if he would let the men dress and cook them, to which he readily assented. I started at once, and scoured the country for miles on the left of the column, hoping at every turn to find a sturdy cow or hog, but to no purpose, the country had been closely foraged before us; and night found me spurring on after the men empty-handed. I was ashamed and almost afraid to see them, but face the music I must. The first question was, "Well, Crackers, what luck?" None. Trouble was afloat in a moment, and "bring on your meat" met me at every turn.

Next morning before day found me miles from the line of march, determined to hunt something for my hungry comrades. And a more faithful searching hunt a man never made. Up the hills and down the valleys I went, perhaps I could get a deer, a pig, anything. I would have been tempted to have killed a mule had I found one. But no, the country was silent, and barren of hair and feather worth carrying to camp, and must have been scoured by hungry men before me. The middle of the afternoon found me again with the command. I was met on every turn by the hungry cry, "Bring on your meat." I was desperate; yet had I not voluntarily assumed the responsible position, and to whom else could the men look for meat?

When I reported my failure to the commanding officer, he looked daggers at me, pulled out his watch, looked at the time of day; two hours to sundown, the last cracker gone, in a section very sparsely settled, the men almost broken down, and hungry, their feet wet and blistered. The rain which had poured down on us during the past two days had spent itself, and the sky was bright for the first time. A halt was called, and a council held. All had been animated by the hope of catching up with the fugitives, and giving them battle, and there had been glimpses of them at intervals during the day, pushing down the other side of the stream, and trying to effect a crossing. But now a new enemy met us, hunger. What was to be done? To retrace our steps was starvation, to proceed further would be disobeying orders, or at least, stretching them beyond excuse. It was finally decided to change our course, and march north in the hope of striking a settlement that had not been closely foraged. I was therefore ordered to take the first left hand road and find a suitable bivouac for the night. Spurring on, I found a cross road within a short distance of where we stopped, and I called their attention to it. All was soon in motion, and I went cantering along to perform the duty assigned me. Mile after mile I rode, but no break in the pine forest. I found a deserted cabin with a small clearing, but no water, that would not do; so on I went a mile or two further. I began to despair of relief for the troops, and determined to select the first spot that afforded wood and water and trust to the morrow for provisions.

Night was coming on, still there was no break in the forest. I felt sad and sick at heart thinking of the hungry, footsore boys behind me, who were looking ahead at every turn in the road for me and relief. I slackened my pace and permitted my poor, faithful horse to walk up a sharp incline in the road. My rifle was lying in front across my saddle, the reins loose on Tom's neck. My thoughts took flight and were away off in my own home. There I met my wife and baby, Mary; tears, hot, scalding tears, ran down my cheeks, my heart was full, for the moment I had forgot my duty, and was slowly repeating the following stanza:

> "Methought from the battlefield's stern array
> That I wandered far on a desolate tract;
> It was evening, and sunshine arose on the way
> To the home of my loved ones, who welcomed me back."

I had repeated half of the next, when my horse came to a sudden stand. I looked up, brushed the tears from my eyes and looked around. I was on the brow of the ridge, and right in front of me, in the valley beneath, lay a beautiful farm. Half a mile distant were the farmhouse, barns, and orchard. The smoke rose from the chimneys and eddied away in the evening breeze. The tingling of a cow bell came floating up the hill, and a lot of cattle stood in the road in front of the homestead. Stacks of fodder stood by the barn, and turkeys were flying up to roost. In a field back of the house, that stretched within two hundred yards of where I sat, there was a small flock of sheep grazing in apparent security. There was plenty, if not peace, within my grasp. How long I sat gazing at the peaceful scene before me I know not, but the clear neigh of a horse away at the foot of the hill behind, told me that the column was near.

In a moment my course was mapped out. I would tie my horse, creep to the fence, shoot down that flock of sheep, and buy them afterward. When I reached the fence I was within from sixty to one hundred yards of the flock, sixteen in number and large ones. I steadied my nerves for the work, determined that every shot should count. Dropping down in the fence corner out of sight, I loaded and fired in quick succession. One after the other of those innocent creatures dropped to my shots. I seemed to be inspired; not a bullet missed its mark, and just as the last one fell the head of the column appeared on the top of the ridge on my right, and an angry farmer came running across the field on my left. When the pleasant view burst on the eyes of the weary, hungry soldiers, they broke out in loud cheers, which drew the attention of the farmer, who took in the situation at a glance. He stopped short, looked first at the troops, then at his bleeding flock. I went up and tried to explain matters, but after listening a while he turned on his heel and started off without a word. When distant about twenty steps he turned and said, "Stranger, come down to the house, will you?" and left.

After seeing big roaring fires of dry rails ablaze, and the sheep stripped of their pelts, which was a wonderfully short job, I went to the house, and was kindly received by the host. All were in a state of abject fear lest the men would come down and do all kinds of bad things, as they had been told would happen when the hireling Yankees would come, but seeing that I was a human being, and rather a kind one at that, the children came up to me, and when I told them of my own little darling at home, they became reassured, and when I asked for a piece of bread, for I was hungry, that true spirit of American hospitality came to the front, and the oldest daughter, who had been very shy, brought me some sweet milk and light bread, which proved a treat. After assuring them that we were friends, that nothing should be disturbed, and that we would pay for everything in good greenbacks, they became sociable and obliging. The old gentleman offered to haul a load of sweet potatoes to the camp at thirty cents a bushel, and priced his sheep at two dollars and a half a head, all of which was paid. We even paid him for the rails we burned, for he proved to be a good man, and befriended us in a pinch. What a feast we had that night, roast mutton and sweet potatoes. The men dried their clothes and got a good night's sleep on that hillside.

The next day, with a supply of sweet potatoes stored in haversacks and ambulances, and our horses well fed with sweet fodder, we turned our faces campward, receiving accurate directions from our host as to the course, and on the third day we reached our tents without the loss of a man.

This perchance may meet the eyes of some of the boys—now old men—who helped eat the mutton, if so, they will know that "Crackers" still lives. CAPE ROCK.

CAPE GIRARDEAU, MO.

Natural History.

THE BALTIMORE ORIOLE.

(Icterus Galbula.)

WHAT a beauty! Yes, you may well say so. Observe the taste he displays in his dress—orange and jet—a most perfect combination. The colors, too, so rich and of a brilliancy I have rarely seen surpassed. The fine fellow is the dandy of his family, his modest spouse affecting a more quiet costume and appearing, in consequence, all the more lovely by contrast. A joyous, rollicking chap is "Baltimore," and a gay life he leads, spending most of his time in the treetops, from whence his clear, ringing calls come down to us with the rush of the breeze through the foliage. There is a wild freshness about the life of this bird that imparts an indescribable charm to him. The home he builds is a marvel of ingenuity, and so well is it put together that with a little repairing it often answers for the second season. Many times I have found it half filled with the husks of beechnuts and empty acorn shells, remnants from the feasts of tree mice, who took possession after the rightful owners had vacated the premises. With us he is inclined to favor the beech as a building site, no doubt from the fact that its twigs are stouter and less liable to snap in the strong gusts which sometimes sweep among the boughs.

Way out, in the last fork of some gracefully drooping branch he will tie the foundation knots of his pendant home. String, horsehair, paper, strips of soft cedar bark (and in one instance in my own experience a piece of blue ribbon) are most cunningly interwoven and shaped into a pouchlike form. Nearly a fortnight passes before the work is completed to the satisfaction of the little architects and the house ready to receive its mistress. All is ready at last, and "my lady," looking as demure as possible, is soon deep in household cares.

The finished nest is a light, graceful structure, swaying responsive to every breath that stirs, but withal so strong that the fierce gale will only toss it about, without injuring its contents, and often the mother bird will ride out the storm therein in perfect security. So well is it hidden that it often passes unseen, the dark leaves rooting it in completely. The male, however, often betrays its whereabouts with his noisy chatter, as he dashes at some careless bird who has ventured too near. Immediately after you will hear

his metallic *tu-e! tu-e! te-u! tu-e!* as he proclaims to his mate that "all is well." When the little family arrives the joyous parents are busy from early morning until night foraging for food, and they are valuable at this season as most indefatigable insect destroyers. As I have said, the oriole is strictly a tree bird, and rarely seen below. He has often come to the bath, however, yielding to its attractions during the summer heats, and a beautiful sight it is to see him dash the spray from his jetty wings as he washes, his handsome brown eyes rivaling the flying drops in their sparkles. When does he arrive? With the buds and blossoms; when the orchards are covered with flaky blooms, and the locust fills the air with its perfume, then it is you hear him, with his wild voice full of the breezy tree tops and his bright form gleaming like a coal of fire among the leaves. *Tu-e! tu-e! te-u! tu-e!* WILMOT.

NEW YORK CITY.

THE COUESIAN PERIOD.

By R. W. Shufeldt, Capt. Medical Corps, U. S. A., Chairman Section of Avian Anatomy, A. O. U. Continuation of the Historical Preface from advance sheets of Coue's "Key."]

THE POST-LINNÆAN EPOCH: 1758–1800.

(1758—1766.)

THE *Linnæan Period.*—An interregnum here, during which not a notable work or worker appears in North American ornithology itself. But events elsewhere occurred, the reflex action of which upon our theme is simply incalculable, fully requiring the recognition of this period. The dates, 1758-1766, are respectively those of the appearance of the tenth and of the twelfth edition of the "Systema Naturæ" of Linnæus. In the former the illustrious Swede first formally and consistently applied his system of nomenclature to all birds known to him; the latter is his completed system, as it finally left his hands; and from then to now, zoologists, and especially ornithologists, have disputed whether 1758 or 1766 should be taken as the starting point of zoological nomenclature. In ornithology, the matter is still at issue between the American and British schools. However this may result, the fact remains that during this "Linnæan period," 1758 to 1766, we have the origin of all the tenable specific names of those of our birds which were known to Linnæus; the gathering up and methodical digestion and systematic arrangement of all that had gone before. Let this scant decade stand—mute in America, but eloquent in Sweden, and since applauded to the echo of the world.

Nor is this all. The year 1760 saw the famous "Ornithologia" of Mathurin Jacques Brisson (* April 20, 1725—† June 23, 1806) in six portly quartos with 261 folded plates, and elaborate descriptions in Latin and French, of hundreds of birds, a fair proportion of which are North American. Many are described for the first time, though unfortunately not in the binomial nomenclature. The work holds permanent place, and most of the original descriptions of Brisson are among the surest bases of Linnæan species.

(1766-1785.)

The Forsterian Period.—Nearly twenty years have now elapsed with so little incident that two brochures determine the complexion of this period. John Reinhold Forster was a learned and able man, whose connection with North American ornithology is interesting. In 1771 he published a tract, now very scarce and of no consequence whatever, entitled "A Catalogue of the Animals of North America." But it was the first attempt to do anything of the sort—in short, the first thing of its kind. It gives 302 birds, neither described nor even named scientifically. But that was a large number of North American birds to even mention in those days—more than Wilson gave in 1814. Forster followed up this exploit in 1772 with an interesting and valuable account of fifty-eight birds from Hudson's Bay, occupying some fifty pages of the "Philosophical Transactions." Several of these birds were new to science, and were formally named, such as our white-throated sparrow, black-poll warbler, Hudsonian titmouse and Eskimo curlew. Aside from its intrinsic merit, this paper is notable as the first formal treatise exclusively devoted to a collection of North American birds sent abroad. The period is otherwise marked by the publication in 1780 of Fabricius's "Fauna Grœnlandica," in which some fifty birds of Greenland receive attention; and especially by the appearance of a great statesman and one of the Presidents of the United States in the rôle of ornithologist; Thomas Jefferson's "Notes on the State of Virginia" having been first privately printed in Paris in 1782, though the authorized publication was not till 1787. It contains a list of seventy-seven birds of Virginia, fortified with references to Catesby, Linnæus and Brisson as the author's authorities. There were many editions, one dating 1853.

The long publication in France of one of the monumental works on general ornithology coincides very nearly with this period. I refer of course to Buffon and his collaborators. The "Histoire Naturelle des Oiseaux," by Buffon and Montbeillard, dates in its original edition 1770–1783, being in nine quarto volumes, with 264 plain plates. It forms a part of the grand set of volumes dating 1749–1804, in their original editions. With the nine bird volumes are associated the magnificent series of colored plates known as the "Planches Enluminés," published in 42 fascicles, from 1765 to 1781. The plates are 1,008 in number, of which 973 represent birds.

(1785-1791.)

The Pennantian Period.—A great landmark—one of the most conspicuous of the last century—was set up with the appearance in 1785 of the second volume of Thomas Pennant's "Arctic Zoology." The whole work, in three quarto volumes with many plates, 1784–87, was "designed as a sketch of the zoology of North America." In this year, also, John Latham completed the third volume (or sixth part) of his "General Synopsis of Birds." These two great works have much in common, in so far as a more restricted treatise can be compared with a more comprehensive one; and in the history of our subject the names of Latham and Pennant are linked as closely as those of Catesby and Edwards. The parallel may be drawn still further; for neither Pennant nor Latham (up to the date in mention) used binomial names; their species had consequently no standing; but they furnished to Gmelin in 1788 the same bases of formally named species of the thirteenth edition of the "Systema Naturæ," that Catesby and Edwards had afforded Linnæus in 1758 and 1766. Pennant treated upward of 500 nominal species of North American birds. The events at large of this brief but important period were the progress of Latham's Supplement to his Synopsis, the first volume of which appeared in 1787, though the second was not completed till 1801; the appearance in 1790 of Latham's "Index Ornithologicus," in which his birds receive Latin names in due form; and the publication in 1788 of the thirteenth edition of the "Systema Naturæ," as just said.

We are so accustomed to see "Linn." and "Gm." after the names of our longest-known birds that we almost unconsciously acquire the notion that Linnæus and Gmelin were great discoverers or describers of birds in those days. But the men who made North American ornithology what it was during the last century were Catesby, Edwards, Foster, Pennant, Latham and Bartram. For "the illustrious Swede" was in this case little more than a methodical cataloguer, or systematic indexer; while his editor, Gmelin, was merely an industrious, indiscriminate compiler and transcriber. Neither of these men *discovered* anything to speak of.

(1791—1800.)

The Bartramian Period.—William Bartram's figure in the events we are sketching is a notable one—rather more on account of his bearing upon Wilson's subsequent career, than of his own actual achievements. Wilson is often called "the father of American ornithology;" if this designation be apt, then Bartram may be styled its godfather. Few are fully aware how much Wilson owed to Bartram, his "guide, philosopher and friend," who published in 1791 his "Travels through North and South Carolina," containing much ornithological matter that was novel and valuable, including a formal catalogue of the birds of the Eastern United States, in which many species are named as new. I have always contended that those of his names which are identifiable are available, though Bartram frequently lapsed from strict binomial propriety; and the question furnishes a bone of contention to this day. Many birds which Wilson first fully described and figured were really named by Bartram, and several of the latter's designations were simply adopted by Wilson, who, in relation to Bartram, is as the broader and clearer stream to its principal tributary affluent. The notable "Travels," freighted with its unpretending yet almost portentous bird matter, went through several editions and at least two translations; and I consider it the foundation of a distinctively American school of ornithology.

We have seen, in several earlier periods, that men's names appear in pairs, if not also as mates. Thus, Catesby and Edwards; Linnæus and Gmelin; Pennant and Latham; and, perhaps, Buffon and Brisson. The Bartramian *alter ego* is not Wilson, but Barton, whose "Fragments of the Natural History of Pennsylvania," 1799, closed the period, which Bartram had opened, and with it the century also. Benjamin Smith Barton's tract, a folio now very scarce, is doubly a "fragment," being at once a work never finished, and very imperfect as far as it went; but it is one of the most notable special treatises of the last century, and I think the first book published in this country that is entirely devoted to ornithology. But its author's laurels must rest mainly upon this count, for its influence or impression upon the course of events is scarcely to be recognized—is incomparably less than that made by Bartram's "Travels" and his mentorship of Wilson.

By the side of Bartram and Barton stand several lesser figures in the picture of this period. Jeremy Belknap treated the birds of New Hampshire in his "History" of that State (1792). Samuel Williams did like service for those of Vermont in his "History" (1794). Samuel Hearne, a pioneer ornithologist in the northerly part of America, foreshadowed as it were, the much later "Fauna Boreali-Americana" in the narrative of his journey from Hudson's Bay to the Northern Ocean—a stout quarto published in 1795. Here a chapter of fifty pages is devoted to about as many species of birds; and Hearne's observations have a value which "time, the destroyer," has not yet wholly effaced.

THE WILSONIAN EPOCH: 1800-1824.

(1800-1808.)

The Vieillotian Period.—As we round the turn of the century a great work occupies the opening years, before the appearance of Wilson, a work by a foreigner, a Frenchman, almost unknown to or ignored by his contemporaries in America, although he was already the author of several illustrated works on ornithology, when, in 1807, his "Histoire Naturelle des Oiseaux de l'Amerique Septentrionale" was completed in two large folio volumes, containing more than a hundred engraving, with text relating to several hundred species of birds of North America and the West Indies; many of them figured for the first time are entirely new to science. This work, bearing much the same relation to its times that Catesby's and Edwards's respectively did to theirs, is said to have been published in twenty-two parts of six plates each, probably during several years; but the date of its inception I have never been able to ascertain. However this may be, Vieillot alone and completely fills a period of eight years, during which no other notable or even mentionable treatise upon North American birds saw the light. Vieillot's case is an exceptionable one. As the author of numerous splendidly illustrated works, all of which live; of a system of ornithology, most of the generic names contained in which are ingrained in the science; of very extensive encyclopædic work by which hundreds of species of birds receive new technical names; Vieillot has a fame which time rather brightens than obscures. Yet it is to be feared that the world was unkind during his lifetime. At Paris, he stood in the shadow of Cuvier's great name; Temminck assailed him from Holland; while, as to his work upon our birds, many years passed before it was appreciated or in any way adequately recognized. Thus, singularly, so great a work as the "Histoire Naturelle"—one absolutely characteristic of a period—had no appreciable effect upon the course of events till long after the times that saw its birth, when Cassin, Baird and others brought Vieillot into proper perspective. There is so little trace of Vieillot during the Wilsonian and Audubonian epochs, that his "Birds of North America" may almost be said to have slept for half a century. But today, the solitary figure of the Vieillotian period stands out in bold relief.

(1808-1824.)

The Wilsonian Period.—The "Paisley weaver;" "the Scotch pedler;" the "melancholy poet-naturalist;" the "father of American ornithology"—strange indeed are the guises of genius, yet stranger its disguises in the epithets by which we attempt to label and pigeon-hole that thing which has no name but its own, no place but its own. Alexander Wilson had genius, and not much of anything else—very little learning, scarcely any money, not many friends, and a paltry share of "the world's regard" while he lived. But genius brings a message which men must hear, and never tire of hearing; it is the word that comes when the passion that conceives is wedded with the patience that achieves. Wilson was a poet by nature, a naturalist by force of circumstances, an American ornithologist by mere accident—that is if anything can be accidental in the life of a man of genius. As a poet, he missed greatness by those limitations of passion which seem so sad and unaccountable; as the naturalist, he achieved it by the patience that knew no limitation till death interposed.* As between the man and his works, the very touchstone of genius is there; for the man was greater than all his works are. Genius may do that which satisfies all men, but never that which satisfies itself; for its inspiration is infinite and divine, its accomplishment finite and human. Such is the penalty of its possession.

Wilson made, of course, the epoch in which his work appeared, and I cannot restrict the Wilsonian period otherwise than by giving to Vieillot his own. The period of Wilson's actual authorship was brief, it began in September, 1808, when the first volume of the "American Ornithology" appeared, and was cut short by death before the work was finished. Wilson, having been born July 5, 1766, and come to America in 1794, died August 23, 1813, when the seventh volume was finished; the eighth and ninth being completed in 1814 by his friend and editor, George Ord. But from this time to 1824, when Bonaparte began to write, the reigning work was still Wilson's, nothing appearing during these years to alter the complexion of American ornithology appreciably. Wilson's name overshadows nearly the whole epoch—not that others were not then great, but that he was so much greater. This author treated about 280 species, giving faithful descriptions of all, and colored illustrations of most of them. There are numerous editions of his work, of which the principal are Ord's, 1828-9, in three volumes; Jameson's, 1831, in four; Jardine's, 1832, in three, and Brewer's, 1840, in one; all of these, excepting of course the first one, containing Bonaparte's "American Ornithology" and other matter foreign to the original "Wilson." In 1814, just as "Wilson" was finished, appeared the history of the memorable expedition under Lewis and Clarke—an expedition which furnished some material to Wilson himself, as witness Lewis' Woodpecker, Clarke's Crow and the "Louisiana" Tanager; and more to Ord, who contributed to the second edition of "Guthrie's Geography," an article upon ornithology. Ord's prominence in this science, however, rests mainly upon his connection with Wilson's work, as already noted. Near the close of the Wilsonian period, Thomas Say gave us important notices of Western birds, upon the basis of material acquired through Long's expedition to the Rocky Mountains, the account of which appeared in 1823. In this work, Say describes sundry species of birds new to science; but he was rather an entomologist than an ornithologist, and his imprint upon our subject is scarcely to be found outside the volume just named.

A noted—some might say rather notorious—character appears upon the scene during this period, in the person of C. S. Rafinesque, who appears to have been a genius, but one so awry that it is difficult to do aught else than misunderstand him, unless we confess that we scarcely understand him at all. In the elegant vernacular of the present day he would be called a crank; but I presume that term means that kind of genius which fails of interpretation; for an unsuccessful genius is a crank, and a successful crank is a genius. For the rest, the Wilsonian period was marked by great activity in Arctic exploration, in connection with the ornithological results of which appear prominently the names of William E. Leach and Edward Sabine.

As illustrating the relation between Wilson and Bartram, which I have already pointedly mentioned, I may quote a few lines from Ord's "Life of Wilson."*

* "His schoolhouse and residence being but a short distance from Bartram's Botanic Garden, situated on the west bank of the Schuylkill, a sequestered spot, possessing attractions of no ordinary kind; an acquaintance was soon contracted with that venerable naturalist, Mr. William Bartram, which grew into an uncommon friendship, and continued without the least abatement until severed by death. Here it was that Wilson found himself translated, if we may so speak, into a new existence. He had long been a lover of the works of Nature, and had derived more happiness from the contemplation of her simple beauties, than from any other source of gratification. But he had hitherto been a mere novice: he was now about to receive instructions from one whom the experiences of a long life, spent in travel and rural retirement, had rendered qualified to teach. . . . From his youth Wilson had been an observer of the manners of birds; and since his arrival in America he had found them objects of uncommon interest; but he had not yet viewed them with the eye of a naturalist." This was about 1800—rather a little later. Wilson's "novitiate" was the Vieillotian period, almost exactly. Bartram survived until July 22, 1823, his eighty-fourth year; the date of his death thus coinciding very nearly with the close of the Wilsonian epoch and period.

[TO BE CONCLUDED.]

TESTING DEUTERONOMY.—One of the most singular things I ever heard about birds was related to me by a friend who has long been an ardent student of ornithology, and of the Scriptures as well. In the course of his reading he came across a chapter in Deuteronomy which embraces "sundry laws and regulations," and found his attention attracted to the following verses: "If a bird's nest chance to be before thee in any tree or on the ground, whether they be young ones or eggs, and the dam sitting upon the young or upon the eggs, thou shalt not take the dam with the young: But thou shalt in any wise let the dam go and take the young to thee, that it may be well with thee, and that thou mayst prolong thy days." This passage puzzled him a good deal; so, with true scientific ardor, he set out to break its injunction, and try to find out why it was made. It being nesting time for the birds he had no particular difficulty in finding what he sought, and soon returned with a female bird and a nest with four young ones in it, put them all together in a cage, and, after supplying them with food and water, left them for the night. In the morning mother and young were found lying dead together, though without any marks of violence upon them whatever, or anything to indicate why they had died. Evidently something was wrong here, so he went out and caught another family, put the mother in one cage and the young in another, and gave them separate rooms, although not removing them so far apart but that they could hear each other in case one or the other should cry out. The next morning all the birds were found dead as before. Again the student went out, and again came back with a capture, and this time he put the young birds in the garret and the old one in the cellar, but although neither mother nor offspring could hear each others' cries, the coming morning showed the same result. He then went out and captured a nest of birds, but let the mother go, and successfully raised the entire brood. In each case the variety of bird was the same—the rose-breasted grosbeak, which is one of the strongest and easiest to rear of all New England species. The reason of this strange occurrence does not appear, but of one thing my friend is convinced, and that is that Moses was the first agitator for a Society for the Prevention of Cruelty to Animals, and that he knew what he was talking about when he discussed birds.—*Sun.*

THE PHILADELPHIA ZOOLOGICAL SOCIETY has issued its twelfth annual report, which shows the institution to be in a most satisfactory condition. The success of the Zoological Gardens is due in a very large measure to the efficiency of the superintendent, Mr. Arthur Erwin Brown.

Game Bag and Gun.

ENGLISH AND AMERICAN GUNS.

A BRIEF REVIEW OF MY REVIEWER.

Editor Forest and Stream:

It was my fortune to be absent from home when the FOREST AND STREAM of the 8th inst. came to my office, or I should have taken occasion somewhat earlier to have paid my respects to your correspondent, "Vitus," who has seen proper to indulge in some harsh criticisms upon my article in which I begged to dissent from certain views of Mr. Greener. Ordinarily, I have no disposition to evade a legitimate and decorously-conducted controversy, but I have no taste for that which degenerates into nerveless puerilities or the introduction of matter certainly *aliunde* to the questions involved. "Vitus," instead of contenting himself with a dissent from my opinions in regard to the value of a gun, and expressing that dissent in respectful terms, has evinced his entire ignorance of the courtesies of a newspaper discussion, however much learning he may have, according to his own statements, in regard to the mechanical excellence of a gun and the cost of its construction. According to his own testimony, he is a proficient in these matters, and woe be to him who dares "come betwixt the wind and his nobility."

There was nothing in my letter which called for a large part of his criticisms. Indeed nearly all of his article is entirely irrelevant. I will use no harsher term. He will allow me to say, however, that even after the authoritative expressions of this self-exalted expert, I have the temerity to adhere to every utterance which I made in the letter which he pretends to answer. If I err, it is because I have listened to and believe the statements of persons who ought to be quite as well acquainted with the subject as this boastful gentleman, even though he may be a gunsmith, and may have acquired his skill in the workshops of Europe and America. It may never have occurred to "Vitus" that there are some persons who have an idea as to what constitutes well-executed mechanism who do not follow a mechanical profession, and who are not entirely ignorant of its commercial value, and that there are those who have pursued such calling for many years, who are not, and never could be, clever artisans. But, of course, "Vitus" does not belong to the latter class. He is such a thorough expert that no dissent from his statements can be tolerated.

Certainly, I never said, either in my letter or elsewhere, that American mechanics are incapable of turning out first-class work. Why should "Vitus" have made such a charge? He had no authority for it. I said nothing of the kind, and believe nothing of the kind. I did say that many American gunmakers bought English and Belgian barrels, not entirely finished, and hence at a less rate of duty, used them, and then claimed that their product was American manufacture. Can "Vitus" deny this? With all his vainglory, I think he will not have that temerity. Why do they buy them? Because they are inferior in quality? He will not say that. He admits that the best quality can be had for $75, but insists that the additional cost of completing the gun will run the figures up to at least $250. He says that locks for such barrels are worth $75. He must excuse me if I venture to say that a first-class article can be had for much less—locks which have the plate case-hardened and the tumbler and dogs steel. There is no need of case-hardening them. If the metal is hard enough to yield to a file, it will last a lifetime. I have examined the locks of guns made by Purdey, Westley Richards, Scott, Greener and Tolley, and not one of them had their parts case-hardened. I have seen many inferior ones of English and American manufacture, which had been subjected to the process. It is not an expensive one. I have seen guns by Westley Richards, Scott, Greener and Tolley, whose locks were all made by Stanton & Company. At all events, they were so stamped. "Vitus" need not tell me that the stamp was a forgery. These were four-pin bridle locks, and no American can surpass them in their mechanical excellence. They did not cost $75, for some of the guns were imported at a less cost than $150.

I have seen advertisements of American and English manufacturers, in which they propose to fit extra barrels for half the cost of the gun. Now, if a first-class pair of barrels is worth $75, what is the value of the gun? It was my fortune to have imported, within the last twelve months, a gun made to order by a well-known English manufacturer. He represented the gun to be the very best he could make, and that the barrels were of the finest English Damascus. I have quite as much confidence in his statements as I have in those made by "Vitus," however unpardonable he may regard the offense. The gun had an extra pair of barrels of the same grade as the regular ones, and the charge was $75. It was elaborately engraved, and the cost was far less than "Vitus" alleges as the proper value of a first-class gun.

Some years ago I was in New York, and at the house of Francis Tomes & Son, 206 Maiden Lane. It was before breechloaders were known. The superintendent, H. W. Tomes, stated to me, in answer to an inquiry, that $75 would buy as serviceable a gun as could be made, and when men went beyond that price they were paying for fancy work, which was really worthless, or for the name of some man who charged fabulously for his reputation. Perhaps Tomes knew nothing of the subject, and was one of those "blasted fools" who beget the ire of Vitus. Verily, some men do make themselves "blasted fools," or nature may not have been very lavish of her gifts to them. But, of course, "Vitus" is not one of them. He stands somewhat as Phillips said of Napolean, "A sceptred hermit in the solitude of his own mechanical magnificence."

"Vitus" condescendingly informs "Wells" that there are thousands of English and Belgian guns imported into this country vastly inferior to Colts. If he will pardon me for saying it, I will state that I am not indebted to him for this information. I knew the fact. There are thousands of such, and I would not give one smile of benignant approval from such a man as "Vitus" for a whole cargo of them, even if they are "Hinglish, you know." It was too bad for "Vitus" to have made this ill-tempered fling. If it had been brilliant, I could have admired the scintillation and not noticed the venom. But it was too—I will not say stupid.

But let us get back to the question. How many guns which are well made, and capable of withstanding severe usage, have these high-priced stocks? Of what real value is that beautiful curl in the wood? How much more durable is such a piece of timber? Cannot a stocker finish a neat, strong stock, of tough wood, for less than $20? Cannot American walnut be found which has all the essential qualities? I have thought so, Mr. Greener to the contrary notwithstanding. Why will not $150 buy a gun possessing all the necessary qualities for long use and good shooting? One who has the money, and is so disposed, may invest more heavily; but will not a well-made $150 gun, plain and unadorned, stand all the "wear and tear" of a more highly-priced one? Am I to be regarded as a "blasted fool" for thinking so? If so, then there are American manufacturers who have incurred the "wrath" of this mighty Achilles, "Vitus."

"My offense hath this extent." I chose to allude to the habit of American gun makers buying foreign barrels and then claiming that their product was domestic work. Perhaps I trod upon "Vitus's" corns, and he seeks to wreak his vengeance upon me for simply stating the truth. Do American manufacturers buy English and Belgian barrels? If so, then the statement should not have produced the harsh criticisms.

Permit me to direct "Vitus's" attention to one of his overwhelming arguments (?) in which he details what occurred with regard to the cheap Belgian gun, which was claimed to be a Jo. Manton, the "circumstance" which taught him a "lesson," by which it is clear he derived no profit. "If a man were to bring in a broomstick and say it was the finest gun I ever saw, I would not contradict him." And yet, when I stated that American gunmakers used foreign barrels, this brilliant pupil forgets all he has learned, and "falls a cursing, like a very bawd, a scullion." For shame, "Vitus!" Take a good dose of Simmon's Regulator, and get an amiable digestion.

I trust I am not guilty of the charge which my assailant makes, of hostility to American manufactures. Nothing which I ever said has given a decent pretext for the allegation. It is simply untrue. No man has a higher appreciation of the skill of our mechanics and artisans, or a more exalted respect for that class of our people. My daily pursuits bring me in contact with them, and they have gained my admiration. I belong to a race of mechanics, who take pride in their "coat of arms"—an anvil and a jack plane. But when an American professes to sell a domestic article, I protest it is not just he should finish up the handicraft of a European and palm it off as his own work. If that is a "Hinglish" idea, "Vitus" may make the most of it he can, and get out of it all the consolation it will afford his patriotic soul. He may rest assured that I am one of the unfashionable class who buy guns and watches, not because they are made in England or America, but solely because I think the article is best worth the money which I may invest.

"Vitus" has yet something to learn, preposterous as he may regard the assertion. It would be well for him to entertain the idea that there is at least a possibility that the powers of the Almighty were not exhausted when He brought him into being, and that for wise purposes He made others, who are not entirely destitute of knowledge in relation to mechanism, and that such are entitled to the courtesy of even so exalted a person as my uncharitable critic. At all events it is but due to even the humblest man that his positions upon any subject should be fairly stated, and that a perversion of them, for the sake of triumph, is unworthy of any one who has a decent regard for his own character. WELLS.

ROCKINGHAM, N. C., May 20, 1884.

SNAPPING TURTLES AND SKUNKS.

IN READING of late, the able and interesting work of C. Hart Merriam, M. D., "Mammals of the Adirondacks," we have been reminded of something that may be of use and interest to many readers of FOREST AND STREAM.

Dr. Merriam does not say too much in defense of that much abused animal, the skunk. It is now more than fifteen years since the writer of this article made his first visit to the beach at the mouth of Sandy Creek, Jefferson County, N. Y. No. 1 Life Saving Station now stands on the ground where our party built a shanty of slabs picked up along the beach, and enjoyed boating and fishing for more than a week.

It is just at this place that Sandy Creek, with another stream, finds its way into Lake Ontario. The most northern of these streams runs through Woodville, and the other one, Sandy Creek proper, through the village of Ellisburg. But before either of them find this outlet, they pass through a marsh for the distance of two miles or more. This marsh is well known to many sportsmen of Oswego, Watertown and Syracuse, and many individuals living in the neighborhood are only too well acquainted with it for the good of the game that finds a home there. In days past it was a favorite breeding place for the wood duck (*Aix sponsa*), with some black ones (*Anas obscura*), and any number of coots (*Fulica americana*), grebes (*Podilymbus podiceps*), and rails (*Porzana carolina*). Indeed it is a favorite resort of the wood duck still, but neither they nor any other water bird have much chance to increase there now.

This is a different place from what is known as "Little Sandy Pond" by the sportsmen in the northern part of the State. Little Sandy is three or four miles to the south of the place we are describing. This marsh is sometimes called Pierrepont's Marsh, or Noble's or Gilbert's, or it has other local names around its borders. Little Sandy has for many years been held, we have heard, as a preserve by the Leather Stocking Club of Oswego. But the marsh in question is about six miles long, with it ponds and creeks and brooks, and a mile and a half or more in width. It lies north and south, and on the west is protected from the waves of the lake by a sand beach that extends along its front. Through this beach run two shallow entrances into the marsh, apart from the deeper entrances, where the streams run into the lake at the life-saving station. Schooners enter here and take the North Creek, as it is called, winding up to Woodville, or Sandy Creek, going toward Gilbert's Landing and the village of Ellisburg. Nothing but fishing boats and small yachts could make the other entrances. And these are nearly two miles away, one north and the other south of the station. Of course, through these openings the waters of Lake Ontario flow in or out of the marsh, and fish pass to and fro. The openings are on an average one hundred feet wide, and the heavy west winds blow the waves on shore and raise the waters over the marsh and along the uplands; or on the contrary, an east wind carries them off and the depth decreases in proportion.

The marsh itself is filled with every variety of feeding ground for water birds and waders. Miles of lily pads spread themselves out, white and yellow. There are acres of wild rice, and flags and rushes and sedge in abundance and through all these brooks and creeks, as they are called, and narrow passages. There are ponds bordered with old driftwood, and bog heads and muddy grounds.

The beach is merely a ridge of sand of the finest kind—fifteen feet high in some places—that blows and drifts like snow. We have the best reason, as many others, for remembering this. On our first visit we were surprised to find everything we ate, or attempted to, gritty with sand. The cook for the day was asked whether he had not made a mistake and used sand instead of pepper. Pickerel, perch, bread, butter, everything sandy. And this would happen even when there was the lightest wind blowing, and with the utmost care that we could take to prevent it. And so the sand has gone on blowing on that beach ever since, and long before we knew it, and winds and waters have made many changes. Acres of marsh have been covered within our recollection, and are now converted into a low sand beach over which the breakers wash at times. Great gaps have been hollowed out in the ridge, through some of which the high waves of the lake in spring and fall dash across some three or four hundred feet, and pour their waters by a new way into the marsh. Then the sand has been blown away from the roots of the larger trees that stood on the ridge and they have fallen. The roots now remain, like great sprawling spiders, hanging and projecting from the banks; while the trees themselves have been cut away for fire wood or remain where they fell. In the rear, next the marsh, the alders that grow there are in many places buried to their tops in sand. It is sometimes eight or ten feet deep.

The old residents living near the place can remember when the whole ridge was almost a continuous line of trees. Indeed, we can ourselves, and when from the mainland it was only here and there that you could catch a glimpse of the water near the shore. It is even curious to this day to see pieces of wood and roots of trees five and six feet below the present surface projecting out of the higher banks, proving that for years since the first trees were cut along the shore there had been changes going on and a drifting of the hills toward the marsh since the ridge began to be denuded. In time, no doubt, the hills will be carried inland and help fill up the marsh, while nothing but a low sand beach will be left to attest their past existence.

As we remember this marsh on our first visit, it was filled, as we have implied, with ducks and coots and rails and divers. Indeed, it seemed almost alive with all of these, and we do not know what to compare the quacking and squealing and peeping to, that could be heard there in the early morning. There was no trouble then in securing a game dinner. We have seen hundreds of ducks there the first day of September and earlier, for the 15th of August was the open season then. Black ones, and wood and blue-winged teal, especially in the evenings have we seen these, as they sought the quiet ponds to "roost," while Wilson's, or English snipe, and yellowlegs and plover from time to time would fly past the shanty.

But now all this has changed, and it has been changing for years, so far as our observation goes, while there does not seem very much more hunting than formerly. Last fall revealed a state of things that we were not unprepared for. Every bird about that place, except blackbirds, redwings and marsh hens were in smaller numbers than we had ever seen them; and our annual visit seemed almost devoid of the pleasant surroundings of the past. The grebes that were so tame, because few hunters disturbed them, were nearly all gone; even the frogs and water snakes were in smaller numbers, and these were always so plenty. They would sit upon the shore or curl up upon the logs, or swim across the creek, while the muskrats that whined among the flags, or splashed from the banks, or swam in front of the boat had entirely disappeared; and we could not think that they had all perished by the hand of man.

But now what is the cause of all this change? Not to say that man's hand may not have had something to do with almost the whole of it, but surely not with the grebes and snakes and frogs. We know of no one there that eats frogs.

Well, here, we think, is one reason of this change and this scarcity, and here is the reason for our thinking as we do, let sportsmen and others form their own conclusions: The borders of this marsh and the beach that stands in front of it were, a few years ago, a favorite resort of the skunk. They abounded in the neighborhood and no doubt at times made raids upon the hen coops and the nests that were stolen away. But they did more than this in the way of destroying eggs. And here comes, in another of their uses, which we take the liberty of suggesting to Dr. Merriam. They followed along the beach (we have seen their trails in the sand) and around the borders of the marsh and dug out the snapping turtle's eggs (*Chrysdra serpentina*). We have seen many of the shells of these eggs in little collections of four, five or six drying up in the sun. No doubt there were a few minks that helped them in this work. But the mink fur passed out of fashion and the skunk fur came in, and hence there was a price offered for their pelts. And very many men and boys went to catching them. We have a friend, F. M. Noble, living near the marsh, a buyer of furs, who bought hundreds of their skins. He told the writer that he stored them in his woodhouse, and that the place smelt so of skunk that he could hardly eat in his kitchen for nearly a year.

And now the result of all this. The snappers have taken possession of the marsh, they and their congeners the *Chrysomys picta* (of a smaller size, and perhaps only less destructive because they are fewer in number), and there is nothing to keep down their increase. The beach is one of their favorite places of resort to lay their eggs in the warm sand. We say one of their favorite places, for we have seen the shells of their eggs, where the skunks and minks have dug them out, all around the marsh we might say, wherever there was a dry knoll or sandy hillock. But the beach is their favorite resort, and after a warm sun in June, it is covered with tracks where they have gone up and came down, while in August and before it hundreds of little ones may be seen crawling along the sand, and leaving a double line as they make their way toward the marsh.

There are few skunks and fewer minks around that place now left to destroy the eggs. Hence the increase of the snappers. Indeed they have the marsh, as we have said, almost to themselves, and everything that crawls, creeps, or swims about it is exposed to their depredations. This is the reason that those living in the neighborhood—friends of the game laws, too—speak of the large numbers of wood ducks that are seen in the early summer, and with their young, and then the few that seem to be around when September comes in, and this number seems to be decreasing, and only confirms what we have witnessed ourselves on this same marsh not many years ago. I will give it as it occurred.

It was during the early part of August that I was there for my health with a nephew. We were trolling for pickeral in the North Creek, he at the oars and I with the line. We had gone up some distance when I observed a coot with a single young one more than half grown, swimming across the stream, about two hundred yards ahead of us. As my nephew was a city lad and unacquainted with the marsh, I

first called his attention to the birds, and then asked him if he would like to see them nearer. He replied that he would, and I at once drew in my line and told him to seat himself in the bow of the boat. I then took the paddles and commenced urging the skiff forward as quietly as possible. The birds meanwhile had crossed the creek and gone in among some lily pads and tufts of wild rice that grew close to the edge of the stream. We had hardly entered these when up went the old bird, but no young one started, and I knew that it was fully fledged. This rather surprised me, and I told my nephew to stand up, look carefully, and he would see it swimming and hiding in the rice that was around us. But no, no bird was there. I was about to stand up myself and see if I could not discover it, for the place was comparatively open, when all at once Frank turned around, with something of terror depicted upon his countenance, and exclaimed, "Oh! what an enormous bullfrog, and he has the bird in its mouth." Knowing that he had mistaken a large snapping turtle for a frog, I told him to take the oar and strike it. He did so, or attempted to, when up came the young bird. It was warm and the blood was running from its side. I found no marks on its feet as though they had been bitten, but a great mouthful had been taken from the side of the bird and the entrails were hanging out.

The only way now that we can see of increasing the game on that marsh or any of those bordering the lake, if the skunks must be destroyed, is to watch the snappers and their congeners in June, when they go up the bank to lay their eggs, and destroy them; while many of the males might perhaps be shot as they sun themselves on the logs. But we do not think the snapping turtle is as much given to this as his companion. However, this is thrown out as a hint to those who have preserves and wish to increase the number of game birds. We have known many young ducks, and even some pretty well grown, to be taken away by snappers. And this even in ponds in close proximity to the house. A friend had to let his pond off last summer before he could catch the turtle that destroyed many of his young ducks. No doubt dogs and minks are often blamed for doing something that belongs to a creature of a very different nature. Farmers had best watch the ponds and brooks where their ducks and goslings feed if they miss them. A. H. G.

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

I have read in a recent issue of your paper the courteous reply of "C. D." to my criticism of certain repeating rifles. The defense is an earnest one and commands the respect always due to sincerity, yet I cannot see that the reasoning of your Wyoming correspondent invalidates at any point the position which I have taken. "C. D." pleads for the repeater, and instances cases where it has been useful; but he does not show that accidents do not occur with it, nor that it can be relied upon to do its work unfailingly. The tests which he quotes are certainly very interesting, but I observe that in these tests there was a failure to extract a shell, *i. e.*, the gun did not work, a breakdown, and an explosion in the magazine. These are the things that I do not wish to have happen with the gun I am using. Of course I do not pretend to say that such occurrences take place often, but I do say that they may take place at any time, and that I prefer a gun not liable to such mishaps.

"C. D.'s" critical reply covers a good deal of ground, and to answer it in detail would occupy more time than I can give to the task. I hope, therefore, that he will pardon me if I confine myself to the original proposition as stated in the letter to which he takes exception, and to one or two other matters more personal in their nature. Of these last let me speak first.

I must apologize to my critic for giving a false impression as to the arm which caused the Jim Baker accident. I supposed, from the connection in which the incident was given in the letter quoted, that it was a Henry (or Winchester) rifle, but, as "C. D." had his account from the old man himself, it is evident that my idea of the occurrence was an erroneous one. I certainly had no intention to mislead.

It is clear that I must have expressed myself unfortunately as to the care which, I think, should be given a gun, and so have been misunderstood by "C. D." I believe that a man should keep his gun in good order, but I do not think that one who, for whatever cause, fails to do this, should lose his life for this failure. The penalty is rather too severe, you see, for what may be nothing more than a little carelessness, or may be quite unavoidable. "C. D." implies that I criticized all repeaters as to their reliability of action and safety. My impression is that a second reading of my letter will convince him that I did no such thing, but that I expressed the opinion that those repeaters which have the magazines in a tube beneath the barrel or within the stock are unreliable and unsafe. Of the former there are a number of forms, all acting on substantially the same principle, all, I believe, likely to get out of order on small provocation, and all liable to premature discharge within the magazine from a number of causes. The Winchester gun is spoken of by those who write on the subject, because it is the oldest of these repeaters, and the one from which all subsequent inventors appear to have drawn their ideas. The most recent rifles of this model have not yet been practically tested in the hands of the public, and when any single individual says that some particular form is the best repeater in the market, is perfectly safe, and will not get out of order, the public naturally waits, before approving or disapproving, to take more testimony on the subject. The dictum of one man is not enough. These arms are new and untried. They have yet to make a record for themselves. I hope that "C. D." will pardon me if I say, moreover, that in some of his recently published writings he has shown a very strong bias in favor of one particular arm, and that, therefore, his opinion, however honest, may not be quite free from prejudice.

In my previous letter I attempted to show that with the repeater the chance of serious danger to the hunter is vastly greater than with the singleloader. I do not pretend to assert that cartridges often explode in the magazine. On the contrary; I think that this occurs very seldom, but then it may occur at any time, and this possibility is somewhat alarming. Two cases of this kind already cited occurred in the hands of men with whom I had close relations.

"C. D.'s" criticism of men who should not be trusted with guns is just enough. But then he must remember that to err is human. If no one ever did a foolish or a careless thing we should have very few accidents with guns. As he very justly says, there is "some preventable cause for each accident," but, as guns go into the hands of wise men and fools alike, we must try to save the lives of as many of the fools as possible by making the guns as safe as possible, and so reducing the danger, from whatever cause, to a minimum.

The man who uses a repeater exposes himself to many dangers not undergone by him who uses the singleloader. If he is willing to take these risks that is his affair.

It is just because a man in the western country must sometimes take his life in his hands that a gun is required that will always work. And this is not true of the Winchester of to-day, nor do I believe it true of other repeaters working on the same plan. I cannot positively assert that all of the various models built on the Winchester plan will get out of order, because, as "C. D." suggests, I have not tried them all. But, admitting this failing in the Winchester of latest model, the inference that the other arms built on a similar plan will act, or fail to act, in the same way, is not an unfair one. I instanced the case of "many years ago," because it was the first time that I had seen much of the repeater, but I think that "C. D." must very well know that at the present day, notwithstanding the march of improvement for "three hundred years," it is an extremely common thing for a cartridge or shell to stick in a tube repeater. This is the testimony of so large a number of practical hunters, whose word would be unhesitatingly taken in other matters, that we cannot doubt that it is a fact. In a country where a man's life may depend on the readiness with which he can use his gun, an arm can have no fault more serious than this.

And now, although I have already written more than I had intended, let me touch on one or two additional points brought up by "C. D." He appeals for rifles that are more accurate. In this appeal I unite, though I cannot but think that for practical purposes any one of half a dozen rifles now on the market is quite good enough. The proposition that to do good shooting we must have good rifles, seems certainly rather elementary. He complains in the last part of his letter that the errors of the man should be charged to the rifle, but he does not appear, in his expressed desire for rifles that will always hit the mark, to remember that, after all, this hitting depends on the man vastly more than on the rifle. No intelligent and observant person can use a rifle much without learning its peculiarities, and after he has acquired this knowledge he can scarcely fail to do with the arm work that is reasonably good. This on the supposition that he is a decent shot, and that the arm is bored true and shoots alike every time. No man, however, can account for the shooting of a tube repeater, the balance of which is constantly changing. If it be supposed that each time a man goes hunting he is to carry a rifle with which he is entirely unacquainted, we could understand how it is that there should be so much anxiety about the accuracy of these rifles, but the rifles of to-day are practically accurate, and an individual may learn by firing at different ranges at a target all he needs to know about his gun; and as soon as a man knows how his gun shoots, the fault if he misses lies in him and not in the weapon. "C. D.," however, appears to assume a man who is infallible, and takes it for granted that a failure to place a ball in the spot aimed at is due to some fault in the rifle he is shooting. That is the way his article reads, but of course I cannot suppose he intended to give utterance to any such absurdity.

He says further, "It is a lucky chance if the hunter can come on his game at a known distance or have full time to estimate it." I grant that it is unusual to come on the game at a known distance, but dissent utterly from the latter part of his proposition. A man who is hunting will often—even usually—see his game before it sees him, and will have abundant time to estimate his distance before shooting. Of course, if one merely rides over the country, taking his chance of stumbling on game, things will be as "C. D." says, but I am speaking of men who hunt, not men who blunder. And suppose the game is found to-day at 50 yards and to-morrow at 150, the hunter who knows his arm should be able to make the necessary allowances for the difference. To judge the distance and shoot accordingly is about as important as any part of the work a hunter has to do.

I hold that the repeater is a cruel weapon, because the knowledge that a man has a dozen shots in reserve, makes him careless in his shooting, and leads him to continue it too long. "C. D." theorizes about an ideal sportsman, but we must reason about the average man. Probably neither "C. D." nor I would continue to shoot, if we carried repeaters, longer than was advisable, but the young hands, the men who are hunting big game for the first time, will try to kill as long as they can. The men who butcher, who wound five head of game for one that they kill, are, so far as I have had the misfortune to be thrown with them, those who are so crazy to kill game that nothing can restrain them; they will shoot as long as the animals are in sight. The man who hunts for his needs knows enough to take his time and to avail himself of every advantage. He gets as close as he can, and the single ball from his rifle does the work. Even a cool headed man, unless he is accustomed to the sight of game, will fire ten shots from a repeater where he would use a singleloader but once. Thus the repeater is a constant temptation.

I am unable to see that the article to which this is a reply is other than a virtual admission of all that I have advanced against this dangerous arm. I believe that other things being equal, the best gun is the safest—safest in action, I mean, and in being always ready for use, and, as I have said before, I do not believe that the repeater with the magazine in the tube under the barrel or within the stock, fulfills these conditions.

My time is so occupied that I cannot give much of it to writing, and I only reply now to "C. D." to show him that I do not consider his arguments good ones, or that he has in any way replied satisfactorily to the points I tried to make. G.

Editor Forest and Stream:

I have owned and used rifles of large and small bores, and have at last settled down to the .32-caliber, short and extra long cartridges, for general hunting and target shooting.

I believe that accuracy is of more importance than weight of powder and lead. If one knows that he can place a ball in some vital part of the game he is hunting, he is pretty certain of making a mortal wound. There is little or no recoil to the .32-caliber to affect the aim, as in all large bores. Of course for grrizzlies, buffalo and moose, a large bore is necessary. But I am speaking now of common hunting, deer, turkey, geese, etc. Probably the .38-caliber would be better still where no small game is hunted.

I am now using a little .32-caliber, and find no difficulty in killing whatever I aim at. I have killed several alligators with it lately—all at one shot. The last one was eight feet in length, the ball (.32 short) entered at one eye, passed through the head, and carried away a large piece of bone near the other, disabling the 'gator so bad that, after he had stopped lashing the water with his tail, I drew him out on the land without resistance on his part. The alligator is like a snake in that it lives long after it has been mortally wounded or has its head cut off. It is pretty well known that a good sized alligator is hard to kill; that in order to kill one at all (outright, or so you can capture it), the ball must be sent into the eye or just back of the foreleg. I know, nine times out of ten, where my leaden messenger will strike, and as I never attempt to kill game at distances over one hundred yards, (and that is further than most game is killed), I am pretty sure of making a mortal wound.

Try the .32 and .38-caliber rifles, (save ammunition and sore shoulders), and you will become crack shots, and bag more game, in fact have more real sport than you could with your 115 to 120 grains of powder and 350 grains of lead.

RED WING.

GLENCOE, Fla.

Editor Forest and Stream:

At last in looking over your articles on "The Choice of Hunting Rifles," I have found a man after my own heart in your correspondent "E. T. D." The case he cites in regard to the Winchester, is almost invariably the way I have found it. The majority shoot away, thinking they are bound to hit something in ten or fifteen shots, when generally the opposite is the case. I have seen so many "tenderfeet" with their repeaters, pump away (excuse the word pump but it is very expressive) at a deer, within easy shooting distance, and that deer was as safe as if he were 100 miles away. You do not, as a rule, find old Rocky Mountain hunters, who face the fiercest animals, use a repeater, they trust to shooting straight, not to the number of shots. I have had considerable experience with the rifle, in shooting such large game as bear, mountain lion, elk, deer, antelope, etc, and after giving the repeaters a fair trial, have thrown them all aside and swear by my Sharps hammerless, .40-70-330, and would far rather be face to face with a "silver tip" with my .40-70, than with twenty Winchesters or any other make of repeaters. I anticipate a two months' trip this summer, and if "E. T. D." will come out here, I will guarantee to show him all the bear, deer, elk, etc., he could desire, and moreover as fine trout fishing as the most fastidious would ask for. I say with him, "I want no better gun than the .40 70." SPORT.

CRESTED BUTTE, Colo.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

I don't care for "style" in a gun, provided the gun is safe, handles well, and is a close, hard shooter. No matter how strong the material, I want some weight of metal in the barrel of my shotgun and especially at the muzzle of a choke-bore. I believe that where a gun is choked at the muzzle, if it is light at that point it springs so that we do not get the full benefit of the choke. I came to this conclusion by putting a light band of lead, fitting closely, around the muzzle, and after firing the gun I found it would drop off easily, having expanded quite perceptibly.

I have been using for the past two years one of the American Arms Co.'s semi-hammerless single guns, a 12-gauge gun, 28 inches, 9¾ pounds, made to order (a 12-gauge on a 10-gauge stock), cut off and rechoked to leave it heavy at the muzzle. PEDAGOG.

CLEVELAND, O.

Editor Forest and Stream:

Several of your correspondents have made statements that I kill geese at 100 yards with No. 10 shot. It is not so. I have seen pinnated grouse killed at that distance, and I have seen geese killed with Nos. 8 and 10 after being shot at with largest size drop shot. A good 10-gauge gun bored for Kynoch's cases will kill a goose at 100 yards with shot from BBB to TT in size, and it is my opinion it is better to hit a goose at long range with small shot than miss it with large. I have killed geese and turkeys when hunting quail at long range with small shot; longer range than I ever killed a quail under same circumstances. Small shot loaded with good powder, good wads and held right will kill a long way. I have never owned a fine gun yet that I had made for long range but what would stick No. 8 shot in a pine board at 100 yards and stick it in good. Any Baker gun 10-gauge, 32-inch barrels, full choke, will do it, and put TT clear through an inch soft board. Remember to use the very best powder and felt wads. Field loading for wildfowl, say 4½ drams of No. 6 C. & H. powder, one cardboard, one ⅝ felt, one pink-edge, 1¼ ounces of Tatham's TT shot, 3-inch brass cases. If American guns are not fine enough for "Byrne," order from England, and you will get as long range, but not a bit longer. You cannot get such shooting from guns chucked out on a machine so many a day, but from a maker who prides himself on a long-range gun. "Almo's" experience extends over three continents and twenty-five years' shooting, in season; and when I stated that a goose was killed away up yonder by a boy with a $25 gun loaded with No. 10s for quail, I did not intend it as my mode of loading. I still say if you want a dead goose it is better to hit it with No. 8 than miss it with TT. ALMO.

TEXAS.

Editor Forest and Stream:

There has been but little allusion to the great importance of having a gun that will throw shot centrally with a good degree of uniformity. It has been my experience that any gun that will throw a given number of pellets to the center will always distribute the rest of the charge in regular manner. How very few cylinder barrels can be depended upon to do this beyond forty yards. For years I shot a cylinder as good as any for the above distance, but how "wild" it would shoot much of the time, after getting a little foul especially. In spite of my prejudices in favor of my dearly loved old cylinder gun, I was actually forced into the purchase of a "full-choked" breechloader. I had too much evidence crowded unwillingly upon me, so that I had to put by the old gun that had occasionally made such splendid shots and oftener made such decided misses.

I put the manufacturer to a severe test, as I thought. I wanted a gun that would shoot 60 yards with No. 6 shot, and 70 yards with No. 4, with sufficient uniformity to kill a duck or pigeon. Three "full-choked" guns were targeted. Each gun was shot four times. In the record there were from one pellet to five that struck a five-inch bullseye in a thirty-inch circle every time. Only one pellet in one discharge; in all the rest a sufficient number to have struck a duck or partridge. In twelve shots the five-inch bullseye was not neglected once. Such is my idea of what constitutes a good shooting shotgun. I have never yet seen a cylinder that would do that kind of shooting with uniformity. I attribute the difference to the system of "choking." The shot may possibly get tangled up somewhat when they reach the

choke, but they go from 20 to 30 yards further with more directness, and if the gun is properly loaded, the penetration is not materially affected.

Those who hunt ducks have probably found it to be very convenient to have a gun that will carry with uniformity one ounce of heavy shot 60 yards, backed by 4 drams of good powder. This increase of distance is undoubtedly obtained by the wise system of choking that our makers have succeeded in getting, enabling us to reach out after game that grows more wild as it gets more scarce. For wing-shooting in the brush I should not desire a full choke, but would even there like a modified choke. We are often obliged to take long shots at quail and partridge if we get any shots at all. Wire cartriuges in a cylinder do good work, but they are costly luxuries for rapid shooting. One thing more: Let it be proven that English guns excel the make of our home manufactories in the field before we decide in their favor. American mechanics never have been excelled in the long run. They are not now. Europe has had our gun trade long enough. CHOKE-BORE.

THAT STEAM CAT.

Editor Forest and Stream:

It is sad to grow old; to be thrust aside from and be left behind by the struggling, advancing crowd of younger men, to feel the vigor of one's frame passing away, the once firm muscles grown flabby, the bones invaded by rheumatic pains, the lissome joints stiffening with age, the erect form warped, the eye grown dim, the ear dull, the arm nerveless, the grass-hopper become a burden. All these indications of approaching senility are hard for one, first to realize, then to submit to; but it is harder still to become aware that one's mental faculties are failing, and that time is blotting many things from the page of memory, and that already much recorded there has become a blank.

This pang I felt most keenly when I read the communication of your correspondent "G. Whillikens," in a recent issue of FOREST AND STREAM, for many of the things related by his friend Squibob as having happened to him and me have entirely passed out of my recollection. I have no remembrance of anything in relation to the steam cat, nor even of the existence of such an animal, and certainly none whatever of my having taken part in any land battle on this continent. What little fighting that I remember done by me with human foes was with my corps, the Horse Marines, at sea, and I cannot recall the fact that I ever bestrode a "cayute," whatever that may be, though during one cruise, when I was attached to the U. S. frigate Constipation, we were mounted on sea horses. It was the hardest service I ever saw, for we were in the saddle almost constantly, swimming our steeds around the ship, half of us all day and half all night, only going aboard for our rations and sleep.

But it is not my purpose to relate my adventures here, but only to confess how sadly my memory has failed. Ah me! it is indeed sad to grow old, but it is a consolation to me to feel that though bodily and mental faculties are waning, my love of truth is as strong as ever, and to know that I have not lost, as some appear to have done, with youth and vigor, my capacity for telling it.

Yours for the truth,

ADIRONDA, May 14. MAJOR JOSEPH VERITY, U.S.H.M.

MIDNIGHT MELODY.

THERE appears to be something peculiar in the geographical situation of this city that attracts migratory birds in passing over. On several occasions of late years vast numbers of plover have been heard calling as they went over the city on their autumnal migration, and before the wild pigeons had been reduced in numbers to the present proportions they were seen in this vicinity whenever they entered the State at all. There has not been a noteworthy flight of pigeons here within fifteen years, but plover, ducks and geese continue to show themselves about the time they are changing their habitation.

On the night of Thursday, May 22, the midnight sky was vocal with what seemed to be the whistling of innumerable birds of the plover species, perhaps they were what you people along the sea coast call bay snipe. They were not gray plover, for its call is so peculiar that I never fail to recognize it. The night was dark and a little rain was falling, so that no one could see the birds, although they sometimes flew so low, to judge from the clearness of their twitterings, that they must have been within gunshot. Again they would be heard so faintly as to indicate that they were a thousand feet above. They seemed to be moving from the east to the west, and the variety of cries led to the belief that all of the birds were not of the same kind or size. The prevailing call sounded to my ear very like the soft whistle of widgeon as they hover over decoys. E. REDMOND.

ROCHESTER, N. Y., May 24.

TWO-EYED SHOOTING.

Editor Forest and Stream:

As my article on "Two-Eyed Shooting" was written for the purpose of assisting beginners and others in the art (for it is an acquired power) of shooting, in justice to myself and those for whom the benefit was intended and through courtesy, I ought not to leave unanswered the kind criticism of your gentlemanly correspondent, "D. W. C.," in your issue of May 15. Before proceeding to discuss his strictures, I must disclaim any desire to "induce others to admire my gun," etc., as set forth in his preamble, as reference to my article will show that "a gun that fits is the only gun alluded to," and as to "my holding" that was the subject matter and I am excusable. Now, as to the main points of his ("D. W. C.'s") objection, I will, to make it clear (without giving in full "D. W. C.'s" communication) quote only points of variance, to wit: "Now, if his advice to hold the gun still about two seconds before shooting only applied to duck sitting on water or any bird not in motion, no doubt he is correct," etc. To which I reply that the aim by my method is equally true at moving objects as at stationary objects. The rule holds good that if the aim of the gun by this method is true in one instance it will be in another. I tried in my first communication to make it appear that the eyes directed the movement of the gun—by what scientific process I am unable to say.

If that point is conceded (which "D. W. C." does concede by saying "if applied to duck sitting on water or birds not in motion, he is correct"), does it not follow that the gun will change as the eye changes from one point to another? In cross shots, as with shooting with one eye shut, allowance must be made for distance and speed of bird and sight taken accordingly, but how much better can it be done with object within line of vision with both eyes open than with one eye shut, losing entire sight of object and making the holding all guess work. To quote further, he says: "Where would the bird be by the time the two seconds interval had expired? Evidently 70 to 100 yards away."

As to rapid flights of birds I have no data to compare with "D. W. C.'s" figures, nor do I think it necessary. It must be remembered that a bird's initial velocity does not compare with the rifle ball, if he does have more "staying power," therefore "D. W. C.'s" extreme speed does not apply to a bird taking wing. I will admit that when game flushes at 40 yards away (and as I am not a 100-yard gunman) two seconds may be fatal to success, but is it certain that he who shuts one eye, can aim quicker? But when birds (as with us) rise from 3 feet to 20 yards, I find no difficulty with my gun (excuse allusion to it), barrels 24 inches long 2¾ drams powder and ⅞ of an ounce of No. 8 shot, in stopping them.

"D. W. C." will admit that there are potterers at all things they undertake; aiming a gun is not an exception, and notably so is a hunting friend of mine, and he will bear me out, that I scold him for being slow in the one only thing he ought to be quick. Nevertheless, with this pottering in aiming, when he has no intervening object, in a clear field, with his 1, 2, 3 and 4 seconds, he makes his bag, when it comes to the bush, with the manner *à la* prince and generosity unequalled, remains a spectator, with the remark, "My friend, you have need of both eyes, perhaps three." I practice what I preach, and at risk of being thought a braggart, I will state that I am considered a good shot and it is known to all of my hunting companions that I shoot no other way. With kindest regards and esteem for "D. W. C." SPORTSMAN.

COLUMBUS, Ga.

DEER FLOATING INCIDENTS.

WHILE reading the articles on "Deer in the Adirondacks" in your paper, I was reminded of two anecdotes, which George Sweeny was accustomed to relate whenever the conversation turned to "night hunting" or "floating" for deer. Probably all sportsmen who have entered the Adirondacks by way of the Lower Saranac have seen or heard of George Sweeny, one of the best and most trustworthy of Adirondack guides, one much sought after by sportsmen on account of his steady habits and general excellence and also a member of that seemingly exhaustless family of the name of Sweeny. (One rarely fails to find a Sweeny or a Moody in any part of the Saranac or St. Regis country.)

At one time, in years gone by, George was in camp at the head of Big Tuppers' Lake and was guiding a gentleman from Ireland, who was in this country in pursuit of sport. Being out of venison it was suggested that George and his sportsman should paddle up Hog River and endeavor to secure that valuable article. As soon as it was dark they started and on their way to the carry by the falls George spent the time in instructing Mr. Sportsman into the *modus operandi* to be pursued. He told him that if they had the good luck to see a deer, to keep perfectly still, and not to shoot until he whispered to him to do so.

Up the river they silently paddled until, as they came around a bend, George discovered a nice buck standing in the water some distance ahead. With strong silent strokes of the paddle George sent the boat along until he thought the proper time, when he whispered "shoot." The man in the bow never stirred. George whispered again a little louder "shoot," but no response from the bow of the boat. In a state of excitement, George whispers in as loud a tone as he dares, "shoot, shoot quick." He has hardly finished when Mr. Sportsman from Ireland turns about so as to face him and exclaims in a loud voice and with a brogue betraying his nationality, "Would I take him now?" It is needless to state the result.

At another time George was one of the guides in the —— party from Yonkers, and one evening took the youngest member of the party out in order to give him his first lesson in "night hunting," and cautioned him to keep perfectly still, whatever he saw. As they were slowly floating along a deer came in sight and the instant the boy saw it he jumped up shouting, "George, I see a deer, I see a deer."

So he did, but that was all. AMPERSAND.

THE MASSACHUSETTS BILL.

Editor Forest and Stream:

Knowing something about the defeat of the proposed game law of Massachusetts, I would like to record some facts concerning it that do not seem to be generally known. The bill passed the Senate without opposition, and it would have gone through the House in the same way had it been a proper bill, intended for the best interests of sportsmen. The House luckily contains a sportsman or two, and their attention was drawn to several very objectionable clauses, that prohibiting the shooting of sea birds in inland waters being most important, in which case the very best autumn gunning on the Massachusetts coast would be entirely prevented. This clause of itself merits the defeat of the bill. The closed season for black duck shooting begins just as these birds arrive on the coast. Other closed dates were very objectionable.

In addition to these were the portions which referred to collecting song birds. Under this clause no person could get an ornithologist's certificate until over twenty-one years of age. I know a number of young men who would be very much injured by such legislation, provided it was executed. As this part of the game law never has been enforced there is little reason to hope that it would have been this year. Indeed, legislation in regard to song birds is and always has been in this State a mere farce. It is a poor way to begin to strengthen them by prosecuting young men interested in ornithology, while the fields are filled with wanton bird killers. More care should be exercised in giving out certificates, and each person ought to be obliged to furnish some proof that he is interested in the birds' welfare. As the Massachusetts law stood it was entirely unfit to pass. Until a game law suitable in all respects is framed for the interest of sportsmen, naturalists and the public, I for one hope that all in the meantime will be defeated. The talk about members of the House being bribed by theater tickets, cigars, etc., is, I think, based entirely upon theory. As for the person who started the opposition and was most instrumental in killing it, I can say that he is an ardent sportsman, who has brought more than one violator of the game law to punishment, and would be the last person to accept a bribe for killing a bill, especially one relating to game. R. T.

Editor Forest and Stream:

Our proposed game law fell through. Generally good, it yet was faulty. While it cut off spring snipe, which is the best time about here to get them, it prolonged the open season on fowl, perhaps to give some gentlemen who visit Cape Cod a better chance at brant. Then again it made the close season on shore birds up to Aug. 1. I have known good shooting on robin snipe by July 13, and for jack curlew, the most of them go along in July. Then the uplands leave on the first good frost. Two weeks in July are worth considerable. I have said nothing about peeps and ringnecks, but they help out a mess, small as they are. Finally, it seems to me that when the birds commence to return from the north it is time to shoot. Whether it be July 1 or any other time, when they come back the fall flight has of course begun.

Males generally come first, then the females, and finally the young of the year as they become strong enough to perform the migration. The trouble is we have too much law now, but not enough enforcement. Sometimes it seems to me as if the so-called pot-hunter got more than his share of blame. Just as long as the *genus homo* endures, there will be those who, to satisfy their appetites, will pay almost any price (in or out of season) for birds or other game. Two wrongs will not make a right, but I do say that a shot at the class I have just mentioned, is one delivered at a fair target, and a very important factor. Boston market is a great dumphole. I admit that and truly hope to see a change.

Sportsmen who want more stringent laws and proper enforcement must dig down deeper into their pockets and fight harder, I mean more substantially, or they will lose the race against marketmen and gourmands four times out of five.

X. Y. Z.

SALEM, Mass., May 3.

THE NEW YORK LAW.

IN answer to a correspondent the other day we quoted the following sections of the Game law:

Section 10. Any person who shall knowingly trespass upon cultivated or inclosed lands for the purpose of shooting or hunting any game protected by this act, or shall take any fish from private ponds or streams not stocked in whole or in part by the State, or after public notice has been given by the owner thereof as provided in the following section shall be liable to such owner or occupation, in addition to the actual damages sustained, in exemplary damages to an amount not exceeding $25.

Section 17. The notice referred to in the preceding section shall be given by erecting sign boards, at least one foot square, upon every fifty acres of land upon the limits thereof, or upon the shores or bank of any lake, stream, or pond, in at least two conspicuous places on the premises; such notice to have appended thereto the name of the owner or occupant, and any person who shall tear down or in any way deface or injure such sign board, shall be liable to a penalty of $25.

The Monte Fredy Fishing Club requests us to print also sections 27 and 28, which read:

Section 27. Any owner or owners, or lessee or lessees, of lands or lands and water, whether such owner or owners, lessee or lessees, be an individual or individuals, association or associations, society or societies, corporation or corporations, desiring to lay out, devote or dedicate such lands or lands and water, for the purpose of a private park or territory, for propagating or protecting fish, birds, and game, shall publish at least once a week for three months, in a paper of general circulation, printed in the county or counties within which such lands or lands and water are located, describing the same. There shall be inserted in said notice, a clause declaring that such lands or lands and water will be used as a private park for the purpose aforesaid. It shall be the duty of such owner or owner, lessee or lessees, at any time during the publication of said notice, or within six months after the final publication thereof, to post up or put up notices or sign boards, warning all persons against trespassing thereon, such notices or sign boards to be not less than one foot square and placed not more than forty rods apart along the entire boundary of said territory, when said premises shall consist entirely of land, and when the same shall consist of both land and water, the said notices shall be placed in conspicuous places upon said territory, so there shall be at least one notice or sign board so placed or erected for every one hundred acres of said territory. When the property to be protected shall consist of a lake or pond only, said notices shall be placed in at least four conspicuous places upon the shore of such lake or pond. When the premises shall be inclosed by a fence or fences of reasonable capacity for protecting said premises, then notices or signboards of the dimensions aforesaid shall be placed on said fence or fences not more than one-half mile apart. After such territory shall be dedicated and designated, all fish, birds, and game, of, in, or upon the same shall be the property of the owners or lessees thereof. [As amended May 31, 1880, chap. 531.

Section 28. After such grounds are inclosed in such manner as to render such fish or game private property, no person shall catch or take from, or kill, any fish, birds, or game, in or upon said grounds or waters, or put on such grounds or in such waters, any poisonous or other deleterious substance, or pisciverous fish, or let off the waters from said grounds, with intent to take fish, or to destroy the fish or eggs placed in such waters, or deface or destroy any sign or notice posted or put up as aforesaid; or place any object against or near such fence or inclosure, with intent to aid dogs or other animals to get into said grounds, or to enable animals kept therein to escape therefrom, or enter upon such grounds with the implements or weapons for catching, taking, or killing fish, birds, or game thereon. Any person found guilty of any offense against this section shall be liable to the owner or lessee, in addition to the actual damages incurred, in exemplary damages to the amount of $25.

The club correspondent adds: "The first trout stream in Onondaga county that has been leased we have possession of. We have stocked and will continue to stock it. Our lease is for twenty years, absolute title. We have complied with the law all the way through and trespassers or poachers will have to take their chances. The first man we catch fishing on our stream will get the full penalty of the law if it costs $1,000."

The section relating to the power of supervisors has been amended to read as follows:

Section 37. It shall be lawful for the board of supervisors of any county, at their annual meeting, to make any regulations or ordinances protecting other birds, fish or game than those mentioned in this act, and also for the further protection of such birds, fish or game as are in this act mentioned, except wild deer, and to this end to prohibit hunting and fishing in particular localities or waters lying within their respective counties, for limited periods and during certain months of the year, and to prescribe punishments and penalties for the violation thereof, and adopt all necessary measures for the enforcement of such punishment and the collection of such penalties. And such regulations and ordinances shall be published in the papers in such county in which the session laws are published; and a certified copy thereof shall be filed in the office of the clerk of the county: provided, however, that nothing herein contained shall be construed as conferring upon the board of supervisors of any county the right or authority to prohibit the owner or owners, in whole or in part, of lands and waters wholly private, or the lessee or lessees thereof, whether such owner or owners, lessee or lessees be an individual or individuals, association or associations, society or societies, corporation or corporations, from angling and taking fish in a lawful manner during the months now allowed by the laws of this State. This act is intended to apply only to such owner or owners, in whole or in part, of lands and waters, or the lessee or lessees thereof, who shall have complied with the provisions of section twenty-seven of said chapter five hundred and thirty-four of the laws of eighteen hundred and seventy-nine, and the acts amendatory thereof.

DOMESTICATING WILDFOWL.—Since the loss of the flock of wood ducks recorded in our columns, Mr. Fred Mather has received, at his place at Cold Spring Harbor, L. I., the following birds, some of which are already mated: One pair of Mandarin ducks or Chinese teal (*Aix galericulata*), four pairs of American wood ducks or summer ducks (*Aix sponsa*), two pairs European widgeon (*Marica penelope*), one pair of European pintail ducks (*Dafila acuta*), and one male green-winged teal (*Querquedula crecca*). The effort to breed our beautiful wildfowl in captivity will be made, and many additions to the list are desired.

THE TRAPPER'S SILENT FRIEND.—Olympia, W. T., May 10.—*Editor Forest and Stream:* Your valuable paper has been the sportsman's friend and the medium of exchange of valuable ideas, the result of the practical experience of scientific sportsmen, and the liberal manner in which these ideas have been given to the public has, in reality, laid the foundation for many of the useful inventions in connection with the rod and gun, and various other articles belonging to the sportsman's catalogue. Perhaps by the same method improvements can be made on the trapper's silent friend, the steel trap. At least information and queries may be exchanged, that will prove of interest to more than one. I notice a growing inclination on the part of the modern trapper and hunter, to catch his fur scientifically and to keep up with the times, and I can show you the files of the FOREST AND STREAM in almost every trapper and hunter's camp west of the Cascade range of mountains in W. T., where a post-office is accessible. The principal fault that various trappers find with the steel trap of to-day is that the catch that works over the jaw of the trap has a tendency to throw the animal's foot away from the trap when sprung, at most catching it by one toe, thus allowing it to twist out. This loses at least twenty-five per cent. of valuable fur. I have reference to beaver and otter. Perhaps some trapper will say, "You should set your trap so as to drown your beaver or otter." In anticipation of such advice I will say that on a lake or river, or where you have plenty of water to drown the animal, that would be correct, but in the shallow brushy swamps that you find west of the Cascade Mountains in this Territory, one does not always have a choice, and even where there is sufficient water the animal is liable to cling to the brush or shore and twist out. Give us an improvement on the steel trap. What think ye?—TILLICUM.

SHORE BIRD MOVEMENTS.—Philadelphia, May 24.—The expected black-breasted plovers, robin snipe, curlews and dowitchers appeared on the New Jersey coast on their way north on Monday, the 19th inst., in small numbers. My last week's communication reached you simultaneously with their arrival and the birds will have passed on before you go to press again. On the 20th, 21st and 22d larger flights showed themselves, and shooting is good at this writing. Market shooters that started out from Atlantic City made good bags, and the birds brought in on the first three days of the week were shipped to this city. Quite a number of short-billed curlew are going north, but are wild and do not stool well; black-breasted plover are more numerous than the other varieties. The birds will not locate at any point on the New Jersey coast, as they once did, and are only passing. Not many years ago willets bred on the New Jersey shore in considerable numbers, and their eggs were collected by some in quantities and considered a great delicacy; but it has been ten years since I have heard of a nest where they once hatched. Ocean City, a growing watering place on Peck's Beach, now occupies what was once a favorite breeding spot. A bear and cub were shot near Honesdale, Pa., last week. On being discovered the old bear, contrary to the custom of *Ursus* with young, beat a retreat, and the cub went up a tree and was first killed. The old one being followed was dispatched, making no resistance.—HOMO

MOSQUITO PREVENTIVE.—Baltimore.—A year or so ago I found a paragraph in a book by G. A. Sala ("Living London," p. 322), in which he stated that the English army, then in Egypt, were much annoyed by fleas, etc., and that they had found a protection in *Pyrethrum rosæum*. I tried the remedy the following summer. While knocking about Chesapeake Bay in a small catboat, it was my custom to camp on shore at night. These camps were generally in a clump of woods, and the mosquitoes, flies and fleas were simply awful. I found that by taking a small quantity of *Pyrethrum rosæum*, or the Persian camomile, making it into a paste with a few drops of alcohol, then diluting with three or four times as much water, applying to the exposed parts of the body and allowing it to dry, that the trouble was much mitigated. The pyrethrum is not poisonous, and may be freely used without danger. The drug is the basis of the so-called Persian insect powder, sold in all drug stores, but some of it is worthless.—D. H. B.

Camp Fire Flickerings.

"That reminds me."

112.

I HAD noticed while driving along the road some miles from home a large pond with a swampy, swalish surrounding, and while gazing on it, up flew a brace of wild black ducks. As was natural in any one fond of sport, my heart was in a flutter, and a mental resolve was at once made to come here to-morrow with my gun. I sought a companion, congenial both to the business in view, and the requirements of sociability, and secured a young, robust, zealous sportsman, who was an inveterate smoker. In him I had just the companion I wanted. The morrow was fine, but windy. Our drive, which occupied about two hours, was somewhat marred of pleasure by the strong wind which prevented our smoking and filled our eyes with dust, for the season had been wonderfully dry. Arriving at last, we tied the horse to the fence, and rammed down a heavy charge of No 4 into those old-fashioned muzzleloaders of that date. Now, for the first time, we noticed a large board intimating "No trespassing," which, however, caused no more trouble than the loss of a moment or so, in consultation. It was a brave deed, we thought, to attack that pond, lying as it did under the very shadow of the house and farm buildings, whose owner had expended labor and money in erecting those warning boards for our benefit; but the grass and the weeds were high and thick, which lessened the danger, and we had of necessity to crawl so as not to disturb the game.

Going on hands and knees in excruciating agonies and dire discomforts, our nether garments soaked, our heads throbbing and swelling fit to burst, we at last found ourselves in full view of the pond. But not a duck was there, and barring the two that had visited the place the day previous, I do not believe there ever had been any. We were both angry, and a look at either of us was as much evidence of the fact as if we had openly declared it. The strong wind which now blew with unsheltered strength on us, had a cooling effect, however, and we filled our pipes. As we puffed away, some thought, either of revenge or mischief, seized my companion, for he quickly said, "I wonder if this stuff would burn?" and by way of illustrating what he meant, applied a match to the parched reeds and grass. Oh, what a blaze was there! What a game the wind had all alone. It seemed to pick up tuft after tuft of red hot grass, and hurl them all over that swamp. It reminded me of Samson's foxes over again, or ten thousand will-o'-the-wisps gone crazy. The heat became intense, and we were soon hemmed between the two elements, fire and water, before and behind.

A shout startled us; then, as if in echo, ten, twenty more, and we beheld a regiment of agriculturalists on the double, each armed either with instruments of punishment or fire extermination, we did not know which. We could not stand in idleness any longer, so we went to work, and worked hard, too, by running with all our energy and strength along the edge of the pond, miring at every other step in our endeavor to escape the excited mob. I think we should have succeeded had not five or six men lain in ambush and seized us as we emerged from the swale. We did no fighting. We cowed. Discretion and valor had a meeting, and decided in favor of the former. Thoroughly ashamed of ourselves, we joined in fighting the flames, and after throwing down a few hundred rods of fencing and beating the blazing carpets till the spark dust flew thick about us, we became masters of the situation.

The rest is told in a few words. We footed the bill and said no more about it till now. I often think now that it would have paid me better to have bought a farm than to go seeking a couple of ducks that my own eyes had beheld flying away twenty-four hours before. VERAX.

CANADA.

113.

Ten years ago I found an Indian skull while hunting in Chaquaco Canyon, Colorado, and took it home to my ranch. I have had so much fun with it since that I have always kept it, and at this moment it is grinning at me.

I came to Kansas in 1878, and hung the skull in the office of my hotel. The country was full of land hunters from the East, who proposed to make farms out of a chunk of this desolate prairie that will hardly raise buffalo grass. They were to the last man very romantic and anxious to hear big yarns. My clerk observed that if he told the truth about the skull when questioned about it, the tenderfeet would seem disappointed, so he used to romance a little. One morning he related to a lone land seeker a most blood-chilling account of how he shot the Indian in the bowels and cut off his gory scalp with his own bowie knife. The next day another man questioned him, and he forgot that Number One, who was present, had ever heard anything about the skull, so he killed the Indian over for Number Two by putting out a biscuit baited with strychnine, and "ketching" him and afterward cutting off his head with an ax." "Hold on," says Number One, "you told me yesterday that you shot him in the bowels with a rifle and scalped him." "That was another time I killed him," remarked Jim, looking Number One mildly in the face. W. J. D.

114.

A young man who did not know a setter from a pointer or a trigger of a gun from the hammer, went from this city to Toronto, and became acquainted with some Canadian sportsmen, to whom he vaunted of his skill with the shotgun and success in the field over dogs. He was welcomed into the circle of shooters and promised by them a day's sport, they volunteering to provide him with gun and dog. A party was made up and duly repaired to a locality where birds were known to be abundant. Our hero (who told the story himself), with gun in hand, followed a setter, and after some tramping through the brush noticed the dog moving slowly and finally stop as if paralyzed. He thought that it was a hunting dog's business to hunt, and that a dog which grew tired and gave up so soon in the day deserved punishment for laziness, so picking up a piece of wood he hurled it at the offending setter, and started in amazement as a "lot of big brown birds" burst up before the dog. CROWN WAD.

ROCHESTER.

115.

Uncle John McK. was a local preacher, quite wealthy, and withal a good man. He was also a sportsman and well known in several counties around for his love of field sports. His case was the subject of frequent discussion among his brethren, but the old man still clung to his gun, rod, hounds and his profession.

One Sunday morning, while on his way to fill an appointment, he found his youngest boy, Russel, at the foot of the river fishing. The old man was justly indignant; but just as he reined up his horse the boy made a handsome cast and strike. The hard lines on the face of the father gradually softened as the play went on, and presently he said, "My son, give him the butt of the rod and he is your bass." Even then he was not forgetful of the duties of his calling, and when the boy plead the beautiful day and the voracity of the bass as the cause of his transgression, the father, mindful of the publicity of the place, leaned forward in his saddle and whispered, "Russel, my experience leads me to advise that just up around the bend of the river is the best fishing ground in the State." PARSON O'GATH.

OHIO.

WHAT THEY SAY OF "WOODCRAFT."

THIS book contains a series of useful instructions for those who go to the woods in search of health or amusement, and is, on the whole, a valuable companion and assistant to such as have not large stores of personal experience to draw from. It is systematically arranged and plainly written. * * * On the whole, the book is sound and practical, and well worth the reading.—*The Nation.*

This charming little book is written to teach the traveler how to journey through the wilderness with ease, and on perusing its contents we find that it is the experience of an old hunter, who gives the best of advice to those who go out in the woods for a season of rest and relaxation, and need to study lightness and economy in a forest and stream outing.—*Spirit of the Times.*

SEATTLE, Washington Territory, May 8.—I received "Nessmuk's" book, and was highly pleased with it; in fact, did not lay it down till I had finished it. It contains numberless hints of value to the novice, or "tenderfoot," and even some which we old hands might profit by. Success to old "muzzleloader's" venture anyway, and may he sell ten million copies.—H. H. L.

The newest volume of the FOREST AND STREAM series is "Woodcraft," by "Nes-muk." It is a little volume written in a sparkling vein, and crammed with hints to the camper-out. It is intended to teach the reader "how to make an outing a pleasure instead of a misery, a comfort instead of a calamity," and it is certainly one of the brightest books on the subject that has ever come to our notice. Not the smallest of its attractions is the illustration of the subject, even to the details of making a camp-fire, showing at a glance what the writer means to teach. It is a charming little publication, and is quite as attractive for its occasional dissertation on trout fishing, as for its matter-of-fact details of camp life.—*Portland (Me.), Press.*

Sea and River Fishing.

CAMPS OF THE KINGFISHERS.

Black Lake, Michigan.—III.

SHORTLY after leaving the spring we came to the "twin lakes," a pair of lovely little gems of water, separated by a high backbone a few yards wide at the top, over which the wagon road passes. So narrow is this ridge that from the wagons we could look down, seventy or eighty feet it seemed, on either of them; the one on the right appearing much lower than the other.

They are perhaps eighty rods long by half as wide, and are surrounded on the sides opposite the ridge by hills that are thickly wooded to the water's edge.

We could see no inlet or outlet to them, and our driver said he had never heard of their having any, nor was it known whether they contained fish or not. As this was a question we did not care to spend time in solving, we drove on, satisfied that the Master had scooped them out for some wise purpose which to us was a sealed book.

Skirting around the base of a lofty, forest-clad ridge, trending off to the left in a southeasterly direction, the road led us around the point on to another plain, and off in the distance we caught the shimmer of water and the sight of a green line some miles away that our driver informed us was the further shore of Black Lake. Our understanding had been that we were to have crossed Big Black River somewhere below and gone up on the opposite side from where we now were, as Merrill lived on that side and our camp was to be somewhere near his house; but we now learned from the drivers that it was impossible to cross the river without swimming it, so we had the unpleasant alternative left of driving clear around the lake to a point some three miles from the head to where we were to make camp.

And we learned, too, that neither of the three smart drivers knew where they were going or how to get there, nor did they know where Merrill lived, only that his place was twenty-two or twenty-three miles from Cheboygan and near Black Lake. Here was another "category," but we took the matter into our own hands and mildly requested them to "bile ahead till they smelt blud," or find Merrill's, if it took a week. The road led straight across the plains to the lake, which we struck a mile or such a matter from the outlet.

From the top of the bank overlooking the lake, we could see a small steamer at anchor near the further shore three or four miles away, which our driver said was used to tow booms of logs to the head of Big Black River—the outlet of the lake—and this might be brought over by a smoke signal to take us and our traps up to our camp, which would allow them to drive back to town that evening.

Four or five of us got out and took an old loggers' road down to the water to get a better view of the lake and study over the situation.

The driver's hint was not acted on and no smoke was made, except by old Ben in making a few remarks to fit the occasion, as the water was too shallow near shore to allow the steamer to get nearer than thirty or forty yards, which would leave us to float our heavier boxes alongside and get them and ourselves aboard as best we might.

This we did not propose to do, and we went back to the wagons and took the road up the lake in not quite as hilarious a mood as pervaded the party at the spring, for we knew by the slant of the sun that it would be long after dark before we reached Merrill's, where we could at least pass the night, or what remained of it, and go to camp early in the morning.

But we were in for it and drove along at a good pace without grumbling, having made up our minds that growling would not shorten the distance nor find Merrill's clearing.

When near the head of the lake, shut off from view, however, by a belt of timber, the road forked, and the drivers soon decided they did not know which one to follow. The one leading to the right might be only an old log road ending at the lakeside; the other they thought led into the State road a mile or so further on, which crossed the Rainey River near the head of the lake. "Nothing like having drivers that don't know anything," remarked the Scribe, "as it gives us a chance to run the whole show for a brief period ourselves."

We settled the matter by taking the right hand road, as promising a near cut, taking the chances at the same time on getting through, or camping somewhere for the night. At the top of the hill we got out, except old Dan, Frank and the drivers, and forming ourselves into a pioneer corps, went ahead, the wagons following after. Down a steep, sandy hill, and into a cedar swamp bridged by a corduroy of poles and logs, a matter of forty rods from the main road, and we came suddenly out of the tangle onto the beach at the very upper end of the lake. Here the road seemed to end, and we were in a worse category than ever, for it would be a serious matter to turn around here and get the heavily loaded wagons back to the top of the sandhill.

When our minds were about made up that we were in a trap, we noticed faint wagon wheel marks in the bushes to the left which the Scribe and I followed a few yards and found a good road leading along a strip of low, open bottom land between the beach and the hill a few rods back.

A hundred yards further, we stood on a substantial wooden bridge spanning the Rainey River, only a few rods from where it flowed into the lake, and from this point we had a good view of this beautiful sheet of water for the greater part of its length, which is about nine miles. It was fully as wild as we had pictured it.

Sweeping away around to the left in the form of a deep bay, to a point six miles or more below, where the lake narrowed from six miles, at its greatest width, to about three and a half miles, was an unbroken line of wooded shore, not a sign in sight of clearing, house or shanty to mar the harmony of its green setting. Down the right hand side, near which we were, the shore line was nearly straight, and as far as we could see for a trend in it to the northward, the general features were the same, woods and bushes nearly down to the water the entire distance. It was a rare, quiet picture, but we had little time in which to enjoy it as the sun was nearly down, and Merrill's yet in the dim and uncertain distance—verily not a cheering prospect of seeing our camp that night.

We shouted to the boys to come ahead, and following the road along the bottom for perhaps an eighth of a mile it led us off to the left up a low rocky hill (the first rocks we had seen) out onto the level country and into the State road. Soon we saw a faint blue smoke through the woods, then a house, and as we came abreast of a small clearing by the roadside, a man hoeing in a "tater patch," the whole "farm" fenced by the road on one side and a wall of woods on the other three. Walking over to the stranger, who on noting our ap-

proach had come to a rest on his hoe handle, we bid him good evening and asked if he could direct us to one Merrill, who as near as we had been able to learn, lived somewhere in this neighborhood. He could, and pointing across the road: "He leef over dare 'bout mile." This was good news, but when he said we would have to go around three or four miles, as there was no road through the woods in the direction he had pointed, we felt our grip relax and had a mind to camp right there for the night, but finally decided to go on to Merrill's, or "kill every hoss and driver in the procession." as Ben said. "Follow State road 'bout mile west," said the Frenchman of Canadian extraction: "Mebbe leetel more'n mile; come to schoolhouse (they have schoolhouses in Michigan if nothing else), turn to right, follow road mile north, turn to right, go mile east, come to Merrill."

Here was a section of land with roads on three sides of it, but the one we most needed just at that particular juncture, appeared to have been left for us in the shape of a howlin' wilderness.

We made a few remarks right there at the edge of that tater patch that would not dress up very well in print, so I will leave them to the imagination of the reader.

Mounting on the wagons as they came up, we thanked our friend of the hoe for the directions given, and were off for the schoolhouse at a good jog, for this State road is a good one and kept in good repair.

As we turned north at the section corner, old Ben selected from a large stock of plain and ornamental oaths kept constantly on hand, one that seemed to fit into the right place, and swore "that mile back to the Frenchman's is the longest mile on the face o' this livin' earth; we've come three mile et we've come a solitary foot."

By the time we turned into the road going east it was so dark we could feel it, and the horses were left to pick the way for themselves, as any attempt to guide them would have led to a calamity in the shape of a dispute with some invisible stump as to which was entitled to the right of way.

We caught an occasional glimpse of a patch of sky up through the wall of trees lining either side of the narrow road, which only seemed to intensify the gloom through which we felt our way. The only sounds which broke the oppressive stillness was the rattle of our wagon, as the patient, intelligent horses picked their weary way carefully through the blackness, a grunt from old Ben or the writer, a whine from Dick, or a string of high-flavored adjectives that a pi-usly afflicted type setter would probably represent thus: —— —— — —— ——, as a wheel would strike an unusually large root, with which this delightful highway was numerously infested.

We stopped two or three times to listen for sounds from the other wagons, but nothing broke the silence but the breathing of our tired horses. We knew the spring wagon ahead of us was all right, but the one behind gave us some concern as it had only the driver and Frank to pilot it through the darkness, and we were fearful lest they had missed the way or got lost in the tangles of another "huckleberry patch."

At last we shouted loud and long, and waited for a response from the rear. A clarion blast away ahead in the hair-raising voice of Old Knots was all that came back, and we drove on, leaving them to find the way as they might, or pass the night in the "bresh," an exhibition of brotherly feeling that, after thinking over seriously, I trust will not be an example set up to copy after, but we were a trifle riled at them for not keeping us in sight at the schoolhouse, and made ourselves believe that under the circumstances we could do no better.

When we had felt our way through the woods for "not a solitary foot less'n five mile," as Ben averred, we thought we saw the faint glimmer of a light ahead to the left, and the next minute were plunging through a miry swamp that must have taken the horses to their knees. A pole or log across it here and there—a miserable make-believe that an attempt had once been made to corduroy it—only made it worse, and it was by the most desperate efforts of the brave team that we reached the hard ground four or five rods ahead.

Here an opening in the woods, that looked much lighter than the inky gloom from which we had just emerged, promised a "clearin'," and directly, "Come ahead, boys; here's a house," infused new life into us; and in a few minutes we were off the wagon with the others, at the edge of the clearing, trying to shake our loosened joints together again after the severe jolting of the last mile.

Out in the clearing, a hundred yards or so, a couple of dogs were barking furiously, "ten yelps to a breath," as Ben expressed it, and, joining in the racket with a united yell, we soon had the satisfaction of seeing a light slowly approaching, preceded by the yelping dogs. As it came nearer, "Shet up Turk, don't be so fresh," quieted the dogs, and as the light flashed on us, "Hello, gentlemen; this must be the Kingfisher party," from a gruff voice, was followed by a brief introduction to Mr. Merrill, the long-sought and hard-to-find, the dogs meanwhile sniffing at our heels, undecided whether to make friends or snatch a veal cutlet out of our calves. A sharp rebuke from their master, followed by a vigorous kick at one of them which he dodged with a neatness and celerity that showed long practice in avoiding these gentle reminders, put a sudden stop to their investigations and the "talk" went on without further interruption. Merrill claimed he had not received my letter asking plain directions how to find his house, nor had he expected us until the next day, else he would have met us with the boats at the point where we first struck the lake, and as we were really one day ahead of the time set, he had the best side of the question, which gave us little room to talk back.

Still no sound from the lagging wagon, and we began to fear they had met with a mishap of some kind. Merrill went with the lantern to the edge of the swamp and "hollered" at short intervals in a voice that must have awakened every sleeping varmint within two miles, and finally when we had about given them up as lost, an answering whoop announced they were coming. When they came to the mud hole, we fully expected they would stick, as they had the heaviest of the three loads and a pair of light horses, but as Ben said, "The little fellers was chuck full o' sand and grit," and they brought the wagon through with a regular step that showed how reliable they were in a tight place. Their late coming was due to not keeping us in sight at the schoolhouse, and they had driven straight on past it a mile or more before discovering their mistake. "Huckleberries," growled the Scribe, which was probably nearer the mark.

But now, here we all were, in the suburbs of Merrill's unfenced tater patch, tired with the long ride and walk of over thirty miles, hungry as wolves, and best of all, in excellent humor. The horses were unhitched, watered, and given a well earned ration of hay and oats, the frogs carried to a little pool near by and a couple of buckets of water dashed over them and left for the night, and then it was mildly hinted to Merrill that if the trouble were not too great, a trifle in the way of satisfying a feeling of emptiness pervading the party would endear him and his good wife to us for the remainder of our sojourn, to quote Ben, "on the face o' this livin' earth." He said we would "have to ask the 'boss' about that," and repairing to the house the good woman was prevailed on to fry some bacon, slice up a huge loaf of old-fashioned home-made bread, and brew a steaming pot of coffee, and this, with butter and eggs procured from our provision box in one of the wagons, made a meal that Ben declared "jest laid over anything in the way o' eatin' he'd seen in a solitary year."

Frank insisted on teaching the matron of the house how to make good coffee and boil eggs to the proper turn, but his officiousness was nipped in the bud by a timely hint, and he retired to a corner an abashed spectator of the proceedings.

I write this that in case it meets his eye he may take unto himself warning not to tamper with this pernicious berry in future while on his way to camp, and if the hint mayhap touch any of the brethren in a tender spot, I trust no offense will be taken, and that it may bear better fruit than the berry in question.

We found the accommodations at the "Hotel Merrill" to be exceedingly meagre; the back part of the one room of the cabin being curtained off into sleeping rooms for the heads and smaller members of the somewhat numerous family, while the front and larger part served as kitchen, dining-room and room of all work. Overhead in the loft, Merrill informed us, were more of his boys and four or five sleeping lumbermen, so we were forced to betake ourselves to the 'tater patch or the "bresh."

Without much trouble we got out of the wagons a couple of boxes packed with blankets, and distributing them around, each one proceeded to stake out his claim by the light of the lantern.

Old Danny was, however, made as comfortable as possible on the floor in the house, while Frank, with a commendable concern for Dan's welfare, rolled himself in a single blanket and was soon snoring near him, an odorous terror to any foolhardy mosquito that might come prowling around within the range of his breath.

The Deacon made friends with the two dogs, and wrapped in his blanket, passed the remainder of the night with them by the side of the house without any serious trouble arising between the trio. The rest of us scattered ourselves around and under the wagons, Jim taking much comfort to himself in the possession of an extremely soft pine board which he found lying near the house.

Old Knots, Ben, Dick and the drivers selected places to their pleasement and made their beds, while the chronicler of this night's comforts and miseries found a soft spot in the sand near a wagon wheel that just fitted his frame, where he rolled himself in the ample folds of a rubber piano cover and stretched his weary bones for a few hours much needed rest. It must have been midnight when quiet reigned in the tater patch, but not long did this quiet abide with us. The skeeters and punkies seemed to have been apprised of our coming and had been coming in from all quarters since our arrival, until they had become, as the Scribe remarked, "quite multitudinous," and were sharpening their bills on the wagon tires and waiting for us to settle down, to begin their work of making life a burden to us.

While we were moving around they were not very troublesome, but when everything was still, and not having the protection of bar, net or "smear," they began business in earnest. Mutters and growls from all sides, and imprecations not loud but of great depth and frequency floated around in the darkness until it was a question which were the more numerous, the skeeters or the fragmentary profanity fired at them, and not a few getting in range of Ben's remarks must have escaped with singed wings and the temper drawn from their bills. But Jim, of whom much had been expected in this line, said not a word; he just went quietly off to sleep with as much unconcern as though his pine board was a couch of down and not a skeeter or punkie in miles. Dick and one of the drivers were, however, the objects of their especial attention, Dick's locality being plainly indicated by a stream of whines, disjointed utterances of dire import, and vigorous slaps that were simply astonishing.

A few of the pests found their way into my breathing hole through the folds of the rubber, but I was too tired to remain long awake and went to sleep with the sound of Dick's gentle voice ringing in my ears, and knew no more until aroused by him at daybreak with, "Get up you old crank and let's get out of this, for I'm about eat up by them cussed croppies, or whatever you call 'em." (He meant punkies, but had forgotten the word.) He and the driver had not slept a wink the whole night. When they could bear it no longer, he said they got up and paced up and down the road a few yards till the first streak of dawn, and, according to his estimate they must have wiped out of existence fully a million "croppies" and half as many skeeters, and he further proclaimed in a voice reaching for high C, that he "wouldn't go through another sich a night for all the fish in Michigan, and the d—elightful State throwed in." (Note.) Dick held a consultation with himself sometime afterward and decided he would like to try it all over again, with the first night left out.

[TO BE CONTINUED.]

THE REVALLIER OR RAVALLIA.

Editor Forest and Stream:

In reading up the back numbers of FOREST AND STREAM, I find in the issue of Jan. 17, 1884, a communication from my friend, "Al Fresco," on the ravallia of the west coast of Florida. He seems to be in doubt as to the identification of this fish, but he will recognize it at once under the name of "snooks," as it is called on the east coast. I referred to it particularly in both series of my Florida papers in FOREST AND STREAM, under the various names of cobia, crab-eater, sergeant-fish and snooks. The name "snooks" is used as early as the seventeenth century in the account of the voyages of Captain William Dampier, who also mentions mullets, ten-pounders, tarpoms, cavallies, paricootas, gar-fish, sting-rays, Spanish mackerel, etc.

In the communication referred to, "Al Fresco" embodies an opinion of David S. Jordan, who supposed (from the similarity of sound of the two names) the ravallia to be the robálo (*Centropomus undecimalis*), but I never heard "ravallia" or "revallier" applied to any fish on the west coast but the sergeant-fish (*Elacate canada*).

In "Fishing with the Fly," Dr. Kenworthy alludes to the ravallia being taken with the artificial fly by Dr. Ferber, who describes it as resembling the pike-perch, and that it is taken up to thirty pounds in weight—all of which I can indorse, though in shape and habits it more nearly resembles the true pike, especially in the form of its head and dentation.

It is probable, however, that there exists some confusion in the use of the name ravallia on the west coast of Florida, as the two fish mentioned are somewhat alike in formation and appearance, and both have a very distinct black lateral line.

JAMES A. HENSHALL.

CYNTHIANA, Ky., May 17.

USEFUL HINTS.

THE articles on fly-rods, started by Mr. Wells in FOREST AND STREAM, have been very interesting to me. Since my first essay in fly-fishing some years ago, I find that my enthusiasm for the sport increases each season; and the subject has become quite a hobby with me, occupying much of my time and thinking in winter as well as in summer. Being possessed of an expermenting turn of mind and some mechanical experience, I find a pleasure in making my own rods and flies. I have now ready to take into the woods the coming season rods of my own make and of four different materials, viz., split bamboo, bethabara, hornbeam, ash and lancewood. I have made, as an experiment, some joints and tips of two pieces of wood glued together, with the grain running in opposite directions. All of my rods fit into one handle about fourteen inches long. I do not use dowels or pins.

For a ferrule cement, I make a composition of about two parts gutta-percha and one part white rosin. The gutta-percha is nearly white, and comes in thin sheets looking a little like a piece of white birch bark. It makes an excellent wax for wrapping silk, according to the receipt of Norris—one ounce white rosin, one dram gutta-percha and one teaspoonful raw linseed oil. When a rod breaks near a ferrule I do not try to dig it out, or put it in the fire, as I once did, but I lay it in a hot oven or over the chimney of a lighted lamp for fifteen minutes or so, when the wood will shrink so as to drop out easily, unless the ferrule has been pinned, in which case it will be necessary to leave it until the wood has become charred, which will occur without softening the temper of the ferrule.

I do not remember to have seen described what seems to me the best way to fasten a silk lashing. I have read about winding over a quill and then drawing the end through it, and about threading a needle and running it back under the winding, etc. I take a piece of strong silk (buttonhole twist), double it, and lay it over the lashing, parallel with the rod, with the loop or bight extending beyond the lashings. Then take three or four turns of the lashing silk over the loop, insert the end in the loop and pull it through under the lashings. I make use of the same fastening at the head of flies.

One more small hint is not to allow rubber of any kind to come in contact with your flies; the sulphur in it will tarnish the tinsel.

As I believe that correspondence in regard to angling resorts is invited by FOREST AND STREAM, I wish to say a word about a locality in which I have only a friendly interest and a desire to have it better known and appreciated. I refer to the camps of Mr. Kennedy Smith at Tim Pond and the Seven Ponds, Maine. Each season for the past three years I have spent about two months with Mr. Smith, and I intend to go again the coming summer. His log camps are models of their kind, every one is well treated, and the charges are very moderate. The trout are not of the largest, for Maine trout, but they are there in sufficient numbers to satisfy any reasonable expectations, and the days that they will not rise to a fly are very rare throughout the season; and they are remarkably beautiful and gamy and fine-flavored trout as well.

There is another reason why I go each year to this region. I am a sufferer from that strange disease known as "hay fever," and I should live in torment at home from the middle of August until the appearance of frost. I escape this serious trouble altogether at Tim Pond, and it is a medicine that is very pleasant to take. In that vicinity there is none of that abominable "rag weed" or Roman wormwood, the pollen of which is believed to be the exciting cause of this distressing malady.

I am sure that I have seen queries in regard to hay fever in the columns of FOREST AND STREAM, and perhaps the above may be of interest to some of its readers. W. G.

SPRINGFIELD, Mass., May 10, 1884.

PHILADELPHIA NOTES.

WEAKFISH (blue lights) are being seined in large numbers down the bay on the Delaware State shore. The "neck" farms in the vicinity of the fishing grounds are deriving a benefit from them as a fertilizer as there is no market for the fish, they are so numerous.

Bluefish are reported very scarce on the New Jersey coast this spring, from this the baymen argue that fishing with rod and line will be good the coming summer, as the absence of the bluefish will allow the varieties upon which they feed to come into the bays freely.

It is stated by John Upperman, of Kensington, Phila., who is said to be the oldest shad fisherman of our city, that the largest shad caught in the Delaware River in his experience of fifty years weighed ten pounds, and that the size of the fish has steadily decreased until artificial propagation was attempted about fifteen years ago. Since that time there has been a great improvement both in size and numbers, and now a six-pound shad is by no means uncommon. This year a very marked difference is seen and hundreds of shad tipping the scales at six to seven and a half pounds can be seen.

On the roof of the Philadelphia *Record* building there is a water tank which holds 18,000 gallons, this is supplied by the city main. Last week when the engineer who has charge of the steam pumping machine cleaned out the tank he discovered numerous eels from six inches to nine inches in length in his bucket. A further investigation brought to light catfish four inches long. As the water is pumped into the tank through a three-inch pipe, it is supposed both the eels and catfish found their way from the Schuylkill River when they were very small. The *Record* proof-reader, who is a disciple of Uncle Thad Norris, can now go up-stairs, bait his hook at dinner hour, and save car and steamboat fare to Wissahickon.

The Cape May, N. J., Porpoise Fishing Company are about erecting extensive buildings on the bay side for the double purpose of extracting the oil from these fish and turning the refuse into phosphates. The venture of this company last year with its patent nets was successful, but we prophesy continual fishing for them will, in a few years, drive them entirely away from the section referred to.

HOMO.

FISH DAY AT WORCESTER.

THE second annual fish day festival of the Worcester Sportsman's Club occurred on Wednesday, May 21, and was a success in every respect. The rules governing the affair were the same as last year, except that a fine of one dollar was imposed upon every member who did not participate in the sport. This rule had the desired effect, and called out a much larger number than usual—not that they cared for the dollar, but they did not like to be branded as delinquents. The conditions prescribed were: "Every fish on the list to be caught with hook and line, on the day set for the fishing. Points—Trout, 16 points to the pound; pickerel, 4 points to the pound; perch, 2 points to the pound; pout, 2 points to the pound. For every trout that weighs over eighteen ounces, an additional point to every ounce will be allowed. No private trout streams or ponds to be fished."

The fishermen went in all directions, some to New Hampshire, some to Connecticut, some to the hills of Berkshire county, and a few who did not aspire to trout fishing trolled for pickerel or bobbed for perch and pouts in the ponds about home. It was the first really hot day of the season, and some of the men who are unused to being out of doors came in with faces that would have made good headlights for locomotives. All were tired, but jolly, and nearly every man had a good story to tell concerning the exploits of the day. The scene in the small hall at the Bay State House on Wednesday evening was a delightful one to any man who enjoys looking at a fine display of fish. A long table was spread with platters, in order that those members who had made good catches could spread them out in the most attractive style, as it was pleasant to watch the expression of their faces as they proudly unloaded their creels. It was truly a magnificent display of trout, to say nothing of the other varieties. The finest displays were those of Capt. Jacobs and Chas. A. Allen, caught in New Hampshire; John R. Thayer, caught in Connecticut; H. E. Smith, Davenport, Verry and Barton, caught in Berkshire county, and Samuel Brown and James F. Davenport, caught in the western part of the State. The count closed at 9 P. M., with the following score:

CAPT. GOLBERT'S SIDE.		CAPT. JACOBS'S SIDE.	
R. L. Golbert and Alba Houghton	241	A. R. Jacobs	125½
A. F. Earle and Frank P. Douglass	60	C. Hartwell and A. Colby	240
John B. Goodell	62	A. H. Perry	33
E. S. Knowles	26	H. W. Eager	34
Stedman Clark	10	V. Sheldon and Wm. Coe	88
B. C. Sumner	127	R. J. Healey and S. Porter	72
J. A. Titus and W. Thayer	48	Chas. A. Allen	70½
G. J. Rugg and L. G. White	30	E. B. Stoddard	15
H. E. Smith, S. T. Davenport, H. B. Verry, C. S. Barton	465½	M. O. Whittier	23
Samuel Brown and J. F. Davenport	232	Joseph Garland	13
R. D. Perry	15	A. B. F. Kinney	31
Joseph H. Smith	78	C. R. B. Claflin	39
S. Hamilton Coe	57	Edward Wright	38
B. Henry Colvin	10	Jesse Smith	11
C. F. Batchelder	54	John R. Thayer	65
J. E. Fuller	48	W. L. Davis	71
		Caleb Colvin	08
		L. R. Hudson	07
		Waldo Simpson	09
		O. L. Taft	11
	1,563½		1,003

Captain Jacobs and his men bore their defeat good-naturedly, and Captain Golbert received the congratulations of his friends. The crowd of spectators scattered away and a set of tired fellows went to their homes to dream of the dinner they were to enjoy on the evening of the following day. On Thursday evening, the members with the invited guests assembled in the parlors of the Bay State House one hundred strong, and about 9 o'clock marched to the large dining hall, where Richardson's orchestra was discoursing excellent music. The hall was finely decorated; the tables laid with rare taste and decorated with a profusion of beautiful flowers. It was strictly a fish dinner. After the company had done ample justice to the dinner, President White opened the "after dinner exercises" with a neat speech, introducing H. B. Verry as toastmaster for the evening, who called up several gentlemen in response to sentiments. Mayor Reed opened the speaking with a witty and supposed apropos story. Pleasant remarks were made by Messrs. Jacobs and Golbert, captains of the teams of fishermen, ex-Mayors Hildreth and Stoddard, Gen. A. B. R. Sprague, Dr. Merrick Bemis, President E. O. Parker of the City Council, Dr. W. H. Raymenton, Messrs. John Thayer, E. S. Knowles and F. A. Gaskill. E. SPRAGUE KNOWLES.

WORCESTER, Mass., May 24, 1884.

SCHROON LAKE.

FULL of hope, desire, zeal and ambition for a pleasant trip, we boarded the train at the thriving lake town, Plattsburg, Friday, the objective point being the Trojan city, Troy. Simple chance and nothing more caused your correspondent to become erratic and deviate somewhat from the programme so hastily made the day before. Leaving the train at Crown Point, we boarded the stage for the business part of the town, known locally as Hammond's Corners. This place supports a lively little local paper, and from our short acquaintance with its editor, R. W. Billett, we should judge he was able to accomplish the duties involving upon him in the way of writing up church sociables, quilting bees, and the many other little trifles so necessary for the peace of a country village. From him we learned many valuable bits of information, and if he should happen to read the issue of your paper containing this, he will please accept our sincere thanks.

It was our intention to take the C. P. I. Railroad to Hammondville, and it was also our misfortune, of fortune, to miss the train, so engaging a conveyance we determined to make the best of the matter and find consolation in the fact that the scenery would be more enjoyable from a carriage than the railroad coach. By this time Troy was nearly forgotten in the one idea of seeing a part of the world-renowned Adirondacks, and Schroon Lake seemed the most feasible point from which to resume our journey Troyward.

The scenery after leaving Crown Point Center grows each mile more grand. To the east the Green Mountains of Vermont roll upward as far as the eye can reach, and to the north are displayed the outskirts of the Adirondacks, sloping downward to Lake Champlain, dotted here and there with farms, each just beginning to show the thrift of its worker.

Soon Hammondsville is reached, and stopping to inquire the way to our destination, we view with wonder and surprise the many striking features of the iron mines which are here. The sun gives us warning to move on, and reluctantly leaving the works of man we enter deeply into the works of nature, and soon are where we can view the different features of the woods. To the far north can be seen towering up among the clouds nearly 6,000 feet, and to the west, grand piles of mountains, which convey an idea of grandeur to the beholder that no others inspire. The very air, the clouds, the surroundings, bring forth exclamations from the tourist, and leave wonder in the mind that the section should be blessed with such a multitude of charms and attractions. We have viewed Pike's Peak in Colorado; with alpenstock in hand we have climbed the Alps; we have been astounded by the greatness of the Himalayas, but never have we seen so many wonders combined as one can find in the Adirondacks. We are passing through a wilderness, with mountains on the one side and deep and awe-inspiring precipices and chasms within a step from the wagon track on the other; fear, mingled with a fascination, besets the timid, and frightened, yet dreading to leave the scene, he views the panorama of nature silently, with an emotion too great to express by word or pen.

It is now quite sundown and the sweet music of the forest warblers recalls vividly to our mind the stanza:

> "O, nightingale, that on yon gloomy spray
> Warblest at eve, when all the woods are still,
> Thou with fresh hope the traveler's heart dost fill."

Nature seems king, but not for long. Soon we emerge from the wilderness and enter quite a thickly populated agricultural district, and we know we are nearing our Mecca, Schroon Lake. A little after dark we alight from the carriage at the hospitable doors of the Windsor House.

Let us turn from poetry to the practical. Schroon Lake is fast becoming a popular watering place, and each year brings new faces as well as the old ones. Unlike Saratoga Springs, Long Branch, Newport, and other older resorts, it retains its primitiveness. The sound of the locomotive is yet unknown, and nature has decreed that the railroad cannot penetrate the wilderness. It would be an innovation that would not be endured by the people who congregate here year after year, and the people here would regard it in much the same light. Like Saratoga, nearly every resident "takes" boarders, and besides the boarding houses there are several magnificent hotels that surprise the stranger by their beauty and elegance.

Among the leading hotels can be named the Leland, Windsor, Ondawa and Lake House. The two first named are comparatively new and both are modern and fully up to the wants and needs of the seeker after pleasure and rest. The Leland accommodates 200, the Windsor 100, and the Ondawa 75. The Lake House, another popular hotel overlooking the lake, is the nearest to the sheet of water that gave the place its name. Of the lake itself little remains to be said. Its charms, its beauties and attractions have been told in poetry and prose. My next letter will be from further back, and my only wish is that you were to be with me. ED. M. H.

TIM AND SEVEN PONDS.

THE sportsmen in Connecticut were greatly pleased to see in your advertising columns of last week notice that the resorts named in the caption of this article are soon to be opened to their many friends for the season. It is very gratifying news to us in this section. The cold season has been long. The spring weather has been treacherous. The birds came when the almanac said they should come, but the snow and ice caused them to retire. They came again and began their homes, but the cold storms drove them back. And so they have struggled and are now striving with wind and wet. And our trials have been as disappointing as those of the little gay-plumaged songsters. Some of the bravest of us went to the brooks, but trouty had no overcoat and was not there. We have been several times since, still only a few of the toothsome swimmers could be found. A few gentlemen went to a distant part of our State and returned with fairly well-filled creels. Our streams are well supplied with water, and later we hope for good strings. As I have intimated, our tackle has been in good order for a long time, and we have been restless to use it, and I repeat we were glad to learn our favorite fishing grounds of Northern Maine are soon to be ready for us. We have great expectations, for since the nefarious work of poachers has been stopped, notwithstanding the large and increasing number of visiting sportsmen, the trouting is better in these ponds than when they were opened by Smith to the public. This fact was very noticeable last year to those of us who have fished these waters for five or six years. The first of June, I think, will be about the right time to reach there, for the ice is scarcely out of the ponds and snow out of the buckboard roads. Since the great wind of last autumn the roads have been cleared of fallen trees and put in better order than ever before the entire distance to Seven Ponds via Tim Pond. New horses and wagons have been procured to run between Smith's farmhouse and the cabins at the ponds. The cabins are being repaired and refurnished. So large a number of customers, old and new, have made and are making engagements for cabins and board that it is found necessary for Smith to make much greater preparation than any previous year. The trouting of these ponds in the Dead River region is not damaged by water-power companies and steamboats, as are the lakes at the head of Androscoggin River, described in the FOREST AND STREAM of recent date; nor are tons of trout sent away by express, to spoil on the route before reaching their destination. Consequently, sportsmen find that Tim Pond and the Seven Ponds and others in this region maintain their high standard of excellence for fishing, while the lakes in the region to the west are on the retrograde. A. W. Robinson, of Boston, seeing the greatly increasing demand for information about the Dead River region, has in preparation a guide book and map of this interesting section of the country. I am not informed just when it will be given to the public.

I find a large number of the gentlemen from this State and from Boston will go this year via Farmington and Kingsfield to Kennedy Smith's farmhouse, Eustis, Maine, from thence they and their luggage will be taken to the ponds on buckboard wagons. The location of the Franklin & Megantic Railroad has been approved to Kingfield, and the contracts for construction made. Cars are expected to be running on it this autumn.

A new feature is to be added to the attractions of Seven Ponds for the enjoyment of Smith's visitors. He is to cut and spot a trail to the top of Snow Mountain for a sort of observatory, from which can be seen almost the entire Dead River valley to the Kennebec River; and one can see Lake Megantic in Canada, also the boats when on the lake, and some of the settlement. It is a grand view. Two years ago I witnessed a portion of its magnificence as I ascended to the second plateau, about three-fourths of the distance to the top of the mountain. It is thought that ruffed grouse have wintered well from the amount of drumming from the drummers. More anon. J. W. T.

NEW BRITAIN, Conn., May 22.

MICHIGAN ANGLING NOTES.

BLACK bass have been caught in large numbers during the past two weeks in the Clinton River, near Mount Clemens. Several large catches are also reported as having been made at Johnson's Channel, St. Clair Flats. As it is the spawning season, and as the fish are caught off the spawning beds, I am sorry that there are not more sportsmen to rebuke the unthinking anglers who are boasting of their success. The fish are now thin and poor, and I regret to say that many are caught with trolling line and spoon. How any one can find sport in trolling for black bass when rod and reel are near by is beyond my conception.

Perch have been remarkably plentiful this spring in all the waters about Detroit. In fact, the great numbers taken by anglers have been matters of remark. I have a sneaking admiration or love for the gamy-looking perch. They surely present an exceptionally animated and beautiful appearance as drawn from the water, with fins all erected, they gleam and dance in the sunlight. And what a memorable thing it would have been to have landed one of these Western one-pound beauties years agone when, a little shaver, I used to haul out the "pumpkin seeds," dace and shiners down in old New England. Yes, I love the toothsome, hardy perch. I can appreciate them for what might have been. Remembering the numerous lickings received for playing "hookey" in those halcyon days to catch a dozen or so paltry little fish, I verily believe I would have deliberately agreed to be walloped for a week for the sake of a big perch such as I caught to-day.

The season at the various club houses at the "flats" has fully opened, and the regular habitués of the flats now make their weekly pilgrimages to their fascinating resorts.

It's not often that a Frenchman, born and bred as it were in a boat at St. Clair Flats, loses his life in their waters. Several fatal casualties have occurred during the last few years, but the victims have been gentlemen who went there for recreation, and indeed who sailed or rowed without a professional punter in their boats. Last week, however, Clowel Teabedo, for some time cook on Mr. Harry Newberry's hunting yacht Venita, and who was considered more at home in a boat than elsewhere, lost his life. He left Herson's Island in a small boat at 5 P. M. bound for the Canada shore, eighteen miles away. Shortly after his start a heavy gale commenced to blow, which lasted for twenty-four hours. Nothing has been heard from him, and it is not to be doubted that he was capsized and drowned. Careful search has been made, but nothing found to explain the poor fellow's fate.

The lovers of grayling fishing are making ready for June 1, when the open season on these beautiful fish commences. Wading stockings and pants are being overhauled or purchased, and from appearances a far greater number of anglers than usual will take to the streams to enjoy the delicious sport. DELTA.

DETROIT, Mich., May 24, 1884.

A SWORD SWALLOWER CHOKED ON BASS.—Complaints concerning persons catching black bass out of season have been numerous of late, but despite the vigilance of the members of the Passaic County Fish and Game Protective Association the complaints could not be traced to any good source. Some of the members of the association have taken trips into the country on various days for the purpose of ascertaining whether fish and game were taken out of season. In most instances it was found that there was no ground for the stories circulated; in others it was found that the accounts had been grossly exaggerated and that the catching of fish was done by boys who occasionally captured a black bass while fishing for other fish. The question has frequently arisen what is a person to do if he catches a black bass by accident. There are various methods of catching fish and if a person adopts such a method as is generally recognized as the proper method for catching catfish, suckers or dace, and then accidentally captures a black bass he cannot be held responsible, for the law does not punish accidents unless they can be avoided by the exercise of reasonable prudence. But if a black bass is caught, say on a worm, it is the duty to return the bass to the water if the fish is not so badly injured that he will necessarily die. Should his gills be badly cut it is not thought wrong to take the fish home, as throwing him back into the water would not tend to increase the number of fish there. Last week several members of the association were informed that Mr. John J. Garrabrant and Signor Carlo Benedetti, the sword swallower, had returned from Greenwood Lake with a large mess of fine fish, including several black bass. The allegations were at once reported to Fish Warden Harry Keenan, who is also the warden of the association, and an investigation showed that Garrabrant and Benedetti had displayed some of the black bass at the depot of the New York, Susquehanna & Western Railroad on their return to this city. Quite a number of people had seen the fish and the warden considered himself justified in making a complaint. Senator Griggs, the counsel of the association, accordingly drew up a complaint which was sworn to last night before Recorder Greaves and warrants were issued. Greenwood Lake lies partly in New York State, and over that portion magistrates in Passaic county have no jurisdiction, but it is said that in the present case ample evidence will be forthcoming to show that these fish were caught in Passaic county. Should it appear otherwise there is every probability that the accused will be arrested in New York State as soon as they return there, the association intending to protect the waters of Greenwood Lake at all hazards, as this is the only sheet of water near New York where first-class black bass fishing can be had. Mr. John J. Garrabrant runs the Passaic Hotel and Signor Carlo Benedetti is the famous sword swallower who has given repeated exhibitions in this city of the wonderful construction of his swallowing apparatus.—*Paterson (N. J.) Press.*

BLUEFISHING IN GREAT SOUTH BAY.—A few days ago, on the 14th inst., myself and friend paid a visit to the Prospect House, Bay Shore, L. I., and after a night's sojourn started at early dawn in the sloop Pelican for a trial of fishing for bluefish, none having as yet been caught this season. We determined to be first in the field or on the water. We were soon on the blue wave and began to troll for the swift and gamy fish, and before long had our reward in hauling in fish after fish, weighing from 7 to 9 pounds each. Around us by this time many other boats had congregated, and all seemed to be busy, and almost every boat had quite a successful day; one boat taking 35 magnificent fellows. This being the first run of the season, the fishermen are alive and anxious to get out. From now until the 20th of June the fish will be in great abundance and afford splendid sport. Bay Shore is the finest situation on this magnificent bay.—YACHTSMAN.

Woodmont Rod and Gun Club.—Mr. S. H. Kauffman, the president of the Woodmont Rod and Gun Club (of Washington, D. C.), reports that the institution is in a reasonably prosperous condition, financially and otherwise. From the annual report we take the following: "Owing to the frequent rains of last summer and the consequent high and muddy water in the river, the opportunities for angling were, during 1883, fewer than usual, and the season was, on the whole, an unfavorable one. Nevertheless there were a number of excellent catches reported, both as to the number and size of fish taken. Several of the members had also good success with the gun, bringing in deer, turkeys, ducks, and much small game. A case of poaching on the estate of the Club by two persons was reported during the winter, and instructions were given to cause the prosecution of the offenders, if possible, but up to the present time no arrests have been reported. In this connection I have much pleasure in stating that Mr. A. H. Evans, to whom that service was confided at the last annual meeting of the Club, succeeded in securing, at the late session of the Legislature of Maryland, the passage of a stringent law looking to the protection of game, etc., in Washington county, copies of which have been extensively circulated in the neighborhood of the Club grounds. It may be stated here also that a more stringent law against trespass and poaching was passed at the same session of the Legislature. From both of these measures the Club will be able to derive considerable advantage in the greater enjoyment of its legal rights. With a view to drawing and keeping game upon the estate, arrangements have been made for cultivating two or three lots of ground at different points during the coming summer. The crops to be put in are corn, beans, and buckwheat, the yield whereof will not be gathered, but left upon the ground as food for game of various kinds during autumn and winter. Up to this time nothing has been done, so far as can be learned, by the authorities charged with that duty, toward constructing the promised and much needed fishway at Dam No. 6. When this important work shall be done there is reason to believe that the sport of angling will be greatly improved at all points above the dam, both as to quantity and varieties of fish. In that event it will be possible for fish from below to pass that formidable obstruction, whereas under existing circumstances those which are carried or find their way over it during high water have no chance whatever of returning to their original haunts."

Fly-Fishing for "Hickory Shad."—There has been considerable excitement among the anglers of Baltimore (reports the Germantown *Telegraph*) over a novel impulse which seems to have seized upon the hickory shad—a fish which has hitherto been rated as extremely plebian. He comes into the rivers of Maryland above tide water this year as game as a salmon, and has been rising to the fly in a dashing style that has fired the Waltonian instincts of all true fishermen and carried them out with rod and reel in great numbers. The Patapsco, at the Relay House, Stemmer's Run, Bush River and other places where the salt tides do not come, has been alive with these hickory shad. It has always been customary with old gudgeon fishermen at this season to carry with them to the banks a cast of flies for a stray rockfish or striped bass, and a dip in the water often is rewarded with a strike, but hickory shad have never taken the fly before to any extent. Mr. John Donaldson, a few days ago, caught forty pounds of them. Mr. A. Dresel, on Monday, hauled in five splendid fellows, and others have met with similar luck. The only difficulty encountered in pursuit of the sport is the great number of early gudgeon fishers who line the banks, and who quarrel if their lines and corks are interfered with by an eighty-foot cast and two hackle flies. Those who have been catching the hickory shad in the Patapsco have been using small trout flies. On sunny days the gray or drab flies are the best, but on a cloudy day the "green hackles," "coachmen," or "professors" are about the most attractive on account of their bright colors. The shad rises to the fly with a little splash and takes it off with a fourteen-horse power run. He is hard to kill because his mouth and gills are peculiarly adapted to breathing with the jaws open.

Bass in Harvey's Lake, Pa.—The black bass (small-mouthed) have made their appearance near the shore in Harvey's Lake (this place), and there is promise of good sport during the season, as the fish are abundant and vigorous. They do not take the fly (but perhaps the right kind has not been used), and live bait only can be relied on in casting. Harvey's Lake is said to be the largest body of fresh water (I mean lake, of course) in Pennsylvania. It may be described as T shaped, the two lines forming the figure being two miles in length. Its width varies but little from about three-quarters of a mile. It is private property, but the owners do not deny the privilege of fishing to those who engage in it in a reasonable and lawful way and during the proper season. It is located in Luzerne county, about thirteen miles northwest of Wilkesbarre, and is reached by stage or private conveyance. The place is not much of a resort, owing, probably, more to ignorance of the people that it is such a delightful spot than to anything else, for it is cool and salubrious. I wish you to know that I am not after an advertisement gratis, as I am not a hotel keeper nor have I land to sell, but write to tell you of a place where your reasonable friends who are fond of fishing for black bass may have some sport. The Lake House has good accommodation for this country, and its proprietor, Col. James W. Rhoads, former sheriff of the county, will answer any inquiry as to accommodation, etc., by letter, or by telephone from Wilkesbarre.—T. G.

Black Bass in Ohio.—Cedarville, Ohio, May 22.—So far as I have been able to learn, there has been no change in our game law, though it was reported that a provision had been made to protect squirrels from Jan. 1 to June 1. This would, I believe, be too sensible a measure to emanate from our honorable body of legislators, and, though the proposition was before them, I understand it was defeated. There was a change in the fish law, but not, of course, for the better. How strange it is that the simple proposition to protect our black bass from hook and line, as well as every other means of capture, during spawning season, cannot be allowed to remain on our statute books when once there, nor re-enacted after its idiotic repeal. The provision which allows the catching of suckers and mullets in any way between March 20 and April 20, may justify the remark of a friend, who when told of it said, "Whoever enacted such a law as that must be a set of suckers themselves." At any rate I regard it as a fraud, under the cover of which black bass may be seined with impunity.—J. G. D.

Trouting in the Adirondacks.—A private letter from Gen. R. U. Sherman, of the New York Fish Commission, dated Bisby Lake, May 19, contains the following, which we have been permitted to publish: "The season here is sour and backward. The leaf buds are scarcely visible on the trees, and the waters are cold and high. We take what trout we need for the table by diligent fishing toward nightfall only. I doubt whether there has been any really good fishing yet on any of the lakes in the Wilderness. The running streams are much too high for brook trout fishing. I heard of one good landlocked salmon taken on Woodhull last week with a worm bait. The fish taken are dark-colored and slimy, indicating that they have just come from deep water and have not cleaned yet, as is their custom, on the sands. The great body is yet in deep water, and probably will not move until the minnows run to the shores. I saw many freshly-hatched caddis flies yesterday. No black flies or mosquitoes yet."

What Fish is This?—A correspondent writes: I have just returned from fishing the Macedonia Brook, in Kent, Conn. In the stream I found large numbers of fish about two to five inches long, something like trout, but with sharper noses and forked tails, they are splashed with red, not spotted like trout. Are they young land-locked salmon? I hear such were put in the stream a year or so back. You can judge of their numbers as I put back forty-two in an afternoon's fishing; but understand the folks that way count all fair and basket them. The little rascals took a fly furiously, and jumped time and time again after being hooked. [As salmon and landlocked salmon are black spotted, and have neither red spots nor splashes, we do not recognize what fish these can be. Perhaps these were rainbow trout, but the sharp nose and forked tail seems to forbid the supposition. Without specimens we cannot decide on the species.]

A California Salmon in the Mohawk.—Capt. L. A. Beardslee, U. S. N., has informed Prof. Baird that a California salmon was taken in the Mohawk River near Little Falls, N. Y., some time about May 16 to 20. We have no further information on this subject, nor has Capt. Beardslee or Prof. Baird. The former obtained his information from a newspaper slip which came into his possession. We would like a description of the size of this fish, its capture and by whom, and also of the disposition made of it.

Coast Fishes.—The bluefish have struck in from New Jersey to Cape Cod simultaneously instead of gradually going north, in great numbers. Weakfish are becoming plenty below New Jersey. Kingfish are in the markets in fair numbers. Menhaden are swarming at the eastern end of Long Island and along the coasts of Connecticut and Massachusetts in numbers exceeding that of any previous year within the last fifteen or twenty. All things point to a good season for the salt-water anglers.

Trouting in Chenango County, N. Y.—New York, May 26.—Will one of the many readers of the Forest and Stream inform me if there is any trout fishing near Greene, Chenango county, N. Y.?—Niagara.

Michigan Bird Arrivals.—House wren first observed May 12. Ruby-throated humming bird first seen May 18.—K. (Central Lake, Mich.)

Fishculture.

THE AMERICAN FISHCULTURAL ASSOCIATION.

The President called for Mr. Sweeny's paper which had not arrived. The next paper on the programme was then read; it was entitled:

Fresh and Salt-Water Hatching at Cold Spring Harbor.

BY FRED MATHER.

The new station of the New York Fish Commission, designed for hatching both salt and fresh water fishes, is situated on the north side of Long Island, thirty-two miles east of New York city by railroad. The harbor was formerly a whaling station, and many old buildings connected with that industry still remain there, unoccupied. The line between the counties of Suffolk and Queens runs through the center of the harbor, and while the village and post-office is in the former county, the hatcheries are in the latter. There are two points of especial excellence in the site which will at once commend it, and these are the elevation of the springs, one of which is fully fifty feet above the hatchery, and the proximity to salt water, which at half tide is only two hundred yards away.

The work at the station was begun on January 1, 1883, by the joint operations of the United States and the New York Fishery Commissioners, and has been continued by both Commissions since. The grounds were given, rent free, by Mr. John D. Jones and his brothers Townsend, Samuel and Edward, and the upper spring by Dr. O. L. Jones, and, in addition to this, Mr. Townsend Jones has given stone from the Connecticut quarries to build a sea wall to hold the tide at all times. Two old buildings have been fitted up as hatcheries, and the work done in the short space of time will bear close inspection and comparison with older establishments. Maps of the grounds will be found in the last report of the New York Fish Commissioners by those who care to know more of the station.

In the fresh-water department the present capacity of the houses has been nearly taxed by the hatching of 500,000 salmon, 10,000 landlocked salmon, 38,000 rainbow trout, 50,000 European trout and 1,000,000 whitefish. The fact that the European trout were in five different lots, which will be enumerated further on, rendered it necessary to place them in separate troughs, even though as small a lot as 2,000, taken from one English stream, were kept separate in a trough which could just as well have accommodated 30,000. The whitefish table will hatch 4,000,000 as well as 1,000,000, so that at present we can say that the capacity of the hatcheries is 800,000 salmon and 4,000,000 whitefish, or 1,000,000 salmon and the whitefish. This can be increased, if necessary.

TROUT.

Our native brook trout were formerly plenty in the ponds on this place, but owing to a lack of protection, they were very few when the land was leased to the Fish Commission; about fifty fish being the extent of their number. Eggs of the rainbow trout have been received from three different places, viz.: Direct from the U. S. hatchery at Baird, Shasta county, California; from the U. S. station at Northville, Mich., and from the New York station at Caledonia. They have grown well, but are a fish that I have never fancied much, and am in greater doubts as to their value since reading the last report of the New York Fish Commission, which says:

"A good deal is to be learned yet respecting temperature and other local conditions affecting fish. Till the past year not enough had been done in stocking with rainbow trout to warrant a judgment of their ultimate success in waters on the Atlantic side. Their time of spawning occurring at a different season from that of the native brook trout, it would not seem to be policy to plant them in waters inhabited by that fish. The protective seasons would need to be different, and inhabiting the same waters one kind might be taken often when the other was fished for, and thus unintended violations would be liable to occur. An obstacle to their ready success in our waters presents itself in the circumstance that at the season the fry are ready to plant, all other fish are greedily feeding, and consequently a considerable share of the fry are liable to be nipped in the bud. This, however, may be avoided by providing places where the fry can be free from the presence of predatory enemies till they are able to look after their own safety.

"From the circumstance that they have not been readily found always, in the second year, where the plants have been made, it has been surmised that they are a migratory fish—working their way, as soon as they attain any considerable growth, down stream toward the ocean. Their disappearance, however, may be accounted for by the other cause stated. Further experiments will be necessary to solve all the problems connected with their establishment in Eastern waters; but the promise continues to be that they will prove themselves a fish of great value in stocking large streams whose temperature is too high for brook trout."

An editorial note in Forest and Stream of May 1 says of the rainbow trout:

"We would call attention to the paragraph in our notice of the report of the New York Fish Commission concerning these fish. It is beginning to be learned that they are migratory, and do not remain in brooks. We have never been much in favor of this fish, because we have known, what is not popularly known, that the fish is strongly suspected to be a salmon. There is no difference that an ichthyologist can find between the *Salmo iridea* and the salmon known as 'steelhead,' 'hardhead,' and 'salmon trout' on the Pacific coast, the *Salmo gairdneri*. Although this is the case, and the species *iridea* is a doubtful one, yet it has been thought best not to combine them for the present. We have been waiting and watching the habits of this alleged trout with great interest in order to learn if its habits might not show it to be in some respect different from the steelhead. The evidence of the Commission tends to show that it is a migratory fish, and if so it may escape to sea and be lost, as the other California salmon was. We believe that Mr. Roosevelt has not seen the rainbows which he planted in streams emptying into Great South Bay, Long Island, since they were yearlings."

If this fish has to be confined by screens to prevent its migrating and perhaps entirely disappearing, as the quinnat salmon did, then it will be useless in our open brooks. The promise of the rainbow trout was that in it we had a quick growing fish, which was not as sensitive to warm water as our own *fontinalis*, a desideratum which now promises to be filled by the brook trout of Europe, *Salmo fario*. I would here call the attention of the Association to some specimens of this fish, which jumped out of the ponds last October, when they were six months old. They are, as you see, full six inches long, and are plump, handsome and finely formed. The eggs from which they came were sent to me as a personal present last year by Herr von Behr, president of the Deutschen Fischerei Verein, one of the most earnest and enthusiastic fishculturists in the world. Two varieties were sent, one from the deep waters where they grow large, as in our Maine lakes, and the other from the swift mountain streams of the Upper Rhine, where they are smaller. This year he has repeated his gift by sending some to the United States Fish Commission, in my care, and some to Mr. E. G. Blackford, Commissioner for New York. Last year, when the fish were sent to me personally, I gave some of them to Mr. F. N. Clark, Superintendent of the U. S. Station at Northville, Mich., and to Mr. M. A. Greene, of the New York Station at Caledonia. Both report them as doing well.

This year I repeated these divisions of the German eggs and also received ten thousand eggs of the same species from Mr. R. B. Marston, editor of the *Fishing Gazette*, London. Five thousand of these were labelled "our best trout," 3,000 were from the Itchen, and 2,000 from the Wye. Both last year and this season the large German trout have hatched well but have died freely before taking food, while the small variety has thrived and been distributed to waters not named in this article. The large English trout have done splendidly and will be kept at the station for breeders. This European brook trout has, as you may see, a larger scale than ours, and to my eye is a more beautiful fish than our own trout. It is a fish that from its habit in Europe should live in the Hudson from North Creek, or above, down to Troy. In Europe it is found plentiful in the South of England, while the charrs, of which our so-called trout is one, are only found in the deep cool lakes of the North. I believe that we have the necessary conditions on the Atlantic coast to successfully acclimatize this fish, and I have always been skeptical about habituating the *Salmonidæ* of the short streams of the Pacific coast, with their snow-fed waters in mid-summer, to our longer and warmer rivers, and this skepticism has increased since I have suspected the so-called rainbow trout to be identical with the steelhead salmon, *S. gairdneri*, which is a migratory fish.

WHITEFISH.

The great surface exposure of the reservoir at this station is favorable to the late hatching of the whitefish. The temperature of the water in the hatchery for the month beginning February 23 and ending March 23, varied from 34 degrees to 48 degrees, the mean being 38¼. Shipments of whitefish were made this year to Great Pond near Riverhead, Long Island, on Feb. 15, and to Lake Ronkonkoma on March 19. This is as late as the fish are hatched in the cold lakes, and the young will find food when planted in March.

THE SALT WATER WORK.

The cold weather caused us to suspend out-door work before the completion of the great tidal reservoir, but we were enabled to hold the water as high as half tide and to begin work. The hot air engine worked very well and we hatched the eggs of the little tomcod (*Microgadus tomcodus*), locally known as "frostfish" in the fall of the year, and as tomcod in the spring. I sent some of these eggs to Prof. T. J. Ryder, at the Central Hatching Station of the United States Fish Commission, and he hatched them in artificial sea water. The spawning season of this fish is in November and December, and they had finished spawning before our engine was in position, but we gathered the eggs from the seaweed, to which they are attached in bunches of the size of a hen's egg, and are easily obtained by the oystermen when raking for oysters.

We also obtained several million codfish eggs from the cars at Fulton Market, but none of them were good. They showed the shrunken vitellus which gives both them and shad eggs a "speckled" appearance, which indicates that there is no possibility of impregnating such an egg. In every case the parent fish had been brought in the well of a fishing smack, and after being dipped out had been thrown into the floating car alongside, falling from four to six feet, usually on the abdomen. This, in my opinion, is more than the delicate cod egg can stand.

The membrane, or shell, covering the egg of the codfish, is so delicate that a light touch of the finger, when the egg is on any hard substance, will burst it like a soap bubble, while a trout's egg will bear the hardest squeeze that can be given between the finger and thumb. It is possible that the eggs will have to be obtained from the fishing grounds and be taken when the fish are first hauled in, although they may possibly be found to be good after the smacks arrive and before the fish are put in the cars.

POSSIBILITIES OF THE STATION.

In addition to the salt-water fishes mentioned it is possible to hatch many other species. The density of the water varies

from 1.018 to 1.022, sea water being 1.023 and distilled water 1. The temperature of the water in the hatching jars has, during the months of January, February and March, varied from 33 to 48 degrees Fahr., the mean being 42¾. The water is clear and pure, and everything seems to be favorable for doing much good work. Spanish mackerel and other valuable fishes may be attempted, while in the opinion of Prof. H. J. Rice, the situation is most favorable for oyster culture. The harbor is part of the celebrated Oyster Bay, and oysters and clams are usually abundant and excellent. The past year, however, has not been a good one for either of these products, but the difficulty, whatever may have been the cause, is probably a temporary one.

It is to be hoped that the State of New York will adopt some such system as Connecticut has and which is now in good working and is giving general satisfaction, and in addition begin experiments looking to the production of seed oysters. At a comparatively small expense these experiments can be conducted on the grounds at Cold Spring Harbor, where the machinery for pumping salt water is now in position, and where the situation is favorable for making such ponds as may be necessary.

The experiments of the gentlemen who have devoted their time to the impregnation of the eggs of the oyster have proved that they can be fertilized and hatched in laboratories, and there seems to be no obstacle to the work being carried on, in a suitable location, on a larger scale.

THE MENHADEN QUESTION.

Editor Forest and Stream:

Your Westport correspondent quotes the old adage that a liar is not believed when he tells the truth. By that rule he is in bad repute, for he makes the following inexact statements in his article:

First—That thousands of barrels of menhaden are salted for mackerel bait.

Second—That there was unusually bad weather during the spring of 1883.

Third—That menhaden are decreasing; for it is a matter of record that the greatest scarcity of menhaden ever known was about twenty-five years ago.

Fourth—That there has been a diminution of five hundred purse seines since steam fishing came in vogue, for the reason that less than three hundred were in use at that time.

Fifth—By saying that menhaden are food for mackerel.

Another illustration in favor of free fishing is furnished by the abundance of porgies and sea bass this spring. The large porgies have been absent since 1868, and the sea bass even longer, but they are back again in quantities equal to any other year in the business.

Providing you or any of your readers wish to know quantities and prices of said fish, we invite your inspection of our accounts with Sam. B. Miller and Dudley Haley, Fulton Fish Market, for the month of May, 1884. If you do, you will find it even beats the following, which I cut from the Boston *Herald*, bearing date of May 24, 1884:

"Fresh fish of all kinds are very plenty, and the market is dull, with prices low. Large cod sold yesterday at $1 to $1.50 per cwt.; market cod, 75c. to $1.50; haddock, 75c. to $1.50, with a large supply. There are no hake or cusk here. Choice split pollock sold at,50c. per cwt. Fresh mackerel range from $2.50 to $4.50 from the vessel. Halibut are plenty and very cheap. New shoals sell at 6½c. per lb., and bank at 5c. Shad have been selling at 10c. for bucks, and 20c. for roes. Salmon are easier, and good eastern can be had at 34c. per lb. There is very little doing in oysters, as the season is over. The trade now is confined to restaurants and hotels. Clams are in good demand at 50c. per gal. for shucked. Lobsters sell at 8c. for boiled and 6c. for live. A down-east schooner yesterday brought 6,000 live lobsters." DANIEL T. CHURCH.

The Kennel.

FIXTURES.

BENCH SHOWS.

June 10, 11, 12 and 13.—The Second Annual International Bench Show Chicago, Ill. Mr. Charles Lincoln, Superintendent.

Sept. —.Bench Show of the Philadelphia Kennel Club. Mr. P. C. De Saque, Secretary.

Oct. 8, 9, 10 and 11.—Third Annual Bench Show of the Danbury Agricultural Society, Danbury, Conn. E. S. Davis, Superintendent, Danbury, Conn.

Oct. 14.—Non-sporting Bench Show of the Westminster Kennel Club, Madison Square Garden, New York. Mr. Charles Lincoln, Superintendent.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1213.** Volume I., bound in cloth, sent postpaid, $1.50.

DACHSHUNDE.

Editor Forest and Stream:

It has appeared to me that either dachshunde should not be admitted into any American bench show, or else that a proper classification should be made, the three distinct breeds recognized, and the judging done by persons familiar with the dog in its own country, not by persons who have received their practical education in this line by studying the mixed lot that pass as dachshunde in this country. I make these criticisms because I have become astonished at the bewildering maze of incongruities that seem to hover around the decisions of the judges when the alleged dachshunde are brought into the ring. Now this is how the matter stands at present with those who are the friends of the dachshund: The uncertainty whether the terrier, hound or Hanoverian spielhund is considered by the erudite judges as the type of dachshund to set up as a criterion. Of course, if it is distinctly understood that only the hound type is to be considered, or the terrier, or whichever of the three the judges decide upon, owners will know what to do and what entries to make.

To give you an example of how this uncertainty makes us afraid to enter imported dogs otherwise than those with which the judges are familiar with here. In New Haven there were only two dachshunde, properly speaking, these were two distinct types. One a Hanoverian spielhund, from the Royal Kennels, and a first prize winner in puppy class in Berlin, 1883—a type of dog only found in Hanover and valued very highly by the Germans. The other entry was a good specimen of the ordinary tekel, a dog that can be picked up for a few dollars anywhere on the continent. Now this dog, Scamp, took first, while the Hanoverian type was not recognized as a dachshund. This was satisfactory to the owner, he supposing that the judges in this country did not recognize the dog as belonging to the dachshunde. What was his surprise upon afterward hearing that the judge had never seen the spielhunde.

Now to come to the point: In New York there was not a single full-blooded dachshund. Gretchen, the first prize winner, was a beautiful specimen of the Hanoverian type, but the same type that had been refused at New Haven. Now what I want to know is, how are we to tell what the judges consider dachshunde? If they would only establish at least two classes, they would see fine exhibits, and be released from a sense of knowing that all lovers of the dachshunde in this country only look upon them with pity and uncertainty. Supposing now that there had been a good entry in the class in New York, it would have been a gross error to have neglected Gretchen, yet you would have been obliged to have neglected the dachshunde proper or else Gretchen. I heard the judge at New Haven tell the owner of Scamp when he pulled up his skin some four inches from his back that it was a shame to starve the dog so. Do you think that he thinks much of the prize awarded through such a judge of dachshunde? AUFWIEDERSEHEN.

HARTFORD, CONN.



MR. F. E. LEWIS'S LEMON AND WHITE ENGLISH SETTER DOG "ROCK."
Winner of First Prize, Open Class, New York, 1884.

NATIONAL BENCH SHOW ASSOCIATION.

Editor Forest and Stream:

I inclose you a copy of a circular sent by the Westminster Kennel Club to the foremost kennel associations of the country.

The importance of concert in dog matters should be recognized by all and it is hoped that the meeting will be fully attended and may result in the establishment of a national association of kennel clubs which may take the position in America filled abroad by the English Kennel Club.

ELLIOT SMITH.

[CIRCULAR.]

Gentlemen:

You are invited by the Westminster Kennel Club to attend a meeting of American kennel clubs, which will be held at Delmonico's, Twenty-sixth street and Fifth avenue, on the 21st day of June, 1884, to discuss the propriety of uniting in a general association with the object of securing uniform rules for the conduct of bench shows, adoption of standards, consideration of protests within certain limits, and such other kindred matters as may be submitted.

ROBERT C. CORNELL, Secretary W. K. C.

NEW YORK, May 24.

BEAGLES AT NEW YORK.

Editor Forest and Stream:

In your last issue appears an article on the above by Mr. N. Elmore, in which he says: "I presume the Westminster Kennel Club see the mistake they made by accepting a different judge to make awards in special prizes for beagles," that he don't believe it was the desire of the Beagle Club to have a separate judge, and asks me who made the nominations for judges. Some time before the standard was adopted by our club (it being then in the hands of the committee, of which Mr. Elmore was one), some of the executive committee of our club wrote to me saying that we ought to have a proper judge at the New York show; one who understands and knows what a beagle ought to be. I replied that I fully agreed with them, but we had better wait until the standard was adopted by the club, so we could ask to have the judging done by it. As soon as the club adopted the standard (the time for action being limited), I nominated four members of the club, who were fully capable for the position of judge—Mr. J. N. Dodge of Michigan, Dr. J. W. Downey of Maryland, Mr. F. D. H llet of Connecticut, and Mr. Louis D. Sloan of Pennsylvania, to represent the West, South, East and Middle States; and sent out the postal card of which Mr. Elmore speaks. I then wrote to the Westminster Kennel Club, asking them if they would appoint as judge one of our members who would be elected (Mr. Sloan was duly elected notwithstanding Mr. Elmore did not vote). They replied that they had already appointed the judge for beagles, but would allow Mr. Sloan to award the special prizes donated by the club. I consider I had the authority to make the nominations by Article I. of the by-laws of our club, and also in carrying out the objects of the constitution by Article II., which reads: * * * "also having proper judges selected at our bench shows." I was unaware that the Westminster Kennel Club had appointed Mr. Mortimer until their reply to my letter. I was carrying out the object for which we are organized. It was no mistake of the Kennel Club to have the special prizes awarded by a beagle judge and member of the club and by the Beagle Club's standard. The Beagle Club, I am sure, did not donate special prizes to be awarded by any other scale of points than those adopted by them as the standard. Are we to go backward and have the mistakes made, as has been done in the past? If so, there was no use of our uniting or organizing our club. I refer Mr. Elmore to the preface of the standard, which says: "The necessity for a descriptive scale of points for this breed is very apparent * * * quality being overlooked or ignored. * * * With an accepted standard the judge will have a guide to lead him through the difficulties of his position."

I heartily agree with Mr. Elmore in hoping that all bench show managers will have only one judge, and that one appointed from among the many capable members of our club, and the judging done by our standard. If it is not it will be the fault of the club. I did my best to have it done at New York and will elsewhere. Mr. Elmore says: "Mr. Mortimer's judging was consistent * * * and had the dogs placed right." I ask Mr. Elmore if he considers the dog Frank, which won first in the open class, a beagle or not. I should like an answer to this question, yes or no, for if he says he does I will have something more to say. If he don't consider him such, how can Mr. Elmore indorse Mr. Mortimer's decision and at the same time accept the standard of our club (he being one of the committee to draft the same). He will have to accept one or the other *in toto*. He cannot do both, as Mr. Mortimer did not judge by the standard, as will be seen by his award in the case of Frank. I cannot think Mr. Elmore wishes to ignore all our efforts in having formed a beagle club and in trying to improve on the old style of judging, but it looks very much that way when he finds fault with a judge who made his awards by the standard of our club. I am pleased if Mr. Elmore has a better bitch than Deborah. But leave that for the opinion of others. W. H. ASHBURNER,

President American English Beagle Club.

[Mr. Elmore writes that the following sentence in his remarks of last week should have been quoted, being the opinion of another writer and not his own: "We regret that Mr. Sloan, the judge for the Beagle Club's prize, should have reversed Mr. Mortimer's decisions, irrespective of the fact that Mr. Mortimer had the dogs placed right."].

POINTERS AT NEW YORK.

Editor Forest and Stream:

I shall take Mr. Mason at his word when he says in his letter of May 19, that he will be "pleased indeed," if any one can show errors of judgment in his criticism of pointers at the New York show.

I do not propose to criticise Mr. Sterling's awards, I only want to have my say about some of the well-known pointers exhibited.

First—As to the champion class of large dogs, Meteor, in my opinion, was far and away the best of the lot. I had him out and carefully handled him before he went into the ring. His one important fault is that his head is not handsome. There is almost no stop below the eyes and little depth of skull. In back, loin, legs and feet he is extremely good—such a dog as ought to make an untiring worker in the field, *ergo*, such a dog as I want to see noticed at a bench show. My idea is that we don't want a dog for the bench and another for the field, but a dog for bench and field.

Mr. Mason says Knickerbocker is a better type of dog than the winner. He may be a better type than the "plain dog," but he surely is not a better pointer, and simply because he is, to quote Mr. M., "faulty in back, stifles, tail and neck," beside these faults he is cow-hocked.

Don, to be sure, is a trifle coarse, but he is withal a capital pointer, and I would sooner breed to him on account of his excellent pedigree than to any dog in the class.

Beaufort is, to my mind, not nearly as good a pointer as Meteor, and for the following reasons: His legs are extremely bad, being crooked both fore and aft, his pasterns are bent in so that the dog is actually bow-legged, and his hocks are likewise also bent. I think the criticism applied to Meteor by Mr. Mason would much better fit Beaufort. "He is too long on the legs, and if followed behind when on the chain he will be found to be 'stilty.'" Add to this a very heavy throat, and Beaufort is found lacking in points which are absolutely necessary to make a dog first-class in the field, and he ought not, therefore, to be rated first-class on the bench. On the other hand, the dog has a very good head, a beautiful coat, a good body and a wonderfully fine stern—I had almost said it was an unnaturally fine stern.

As to the statement that Bravo should have beaten Bang Bang: Bravo is better in just one point—he has better hocks. In all other points Bang Bang is immensely his superior. Bang Bang is the most strikingly handsome pointer dog in America to-day. His shoulders are such as no other pointer I ever saw is fortunate enough to possess, and if he proves as level-headed as I think he will, the W. K. C. will have what they have always had in view, viz.: a dog fit to compete and able to hold his own in any company, both on the bench and in the field. ROBT. C. CORNELL.

Editor Forest and Stream:

In your issue of May 22 appeared a lengthy criticism of the judging of pointers at the New York show from the pen of Mr. C. H. Mason. A few days later the manager of my kennel handed me the following note addressed to him by the same gentleman:

DEAR SIR—A protest—indorsed by fifty exhibitors and breeders of pointers—is to be published against the absurd decisions at the late N. Y. show. The protest is already signed by many of the most influential breeders, exhibitors and clubs.

May I add yours or those of any of your friends, who do not wish to see the grand pointer degenerate? Very faithfully,

CHAS. H. MASON.

No. 49 West Twenty-fourth Street, New York.

As Mr. Mason knows me to be a member of the Westminster Kennel Club, this appears to me questionable taste, and as unfair to place my employe in so equivocal a position, against which I object in his behalf.

As to Mr. Mason's criticism, I have had too little time and opportunity during this show to know whether he is right or wrong in all the cases he mentions. I shall therefore confine my countercriticism to the few dogs which I have known for years, both on the bench and in the field, simply to show that no judge can see everything, and even Mr. Mason can be mistaken.

Let me begin, as the fittest subject, with Fan Fan, my own

exhibit, in the heavy pointer bitch class, whose faulty form is so evident even to a novice, that nothing but the knowledge of the general worthlessness of this class in years past, could induce me to exhibit her at all. I relied on the unusual quality in so large a bitch to carry her well to the front, and was not mistaken. She was easily beaten for first by the only one in the class pretending to any form at all, though as a brood bitch I think it much easier work for me to correct Fan Fan's faulty frame than to infuse good or high quality into the winner.

To digress for a moment: It is a fact that nearly all large pointer bitches exhibited in this country for many years have been coarse and short of quality (my definition of quality being the greatest strength in the smallest weight, which necessitates fine bone, fine fiber and fine texture throughout). I have a horror, not of size, but of coarseness and lumber.

Whether this coarseness is due to the use of all sorts of native bitches and the fact that mostly dogs are imported of the highest class, is of no consideration just here. The truth is that the highest quality is found in the smaller bitches and, as Mr. Mason states, the best results, at least for the bench, are obtained from breeding large dogs to the small bitches. But is this any breeding at all? I call it mating. The breeders are those who will keep up the separate strains of large dogs and small bitches, as long as a distinction is made, in order to enable the exhibitor to produce the happy medium. I do not believe in hybrid nor grades of any kind unless I can perpetuate them and make them a breed. Hence, I would advise either to abandon the large pointers as a breed or to improve their quality. That the latter is possible is evidenced in Fan Fan, who has little else to recommend her. But to return to Mr. Mason's criticism of her; he writes: "Fan Fan (Donner's), placed second, has a fair head and tolerably good feet." My judgment is that she has a good head (including lips, eyes, ears and skull), but has intolerably bad feet: in fact, I think a rooster has better feet, at least for the purpose of sitting on the fence. Mr. Mason continues: "Faults, throaty." I claim her skin fine as a mole's, fits her like a kid glove from the tip of her nose to the end of her tail. His next utterance—"wide in front"—I might have written myself, so well do I agree with it; but when he continues—"light in bone"—I again hold another opinion.

The bitch has all the bone she wants. In fact, I never heard of dogs breaking bones except between their teeth. I wish they were all ivory and as light as possible. A really big bone is the surest indication of coarseness, sponginess and goutiness in any animal. I am sure Mr. Mason knows this, but uses the expression "light bone" to designate the leg as a whole, and I think we only disagree as to the quantity there should be of this, and claiming exceptionally high quality for Fan Fan, I disagree with Mr. Mason as to the quantity of leg necessary. The highest bred horses have apparently light legs, but the actual bone is of ivory density without core. The common horse has large bones of a spongy cellular material. The former is not only in itself the strongest, but especially so from the manner in which the tendons are placed at the greatest possible distance from the bone. These act as the cord of an arch and at double the distance give nearly double the strength to the arch. I therefore like a broad, flat or deep leg of fine bone, with the tendons set clean away from it.

In this respect, I do not only disagree with Mr. Mason in regard to Fan Fan, but conclude from his remarks made in praise of other dogs, that he prefers even an actually round leg and coarse bone, as long as there is plenty of it, to a really fine leg of ample strength.

I find that fine legs as a rule accompany fine tails (though both may be faulty in shape). A fine tail indicates a fine bone in the entire frame, and I conclude that it is due to the demand for too much bone in the leg which causes so many coarse tails and skulls in our large pointers. I can count every bone in Fan Fan's tail. Her skull is fine and her legs are in harmony with her general quality. Mr. Mason's last remark about Fan Fan, "too round behind the shoulder," I indorse only in so far as to say, "entirely too round underneath the shoulder," as I want a dog well sprung in the back ribs as soon as they are clear of the shoulders and elbows. After the above minute statement in regard to a single dog, I could offer my reasons for disagreeing in a number of instances from Mr. Mason's criticism, but for fear of offending owners shall take the liberty only in regard to some dogs owned by a personal friend.

These are Mr. Godeffroy's Drake and Sefton, and Mr. Mason writes: "Drake, placed second, was not entitled to the honor; it really belonged to his kennel companion, Sefton, a decidedly better looking dog; he beats Drake everywhere excepting in head and neck. Sefton is a little sour in expression and light in eye; he is also throaty, but he has good quarters and he stands on capital legs and feet." I do not wish to criticise Drake, except to state that in spite of his show form, good or bad, he can and does gallop as long as Sefton can trot or even walk, and he prefers to do so. What is the reason? I answer—coarseness and lumber in Sefton. In this he is so well balanced that at twenty-five yards distance he looks almost first-class. But don't go near him! You find besides the faults enumerated by Mr. Mason, a coarse muzzle and skull, thick ears, neck and beefy shoulders, with coarse, open hard hair all over to the end of his tail. What does Mr. Mason now see in him, except big legs and general symmetry to change his opinion about him? We agreed better on this subject when he criticised this same dog a year ago, quite as severely as I do to-day, and as I hope with Mr. Godeffroy's consent, who has long ago ceased to breed trotting dogs for field trial winners. Sefton is a well-broken field dog, but can be bought reasonably.

Mr. Mason cannot answer me by saying that my ideas of a dog are against the authorities. I think the difference between us lies in the different interpretation of the same rules, and here a difference in opinion may well prevail—at least I never found anything in the rules to prevent a good field dog to be also a handsome dog, but I know of many cases where bench winners turn out very poor movers in the field. This should not be so under good judging, and I doubt whether Mr. Mason is the only judge who will do justice to both Stonehenge and the dog.

J. O. DONNER.

NEW YORK.

N. A. K. TRIALS, 1884.

CANTON, Miss., May 19, 1884.

To the President of National Field Trials:

DEAR SIR—Knowing that the trials for the last year were held at Grand Junction, and knowing also that Canton is a superior place for such trials, we are induced to write this letter as directed by the members of our club. Canton is south of Grand Junction, 187 miles, on the Illinois Central Railroad; has 3,000 inhabitants, and has plenty of hotel accommodations for the visitors. It is 24 miles north of Jackson, at which point the Vicksburg and Meridian Railroad strikes. Its advantages geographically are excellent, but its natural advantages excel by far all other places. This was acknowledged by gentlemen who attended the New Orleans Gun Club trials here last fall after attending the trials at Grand Junction. They spoke in high praise of the open fields and number of birds at Canton. Our gun club has stocked with birds a body of land containing over three thousand acres within a mile and a half of Canton. This land already had plenty of birds on it, and before stocking it was no trouble to find twenty-five covies in one day. We have had the land posted; no one is allowed to hunt it, not even ourselves.

Now a few words as to its surface: Seven-eighths of these 3,000 acres is open level land, the rest is cover and not heavy cover. By our endeavors the Legislature last fall passed a law prohibiting trapping and netting of birds in this county, so that next fall birds will be still more plenty than hitherto. The people of our town are hospitable and will welcome cordially all visitors. The rooms of our club will be open to all. We feel sure that the National trials, if once here, will be always held at Canton. The New Orleans Gun Club trials will be held again at this point next winter. To sum up, we guarantee you 3,000 acres of beautiful ground within a mile and a half of Canton; more than plenty of birds on it, plenty of places to lay your heads, and plenty to eat, and we extend a cordial welcome as a club to the National field trials to come next winter to our town. We will do our best to so treat them that they will always smile a smile of gladness when the word Canton is mentioned. We refer you most respectfully to the following gentlemen who visited our grounds last winter to see the New Orleans Gun Club trials: Messrs. Wallace, President New Orleans Gun Club; Renaud, Secretary New Orleans Gun Club; J. Palmer O'Neil, Pittsburgh, Pa.; H. B. Harrison, Ontario, Canada, and the two judges at the trials, Mr. Thompson, of Louisana, and Capt. Key, of Florence, Alabama.

Yours very respectfully,

G. R. KEMP, Secretary. LAWRENCE FOOT, President.

CHICAGO DOG SHOW.

Editor Forest and Stream:

Beyond the regular prizes offered, medals will be given for the best kennel of five English setters, best five Irish setters, best five Gordon setters, best five pointers, best five Irish water spaniels, best five cocker spaniels, best five collies, best fox-terriers, best three bulldogs. Medals will also be given for the fastest greyhound or deerhound, also for making the highest leap, and a medal for the best trick dog, one for the best retrieving dog. A $10 silver cup for the best pug owned and entered by a lady. A handsome collar for the best black and tan toy terrier in the show, and one for the same kind exhibited by a lady.

The entries are coming in very well, and there is no doubt that the show will be a good one.

The entries close on the 31st inst., and should be sent in at once, addressed to me, P. O. Box 569. Should any intending exhibitor not have received their entry blanks, by sending the breed of dog they desire to exhibit, with the sex, color, age, and pedigree, their entries will be accepted.

CHAS. LINCOLN, Supt.

[Premium lists and entry blanks can be obtained at this office.]

THE ENGLISH FIELD TRIALS.

WE CLIP from the London *Field* a portion of its leading article upon the late English Field Trials, to which we append a letter from Rev. J. Cumming Macdona in reply:

"Within the past two weeks have been held the two great Field Trial Meetings, for pointers and setters of the year, neither of which can be said to have passed over under favorable circumstances. The first—that at Shrewsbury—will stand alone and unprecedented for the badness of the scent, hard, and cold east winds. A hot sun had parched the ground, cracking it in places, and as the wind lulled we had not even that help to enable the pointer or setter to feel the body scent. The second, at Stratford, is remarkable from causes almost exactly the reverse. There had been and was plenty of rain—and cold rain too—wind, and storm generally, and, although under such conditions we have at times seen the best of scent both for hounds and dogs, it was not so on the occasion of which we are writing. Possibly on the Friday afternoon scent was as bad as it had been the previous week, and only during two or three hours each day (generally early in the morning) did the conditions prove favorable for testing the scenting capabilities of the entries.

These trials have not yet become popular, and, though the attendance at the National Trials was fair, perhaps as large as it ever was, at the Kennel Club meeting it was moderate in the extreme, never exceeding some eighty people, and not more than a score and a half were present to witness the final trial between Ruler and Malt. The pointers, as a class, far out-worked the setters; they did this not only under the hot sun and dry ground of Shrewsbury, but were alike predominant under the rain and heavy going at Stratford. This is rather difficult to account for, especially with the fact staring us in the face that of late years the setter has enjoyed much the greater popularity of the two, and is far more extensively bred, especially for bench show purposes. At some of our later exhibitions the pointer classes have been sadly poor, while exactly the reverse was the case with the setters.

Then, of the latter breed actually competing at the two trials, there was but one Irish setter, and not a single specimen of the Gordon or black and tan; while as a rule those animals the most shapely, and having by blood and outward appearance the greatest pretensions to success in the prize ring, performed the worst of all, and, though they had style enough when they found game or backed the point made by their opponent, their noses and breaking were far below mediocrity. Can this be more than a coincidence? We are sadly afraid it is not. Perhaps we may be writing that which many people will consider a foul calumny on the present handsome race of setters, who, with coats and feather almost like floss silk, sweet and expressive countenances, straight legs, perfect feet, beautifully-placed shoulders and ears, loin and muscle not to be surpassed, are seen taking the cups on the show bench. Yet our experience of them has been just as it was proved at the recent trials—poor in the field, and not nearly equal in work to the common-looking little creature who, so far as show purposes are concerned, would not be worth sixpence. Many of our most successful exhibitors of setters have their shootings, and, as sportsmen, they shoot over their dogs, and are all loud in praise of their excellence in the field. Yet the handsome prizes given do not appear sufficient inducement for them to run the risk of a Crystal Palace or Birmingham winner having in the field its nose put out of joint by a dog not good enough to win at a public-house show in the north. Here are facts as they appear before us; we are shocked to find them, and they are not altogether creditable to those whom the subject most concerns. Of course we do not infer that the handsome setters have never won. There is one well-known kennel, which was not represented either at Shrewsbury or Stratford, that can be as successful in field trials as at Curzon Hall; but as a rule the facts are as stated by us. Now, so far as pointers are concerned there is a great difference, and if we have not actually had the handsomest animals winning, still they have been an advance in this respect on the setters, and generally throughout were a great improvement on them. There were half a dozen or more quite up to first-class show form which ran creditably, and somehow the handsomer a pointer was in ordinary appearance the better style it had on game, and usually had pace to boot. We must naturally come to the conclusion that just now, shows notwithstanding, our pointers are far better in the field than our setters, and nothing but practical proof to the contrary will convince us we are wrong."

Following is the letter of Mr. Macdona:

SIR—You are so often right, and so generally take a common sense view of things, I confess I feel some temerity in joining issue with you in your interesting article on the late field trials. You state they "have not yet become popular." Is this really so? Perhaps they may not be in the strict sense of the term "popular," because they are not, nor ever have been, attended by great numbers of people; but is this a true test of popularity? Consider the conditions. Those who attend field trials come, as a rule, from long distances. Whether they be owners of dogs competing, or keepers and trainers of dogs (I like the American term "trainer" better than "breaker"), both alike evince a keen and intense interest—sustained over several days, which I have never seen excelled at other competitions. A horse race or coursing match, with all the horrible and hoarse shoutings of the betting fraternity, rises quickly to fever heat, and the excitement is over in a few moments. At a field trial, what are supposed to be the best trained dogs meet, and in calm and collected manner do their level best against each other, racing in gallant form, yet with well-bred and well-trained dogs seldom outpacing their nose.

You state, "An unpleasant feature is the continued whistling, sometimes shouting, of the worker," etc. Now, Sir, if there is one change for the better more than another that field trials have effected, it is, I think, universally acknowledged that the deportment and manners of the keepers and trainers of the dogs has wonderfully improved since the establishment of field trials. I have attended field trials from their establishment, and have seen a vast change for the better, not only in the quality of the dogs competing, but in the men that work them. If field trials have "not yet become popular," how is it we never see a field trial fail for want of entries? That the public do not flock to them in great numbers may be easily accounted for. Proprietors of large landed estates, who generously give their ground to be worked over, do not care to have more of the public (especially where estates adjoin large towns that harbor many poachers) present than are supposed to have a direct interest in the dogs being tried. If field trials were to become "popular" in the same sense that race and coursing meetings are, the pristine purity of the privilege of attending them would be for ever gone.

If there is one charm that I cherish more than another in field trials it is the select circle of sympathetic spirits, gathered from all parts of the compass that, meeting in the open, trudge on through briar and bramble, over plough and fallow, through sunshine and storm, most earnestly intent upon the movements of the dogs, the keepers, and the judges. It is passing pleasing to meet there such true types of Irish sportsmen as Mr. King and Mr. Lipscombe, to meet Germans, Frenchmen, Belgians, Austrians, Italians, Dutchmen, and Americans come purposely over to attend them. Who that has met Prince Albert Solms, Von Gusted, Von Alvensleben, and other keen Continental sportsmen at our field trials does not feel proud of the prestige of our old English sports in being so attractive in their influence? But to my mind more than all this intense interest of distinguished foreigners and our own country gentlemen in these field trials is the keen appreciation of them by the backbone of all our sport, the game keepers and dog trainers of our country. Why, bless my soul; it is well worth a journey of one hundred miles by rail to go to a field trial to see one of the "bishops," when not occupied with deceased wife's sisters or pigeon shooting, "put down by the judges" to work against Anstey, Armstrong, Brailsford, Bret, Fletcher, Knowlton, Roberts, or Thomas. The keen yet silent zest with which they set to work is a caution to Convocation. To watch the way in which Bishop Elias, the archbishop of all the bishops, worked Ranging Aaron and Ranging Moses was truly unique if not strictly ecclesiastical; and when Ranging Moses turned a summersault in the air, as he pulled himself up in a headlong gallop when he spotted his competitor on a point, was one of the episodes of the late field trials that well deserves to be handed down to posterity along with the deeds of Garth's Drake and my champion Ranger. Though I have never hesitated in giving my opinion pretty freely about the faults of the Kennel Club, yet I am bound to do it the justice it deserves of commending its pluck and spirit in keeping up its field trials as it has done. Of course I know it is, and, as far as I remember anything of it, it has been, inconsistent in many things. Mr. Richardson's case seems decidedly hard and a direct violation of its own printed rules. It is still more inconsistent of the Kennel Club to shut out from its Stud Book Birmingham and Darlington shows, and yet admit the field-trial winners at the National Field Trial at Shrewsbury, who avowedly repudiate and ignore both it and its rules. I agree with you that it is a great pity we do not see more Irish setters and Gordon setters at the Field Trials. If Col. Starkie would compete next time, we would, I think, see a rare team of genuine Gordon goers from the far-famed Huntroyd Kennels. If Lord Lovat, Lord Roslyn, Sir John Clark, and other well-known breeders of Gordon setters would only have the pluck to try their dogs at field trials, the public would, I think, be delightfully astonished to see what the handsome, well-bred Gordon can do.

Hilbre House, West Kirby, May 13. J. CUMMING MACDONA.

THE WINNING POINTER PUPPY AT SHREWSBURY.

Lingo, the winner of the National pointer puppy stake at Shrewsbury, is the daughter of the Westminster Kennel Club's Bang Bang. The following description of her from *Land and Water* will be read with interest:

"Lingo, the property of Mr. C. H. Beck, was the actual winner. She is, with the exception of a very slight lemon marking of the faintest shade on the ears, pure white in color. Her sire is Bang Bang, the winner of this same stake two years ago, and she is thus the daughter of a field trial winner, and is one of a long line of winners having their foundation in one of the grandest pointers of modern days, old Devon Bang. The dam of Lingo is Polly, a bitch that is nearly related to Sir T. Leonard's Priam on his dam's side. Lingo is rather on a small scale, but there is little room to find fault with her in her make and shape. She is built on very much the same lines as her sire, Bang Bang, her head in particular looking as if cast in the same mould. She has a fair amount of bone, straight limbs, good chest and fore quarters, is fairly well ribbed up, has wide loins and well-bent stifles. Her pace is good and her action is capital, both before and behind, but she seldom extended herself, pottering about at times in a most aggravating manner. She carries her head but indifferently, and few people who witnessed her earlier heats took her chances of winning into consideration, so remote did they seem; indeed, we doubt if her breaker thought much of them himself at first. The weather make the trials very "fluky," so that any dog which did not actually commit the gravest of faults was always 'in the race.'. In this case the extreme carefulness of the bitch stood her in good need. The scent being so poor, a free-ranging dog, carrying his head as she did, would have been certain to flush frequently. On a fair scenting day, a dog even with a moderate nose only, but that carried his head well, would give her little chance unless she altered her tactics. We do not, however, wish to detract from the merit of her win, which on the whole she deserved."

CURRENT DOG STORIES.

XXX.

There is sorrow in the Fifth street police station. Jack, a nondescript, four-footed member of the force, is under the care of a surgeon. He limped into the station a few nights ago, and mournfully lay down near the stove. One of his forelegs was broken, and he was suffering from internal injurics. His recovery is doubtful, but his friends think his strong constitution and tenacity will pull him through. Jack, like Moses and other great characters, has no surname. He was born in the Fourth ward, and passed his early years in the pursuit of the quiet-orbed, tortuous-horned goat, and the contents of eating-house ash barrels. After three years of suffering he was adopted by a citizen who passed most of his time in an Allen street barroom. The citizen died, and bequeathed Jack to the barkeeper. One night a drunken man kicked at Jack as he was coming out of the barroom. Jack dodged, and the drunken man's toes struck the door jamb with painful violence. The man, angry beyond control, ran after Jack until a policeman interfered with his hostile intentions by arresting him. Jack followed the policeman and his prisoner to the station. When the policeman returned to his post Jack went after him, and refused to be driven away. At night Jack returned to the station and was formally adopted by the force. Jack has been in the habit of sleeing in the station during the day. He leaps up from behind the stove when the gong sounds for the 6 o'clock relief to assemble. When the men are drawn up facing the Captain, Jack places himself solemnly in front of them. At the Captain's order, "present arms," Jack barks. He then selects a policeman from the ranks and follows him out. He remains with the policeman until the roundsman comes along, and he then transfers his attention to the roundsman. He has assisted in capturing thieves, in driving noisy crowds from corners, and in protecting property. He was once left at the entrance to a basement in which there was a slight fire, while the policeman turned in an alarm. Jack refused to let the owner of the basement enter until the policeman returned. The bartender who formerly owned Jack captured him, and tied him up in the barroom. When the time came for the midnight relief to go out Jack began to howl. He continued howling until morning, when the bartender, who had been kept awake all night, gave him to the driver of a brewery wagon. The driver tied Jack in the wagon and drove to the brewery. A roundsman from the Fifth street station happened in the brewery and saw Jack tied to a post. Jack emitted a wild bark of recognition and delight, leaped up on his hind legs, broke the rope that bound him and ran to the roundsman. Since his injury Jack has made several efforts to go out with the midnight relief,

but he has suffered so much that he could crawl only a little distance. As he sees the last man disappear through the doorway he sets up a mournful howling.—*N. Y. Sun.*

XXXI.

Domestic animals are turned to curious account in some parts of the world. For instance in Spain a small dog is often used by housekeepers for turning the spits before the fire; and it is not at all to be wondered at that he doesn't take kindly to such employment. To say nothing about the heat of the work, it must be a terrible temptation to the poor animal to keep from touching the meat and fowls, which he would much sooner eat up in a raw state than assist in roasting for the consumption of others. A gentleman who traveled once in Spain tells the following amusing story, in which he gives the little turnspit dog credit for a wonderful amount of sharpness. One evening I reached a solitary little inn. Close to the stove lay a dog warming itself in comfort. "What can you give for dinner?" I asked the landlady. "Some eggs," was the reply, and the dog looked fixedly at me. "Eggs," repeated I. "That's poor sustenance for a man that has come thirty miles on horseback. Have you nothing better?" "There's a bit of bacon." suggested the landlady; and the dog looked at me more intently than ever. "I'm not passionately fond of bacon." replied I; "what else have you?" "Santa Anna," cried the landlady, "I can give you a chicken!" At these words the dog jumped up and sprang through the half open window. "Good gracious!" said I; why the word 'chicken' was like a bombshell to him?" "Ah," smiled the hostess, "it's because he turns the spit."—*Chicago Inter-Ocean.*

DEERHOUND CHALLENGE CUP.—*Editor Forest and Stream:* A New York gentleman has expressed his intention of giving a challenge cup, to cost $250, at the shows next autumn and the spring of 1885 for the best kennel of deerhounds, subject to the following conditions: This cup to be competed for only at shows where at least ten deerhounds (dogs and bitches) are entered in the open class; a champion (winner of three first prizes at shows where a first prize has heretofore qualified the entry of the same dog in the champion class at the Westminster Kennel Club's shows), not to be eligible as an entry making one of the ten requisite in the open class, but eligible to compete as one of a kennel; three entries, either all dogs or all bitches or dogs and bitches, to constitute a kennel; cup to be the property of the kennel or individual winning it three times. The cup will be on exhibition at those shows where the foregoing conditions are in force.—CLOVERNOOK KENNEL.

SIMON CAMERON'S DOG.—Last December a fine Newfoundland dog, which had been presented to Simon Cameron by a friend, was stolen in Harrisburg. It has just been ascertained that the thief sold him in York, Pa., for $5, stole him again, and sold him a second time. The Harrisburg Chief of Police has gone to recover the dog.

ONE MILLION OF MEN have held the accident policies of the Travelers, of Hartford, Conn., and *one in nine* have received cash benefits on them.—*Adv.*

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, or breeding or date of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Don Glencho, Madge Glencho, Sultana and Lady Fire Fly. By Mr. James T. Walker, Troy, N. Y., for red Irish setters, one dog and three bitches, whelped April 10, 1884, by champion Glencho out of Claire (A. K.R. 283).

Monarch S. By Mr. J. K. Smith, Waterbury, Ct., for orange and white English setter dog, whelped Oct. 29, 1883, by champion Foreman out of Tallman's Jennie (Lathrop's Dick—Harrington's Gyp).

Foreman II. By Mr. N. Wallace, Waterbury, Ct., for blue belton English setter dog, whelped Oct. 29, 1883, by champion Foreman out of Tallman's Jennie (Lathrop's Dick—Harrington's Gyp).

Portland. By Mr. W. Bradford Smith, Orange, N. J., for liver and white ticked pointer dog, whelped Feb. 22, 1884, by Lord Sefton (Croxteth—Vinnie) out of Clio (Sensation— ——).

Laura B. By Mr. W. H. Pierce, Peekskill, N. Y., for red Irish setter bitch, whelped April 2, 1884, by champion Glencho out of Hill's Daisy (Chief—Tilley).

BRED.

☞ *See instructions at head of this column.*

Blonde II.—Prince B Mr. John Bolus's (Wooster, O.) English setter bitch Blonde II. (Britton—Blonde) to Prince B. (Pontiac II.—Buckeye Belle).

Breeze—Blue Dick. Mr. John Bolus's (Wooster, O.) imported English setter bitch Breeze (Lord Downe's Duke—Belle) to Blue Dick (Blue Dash—Jolly May).

Posy B.—Blue Dick. Mr. John Bolus's (Wooster, O.) English setter bitch Posy B. (Pontiac II.—Buckeye Belle) to Blue Dick (Blue Dash—Jolly May).

Spinaway—Maxim. Mr. J. W. Munson's (St. Louis, Mo.) imported pointer bitch Spinaway (Garnet—Keswick) to Maxim (Garnet—Jilt).

Helen—Boz. Messrs. R. & W. Rutherfurd's (New York) bull-bitch Helen to their Boz (A.K.R. 441), May 9.

Marvel—Meteor. Mr. J. W. Munson's (St. Louis, Mo.) pointer bitch Marvel (Croxteth—Trinket) to his champion Meteor.

——*—Meteor.* Mr. J. W. Harries's imported pointer bitch —— to Mr. J. W. Munson's champion Meteor.

——*—Bang.* Mr. J. H. Richards's pointer bitch —— to Mr. J. W. Munson's imported Bang (Bang—Luna).

Rita Croxteth—Meteor. Mr. George S. Tucker's (Peterborough, N. H.) pointer bitch Rita Croxteth (A.K.R. 168) to Mr. J. W. Munson's champion Meteor.

Kate—Bang. Mr. T. W. Sterling's pointer bitch Kate (Croxteth—Trinket) to Mr. J. W. Munson's imported Bang (Bang—Luna).

Dent—Meteor. Mr. J. W. Blythe's pointer bitch Dent (Faust—Lassie) to Mr. J. W. Munson's champion Meteor.

Dell—Meteor. Mr. George A. Castleman's pointer bitch Dell (Croxteth—Trinket) to Mr. J. W Munson's champion Meteor.

Winnie—Bruce. The Kilmarnock Collie Kennel's (Boston, Mass.) imported collie bitch Winnie to their Bruce (Marcus—Isle), March 25.

Pearl—Snap. Mr. E. W. Jester's (St. George's, Del.) Italian greyhound bitch Pearl (A.K.R. 758) to Snap (Rome II.—Naughty), May 20.

Ruth—Bobolink. Mr. E. W. Jester's (St. George's, Del.) English setter bitch Ruth (A.K.R. 827) to his Bobolink (A.K.R. 1167), May 23.

Leesburg—Bang. Mr. T. B. Legare's pointer bitch Leesburg to Mr. J. W. Munson's imported Bang (Bang—Luna).

Flash III.—Meteor. Mr. J. W. Munson's (St. Louis, Mo.) imported pointer bitch Flash III. (Bang—Pride) to his champion Meteor.

Vanity—Meteor. Mr. J. W. Munson's (St. Louis, Mo.) imported pointer bitch Vanity (Bang—Pride) to his champion Meteor.

Dixey—American Belton. Mr. John Bolus's (Wooster, O.) English setter bitch Dixey (Belton—Dimple) to American Belton (Belton—Blonde).

Buckeye Belle—Chip. Mr. John Bolus's (Wooster, O.) English setter bitch Buckeye Belle (Belton—Belmore) to Chip (Belton—Burlesque).

Cherry Blossom—Don. Mr. John A. Doolittle's (New Haven, Ct.) cocker spaniel bitch Cherry Blossom (A.K.R. 729) to his Don (Dart—Floss), May 25.

Flora—Black Prince. Mr. H. Reiche, Jr.'s (New York) cocker spaniel bitch Flora (Flake—Lady) to Mr. A. C. Wilmerding's Black Prince (A.K.R. 62), May 10.

Coomassie—Gladstone. Mr. L. Shuster, Jr.'s English setter bitch Coomassie (A.K.R. 949) to Mr. P. H. Bryson's Gladstone (Dan—Petrel), May 12.

Iona—Bruce. The Kilmarnock Collie Kennel's (Boston, Mass.) imported collie bitch Iona to their Bruce (Marcus—Isle), Feb. 28.

Nellie—Glencho. Mr. F. Lynch's (Newburgh, N. Y.) red Irish setter bitch Nellie to Mr. W. H. Pierce's champion Glencho, April 10.

Zelda—Glencho. Mr. Jean Grosvenor's (Boston, Mass.) red Irish setter bitch Zelda to Mr. W. H. Pierce's champion Glencho, April 17.

Mag—Glencho. Mr. Richard Bennett's (Lowell, Mass.) red Irish setter bitch Mag (Berkley—Tilley) to Mr. W. H. Pierce's champion Glencho, April 21.

Netta—Glencho. Mr. J. E. Graham's (Wilmington, Del.) red Irish setter bitch Netta (Spy—Reeta), to Mr. W. H. Pierce's champion Glencho, May 11.

Biddy—Glencho. Mr. Wm. Dunphy's (Peekskill, N. Y.) red Irish setter bitch Biddy (Elcho III.—Mag) to Mr. W. H. Pierce's champion Glencho, May 3.

Lulu II.—Glencho. Mr. J. J. Scanlan's (Fall River, Mass.) red Irish setter bitch Lulu II. (Berkley—Lulu) to Mr. W. H. Pierce's champion Glencho, May 7.

Vic—Glencho. Mr. C. H. Dayton's (Peekskill, N. Y.) red Irish setter bitch Vic (Elcho—Lady Helen) to Mr. W. H. Pierce's champion Glencho, May 5.

Nora—Glencho. Mr. A. A. Sampson's (Troy, N. Y.) red Irish setter bitch Nora (Elcho—Fire Fly) to Mr. W. H. Pierce's champion Glencho, May 11.

Lizzie—Glencho. Mr. W. H. Cox's (Newport, Ky.) red Irish setter bitch Lizzie (Rory O'More—Queen Bess) to Mr. W. H. Pierce's champion Glencho, May 17.

Fan O'Mason—Glencho. Mr. J. N. Dyckman's (Peekskill, N. Y.) red Irish setter bitch Fan O'Mason (Larry—Gussie II.) to Mr. W. H. Pierce's champion Glencho, May 19.

WHELPS.

☞ *See instructions at head of this column.*

Iona. The Kilmarnock Collie Kennel's (Boston, Mass.) imported collie bitch Iona, April 28, eight (two dogs), by their Bruce (Marcus—Isle).

Donna. Dr. C. A. Packard's (Bath, Me.) English setter bitch Donna (A.K.R. 499), May 10, seven (two dogs), by Mr. A. M. Tucker's Dash III.; one dog since dead.

Kate. Mr. T. W. Sterling's pointer bitch Kate (Croxteth—Trinket), seven, by Mr. J. W. Munson's imported Bang (Bang—Luna).

Dent. Mr. J. W. Blythe's pointer bitch Dent (Faust—Lassie), six, by Mr. J. W. Munson's champion Meteor.

Dell. Mr. Geo. A. Castleman's pointer bitch Dell (Croxteth—Trinket), nine, by Mr. J. W. Munson's champion Meteor.

SALES.

☞ *See instructions at head of this column.*

Grace. Liver and white ticked pointer bitch, whelped Feb. 22, 1880 (Don—Dot), by Mr. F. W. Chapman, Darlington, Wis., to Mr. F. H. Dwyer, New York.

Brewster. Blue belton English setter dog, whelped Dec. 24, 1883 (Blue Dick—Bramble), by Mr. John Bolus, Killbuck Kennel, Wooster, O., to Mr. A. Saybolt, Jr., same place.

Bruce. Black and white English setter dog, whelped May 15, 1883 (Blue Dick—Buckeye Belle), by Mr. John Bolus, Wooster, O., to Mr. Thos. Gregory, Provencal, La.

Ashmont Nina. Red Irish setter bitch, whelped March 17, 1884 (Nimrod, A.K.R. 631—Romaine, A.K.R. 638), by the Ashmont Kennel, Boston, Mass., to Mr. S. J. Lobdell, East Paw Paw, Ill.

Fezzan. Mastiff dog, whelped Jan. 26, 1884 (Diavolo, A.K.R. 543—Madge, A.K.R. 548), by the Ashmont Kennel, Boston, Mass., to Miss A. M. Libby, Chelsea, Mass.

Glencho—Claire whelp. Red Irish setter bitch, whelped April 10, 1884, by Mr. James T. Walker, Troy, N. Y., to Mr. John Wilson, Baltimore, Md.

Dash III.—Donna whelps. English setters, whelped Oct. 12, 1883, by Dr. C. A. Packard, Bath, Me., a white and black dog to Mr. A. M. Tucker, Charlestown, Mass.; a white and black dog to Mr. Thomas M. Steele, Dover, N. H.; a blue belton dog and a white and black bitch to Mr. J. W. Kittridge, Ayer, Mass., and a blue belton bitch to Mr. John A. Graham, Chester, S. C.

Portland. Liver and white ticked pointer dog, whelped Feb. 22, 1884 (Lord Sefton—Clio), by Mr. J. B. Brown, Montclair, N. J., to Mr. W. Bradford Smith, Orange, N. J.

Pink. Black and white English setter dog, whelped May 15, 1883 (Blue Dick—Buckeye Belle), by Mr. John Bolus, Wooster, O., to Mr. Thos. A. Addison, Chelsea, Mass.

Duke. Blue belton English setter dog, whelped Oct. 20, 1882 (Pontiac II.—Buckeye Belle), by Mr. John Bolus, Wooster, O., to Mr. D. L. Slade, Boston, Mass.

Cassandra T. White and black English setter bitch (A.K.R. 943), by Mr. L. Shuster, Jr., Philadelphia, Pa., to Mr. W. Tallman, Pawtucket, R. I.

Clarinda T. White and black English setter bitch (A.K.R. 945), by Mr. L. Shuster, Jr., Philadelphia, Pa., to Mr. W. Tallman, Pawtucket, R. I.

Pluck. Irish terrier dog (A.K.R. 197), by Mr. Lawrence Timpson, Red Hook, N. Y., to Mr. W. A. Coon, same place.

Foam—Ruby II. whelps. Chesapeake Bay dog and bitch, whelped Jan. 15, 1884, by Mr. G. G. Hammond, New London, Ct., to Mr. M. E. Sears, Lafayette, Ind.

Primer—Jersey Gyp whelp. English setter, color, age and sex not given, by Mr. W. E. Rea, Hackettstown, N. J., to Mr. Jas. Houtaling, Hurley, N. Y.

Don. Red Irish setter dog, whelped April 10, 1884 (champion Glencho—Claire, A.K.R. 283), by Mr. Jas. T. Walker, Troy, N. Y., to Mr. Waldo K. Chase, same place.

Sultana. Red Irish setter bitch, whelped April 10, 1884 (champion Glencho—Claire, A.K.R. 283), by Mr. Jas. T. Walker, Troy, N. Y., to Mr. Erastus Corning, Jr., Albany, N. Y.

PRESENTATIONS.

☞ *See instructions at head of this column.*

Foam—Ruby II. whelps. Chesapeake Bay dogs, whelped Jan. 15, 1884, by Mr. G. G. Hammond, New London, Ct., one to Mr. R. S. Floyd, San Francisco, Cal.; one to Mr. James Flood, Jr., San Francisco, Cal., and one to Lieut.-Gov. Chas. E. Laughton, Carson, Nev.

Rifle and Trap Shooting.

FIXTURES.

May 26 to 31.—First International Clay-Pigeon Tournament, at Chicago, Ill. Managers, Ligowsky Clay-Pigeon Co., P. O. Box 1292, Cincinnati, Ohio.

June 3 to 9.—Annual Tournament Louisville Sportsmen's Association, Louisville, Ky. J. O. Barbour, Secretary, 157 Third avenue, Louisville.

RANGE AND GALLERY.

PHILADELPHIA.—The Passyunk Rifle Co. and Cosmopolitan Rifle Club, two Philadelphia organizations, contested in a match at the Stockton Rifle Range, Camden, on the 21st. Conditions were, any open-sight rifle over 3 pounds pull, 200yds., off-hand. The Passyunk team shot with Remington .32, rim-fire and Union long cartridge. The other club used heavier rifles and stronger ammunition, both of various manufactures. The following is the result:

Passyunk Rifle Co.		Cosmopolitan Rifle Club.	
Capt J D Vaulet	4444545444—42	Geo W Coulston	5545425435—43
J B Hoffner	4444545454—42	W Chambers	4444444451—41
H S Hoffner	4444543444—39	P Woods	3434434544—38
J D Hoffner	5524343443—37	C Greenfield	4443434444—38
W Kirshner	3534434344—36	L Dubois	3424344434—35
T Hayes	4334444344—36	Dr Shimwell	3444424434—32
J T Dunlap	4442443443—35	Capt C H Jones	2404444422—31
J Hinchman	4343853433—35	F Jesser	0545242342—31
W M Hoffner	3432345432—34	J Dixon	3234444223—30
D Shetzline	0443434434—33	C Bowers	5340420042—24
	369		342

Several of the contestants had never shot over the 200yd. range before.

NEW JERSEY.—To-morrow afternoon, May 30, there will be an opportunity at the Shooting Park, in South Orange avenue, to see a competitive trial between eight or ten of the best riflemen in the country. Such shots as Joiner and Brown, of the American team of 1883, Oehl, Will Hayes, Zettler and Dorrier, besides two or three others who are equally well known, have arranged to fire each one hundred times at the ring target, 200yds., to determine which is the best marksman. There will be no prizes, but a natural pride in his reputation will move each man to do his best work. No admission fee will be charged. The spectators will find that the new gallery will afford them a standing place where they can look down on the contest, seeing both the men and the target. The match will begin about 1 o'clock and last about three hours.

The festival of the Newark Shooting Society, on June 9, 10, 11, and 12, promises to be the biggest ever held. Prizes amounting to $2,000 are offered, and well-known shots from many Eastern cities and even from points beyond the Mississippi, will compete.

A DISPUTED TURN.—Boston, Mass., May 22, 1884.—*Editor Forest and Stream:* There is a dispute about the ruling of a certain president of a rifle club here, which you will please answer through the medium of the FOREST AND STREAM. The facts in the case are these: A silver medal is being shot for every Thursday night for six months. A re-entry is allowed, making two scores per man. The highest score of the evening wins the medal, and the winner wears the medal until the following Thursday night, when the medal is again contested for, and so continued until the six months have expired. A certain member leads off and the other shooters follow, according to the order of their names, which have been entered in a book by the secretary of the club. The president of the club calls upon the first shooter to lead again as all members have shot once around. The member objects to lead again, wishing to hang back until the last, as he expresses it, to see what is scored. The president ordered him to shoot in his turn or forfeit his re-entry fee. He was not willing to shoot in his turn, and demanded his re-entry fee back again. The president rules that he cannot have his money back, and that he must shoot when his name is called. Please give decision, and oblige—RUDOLPH SCHAEFER. [It was the duty of the marksman to shoot his score when called to the firing point. To yield to the demand of the shooter in this case would create a precedent which might bring the match to a short end-ing.—ED.]

BOSTON, May 24.—There was a large attendance of riflemen on the range at Walnut Hill to-day. The day proved a bad one for close shooting, wind blowing most of the time down the range. J. Francis, who, by the way, has another and a real name, an old member of the association, now a non-resident, was present, and as usual, was shooting with an odd firearm, a .25-caliber rifle. With this little gun he made several brilliant scores, and in the team shoot secured fourth position. The interesting event of the day was a telegraphic match between teams representing the Massachusetts Association and the Springfield Armory Club. As will be seen by the records appended, "ye men of Walnut Hill" were victorious by a score of 316 against their opponents' score of 314. The records in all the matches are appended:

Creedmoor Prize Match.		Creedmoor Practice Match.	
W Charles, E	5555545555—49	O M Jewell	5555454545—47
H G Bixby, B	5555455555—49	R Reed	5555555444—47
E F Richardson, B	5544455555—47	J Francis	5445544555—46
A C Adams, E	5554545555—47	A L Brackett	5544545155—46
G Cushing, B	4545545455—46	C B Edwards	4545455545—46
J I Bates, B	4445555445—45	A B Carr	4445544545—44
C B Edwards, B	5445544554—45	J B Darmoddy	3453454454—41
J C Cobb, B	5454545454—45	W H Morton	4435444444—40
J B Thomas, B	5455545444—45	L A Harkins	5443443431—37
W H Oler, E	4451555453—44	P L Eaton	2434453342—34
A B Carr, B	4534444541—43		

Decimal Match.

W Charles, E	9	10	9	9	9	5	8	10	7	8—84
J B Fellows, A	6	6	8	9	8	10	7	6	9	9—78
A C Adams, E	5	8	7	6	6	9	8	10	10	9—78
W H Oler, A	5	9	9	9	8	8	10	5	7	8—78
H Cushing, A	8	9	9	8	5	6	10	6	4	5—68
A B Curtis, E	6	9	4	7	5	9	7	5	7	8—67

Rest Match.

W Gardner, E	10	10	10	8	10	9	8	10	9	10—94
H Cushing, A	7	10	10	7	10	10	10	10	9	10—93
J Francis, A	9	7	9	7	10	9	8	10	10	9—88
W H Oler, A	8	9	8	9	10	8	5	9	8	7—81
A B Curtis	10	10	8	9	5	6	6	9	7	10—80

Team match.

Massachusetts Rifle Association.		Springfield Armory Club.	
E F Richardson	4555555455—48	F R Bull	49
H Seaverns	5444545555—46	R J Hare	46
J B Fellows	5554454554—46	J B Wilson	46
J Francis	4445445544—45	S S Bumsted	46
W Charles	5545445544—45	J A Kimball	44
O M Jewell	4444545544—43	L H Mayott	43
H G Bixby	4554444544—43	F W Bull	40
	316		314

THOMASTON, CONN.—The shooting tournament of the Empire Rifle Club, at the opening of their new range here on the 21st and 22d, was the biggest kind of a success. The weather was perfect, and a large delegation of visiting riflemen were present and expressed themselves as highly pleased with the range, saying that it was one of the best in location and appointments in New England. Some of the most notable shots present were G. W. Ellsworth, of the Gardner (Mass.) Club; W. Charles, of the Walnut Hill Club, Boston; G. H. Hubbard, D. E. Marsh and W. H. Beardsley, of Bridgeport, Conn.; O. B. Hull, of Collinsville, and H. Andrus, of Hartford. The conditions of the shoot were: Distance, 200yds.; off-hand; Massachusetts ring target; rifles limited to 3lbs. trigger-pull; strings of 5 shots each, possible 60, three highest to count for prize, making a possible 180; re-entries unlimited. The following are the prize-winners, the three highest tieing with a score of 170:

G. W. Ellsworth.

First score	11	12	12	12	11—58
Second score	11	10	12	11	12—56
Third score	10	12	11	11	12—56—170

Prize, $40.

W. Charles.

First score	12	10	12	11	12—57
Second score	10	12	12	12	11—57
Third score	12	10	11	11	12—56—170

Prize, $20.

O. B. Hull.

First score	11	12	12	10	12—57
Second score	12	12	9	12	12—57
Third score	12	10	11	12	11—56—170

Prize, $15.

G. H. Hubbard 168, W. H. Beardsley 163, D. E. Marsh 162, E. Nothnagle 161, H. Andrus 161, W. H. Dunbar 158, B. Higley 158, G. A. Lemmon 154, D. S. Seymour 154, J. Gregory 153, W. W. Tucker 152, B. H. Sutliff 152, D. B. Wilson 150, S. J. Lyon 149, C. F. Williams 146, G. W. Canfield 146, B. W. Pease 143, Capt. O'Brien 133, M. O'Connell 137, W. H. Tuttle 135, C. L. Alling 134, G. F. North 134, A. R. Lacy 133, P. Simmons 132, D. C. Calhoun 130, P. M. Beers 129, R. S. Goodwin 129, E. W. Bennett 125.

G. W. Ellsworth also took a special prize of $10 for the largest number of bullseyes, 102. Over $100 were given in cash prizes.—F. A. P.

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

THE INTERNATIONAL MATCH.

[*Special to Forest and Stream.*]

CHICAGO, Ill., May 23, 9:18 A. M.

OWING to windy weather the International championship match was postponed to ten o'clock this day. In the Chicago sweepstakes, 5 single birds, 15yds rise, entrance $7, there were 56 entries. Still, Perry, Sheldon, Williams, Jenkins and Taylor divided first money. Drake and Calhoun second, Rowers, Sampson, Taber, Wilson and Kleineman third. Second sweepstakes, 74 entries, 18yds. rise, $6 each, 7 birds. J. A. Prechtel, Cleveland, won first money, scoring 7 straight birds. Perry and Mills second. Gartright and Riley third. The third sweepstake was a miss and out, $8 each, 18yds. rise, 20 entries. Gartright and Jenkins tied and divided the stake. The championship match is the exciting topic to-day. Visiting sportsmen from all sections are here in large numbers. J. E. B.

THE CHAMPIONSHIP TEAM MATCH.

1:45 P. M.—The Championship Team match began at 10 o'clock this morning. The scores so far are as follows: Blue Island Gun Club (Illinois) 22; Jacksonville (Ill.) Gun Club, 24; Chicago Gun Club, 25; Diana Gun Club (Chicago), 24; Bradford (Pa.), No. 1, 22; Bradford (Pa.), No. 2, 29. Eight other teams are to follow. Best individual score of ten straight was made by C. H. McKenett of Bradford, Pa.

WALNUT HILL, May 24.—Some days since I mailed you a card giving dates on which occur the regular shoots of the Massachusetts Rifle Association, which you kindly published, thus making known to the lovers of the rifle and shotgun in other sections of the country who may have occasion to visit this vicinity, and possibly may be pleased to spend a few hours at Walnut Hill, the days they can do so with the certainty of witnessing a shoot, and should they so desire enjoy the privilege of participating in the same. Our range, and matches generally, are open to all, and we are pleased to have all who enjoy the sports we indulge in come and participate.

Wednesday last was shotgun day at the range, and the day and occasion proved most enjoyable, as a more perfect day is rarely had for out-door sports. Inclosed I hand you report of the day's doings:

First event, 5 clay-birds, 12 entries—Francis first, Tobin second, Evans third, Snow and Newton divided fourth.

Second event, 5 glass balls, 9 entries—DeRochmont and Hart divided first, Tobin second, Francis third.

Third event, 5 clay-birds, 12 entries—Stanton and Francis divided first, Evans and DeRochmont divided second, Nichols third, Tobin fourth.

Fourth event, 3 pair clay-birds 12 entries—Hart first, Evans and Snow divided second, Stanton third, Nichols fourth.

Fifth event, 5 clay-birds, 18 entries—DeRochmont and Stanton divided first, Evans and Francis divided second, Thompson, Eddy and Cutting divided third, Papanti and Souther divided fourth.

Sixth event, 5 glass balls, 12 entries—Francis and Tobin divided first, DeRochmont and Evans divided second, Newton and Shattuck divided third, Short fourth.

Seventh event, 3 pair clay-birds, 13 entries—DeRochmont, Evans and

Stanton divided first, Snow and Short divided second, Eddy third, Souther and Tobin divided fourth.

Eighth event, 5 clay-birds, 22 entries—Shattuck first, Evans and Gore divided second, Francis third, Nichols fourth.

Ninth event, 5 glass balls, 9 entries—Evans and Decker divided first, Nichols second, Francis third.

Tenth event, 5 glass balls, 13 entries—Francis and Snow divided first, Evans and Warner divided second, Decker and Nichols divided third, Crosby fourth.

Eleventh event, 5 clay birds, straightaway, 19 entries—Francis and Evans divided first, Hart and Tobin divided second, Crosby third, Cutting and Warren divided fourth.

Twelfth event, 5 glass balls, 10 entries—Decker first, Tobin and Evans divided second, Newton third, Warren and Short divided fourth.

Thirteenth event, 3 pair clay birds, 16 entries—Decker and Francis divided first, Stanton second, Hart third, DeRochmont fourth.

Fourteenth event, 7 clay birds, 20 entries—Evans and Stanton divided first, DeRochmont, Thompson and Parker divided second, Souther third, Warren and Cutting divided fourth.

Fifteenth event, 5 glass balls, 13 entries—Crosby and Francis divided first, Tobin, Newton and DeRochmont divided second, McCoy and Eddy divided third, Warren fourth.

Sixteenth event, 3 pairs clay birds, 9 entries—Decker and Francis divided first, Nichols and Gore divided second, Snow third.

Seventeenth event, 5 glass balls, 10 entries—Francis and McCoy divided first, Nichols and Eddy divided second, Decker third, Warren fourth.

Eighteenth event, 5 clay birds, 21yds. rise, use of both barrels, 20 entries—DeRochmont, Marston and Francis divided first, Stanton and Gore divided second, Nichols and Crosby divided third, Short fourth.

NIAGARA.—The fifth of the monthly shoots for the medal which is to decide the championship of Niagara county, took place on Saturday last, on the old shooting grounds between Niagara Falls and Suspension Bridge. The following is the score:

E M Moody	1101111111111011111111111—23
E H Smith	1111111101011111111111011—22
C S Rice	1111111010101011111111111—22
Dr. Moyer	1101110111111111111111110—22
T Jennings	1110111111111111111110010—21
J S Pierce	1011111011001001111111—19
George Barker	0011011111011111110111011—18
H C Howard	1111111110110010011111011—18
G H Moody	1011110110000111111110001—16
E E Philpott	1000010100011111110910110—13
W Taylor	1110000000011100000010111—10

Ties of 22 for second: Smith 4, Rice 4, Moyer 4, Smith 5, Rice 5, Moyer retired. Smith and Rice divided second, Jennings took third, Pierce fourth.

UNKNOWN GUN CLUB.—Brooklyn, N. Y.; regular monthly match, May 22; three prizes, one barrel, gun below the elbow:

Knebel, 25yds	1111111—7	A. Harned, 23yds	1110111—6
Rathjen, 25yds	1111111—7	Doyle, 21yds	1111100—5
Moller, 23yds	1111111—7	Midmer, 23yds	1110101—5
Tomford, 25yds	1101111—6	Muller, 24yds	0011011—4
Pope, 24yds	1101111—6	Plate, 24yds	0001111—4
Van Staden, 23yds	1111110—6	Stillwell, 23yds	0001111—4
Layton, 21yds	1111110—6	W Harned, 23yds	0111110—5

WILL NOT BREAK WITH ONE SHOT.—Poughkeepsie, May 2.—*Editor Forest and Stream:* Some time ago I noticed an advertisement in FOREST AND STREAM of the Target Ball & Pigeon Co. of Stockport, N. Y., saying that their target balls were far superior to glass balls, were no injury to the finest lawns, and were sure to break if struck by a single pellet of No. 8 shot, and much more to the same effect. We tried the balls several times, and it was very seldom that a ball would break if struck by no more than one or two No. 8 shot. In fact we were constantly picking up balls with one, two or three holes in them. We hung one up on a stick at 40yds. and shot at it, and it took three charges to break it, each time putting one shot through. We repeated this several times and found that it was almost impossible to break these balls with one pellet. A good composition ball would be a great thing, as almost all farmers and owners have objections to broken glass on their land.—A. C. G. [The remedy is to load or hold the gun better. The only ball that will suit everybody will be one that can stand all kinds of rough handling, but will break automatically when a gun is pointed at it.]

WELLINGTON, Mass., May 24.—The summer heat to-day tended to augment the number of shooters at the grounds of the Malden Club at Wellington, and a goodly array of events were participated in, as follows:

Gold Badge Contest.

Field	1011011111111101101—16
Buffum	1011111101111111000—15
Saunders	1110111001011111111—15
Hopkins	1111011111111100000—14
Brown	0111010111101011011—14
Nichols	1100101110011111111—14
Scott	1101111110010110101—14
Sanborn	1111001011010110101—13
Adams	0110110101011111000—12

Winners—First badge, Field; second, Saunders; third, Scott.

SYRACUSE, May 25.—A large crowd assembled at Lake Side Park, Friday, May 23, to see the clay-pigeon match between Geo. C. Luther, of this city, and John E. Graham, of Canastota, N. Y.; 100 clay-pigeons each, 18yds. rise, trap set in 4th notch, use of one barrel:

Luther—1111111101111111111111111111111111111111011111111111111111101 1111111111111111111011111111111011111—95.

Graham—1101111111010101011100111111101110111111111001111111111101 1111110111001111111111111101111111111—84.—I. I. C.

BELLEVILLE, Ont., May 21.—The first contest for the possession of the champion badge of the Sportsman's Club, which is to be won three times before it becomes the property of any one, took place to-day on the rifle ranges. Six competitors came to the front, and when the contest opened a number of spectators were present. The conditions were: Card trap rotating, 18yds., 15 glass balls each. While the score was being recorded it was plain to be seen that the contest for the trophy lay between Prof. Bell, his son R. S. Bell and John N. Pringle. Mr. R. S. Bell, first vice-president of the club, led the score and captured the prize. Prof. Bell, for a gentleman of his years (78) did remarkably well. Appended is the score of the leaders:

R S Bell	1101111111101011—12
Prof Bell	0110101111111011—11
J N Pringle	0111111111100000—10

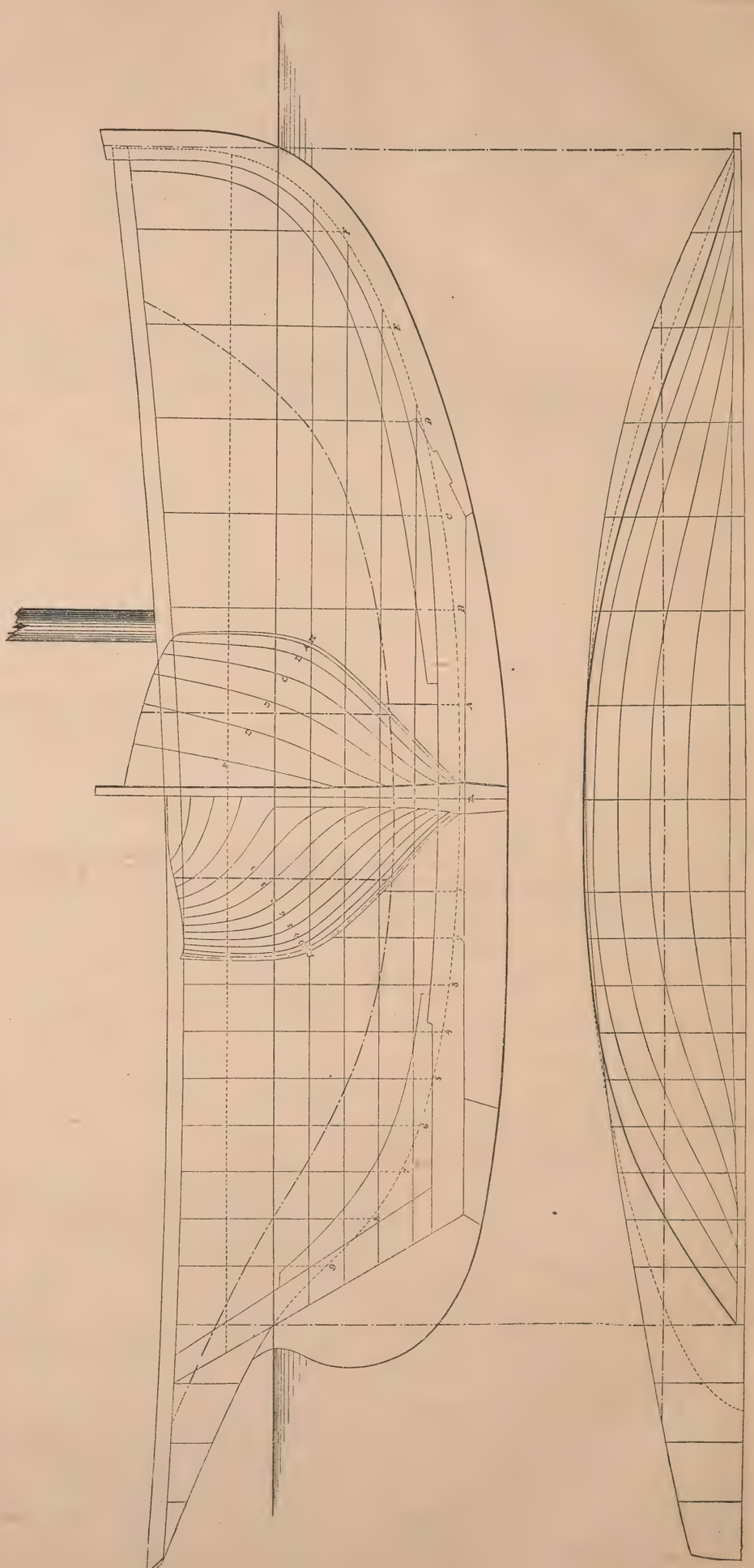
Messrs. S. R. Balkwell, W. Mills and C. Wallace followed in the order named. The second competition will take place on Friday, June 13.

Yachting.

FIXTURES.

Secretaries of yacht clubs will please send early notice of proposed matches and meetings.

May 30.—Knickerbocker Y. C., Spring Matches.
May 30.—Atlantic Y. C., Opening Cruise.
May 30.—Newark Y. C., Spring Match.
May 30.—South Boston Y. C., Spring Match.
May 30.—City Point Mosquito Fleet, 13 and 15ft. boats.
May 30.—New Haven Y. C., Opening Cruise.
May 31.—Boston Y.C., First Match, Connor and Commodore's cups.
June 9.—Portland Y.C., Challenge Cup.
June 9.—Savannah Y. C., Opening Cruise.
June 10.—Atlantic Y. C., Annual Match.
June 11.—Hudson River Y. C., Annual Match.
June 12.—New York Y. C., Annual Matches.
June 12.—Jersey City Y. C., Spring Matches.
June 14.—Seawanhaka Corinthian Y. C., Annual Matches.
June 16.—East River Y. C., Annual Matches.
June 16.—Newark Y. C., Open Match.
June 17.—Dorchester Y. C. Race at Nahant. Open to clubs of the New England Y. R. A. Three races for small craft. Fall race for club boats.
June 19.—New Jersey Y. C., Annual Match.
June 21.—Hull Y. C., Pennant Match.
June 23.—Newark Y. C., Open Matches.
June 24.—New Haven Y. C., Spring Match.
June 26.—Salem Bay Y. C., First Championship.
June 28.—Boston Y. C., Ladies' Day.
June 30.—Manhattan Y. C., Annual Cruise.
June 30.—Eclipse Y. C., Spring Match.
June 30.—Quincy Y. C., Second Match.
July 4.—Larchmont Y. C., Annual Open Matches.
July 4.—Hull Y. C., Review and Cruise, five days.
July 9.—Beverly Y. C., Marblehead, First Championship.
July 12.—Boston Y. C., Second Club Match.
July 12.—Hull Y. C., First Club Match.
July 19.—Hull Y. C., Ladies' Day.
July 26.—Beverly Y. C., Nahant, Second Championship.
July 26.—Salem Bay Y. C., Second Championship.
July 30.—Oswego Y. C., Open Matches.
July 30.—Quincy Y. C., Third Match.



THE MERLIN.

OF the many new boats of the cutter type now building in New York and the East, none is better worthy of notice than the cruiser now building in South Brooklyn from the designs of an amateur, who has devoted some study to this class of boat.

The main objects of her designer were safety and accommodation, speed being but of secondary importance; but we shall be disappointed if she does not make almost as good a showing in the latter respect as in the former two. The boat has the wave form throughout, the calculations being based on the theories of Mr. Colin Archer. The radius of the construction circle (1ft. 6in.) was so selected, however, as to make the center of gravity of the curve of areas nearly coincident with the centers of buoyancy, etc.

The frame is of white oak, keel sided and moulded 8in., stem and stern sided 4in, frames all of steamed oak, 2½×3 at heels, tapering to 2×1½ at heads, and spaced 12in center to center. The bilge clamps and wales are of yellow pine, the plank 1in. thick, of white cedar, and the ceiling of white pine. The planksheer is of white oak bent on cold, and the deck of narrow white pine, laid with the side line. The fastenings are all of copper, riveted over burrs.

On deck forward is a hatch opening into the forecastle, over the cabin is a companion and skylight in one, and aft a cockpit 5ft. long. Immediately under the cockpit is a drawer for ice, below which is a water tank in the run. On descending the companion ladder there is a closet to starboard, just aft of which, and partly below the cockpit, is a sail locker; while on the port side there is an extra berth running back beside the cockpit. A narrow door at the head of this berth, in connection with the similar door of the closet opposite, serves to shut off this portion of the boat from the main cabin.

The cabin proper has two lockers, the seats of which are arranged to fold out, making large berths for sleeping. On the starboard side forward is a washstand and mirror, the former provided with a hinged top, making a small table of it if required, and opposite, on the port side, is a space bulkheaded off for a w. c.

A door abreast the mast gives access to the forecastle, where a place is provided for a stove and a berth for one man. The chain locker is just forward of the mast, thus lessening the weight in the bows.

The workmanship throughout is of the first class, and in every way she is a credit to her builder, Mr. Daniel C. Bernard, who may well be proud of her. Her sails, the drawings of which we will publish next week, are being made by Wilson & Griffin, of South street, and in quality will be in no way inferior to the rest of the work.

The following are here principal dimensions:

Length on L.W.L.	35ft.
Length over all	30ft. 4in.
Beam extreme	7ft.
Draft of water	5ft.
Height of freeboard	1ft. 11in.
Midship section aft center of length L.W.L.	1ft. 9in.
Area load water plane	59.79 sq. ft.
Center of gravity ditto forward section	.133ft.
Area midship section	17.47 sq. ft.
Center of buoyancy forward section	.144ft.
Center of buoyancy below L.W.L.	1.468ft.
Center lateral resistance aft center of length L.W.L.	2ft.
Center effort of lower sails aft center of length L.W.L.	1ft. 6in.
Displacement in long tons	7.14
Ballast inside	2½ tons.
Ballast outside	2 tons.
Mast, from foreside stem	10ft.
Mast, deck to hounds	23ft.
Topmast, fid to sheave	19ft. 6in.
Boom	26ft.
Gaff	17ft.
Bowsprit, outboard	13ft.
Area lower sail	730 sq. ft.
Masthead	5ft.
Angle of gaff with horizontal	51 deg.

FOOD AT SEA—CHEESE VS. SALT JUNK.

ANY one who is able to find a substitute for salt junk is a benefactor to our seamen, and it would appear that such a benefactor has arisen in the person of Mr. W. Mattieu Williams, F.C.S., who has lately been delivering the "Cantor" lectures for the year at the Society of Arts to crowded audiences. The substitute is cheese. Not cheese eaten as it is purchased, but cheese to which has been restored the proper amount of the salts of potass necessary to convert it into nutritious and digestible food. It is well known that the chief reason why salt meat is unwholesome and not nutritious is that the salts of potass have been driven out of it in the pickling. It is now known that one reason why cheese is indigestible is because the salts of potass originally in milk are absent from cheese.

As regards the relative nutriment in meat and cheese the Professor tells us that—

"Taking the composition of a whole skinned and prepared sheep or ox as it hangs in a butcher's shop, the amount of nutriment in it is about equal to one-third of its weight of cheese. The fat is about the same in both, but the difference is due to the bones and excess of water. Thus twenty pounds of cheese contain as much nutritious material as a sheep of sixty pounds weight and would have the same value as practical nutriment of it could be as easily digested. "Cheese is the most portable of all food, even more so than wheat, on account of the greater value in a given bulk."

Mr. Williams goes on to tell us that the common English or American cheese is the best for the purposes of food. Here, then, we have in our midst the most valuable food to be obtained, and it is not used simply for the reason that owing to absence of salts of potass it is indigestible. Make it digestible by restoring the potass, and we have food for our toiling millions on shore, and for those at sea a food which will go far to not only nourish the consumer, but to make him proof against scurvy as well.

Here is the recipe, and we would advise our readers who are master mariners to copy it into their private logs, and those who are landsmen to have a copy made for use in the kitchen. Cheese prepared as below is not only good and sufficient of itself for a meal with potatoes, rice, etc., but forms a most useful, digestible, and appetizing adjunct to the *menu* of even a "swell" dinner.

1. Cut the cheese into shreds, or grate it, or chop it up fine, like suet.

2. To every pound of cheese thus treated add quarter of an ounce of bi-carbonate of potass. [This as nearly as possible puts back into the cheese the amount of potass that was taken out of it in separating (by rennet) the curds in the original milk.]

3. Put the mixture of cheese and bi-carbonate of potass into a saucepan with either three times its bulk of cold water or four times its bulk of cold milk and mix well.

4. Put the saucepan on the fire and bring the mixture slowly to the boiling point, taking care to stir it all the time.

5. Having got it to boil, keep it hot until the cheese is melted which does not take long.

6. Turn it out into a dish, and the result gives a beautiful nutritious mixture which thickens like a custard in cooling. This custard may be eaten with impunity even by those persons who would be ill after eating a piece of cheese the size of a nut, and is peculiarly adapted as food for all persons who work hard with either brain or muscle.

Fancy dishes may be made by the ship's cook in the following manner for the captain's and passengers' tables, *e. g.*, take the mixture of cheese and bi-carbonate and water (or milk) given above, and add to it two eggs, white and yolk beaten up together, for every quarter of a pound of cheese in the mixture. Put into a dish or a series of disnes (previously buttered) and bake till brown. This must be eaten with bread or biscuit. Another way is to make the mixture a little thinner by adding a little more milk or water, and to put it in a pie dish with slices of bread laid one over the other. The custard should be poured in cold and left for an hour to soak before it is baked. This dish is a great improvement on the ordinary bread and butter pudding.—"*Sea Cook*" *in Nautical Magazine.*

A "PLANK ON EDGE."—The term "plank on edge," first applied derisively to anything whose moderate beam did not entitle her to the designation of "flatiron," seems likely to become almost literally true, if we may judge from the drawing of the new three-tonner Ne Plus Ultra, described by Mr. Dixon Kemp in a late number of the London *Field*. The principal dimensions of this remarkable craft are as follows: Length over all, 60ft.; length on L.W.L, 38.5ft.; beam extreme, 3ft.; draft of water, 11ft.; ballast on keel, 15 tons; displacement, 19.8 tons; center of buoyancy below W.L., 2.9ft.; ratio of sail area to wetted surface, 2.43; area of lower sail 1,500 sq. ft.; mast, deck to hounds, 26ft.; tonnage, Y. R. A. rule, 3 tons; tonnage, sail area rule, 12 tons. Of course the advantages such a boat enjoys are only possible under the arbitrary rule at present in vogue in England, and they would at once disappear under any rule that gauges even approximately the size of a boat; but it is to be hoped that the mechanical difficulties attendant on such an extreme form may be successfully overcome, and also that a crew long and lean enough to live aboard and work her may be found, as her success will hasten the abandonment of the present rule of measurement.

GREENWICH, CONN.—Indian Harbor will be lighted and buoyed from June 15 to Sept. 15 for the benefit of yachts entering there. Yachtsmen desiring to enter can obtain sailing directions by addressing H. F. Winslow, Indian Harbor Hotel, Greenwich, Conn.

SAN FRANCISCO Y. C.—While the Nellie was out on the ways she had iron keels put on alongside the wooden ones between the fore and main chains on both sides. Some new planks were also put on. Some inside ballast was removed and a little more lead added to the keel. The plans and a model of the yacht to be built for James V. Coleman have been received. The model shows a hull of graceful lines, predominantly suggesting speed. The yacht will have some novel features, such as an unusual "drag" aft, or greater draft abaft midships; a considerably raking stern post and largely overhanging stern. The deck will present the appearance of being flush, the small house only extending over the after staterooms, and rising no higher than the skylights over the saloon and gangway from the saloon forward. A sectional view shows that there will be a stateroom on either side of the companionway and two on either side of the gangway between the saloon and galley, making six in all. The saloon will be 15ft., measuring fore and aft by the full beam of the yacht. The pantry and galley will be forward of the gangway and will be arranged with an eye to more cruising than the bay affords. The dimensions of the yacht will be 79ft. 10½in., length of deck 65ft. on water-line, 16ft. 5in. beam, 10ft. draft, and least freeboard 3ft. Her timbers will be all natural crooks of white oak, and her floor timbers rights and lefts. There will be 11 tons of lead on the keel, and a total ballast of 35 tons, all of lead. The furnishing has not been all decided upon, nor the interior decorations, but both will be elegant and luxurious, while preserving the strength and substantial qualities demanded in all the appointments of a sailing craft intended for use more than show. Mr. Coleman says he has about decided to have his craft built in the East, as all the details of the plans were made with reference to the building materials in use there, and under such circumstances yachtsmen consider it inadvisable to proceed with construction with materials not considered in the plans.

THE LAST OF A FEDERAL CRUISER.—A recent London dispatch announced the abandonment at sea of the bark Elliot Ritchie, Capt. Perkins, from Brunswick, Ga., to Buenos Ayres. The crew were landed at Fernambuco. This vessel was the last of a once celebrated Federal cruiser—the Harriet Lane. She was named after President Buchanan's niece, that estimable and popular lady who did the honors of the White House so gracefully during Mr. Buchanan's term of office. During the war the Harriet Lane made things lively for blockade runners along the Atlantic and Gulf coasts. She was a very fast vessel under steam or sail. She was once captured off Galveston, Tex., over which there was great rejoicing among the rebels, and was carried to Havana as a prize vessel by Admiral Semmes. Her engines were taken out and she was converted into a sailing vessel, bark-rigged, and was one of the fastest sailing vessels afloat. She was an old trader along the coast, latterly belonging to Savannah, and was loaded with lumber for Buenos Ayres when she was abandoned at sea.—*N. Y. Herald.*

SEAWANHAKA CORINTHIAN Y. C.—The fleet will rendezvous off the club house, Edgewater, Staten Island, on Friday morning, May 30, upon the arrival of the 10 o'clock boat from New York, for the annual Decoration Day practice sail. On signal, yachts will pass in review between the flagship and the club house, saluting the commodore's flag by dipping colors. Signals will be as follows: Preparatory signal, gun and V of code; starting signal, ten minutes later, for yachts to cross the line as above, gun and M of code. The fleet will then proceed upon one of the following courses, to be announced from the flagship before the starting signal is made: To and around Buoy 8½ on the Southwest Spit, thence to and around the Gedney Channel Whistling Buoy, thence home; or, to and around Buoy 8½ on the Southwest Spit, thence to and around the Scotland Lightship, thence home, leaving Buoy 8½ on the starboard hand.

NEW LIGHTHOUSE IN THE HUDSON RIVER.—Notice is given by the Lighthouse Board that on and after May 24, 1884, a fixed white light will be exhibited from the structure recently erected at Lampneres Dock (Narrow Channel), Hudson River, New York. The light should be seen in clear weather from the deck of a vessel twelve feet above the water ten nautical miles. The structure is a hexagonal frame portable beacon eleven feet high, on a brick foundation, one foot above the ground.

LENGTH AND SAIL AREA RULE ABROAD.—The Royal Alfred Y. C. will sail their six Channel and Corinthian matches this year under the "Length and Sail Area Rule," the six Champion Cup matches being sailed under present Y. R. A. rule; a practical test of the new rule that, it is to be hoped, will lead to its permanent adoption. The Royal London Y. C. will also sail some of their races under it.

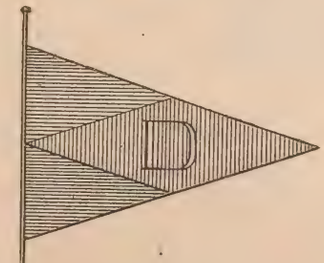
Canoeing.

Secretaries of canoe clubs are requested to send to FOREST AND STREAM their addresses, with name, membership, signals, etc., of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to FOREST AND STREAM their addresses, with logs of cruises, maps, and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.

FIXTURES.

May 30.—Pittsburgh C. C., First Annual Regatta.
May 30 to 31.—Hudson River Meet, Newburgh.
May 30 to 31.—Connecticut River Meet.
June 14 to 16.—Merrimack River Meet.
June 19.—Rochester C. C., Summer Regatta, Irondequoit Bay.
July 9 to 15.—Chicago C. C., Annual Cruise.
July 14.—Allegheny C. C., Cruise at Conneaut Lake.
July 19.—Chicago C. C., First Annual Regatta.
July 24 to 26.—Lake George Meet, Lorna Island.
Aug. 1 to 12.—A. C. A. Meet, Grindstone Island.

DESERONTO C. C.



DESERONTO C. C., Deseronto, Canada. Captain, F. S. Rathbun: Mate, Geo. Clinton, M.D.; Purser, E. C. French. Organized March 17, 1884. Thirteen members. Burgee, red diamond, two blue triangles, letter D in white.

CANOEING IN THE EASTERN STATES.

FOR some unknown reason canoeing has been of much slower growth in the Eastern States than in the Middle States and Canada, there having been, previous to 1884, but few clubs in Massachusetts and Connecticut, though the number of individual canoeists has increased steadily. Of late, however, a number of new clubs have formed, and the coming meet on the Merrimack River will doubtless add largely to the ranks of canoeists. The following from the Lowell *Courier* shows the growing popularity of the sport:

"Rowing is at a low ebb in the Vesper club, although the plan of holding the annual regatta so early in the season may tend to awaken a new interest. Thus far only two or three members are known to be taking regular practice, but several others are out occasionally, and the number will increase as the weather grows warmer. The new Lowell Rowing Association seems to be having up hill work, and the new boat house is still a thing of the future. There is some difficulty about getting a suitable lot of land, and the recent benefit ball netted but a comparatively small amount, though it is hoped to swell this by a picnic later on.

"By far the most active local interest now centers in canoeing and in this popular sport the Vespers have taken the lead. Prominent oarsmen of former years are now enthusiastic canoeists and have exchanged the toil of rowing, with the strict training necessary to its satisfactory accomplishments, for the more easy, graceful and quite as healthy exercise of paddling. Single and double blades are seen glistening in the sun of a pleasant afternoon, while by sails flit about on the river and add to the witchery of the sport. From the very first the canoe interest has steadily grown, while the fleet of canoes has at the same time increased proportionately in numbers. Indian birches, which are perhaps more romantic though not so dry or comfortable as modern canoes, were first introduced and the Vesper house now contains nine of this class, largely imported from New Brunswick at comparatively small cost. Next came the light open lapstreaks which have proved quite popular, owing to ease of making a portage with them.

"In addition to the Vesper fleet there are numerous canoes housed elsewhere. Corbett's house contains two small ones used by boys. At McFarlin's are four canvas canoes, three of which are decked and used with double paddles. There is also one open lapstreak. Two finely finished home-made paper boats of fine model and good sailing capacity are housed by Williams, while a Racine St. Paul with several lapstreaks and canvas canoes are kept by individuals in various parts of the city. Altogether the number of canoes owned and used in Lowell will not fall short of forty, and probably runs higher, so it will be seen that the sport, which is yet comparatively in its infancy, has already reached extensive proportions and is still growing.

"Boating men in other cities along the Merrimack are also taking up the sport, and there are a number of active canoeists in Manchester, Nashua and Lawrence. Among the canoes in the latter city are several built of canvas and modeled exactly like a birch. They were designed by Mr. J. H. Treat, a veteran woodsman, who has used them not only on our own river but often in the wilds of Maine. Going on down the river we find canoeists in Haverhill and Newburyport, with still more in Salem. Cambridge has a club and Boston two, both of which were recently organized and one confined to birches while the other embraces legitimate cruisers. Leading cities throughout the country all boast their canoe clubs nowadays, and as showing how they do things in the West it may be stated that the Chicago club, organized Jan. 11, already has over forty members, nearly all of whom own canoes, and has arranged not only a regatta but a whole week's cruise to come off in July. Over all stands the American Canoe Association, with its 600 members, many of whom will meet, camp and race at the Thousand Islands in August.

"Canoeing properly embraces camping in connection with cruising, and it is to be regretted that so few local members of the fraternity indulge in this branch of the sport. A complete cruising canoe affords facilities not only for paddling and sailing but for sleeping as well, and when this craft takes the place of the other variety now so common, as it properly should and eventually must, there will be a more true appreciation of the field of canoeing. And it is not the racer who paddles to score as many miles as possible, but the 'dawdler' who drifts leisurely along some picturesque stream or threads his way among the islands of a beautiful lake, that fully enjoys himself and his canoe. At frequent intervals he stops to lunch, to bathe, to sleep. He is constantly in the open air and in close communion with nature. He it is who catches the spirit of canoeing, a manly pastime free from the taint of professionalism. He it is who reaches the acme of the outer's happiness, the maximum of health and pleasure at the minimum of expense."

THE ASSOCIATION BOOK.

THE third annual report of the American Canoe Association has just been completed and sent out by Secretary Neidé in the form of a neat little book from the press of the Forest and Stream Publishing Company. The officers of the Association are: Commodore, F. A. Nickerson, Springfield, Mass.; Vice-Commodore, C. K. Munroe, New York City; Rear-Commodore, Col. H. C. Rogers, Peterboro., Ont., Canada; Secretary and Treasurer, Dr. Chas. A. Neidé, Schuylerville, N. Y.

The Executive Committee is composed of the officers, with Messrs. Robert J. Wilkin, of New York, W. B. Wackerhagen, Albany, and Hugh Neilson, Toronto, Canada; the offices being so distributed, geographically, as to represent all localities in turn.

The Regatta Committee for 1884 is as follows: William Whitlock, New York C. C., New York city; E. B. Edwards, Peterboro C. C., Peterboro, Ont., Canada; L. Q. Jones, Hartford C. C., Hartford, Conn.

The list of members shows four honorary, twelve lady members and 524 active, compared with 215 active last year, a gain of 309 members. An inspection of the list shows that a large majority of the members are from the Middle and Eastern States, and Canada, the Association thus far having made but little progress in the West, although there are a large number of active canoeists west of Pittsburgh, whose interests are identical with those of Eastern canoeists, and whose names should be found in the book. The list of canoes includes 257 names.

ANNUAL MEETING, 1883.

The third annual meeting of the American Canoe Association was held in the Headquarters Marquee on Juniper Island, Stony Lake, Canada, on August 23, 1883. Officers present: E. B. Edwards, Commodore, and Dr. Chas. A. Neidé, Secretary and Treasurer.

The meeting was called to order by the Commodore. The Treasurer read his report for the year ending August 3, 1883, showing his expenditures to be two hundred and seven dollars and twenty-seven cents ($207.27), and a balance on hand of three hundred and sixty-six dollars ($366)

The Secretary's report showed a membership of four hundred and fifty (450).

The report of the Committee on "Fouls" was then read and accepted. On motion of Mr. R. J. Wilkin, an appropriation of one hundred and fifty dollars ($150) was voted for the Secretary's use for clerical hire.

The Nominating Committee then made their report, and the Secretary was directed to cast one ballot for each nominee, which resulted in the unanimous election of Messrs. Fred A. Nickerson for Commodore; C. K. Munroe, Vice-Commodore; Col. H. C. Rogers, Rear-Commodore; Dr. Chas. A. Neidé, Secretary and Treasurer. R. J. Wilkin, Hugh Neilson, W. B. Wackerhagen, three Members-at-Large.

On motion of Gen. Robt. Shaw Oliver, a vote of thanks with cheers was given Rev. Geo. L. Neidé for his services as Assistant Secretary-Treasurer during the past year, and the request that he act in the same capacity in the absence of the Secretary during the coming year. A vote of thanks, backed with cheers, was given Commodore Edwards.

On motion of Gen. Oliver, the Executive Committee was requested to look over the amended Sailing Rules and reject what they considered unnecessary.

Mr. R. J. Wilkin moved, as instruction to the Executive Committee, that the terms Junior and Senior be abolished.

The newly elected officers and Messrs. Toker and Wood then made short addresses, following which the meeting adjourned.

MEETING OF THE EXECUTIVE COMMITTEE, OCT. 13, 1883.

At the call of the Commodore, the Executive Committee of the American Canoe Association met at the Delavan House, in the city of Albany, N. Y., on the afternoon of Oct. 13, 1883. There were present: F. A. Nickerson, Commodore; C. K. Munroe, Vice-Commodore; Col. H. C. Rogers, Rear-Commodore; Dr. Charles A. Neidé, Secretary-Treasurer; Mr. R. J. Wilkin and Mr. W. B. Wackerhagen, Members-at-Large; Mr. William Whitlock and Mr. R. E. Wood (the latter representing Mr. E. B. Edwards, who was unavoidably absent), of the Regatta Committee for 1884.

The meeting was called to order by the Commodore, in the chair. Vice-Commodore Munroe presented a motion that the present officers' flags be changed to a flag 12x18 inches, on which shall be displayed a pair of crossed paddles, with the letters A. C. A. in the three upper corners and a star in the lower one. That of the Commodore to be of blue with device in white, that of the Vice-Commodore to be of red with device in white, and that of the Rear-Commodore to be of white with device in red. Unanimously carried.

The motion of Mr. W. B. Wackerhagen, seconded by Vice-Commodore Munroe, that a committee of three be appointed by the Chair to design an appropriate membership badge, was unanimously carried.

The committee then elected the following named applicants to membership in the Association, viz.: William A. Rogers, New York city; Edwin M. Gilmore, Rochester, N. Y.; H. M. Stewart, Rochester, N. Y.; G. C. Edwards, Ottawa, Canada; Chas. V. A. Decker, Rondout, N. Y.; Williams Lansing, Buffalo, N. Y.; Livingston Crosby, New York city; F. W. Battershall, Albany, N. Y.; James K. Hand, Sing Sing, N. Y., and F. J. Kirkpatrick, Springfield, Ohio. Mrs. C. K. Munroe was elected a lady honorary member. Vice-Com. Munroe then made an address on the advisability of a permanent home for the A. C. A., and made a motion, seconded by Mr. R. J. Wilkin, "that this body recommend to the Association at its next annual meeting, that the American Canoe Association have a permanent home." The motion was unanimously carried.

The members present then expressed their views as to the location of the 1884 Camp; and Rear-Com. Rogers reported that the Canadian local committee would have about one hundred and forty dollars to hand over to the Treasurer of the A. C. A. The thanks of the Committee then, on motion of Mr. Wilkins, were voted to Messrs. Edward Wood, Toker and White, for their curtesies during the Stony Lake meet. Mr. Whitlock, of the Regatta Committee, presented a motion "that the present rule of the Association, which defines that a boat shall be measured between perpendiculars, be changed to read 'A boat's sailing length be defined to be her water line length; total overhang allowed, to be defined to be not more than six inches."

The recommendations of the Regatta Committee for 1884 were then presented and accepted.

On motion of Commodore Munroe, the terms Senior and Junior were abolished, and the term *Novice* adopted, the latter to mean "one who has never sailed a race prior to January of the current year."

Applications to offer special prizes to A. C. A. races were acted on

and lost. The action of the Committee on the location of the Camp for 1884 resulted in the appointment of a committee of two, whose duty it should be to visit the various sites offered, and report. The meeting then adjoined subject to the call of the Commodore.

REPORT OF COMMITTEE ON 1884 CAMP SITE.

The Committee, appointed by Commodore Nickerson, at the meeting of the Executive Committee, Oct. 13, for the purpose of locating a site for the 1884 Camp of the American Canoe Association, visited the Thousand Island region, and inspected two sites offered, and recommended that the next A. C. A. Camp be held on the northeast end of Grindstone Island. A copy of the Committee's report was sent to each member of the Executive Board, with a request that he send in to the Commodore his vote on the same, which resulted in the unanimous adoption of the suggestion.

The regatta of 1883 included 7 paddling races, 11 sailing races, 1 sailing and paddling race, 1 double paddling races, 3 upset and 1 portage race, for which 38 prizes were given.

THE 1884 CAMP.

The fourth annual meeting and camp of the American Canoe Association will be held on Delaney's Point, at the northeast end of Grindstone Island, in the Thousand Islands region of the St. Lawrence River, commencing on Friday Aug. 1, and continuing until Friday, Aug. 15. The camp site is about four miles distant from Clayton, N. Y., and five miles from Gananoque, Canada. The steamer Puritan will make regular trips between Clayton and Gananoque, stopping at the camp on both trips when passengers are to be landed or taken on board. At Clayton, she connects with the Utica and Black River Railway, and at Gananoque with trains on the Grand Trunk Railway of Canada. The fare on this steamer will be twenty-five cents each way, with canoes and kits free. Other transportation arrangements will be made prior to the date of meeting, of which due notice will be given through FOREST AND STREAM.

The book also contains the Constitution and By-laws of the Association, with the sailing rules. It is very neatly gotton up, of a convenient size for the pocket, and altogether reflects great credit on the gentleman who has filled so well the position of secretary for the past two years.

ORGANIZATION OF CANOE CLUBS.

IN ANSWER to several inquiries from newly formed canoe clubs, we give below a constitution and by-laws that have been found to work well in practice. Article VIII. has been amended so that the election is now by postal card, the name of each new candidate being sent to the members by the secretary. If no negative replies are received, the candidate is considered elected. If a candidate is rejected, he can appeal to a ballot at a meeting of the club. This plan has been found necessary where the members live at a distance and meet but seldom.

CONSTITUTION.

Article I.—Officers.—The officers of this Club shall consist of a Commodore, Vice-Commodore, and Secretary.

Article II.—Election of Officers.—The annual election of officers shall take place at the last general meeting in each year, and said election shall be by ballot only. Each officer shall hold office until the adjournment of the last general meeting of the following year. Vacancies may be filled at any general or special meeting.

Article III.—Quorum.—Five active members to constitute a quorum.

Article IV.—Duties of Commodore.—It shall be the duty of the Commodore to take command of the squadron, to preside at all meetings, and to enforce the rules and regulations. He may call a special meeting of the Club at his pleasure, and he shall do so at the written request of two active members of the Club.

Article V.—Duties of Vice-Commodore.—It shall be the duty of the Vice-Commodore to assist the Commodore in the discharge of his duties, and in his absence to officiate in his stead.

Article VI.—Duties of Secretary.—It shall be the duty of the Secretary to keep a record of all the proceedings of the Club; to receive all moneys due the Club, and pay all bills duly contracted by it, keeping a correct account of same; and to make a report at the last general meeting in each year.

Article VII.—Voting.—All voting to be by active members of the Club; each member to be entitled to one vote.

Article VIII.—Election of Members.—Any person shall be eligible to membership. Each candidate for admission must be approved by the Executive Committee, and elected at a meeting of the Club; two negatives shall defeat an election.

Article IX.—Dues.—Each member, on his election, shall pay an initiation fee of * * dollars. If said sum is not paid within thirty days from the time of his election, such election to be null and void. The yearly dues shall be * * dollars, and shall be payable in advance.

Members who are absent from the United States for a whole year shall be exempt from their dues for such year, provided they give notice of their absence to the Secretary. On the first day in November of each year all members whose dues for the year remain unpaid shall at once be notified of the same by the Secretary; and if any member shall allow his dues to remain unpaid for a year, he shall be considered, unless he be absent from the United States, as having forfeited his membership. No member shall be entitled to any of the privileges of the Club until his dues are paid.

Article X.—Honorary Members.—Any person shall be eligible to be elected an honorary member who shall be approved of at a general or special meeting.

Article XI.—Executive Committee.—The general government of the club, and the supervision of the club house and the property thereof, shall belong to an Executive Committee of five, of which the Commodore, Vice-Commodore and Secretary shall be *ex-officio* members, and the remaining two shall be active members of the club, and shall be elected at the last general meeting of each year. All regattas shall be under the control of a committee of five, to be appointed by the Commodore.

Article XII.—Amendments.—This constitution may be amended at any meeting; but no amendment passed at any general or special meeting shall be valid until approved at a subsequent meeting; and any amendment must be submitted at a general meeting.

BY-LAWS.

Chapter I.—Notices.—Notices shall be sent to every member, of all meetings, at least five days before such meeting.

Chapter II.—Representatives.—Any active member may authorize any other active member to vote for him by a written proxy, which shall be valid for that meeting only.

Chapter III.—Order of Business.—(1.) Minutes; (2.) Treasurer's report; (3.) Election of members and officers; (4.) Committee reports; (5.) Miscellaneous business; (6.) Adjournment.

Chapter IV.—Pendants.—The Commodore's signal shall be a broad pendant, with two crossed paddles encircled by four five pointed stars in white, on a blue field. The Vice-Commodore's shall shall be a broad pendant, with a similar device on a red field. The Acting Commodore will have a broad pendant, blue field, without device.

Chapter V.—Signals.—The distinguishing signal of the club shall be a pointed burgee, its width being two-thirds of its length (length, one inch for each foot of length of deck); the device being * * * * * * * Each canoe is required to have a distinguishing signal flag, such signal to be rectangular, and same width and length as club signal.

Chapter VI.—Senior Officer.—In the event of the absence of the Commodore and Vice Commodore, the oldest member of the club, being at the time a canoe owner, shall be considered the senior officer and acting Commodore.

Chapter VII.—Expulsion.—Any member may be expelled by the vote of the majority of active members at any general meeting.

Chapter VIII.—Amendments.—These by-laws may be amended at any general or special meeting.

THE CONNECTICUT RIVER MEET.

ON May 30 and 31 the Hartford and Springfield Canoe Clubs will hold their second annual meet on the Connecticut River, at Calla Shasta Grove, six miles south of Springfield. This beautiful grove is on a bluff overlooking the river, which at this point widens into a splendid sheet of water that resembles a lake more than a river, because three miles north of the grove and four miles south there are curves in the river that give the outline of an oblong lake and retards the current so as to give almost slack water.

The five-mile sailing course is in full view of the camp, and can be used favorably in either of the prevailing winds, viz., northwest or southwest. There are also a fine pavilion, swings, bath-houses, superb camping ground, an open spot for games, etc., also a cook house well supplied with the necessary furniture.

At a meeting of the Springfield C. C. on May 19 all arrangements were perfected for the entertainment of our guests, who write that they will certainly bring twenty canoeists, and may show up with twenty-five. They leave Hartford Thursday night by steamer, and we hope to join them with twenty men from our club. A showing of forty canoes at a local meet of two clubs is rather suggestive of "canoe fever well developed" in this region.

We have every reason to expect a grand pow-wow and camp-fire, when it is known that fourteen of the Hartford C. C. members are also members of a famous banjo team, and said fourteen men will bring banjoes with them, and, reinforced with other instruments and a chorus of good voices, they will alternate with the usual camp stories and camp experiences. The Hartford men will remain in camp until Sunday, and then set sail down river, a distance of about twenty-five miles. Springfield will break camp Monday morning. GERI.

SPRINGFIELD, Mass., May 20.

THE HUDSON RIVER MEET.

PRIZES FOR THE RACES.

THE meeting of canoeists on Newburgh Bay on the 30th of this month promises to be of a very interesting and pleasant character. Paddlers and sailors from the New York, Albany, Rondout, Knickerbocker, Lake George and other clubs, besides many unattached canoes will be present. A number of races will take place and the canoeists of the city have gotten up four elegant prizes which they will present to the winners. They are now on exhibition in the windows of Mr. N. S. Smith's book-store, No. 76 Water street, and their beauty is attracting a great deal of attention. The prizes consist of four flags, made of heavy silk, two of deep blue and two of crimson. In the center of each is a charming painting in oil, one a perfect picture of Washington's headquarters, the other three being views of the Highlands from different points on the river. Each picture is oval and is a gem of art. Paddles and boat hooks, the emblems of a canoeist, are crossed behind each painting, while cat tails and broad-leafed lilies are gracefully arranged on each side. "Newburgh, 1884," is painted in antique letters on the front of each, and on the reverse side, "Won at Newburgh, 1884," is printed in small letters. The flags are all of the regulation size, 10 by 15 inches, and are bordered with a heavy silk fringe, of a deep gold color, two inches wide. They are finely mounted on black walnut staffs, with a gold spear head. Nothing could be more elegant and appropriate for the occasion, and there will no doubt be a strong and earnest contest for their possession. The flags were gotten up by Mr. N. S. Smith, with whom the idea originated, and were painted by Mr. Thomas B. Pope, artist of this city. It is expected that no less than seventy-five canoeists will participate in the meet, which will continue for three days.—*Newburgh Daily Register.*

THE MERRIMACK RIVER MEET.

Editor Forest and Stream:

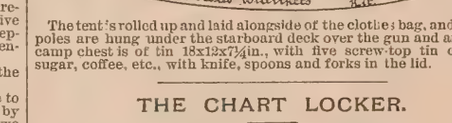
I notice by your columns that there is to be a canoe meet on the Merrimack, June 14 to 17. The location chosen for a camp is unsurpassed, being high and dry, there are two fine cold springs of water just below the camp, and one, with a cold brook fed by springs, just opposite. Both sides of the river are bounded by hills covered with pine, hemlock, and a great variety of deciduous trees. Not a house can be seen, but only woods, fields, ledges and the river. Back of the woods are a few farmhouses where milk, etc., can be obtained.

Have also been informed that many different styles of canoes will be present, birches, canvas and wooden boats. It is to be hoped that all canoeists who can will be present and test the relative merits of the various kinds of craft. There is a fine expanse of smooth water for racing. J. H. TREAT.

LAWRENCE, Mass.

STOWAGE OF CANOES.

THE limited room in a canoe makes the problem of stowage a serious one, especially to the novice; how to utilize each inch of space, and yet have everything as nearly within reach as possible. The accompanying sketch shows the plan followed by Captain Kendall in his canoe Solid Comfort. The dimensions of the boat are, length 14ft. 2in., beam 36in., height amidships 9in., sheer forward 6in., aft 4in.



The tent's rolled up and laid alongside of the clothes bag, and the tent poles are hung under the starboard deck over the gun and axe. The camp chest is of tin 18x12x7¼in., with five screw-top tin cans for sugar, coffee, etc., with knife, spoons and forks in the lid.

THE CHART LOCKER.

X.—MISSISSQUOI RIVER.

IS this river navigable for canoes from Lake Memphremagog to Lake Champlain in July and August?

HARVARD C. C. SPRING RACES.—The first set of races of the Harvard C. C. on Charles River course came off to-day (24th) very successfully. The weather was perfect, a stiff breeze giving good opportunities for showing skill in handling canoes. The first event was a sailing race, two miles on and off the wind; six men started. The start was lively, owing to the strong wind. Three had to drop out in a short time. T. Dunham, '85, led the whole race and came in first; E. L. Hand, of Law School, second. Time of whole race not taken, but Dunham covered the last mile in eight minutes. The second event, paddling, in tandem, three-quarters mile, had five entries, and it was close and well contested. P. L. Livingston, '85, first; A. G. Webster, '85, second. The third event, paddling in tandem, three-quarters of a mile, had two entries: Frothingham, '84, and Livingston, '85, against Dunham, '85, and Webster, '85. A very close race was won by Frothingham and Livingston by several lengths. The fourth event, upset race, had three entries. The race was very amusing. Webster, '85, first; Dunham, '85, second. Prizes, silver cups. Referee, Mr. F. A. Mason, '84. Judge at stake, Mr. W. L. Everett, '85.—*N. Y. Herald.*

LAKE GEORGE C. C.—Canoe affairs are moving along splendidly. A new and commodious club house is under construction, and will be ready for occupancy in a week or ten days. It is situated at Glen Lake, three miles from Glens Falls. This little gem of a lake is a mile and a half long by three-fourths in width, abounding in black bass, perch and pickerel, and during the migratory season with ducks. A carry of about ten rods brings one to the "bull-heading" ground, where this not unpalatable fish is caught as fast as the hook can be baited. The shore is beautifully wooded, and in fact, the spot is "too lovely for anything," so she said. With such attractions one cannot wonder at the regularity our members are seen en route, afoot and walking, to their favorite rendezvous. The uniforms will be furnished in about two weeks. New members are joining, and withal the club is in a very satisfactory and flourishing condition.—HAWKEYE (Glens Falls, N. Y., May 26).

THOSE RUSHTON CANOES.—*Editor Forest and Stream:* I was both amused and vexed with "O. K. Chobee's" article in FOREST AND STREAM of May 22. That I built *canoes* 14ft. 6in.×42in. was soniething new to me. That "O. K. Chobee" should call an open pleasure boat 14ft. 6in.×42in., a canoe was amusing. That my "canoes" of 42in. beam should be so badly beaten by Psyche was vexatious. I do not know that I ever built a boat 14ft. 6in.×42in., but last winter I sold two *pleasure boats* 15ft.×42in. to a gentleman in Mandarin, and I suppose those are the "canoes" referred to. I often fit these boats with Atwood centerboard and a small sail, but never had any idea of their being raced against first-class sailing canoes; when they are they should be reported as pleasure boats, not canoes.—J. H. RUSHTON.

PHILADELPHIA TO NEW YORK BY CANOE.—Messrs. Norton and Howard, of the New York C. C., made the trip from Philadelphia to New York in the tandem canoe Kittiwake, leaving the Schuylkill River on Monday, May 19, halting one night at Burlington and one at Kingston, and arriving on the third night at South Amboy. Here the boat was stored, the crew coming to New York by rail. On the 27th, they returned to South Amboy by rail, were under way at 2 P. M., and reached West Brighton at 8 P. M., stopping for the night with Mr. Stepheus. On Wednesday morning the voyage was completed by a short paddle to the N. Y. C. C. house. The cruise was diversified by an upset, caused by the tow line of a boat on the Delaware and Raritan Canal.

LEAKS IN BIRCH BARK CANOES.—*Editor Forest and Stream:* In issue of 1st inst. a recipe for stopping leaks in a birch bark canoe is asked for. Boil rosin and oil together, smear some of the mixture hot on the bark, lay smooothly over it a piece of strong cotton, or light duck, large enough to cover the leak, then more of the mixture over the cotton. Let the rosin cool before launching and the leak is effectually stopped. [In "Wenonah's" receipt for stopping leaks in birch bark canoes in last week's issue, the amount of tallow should be two ounces instead of one, as printed.]

NEPTUNE C. C.—The Neptune C. C., of Newark, N. J., organized in April with twenty-five members, have built a club house on the Passaic River at Newark, N. J. The club's new officers are: Commodore, George O. Totten; Vice-Commodore, L. Thorn; Secretary, Harry T. Freeman; Purser, Edward A. Alston.

A QUICK RUN.—The canoe Rambler, owned by Mr. Lyman R. Ingraham and attached to the Hartford club, recently sailed from Hartford to Middletown, twenty-two miles, in one hour and fifty minutes.

OTTAWA C. C.—This club now numbers thirty-six active members. The officers are: Captain, R. W. Baldwin; Mate, E. King; Purser, J. H. Henderson.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

F. B. W.—We do not know where you can buy rubber decoy ducks.

MAX.—We know of no journal devoted to the subject. Thanks for address.

F. D., East Toledo, O.—We have heard the region highly spoken of as a deer region.

K. A. N., Brooklyn, N. Y.—"Practical Canoeing," by Tiphys; price, $2.50; can furnish it for you.

F. W. S., New York.—There is no shooting to be had at this season in the vicinity of New York.

F. M. M.—A 10-bore is usually considered to have some advantage over a 12-bore in trap-shooting.

SUBSCRIBER.—Address of portable house makers is American Portable House Mf'g Co., Corona, N. Y.

F. H. H.—The book "Camp Life in Florida" was compiled from the columns of the FOREST AND STREAM. It is now out of print.

A. G. W., Cambridge, Mass.—Provisions for cruise, about $3 per week. See the FOREST AND STREAM of April 3, 1884, for aprons.

SUBSCRIBER.—Where can I get a day's trout fishing on a Long Island preserve near the city? Ans. Try Carman's ponds at Amityville.

CONSTANT READER, New York.—Can you let me know where I can have some large bullfrogs (living)? Ans. Write Mr. E. G. Blackford, Fulton Market, New York.

W. S.—How can I remove tan and sunburn? Ans. Keep out of the sun and in time the tan will wear off. If skin is burned by sun so that it is painful, apply glycerine or vaseline.

O. C. M. A., Dorchester.—A strong paper is specially made for paper boats; we do not know where it can be had; 14×30 would be better; we cannot tell the proable cost of material.

P. L., Jobstown, N. J.—The best baits for carp are worms, boiled peas, and wet cotton, into which flour has been worked. They are very wary and no sinker to make a splash should be used.

J. D. B., N. J.—1. When is the law up on black bass in New Jersey? 2. Where is a good place to go for them within three hours from New York city? 3. What are the best baits? Ans. 1. June 1. 2. Lake Hopatcong or Greenwood Lake. 3. Helgramites, minnows and frogs.

C. F. L., Cincinnati.—The title of the book by "Stonehenge" is "The Modern Sportman's Gun and Rifle." The first volume treats of the gun; the second (not yet out) of the rifle. Price per volume $6. We can furnish the first to order, will take about three weeks to import.

E. B. V. G., Pittsburgh, Pa.—Hoy's Wilderness is reached via Oakland, West Virginia, on the Baltimore and Ohio Railroad. There used to be good trout fishing in Hoy's Wilderness or Blackwater region, and we presume there is now; and there used to be bear, deer and wild turkey shooting. Possibly some reader may supply fuller information from recent experience.

C. B. H.—I have eleven wood duck eggs under a hen. Provided they hatch what will be the most suitable food for the young ducks? Ans. Feed soaked bread at first, but not much corn meal. They should also have some animal food, which they may get if they have a run in the garden, where they will find insects. As they get older they will eat wheat screenings and table scraps.

W. E. W., Lexington, Va.—1. The bird note will receive attention on return of natural history editor. 2. The angle fish is not so named because of his big mouth, but because he is supposed to hold the antennæ in front of him to serve as lures to attract the fish within reach. See Prof. Gill's article on this subject in our last volume, page 229, entitled "Deep Sea Fishing Fishes."

A. C., New York.—Are the fisheries of Greenwood Lake, Stirling Lake and also of Lake Mahopac and St. Mary's Lake public, and what fish are to be caught in these lakes during this month? Ans. Greenwood and Mahopac are public; the others we know nothing of; there is little fishing for anything but black bass in Greenwood, and the season begins June 1; there are perch in Mahopac.

F. W. INGERSOLL.—The Lewis and Clarke expedition was sent out by the Government in 1803, to explore the western territory. They started in the summer of 1803, spent the winter at the junction of the Missouri and Mississippi, in spring, summer and fall of 1804 ascended the Missouri, camped among the Mandans in winter of 1804-5, in July of 1805 reached the three forks of the river, ascended to the source of one of them, the Jefferson, then went to the mouth of the Columbia. Returning, they reached St. Louis Sept. 23, 1806. An account of their expedition was published in 1814, and other editions later. The work is now in great demand and is exceedingly scarce. You might possibly obtain a copy by writing to Mr. Chas. L. Woodward, dealer in Americana, No. 78 Nassau street, New York.

GREENHORN, N. Y.—1. Please tell me what is spinning with the minnow? How is it done, what is the necessary tackle? 2. What is "skittering?" How is it done? What is the tackle? For what fish? Ans. 1. "Spinning" is a term used by English anglers for what would be called "trolling" in America. It is done with a minnow gang, on which the minnow is so placed that it revolves or spins, as it is drawn through the water. A stiff rod is used and the bait is cast and drawn to the right or left. 2. "Skittering," we believe, is an American term for casting a minnow and making it skip or "skitter" on the water by quick jerks, much as boys make flat stones or shells skip on the surface of a pond. Both spinning and skittering are done for pike (New York pickerel) and occasionally for black bass.

YOUNG TENDERFOOT, Philadelphia.—1. What size and kind of rod, hooks and line for trout and black bass (bait-fishing) would you advise me to get? 2. Can you recommend "Hallock's Sportsman's Gazetteer" as a practical guide for a tyro? 3. Did Mr. T. S. Steele, author of "Canoe and Camp-ra," make the 200 mile Maine trip in an Osgood folding boat, and afterward recommend them by affidavit? 4. Can you give me directions for skinning and preserving snake skins? Ans. 1. Get an 8 to 10-foot ash and lancewood rod, a good reel, a waterproof silk line, and sproat hooks, Nos 5 to 7. 2. Yes. 3. He made the trip in an Osgood boat, but we don't know anything about an affidavit. 4. If for belts, cut the snake down the abdomen and skin. Take it to a tanner and have it tanned, unless you are an adept at tanning.

A Palace-Prison; or, the Past and the Present.—A novel. New York: Ferds, Howard and Hulbert. The story is of a young girl immured in an insane asylum, where by the fiendish devices of superintendent and attendants she becomes hopelessly insane. A book like this one ought to open the bars and let out the victims who are sharing the horrible fate of the heroine.

PUBLISHER'S DEPARTMENT.

SPORTING BOOKS.—Mr. J. W. Bouton, of No. 706 Broadway, announces a rare collection of works on angling, shooting, the horse, hunting and yachting. Elsewhere see his card.

THE CONEY ISLAND SEASON has opened and New Yorkers are happy once more. The great bulk of the travel thither is over the New York and Sea Beach Railway, which connects with Battery boats.

ORIENTAL.

CANTO I.

One night, the poor disconsolate
Young heiress in her boudoir sate,
"Would I were beautiful, or dead!"
"Why so?" asked Jenny. "Don't you see
De Smyth won't fall in love with me!
What's gold to me? What's jewels? What
The splendid mansion I have got?
With half my wealth I'd gladly part,
If I could win my Alfred's heart."
"Give me a thousand dollars, Miss,
And you shall have that much prized bliss."
"One thousand! Jenny!" Julia said,
"I'll double that the day we're wed!"
"'Tis done!" exclaimed the lady's maid,
"And don't go back from what you've said."

CANTO II.

That night, the magic rites begin,
With a mysterious compound, which
Made her complexion white and rich;
Freckles and pimples faded away,
Like darkness, at the smile of day.
"How was it done?" now fair Julia cries.
"I'll tell you how," the maid replies;
"That peerless skin's bright snowy gleam
You owe to *Oriental Cream*,"
To close the story, let me say
The pair were married yesterday,
And sent, for darling Cupid's sake,
(Gouraud T. Felix) a mighty slice of cake.

FOREST AND STREAM.

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CORRESPONDENCE.

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Transient advertisements must invariably be accompanied by the money or they will not be inserted.

Address all communications,

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POINTERS AT NEW YORK.

THAT the judging of the pointer classes at the Westminster Kennel Club show was received with surprise and dissatisfaction by a large majority of those interested, is well known. As a consequence of this we have received a great number of letters bearing on the subject. Of these a very considerable number contain no statements of argument or fact, and will therefore never make their appearance in these columns; others, which deal liberally in reckless accusations, of "hatred, malice, and all uncharitableness" on the part of other writers, will also fail to appear in type, while a third class, devoted to the laudation by their owners, of certain champion stud dogs, can only be printed at our usual advertising rates.

It seems too often impossible for men to discuss the faults and merits of the dogs which they own in a temperate and common sense manner. If X. criticizes Y.'s greyhound as having a bulldog head, Y. is very likely to reply that X.'s paternal grandfather made his money in the slave trade. Reason, logic, and common sense appear to be thrown to the wind when it comes to a question of a dog's qualifications for the show bench. It is not difficult to see why this is the case. The explanation, of course, lies partly in the warm affection which exists between the dog and his owner. No one of the lower animals is so near to man as the dog, and in many cases the love with which it is regarded is not very different from that feeling which a man has for his children. So it is that very often when a man attempts to write in defense of his dog he is so strongly moved that he will use any weapon, however puerile, which he thinks may serve his purpose. And yet it ought to be possible for men, who in the ordinary affairs of life are sensible enough, to employ their intelligence in considering a question where their feelings are so deeply engaged. They ought not to write like children, and when they do so it will be a waste of good postage to send their letters to this office.

Mr. Mason's criticism of the pointer judging was temperate and quiet, devoted wholly to pointing out what he considers the faults in the individual dogs, and so a model of its kind. The replies to it should be in the same strain, and it is certainly unnecessary that they should contain anything more than the judgment of the writer on the animals discussed. After all this judgment will be nothing more than an expression of opinion, for we have no model, no perfect dog with which we can compare the living animal. Each man in looking at a pointer for example, will have a different idea as to the faults of this particular dog. One man will think that his chest is just right, while another will consider it not deep enough, and a third too wide, and to a positive statement as to faults of this kind there seems to be no reply except a reference to authorities which can not settle the question because their statements are susceptible of widely differing interpretations.

Another reason why men find it impossible to reason temperately about the bench show qualities of their dogs is that the average man appears to be utterly unable to appreciate that excellence on the bench and excellence in the field may be, and often are, two utterly diverse things. A bench show winner may be a good field dog, or he may be utterly worthless to shoot over, but there are thousands of dogs which it is a delight to follow afield in the autumn days, but which, if entered in a bench show, would be laughed at by every one. Yet, we often hear a disappointed exhibitor say, "Well, my dog ought to have had a place, he is a superb dog on ruffed grouse!" Such people ought to know enough to keep their dogs out of bench shows, and so save themselves expense and much anxiety. A dog's field qualities depend largely on characters which are mental and are susceptible of cultivation. They are more or less dependent on outside circumstances, but a dog's bench show qualities are purely physical, and can scarcely be modified at all after the animal has matured. Bench show qualities are, in a measure, the result of breeding, yet the most careful breeding may produce animals which have the gravest faults. Therefore accident, or some unknown quantity which we cannot as yet determine, usually decides what the young animals shall be.

We urge upon our correspondents interested in kennel matters, the importance of moderation in their discussions, and for ourselves we must decline to admit to our columns any bitterness. The virulence of these quarrels, as sometimes carried on in our contemporaries, cannot but give sportsmen generally the impression that dog owners and breeders are a quarrelsome and ill-conditioned lot, and that like their favorites so much maligned by good old Dr. Watts, they

> * * * "delight
> To bark and bite
> For 'tis their nature to."

THE WILD DOGS OF MAINE.

LET the dakhun hide in the shadow of Cheops, and the cuansu slink abashed into the jungle; let the polugar dhole drown in the Ganges, and the pariah flee to Himalayan fastnesses; let the pero get him to the uttermost antipodes, and the dingo crawl into a hole. The dogs of Maine are wild. So pronounces the Supreme Court of that State. Dogs (wild and tame) sometimes go mad; Supreme Court judges never lose their reason.

The learned gentlemen whose opinion on this point is elsewhere given in full, have performed a courageous and momentous task. We term it courageous. It is. Upheld and inspired by their keen vision into the arcana of canine philosophy, the Maine judges have dared to stand in the face of the common sense of mankind in this year of grace 1884 and declare that the dog—"man's best friend"—is a wild beast. The pet that plays with the children, the old house dog that has been a faithful guard so long, the pointer and setter, fine bred and trained, all these belong with the bear, the wolf and the 'coon, to the *feræ naturæ*.

We are surprised that certain citizens of Maine, who style themselves sportsmen, are disposed to be enraged at the dictum of the judges. Clearly these fault-finders do not fully comprehend what a glorious thing this is for the game supply. In decimating and exterminating Maine game the dog has taken an active part. He has run the deer and pointed the grouse. "Now," reason the judges, "we will have a bit of retributive justice. The dog has helped to destroy the game, we will make game of him. There is little else to hunt, let us hunt the dog." This, it will be observed, fully exempts the judges from the very serious charge made against them, namely, that "they are no sportsmen." On the contrary, they must be sportsmen, and the very truest sort of sportsmen at that. While other sportsmen, glowing with earnestness, have been devising various more or less impracticable schemes to conserve the game, the Supreme Court worthies have grappled the problem and solved it on the instant by transforming into savage beasts the tens of thousands of formerly inoffensive and presumably domestic animals. The novelty of this class of game may lead to much perplexity of spirit among those who desire to hunt dogs in a decent and "legitimate" manner. The ethics of the sport are little understood, and it will take some time to learn what is the approved fashion of dog pursuit. Perhaps the gentlemen who hunt the metropolitan curs might be induced to go to Maine and instruct the rising generation in their art.

We congratulate the hunters of Maine upon this sudden and magnificent addition to their wild game supply. It is to be hoped that enthusiastic dog hunters will not recklessly engage in the exciting and ennobling pursuit of shooting the game. The dog is, of all wild animals, the most confiding. In some parts of Maine, we are credibly informed, he ventures in broad daylight into the barnyards, and even now and then into the kitchens of the farmhouses. These habits render it very easy for the circumspect gunner to approach him. If every man and boy who happens to own a gun goes out to shoot dogs, it stands to reason the supply will be decimated in less than no time, and before long the Maine wild dog will go the way of the dodo and the snakes in Ireland.

It is imperative that a close season should be provided, during which no dog should be killed; and it might be well to add a clause forbidding at any season the exportation of dog quarters to the Boston sausage market, or of their hides to the New York kid-glove factories. We are quite content to leave this matter of a dog season to the sportsmen of Maine, merely suggesting that they have now an opportunity to provide an abundance of game for the professional gentlemen who take their vacation in mid-summer. There is no special reason why the dogs should not be shot at that season; and it is probable that those who enjoy shooting the doe with fawn would take kindly to the sport of dog shooting.

An exception should be made in favor of the yellow dog. He ought to be protected all the year around, and be given every encouragement to increase and multiply, in the hope that in some way, at some time and in some place, a yellow dog and a Maine Supreme Court judge may meet, for the judge might learn something from the dog.

THE REWARD OF VIRTUE.

ONE of the most mysterious features of angling, to one who has not the gift, is the patience with which a man will sit at the end of his rod, hour after hour, and half a day or a day at a time, though never a nibble nor a rise gives him encouragement. The uninitiated are wont to scoff at such perseverance; they are always ready with a dozen or two other things that a man might well better give his time to than dangling a bait-line or throwing a fly. Leave such wiseacres to their conceit. The patient angler is wiser than they. He knows that after all the waiting there may yet come the reward. Perseverance is his cardinal virtue. Hope springs eternal in the angler's breast. And if the fish is not finally creeled, if the long vigil has been without tangible fruition, yet is he not without compensation, for has he not all day long been indulging in the pleasures of hope? To-morrow, perhaps, he will prove again not only the joys of anticipation, but the satisfaction of basketing a fish as well; and so to-morrow you will find him once more at his post.

It is a pleasant little story that comes to us from a correspondent in Vermont. A St. Albans angler went out the other day to try his luck for speckled trout at Fairfield Pond. He began fishing at 10 o'clock; 11 came and he had had no sign that there was a fish in the pond. The sun climbed to the meridian; 1 o'clock, 2, 3, went by, and still no fish. Finally, at half past 3 there was a rise, a strike, and a 5½-pound trout in his basket. He had been fishing five and one-half hours. The catch averaged just one pound to the hour. He felt amply rewarded for the day's work. There are all varieties of tastes and shades of sentiment among anglers; and it might not be universally conceded that this was very good fishing. Some anglers might contend that they would prefer their five and one-half pounds of trout in installments at more frequent intervals, while there are others who would choose the luck of the Fairfield Pond man. In their scale of merit, one five and one-half pound trout tips down the beam against a bushel of fingerlings.

HYDROPHOBIA.—A lawyer of Goshen N. Y., who is also an angler, gives it as his deliberate opinion that the average citizen stands a better chance of being blown to flinders at the mouth of a cannon than of being bitten by a rabid dog. He is right.

The Sportsman Tourist.

UNCLE LISHA'S SHOP.

I.

AFTER his adventures with the bear, which some of the readers of FOREST AND STREAM may remember, Uncle Lisha Pegg's shop became a sort of sportsman's exchange, where, as one of the fraternity expressed it, the hunters and fishermen of the widely scattered neighborhood met of evenings and dull out-door days "to swap lies." Almost everyone had a story to tell, but a few only listened and laughed, grunted, or commented as the tale told was good, bad or of doubtful authenticity. And so one October evening, as the rising hunter's moon was streaking the western slopes with shadows of evergreen spires and long paths of white moonlight, Uncle Lisha's callers began to drop in by ones and twos. The first comer got the best seat, the broken-backed chair, the next the second best, so accounted, the chair with three legs, though the occupant had to give so much thought to the keeping of his balance, that he sometimes tumbled to the floor when the laugh came in. The later comers had the choice of seats on a roll of sole leather, the cold box-stove, or a board laid across the tub in which Lisha soaked his leather, and the latest the floor with the privilege of lying at length upon it or setting their backs against the plastered wall. So were disposed a half score of the old cordwainer's neighbors, thus far doing little but smoke, chew and silently watch Lisha as he hammered out, shaped and pegged on the tap of a travel-worn boot as intently as if they were taking lessons in the craft, when Antoine Bassete entered with a polite "Good evelin, Oncle Lasha; good evelin, all de ghoute mans." Then as he looked about he drew forth from one pocket his short black pipe, from another his knife with which he scraped out the pipe and emptied it on the stove hearth, then he got out from another a twist of greenish-black tobacco, and whittling off a charge and grinding it between his palms, filled and lighted his pipe at Lisha's candle with such sturdy pulls that the little dip seemed likelier to be quenched than to longer "shine like a good deed in a naughty world."

"Git aout! ye dummed peasouper," Lisha shouted, after pounding his fingers instead of a peg in the uncertain light, "you'll hev us all in total moonlight fust ye know! Take a match er a splinter an' light yer pipe like white folks, stiddy suckin my candle aout. Don't ye know what the feller said at was goin' t' be hung in ten minutes, when they gin him a candle t' light his pipe with? He says, sez he, 'gimme a match if ye please, 'taint healthy t' light a pipe with a candle' sez he. Take keer 'f yer health, Ann Twine, f' that 'ere Canady Gov'ner 'll want ye t' be wuth hangin' when he gits a holt on ye."

"Hah, naow, Oncle Lasha," said Antoine, "dat wus too bad faw you talk so to me. Who help you w'en dat bear keel you, hein?"

"Wal, yes," Lisha rejoined, "ye did help, sartin; the bear an' I done the fightin' an' yeou done the runnin'. Yeou larnt how to dew that in the Pap'neau war, an' ye larnt it well, Ann Twine; ye don't need no more lessons."

"Wal ah do seh! Ah wan' some bodee show me haow ah run wid dem boot you mek me 'f ah don' cah heem in mah han' an' den he pooty heavy. But, gosh! wa' heem on may foots? Ah, jus' leave wa' two store like dat. He be jus' so sof', jus' so not heavy."

"Haow d' ye 'spose any body could fit yer dummed Canuck feet arter ye'd wore souyaas ever sen' ye was weaned, ker-splash, ker-spotter, till yer feet 'as wider'n they was long? Yeou git ye some babeesh an' I'll give ye ten sides o' sole luther, an' then ye can make ye some souyaas, 'n' then put on yer ole trouses 'l ye could carry a week's p'vision in the seat on, an' be a Canuck; ye can't be a 'Merican, no ways."

"Ah, Oncle Lasha! You pooty bad hole man. Haow you feel dat time you tink you dead? Wha' yo tink you go? A'nt you sorry you don't was been mo' gooder? Wha' you tink you go, hein?

"I do' know," Uncle Lisha slowly responded; "but I hoped I'd go where the' wa'n't no Canucks!"

"Dah! dah! Oncle Lasha; you so weeked no use talk to you," cried Antoine, when the laugh in which he joined had subsided; "'f you tole dat leet' story you beegin dat night, ah won't said no mo'; you leave off rat in meedle w'en de bear shoot heself, an' you see ah got so Yankee ah mos' come dead 'cause ah do' know de ca' of it. Dat story, you know, 'bout man dot cut bread so fas' wid shoe knife. You 'membry?"

"Le' me see," said Lisha, scratching his head with his awl; "oh, yes, I remember. Wal, I s'pect that's a true story, Ann Twine, an' 'f I tell it ye got t' b'lieve it."

"Oh, sartin, Oncle Lasha; ah don' b'leeve you tole lie no more as ah do; no, sah."

"Humph!" Lisha grunted, "I never knowed but one Canuck but what 'ould lie."

"An' dat was me, Oncle Lasha?"

"No, sir! He was a dead one! Wal, the' was a shoemaker 't lived in Connecticut, an' my father knowed him, 'at he'd a knife julluck this"—holding up his longest knife—"the cutest thing t' cut bread with 't ever was, but he wouldn't let nob'dy but his own self use it, so they use ter send for him to all gret dinins t' cut the' bread fer 'em. Wal, arter he'd ben a cuttin' raoun' for three, fo' year, they sent fer him one July to go t' Colonel Leavenworth great shearin'. He kep a thou-san' sheep, an' hed twenty shearers, an' made a big splonto, 'wine in quart mugs an' strawb'ries rolled in cream,' he use ter brag about, but they wan't on'y pint mugs 'n not filled very often at that, an' the wine was cider, an' the' wan't more 'n tew strawb'ries a piece, 'n' they was dried apples. Wal, the shoemaker come with his knife keener 'n ever, an' the han's and comp'ny hed all got washed up for dinner with the' clean clo's on, an' stood 'raound watchin' on him cut the bread, ker slice, ker slice, faster 'n a gal could pick up the slices, off 'm a loaf 't he hel' agin his breast. He done it so neat 't they cheered him, which he got kinder 'xcited an' tried t' cut faster 'n ever, an' the next lick he gin the loaf he cut hisself clean intew, an' the man 'at stood behind him clean intew, an' badly wounded the next one. They sot tew an' stuck 'em together so 't they lived, but it spilte the shoemaker's bread cuttin' business, an' he hed to go back to shoemakin' an' starvin', julluck me."

"Wal sah, Oncle Lasha," cried Antoine, emphasizing every word with a gesture, "ah b'lieve dat story, cause ah promise, balt ah tink t'was 'cause you goin' tole it dat bear scrape you so bad. You see, sah, bear is send for punish bad folkses. An't you hear haow bear keel fawty leetly boy 'cause dey call hole man he don' got no hair on top hees head of it—what you call heem—ball? Ah spec' dey be nudder bear long 'fore soon for ketch hole man what tole such story, an' den tell Frenchman he don' lie honly w'en he dead!"

"Good airth an' seas!" Lisha roared, "I dew beleeve one on 'em would hev the last word 'f he was deader 'n a door nail. Wal," he continued, as he put his tools in their places and took off his apron, "it's 'baout time 'l honest folks was abed an' rogues locked aout, but you needn't hurry none 'baout goin' t' bed, Ann Twine."

Ten minutes later the shop was dark but for the patch of moonlight that shone in through the little window set longwise of the room, and the visitors scattered to their homes.

AWAHSOOSE.

ADIRONDACK FISH AND GAME.

THE snow and ice are now all out of the Adirondack woods south of this place, excepting in some few of the deepest and most shaded ravines or valleys, and the trout are now biting freely in all the streams and ponds. A fine string of about thirty pounds in weight was taken this week out of the Twin Ponds by two young men of this place. The largest was seventeen inches in length and weighed two pounds thirteen ounces. A number of fine lots have been taken out of the St. Regis River near Blue Mountain during the past week.

In a former communication to the FOREST AND STREAM I stated that a railroad was being built from this place to some point in the Adirondacks south from here. This road is now completed from here to Spring Cove, on the middle branch of the St. Regis River, distant from here twenty miles, and is within four miles of Blue Mountain, and six of the foot of the sixteen-mile level. Passenger trains are running to St. Regis Falls, eleven miles from here, which connect with passenger trains on the Ogdensburg and Lake Champlain road at this junction. Lumber trains run over the remainder of the road from the Falls to Spring Cove, on which parties visiting this region can get themselves and baggage carried after arriving at the Falls. During the coming summer the road will be extended to River Pond on the sixteen-mile level, which place is about ten miles west of Paul Smith's Hotel at St. Regis Lake.

The building of this road makes the region about the headwaters of the St. Regis River the easiest of access of any portion of the Adirondacks where game and trout are still to be found at all plentiful. Spring Cove, the present terminus of the road, is itself in the heart of a good hunting and fishing locality, where scores of deer have been killed and many fine creels of trout caught during the past three or four years, and the sixteen-mile level, only six miles above, is one of the best waters for trout fishing I know of that does not require a tramp of several miles on foot to reach it; and is also a noted place for deer hunting, the great extent of unbroken wilderness on both sides of it making it a great resort for those animals. There are also several other streams and a number of ponds in this region which are not so easy of access—all of which contain trout—and heretofore have been but little frequented by sportsmen or anglers.

For the last five years the sixteen-mile level has been my camping ground through the greater portion of each season. Last season I found as good trout fishing there during July and August as I ever found before at any time or at any place. I found no better twenty-five and thirty years ago when I first began to frequent the Adirondacks. I caught ten trout that all together weighed thirteen and three quarter pounds, and I must have caught fifty to sixty weighing half a pound or over. The most of these I caught fly-fishing mornings and evenings out of a pool in front of my camp. I could have caught ten times the number had I wished. I camped alone most of the time and did not want to catch more than I wished for my own use and occasionally a mess for a party who fished only with bait and could not catch any at that time in the season. There is only now and then a day during the last half of July and through August that sunken bait can be used with any chance of success in these waters.

Sportsmen and anglers will for one or two seasons at least, find better hunting and fishing, I believe, in this region, than in any other part of the Adirondacks that will not require a ride in a wagon of fifteen or twenty miles over a rough road to reach. At Spring Cove is a boarding house, where meals and a bed can be procured if wanted. But at Blue Mt. Hotel, four miles further south, good accommodations can be had by the week or day, and Mr. Henry Phelps, the proprietor, keeps boats and will furnish guides at a moderate charge. The greatest objection is that it is three miles from the foot of the sixteen-mile level, the nearest water navigable for boats. The river is but half a mile below the house, but here are rapids, and although it affords good fishing from the banks, it is not so favorite a resort for anglers as the sixteen-mile level and the nine-mile at Spring Cove, where boats can be used. Mr. Phelps also keeps boats at McCavanaugh, Long and Wolf ponds, which are distant three to eight miles from the house. If the angler is willing to take a tramp through the woods four or five miles on foot, he can find as good trout fishing in a number of waters in this region, where the trout are as plenty in them to-day as they were fifty years ago, or as plenty as they were in the Bigosh in its palmiest days. But if the tramp is not taken soon, he will find them like all other localities that are easy of access—a thing of the past—as far as trout fishing is concerned.

Deer are still very plenty all through this region, although hundreds of them have been shamefully slaughtered during the five years that I have made it my camping ground. The majority of them were killed by night-hunters and during the early summer months. I am not prejudiced against, or interested in, any one method of hunting deer more than another, any more than wishing to have game preserved as long as possible within the Adirondacks; and I do not think any disinterested person who has spent the whole or nearly of each season in camp in them, as I have for the past five years, will contradict me when I say that more deer are destroyed by night-hunting than by all other methods combined. I would be pleased to have night-hunting and hounding both prohibited entirely, and still-hunting confined to November, with no extra time allowed to dispose of the venison. As we now have a game protector appointed for this county, I hope the slaughter here out of season will be stopped.

ADIRON ONDACK.

MOIRA, Franklin County, N. Y., May, 1884.

Just returned from a flying trip to the Adirondacks, and although the season has as yet not opened there, the inhabitants are busy preparing for the expected visitors, and it bids more than fair that the coming one will be a lively season.

I spent two days at the upper Ausable Pond in company with Frank C. Parker, the well-known guide of Keene Valley, and Joe Parker, of Brooklyn, who had with him his red Irish setter Victoria. We tried the trout in trolling and hooked three beauties, averaging 35 ounces. The trout in this pond are all speckled ones, and have been caught weighing 4½ pounds.

Early in the season, or up to the 4th of July, the trout fishing in Keene Valley is very good, in John's and Roaring brooks, also in Orbed Brook, a tributary of John's Brook. The writer caught 36 pounds in two days' fishing on Orbed two years since, and 30 pounds last August in two days with the fly, and the fishing there is royal sport. Keene Valley is the place for health and pleasure, and cannot be excelled for scenery and advantages for camping out.

W. L. HOWARD.

BROOKLYN, June 1, 1884.

Natural History.

THE COUESIAN PERIOD.

[By R. W. Shufeldt, Capt. Medical Corps, U. S. A., Chairman Section of Avian Anatomy, A. O. U. Conclusion of the Historical Preface from advance sheets of Coues's "Key."]

THE AUDUBONIAN EPOCH: 1824–1853.

(1824-1831.)

THE *Bonapartian Period.*—A princely person, destined to die one of the most famous of modern naturalists—Charles Lucius Bonaparte, early conceived and executed the plan of continuing Wilson's work in similar style, if not in the same spirit. He began by publishing a series of "Observations on the Nomenclature of Wilson's Ornithology," in the "Journal" of the Philadelphia Academy, 1824–25, republished in an octavo volume, 1826. This valuable critical commentary introduced a new feature—decided changes in nomenclature resulting from the sifting and rectification of synonymy. It is here that questions of synonymy—to-day the bane and drudgery of the working naturalist—first acquire prominence in the history of our special subject. There had been very little of it before, and Wilson himself, the least "bookish" of men, gave it scarcely any attention. Bonaparte also in 1825 added several species to our fauna upon material collected in Florida by the now venerable Titian R. Peale, whose honored name is thus the first of those of men still living to appear in these annals. Bonaparte's "American Ornithology," uniform with "Wilson," and generally incorporated therewith in subsequent editions as a continuation of Wilson's work, was originally published in four large quarto volumes, running 1825–33. The year 1827, in the midst of this work of Bonaparte's, was a notable one in several particulars. Bonaparte himself was very busy, producing a "Catalogue of the Birds of the United States," which, with a "Supplement," raised the number of species to 366, and of genera to 83; nearly a hundred species having been thus become know since Ord laid aside the pen that Wilson had dropped. William Swainson the same year described a number of new Mexican species and genera, many of which come also into the "North American" fauna. But the most notable event of the year was the appearance of the first five parts of Audubon's elephant folio plates. In 1828–29, as may also be noted, Ord brought out his third volume 8vo edition of Wilson. In 1828 Bonaparte returned to the charge of systematically cataloguing the birds of North America, giving now 382 species; and about this time he also produced a comparative list of the birds of Rome and Philadelphia. His main work having been completed in 1833, as just said, Bonaparte continued his labors with a "Geographical and Comparative List of the Birds of Europe and North America," published in London in 1838. This brochure gives 503 European and 471 American species. The celebrated zoologist wrote until 1857, but his connection with North American birds was only incidental after 1838. The period here assigned him, 1824–1831, may seem too short; but this was the opening of the Audubonian epoch—a period of brilliant inception, and one in which events that were soon to mature their splendid fruit came crowding fast; so that room must be made for others who were early in the present epoch.

(1831-1832.)

The Swainsonio-Richardsonian Period.—The "Fauna Boreali-Americana," the ornithological volume of which was published in 1831, made an impression so indelible that a period, albeit a brief one, must be put here. The technic of this celebrated treatise, more valuable for its descriptions of new species and genera than for its methods of classification, was by William Swainson, as were the elegant and accurate colored plates; the biographical matter, by Dr. (later Sir) John Richardson, increased our knowledge of the life-history of the northerly birds so largely, that it became a fountain of facts to be drawn upon by nearly every writer of prominence from that day to this. Each of the distinguished authors had previously appeared in connection with our birds—Swainson as above said, Richardson in 1825, in the appendix to Captain Parry's "Journal." The influence of the work on the whole cannot be well overstated.

Two events, beside the appearance of the "Fauna," mark the year 1831. One of these is the publication of the first volume of Audubon's "Ornithological Biography," being the beginning of the text belonging to his great folio plates. The other is the completion of the bird-volumes of Peter Pallas's famous "Zoographia Rosso-Asiatica," one of the most important contributions ever made to our subject, treating so largely as it does of the birds of the region now called Alaska. The same year saw also the Jameson edition of "Wilson and Bonaparte."

(1832-1834.)

The Nuttallian Period.—Thomas Nuttall (*1786-†1859) was rather botanist than ornithologist; but the travels of this distinguished English-American naturalist made him the personal acquaintance of many of our birds, his love for which bore fruit in his "Manual of the Ornithology of the United States and Canada," of which the first volume appeared in 1832, the second in 1834. The work is notable as the first "hand-book" of the subject; it possesses an agreeable flavor, and I think was the first formal treatise, excepting Wilson's, to pass to a second edition, as it did in 1840. Nuttall's name is permanent in our annals; and many years after he wrote, the honored title was chosen to be borne by the first distinctively ornithological association of this country—the "Nuttall Ornithological Club"—founded at Cambridge in 1873, and still flourishing.

(1834-1853.)

The Audubonian Period.—Meanwhile, the incomparable work of Audubon—"the greatest monument erected by art

to nature"—was steadily progressing. The splendid genius of the man, surmounting every difficulty and discouragement of the author, had found and claimed its own. That which was always great had come to be known and named as such, victorious in its impetuous yet long-enduring battle with that course of the world—I mean the commonplace; the commonplace, with which genius never yet effected a compromise, since genius is necessarily a perpetual menace to mediocrity. Audubon and his work were one; he lived in his work, and in his work will live forever. When did Audubon die? We may read, indeed, "on Thursday morning, Jan. 27, 1851, when a deep pallor overspread his countenance . . . Then, though he did not speak, his eyes, which had been so long nearly quenched, rekindled with their former lustre and beauty; his spirit seemed to be conscious that it was approaching the Spirit-land," And yet there are those who are wont to exclaim, "a soul! a soul! what is that?" Happy indeed are they who are conscious of its existence in themselves, and who can see it in others, every instant of time during their lives!

Audubon's first publication, perhaps, was in 1826—an account of the turkey buzzard, in the "Edinburgh New Philosophical Journal," and some other minor notices came from his pen. But his energies were already focused on his life work, with that intense and perfect absorption of self which only genius knows. The first volume of the magnificent folio plates, an hundred in number, appeared in 1827–30, in five parts; the second, in 1831–34, of the same number of plates; the third, in 1834–35, likewise of the same number of plates; the whole series of 4 volumes, 87 parts, 435 plates and 1065 figures of birds, being completed in June, 1839. Meanwhile, the text of the "Birds of America," entitled "Ornithological Biography," was steadily progressing, the first of these royal octavo volumes appearing in 1831, the fifth and last in 1839. In this latter year also appeared the "Synopsis of the Birds of North America," a single handy volume serving as a systematic index to the whole work. In 1840–44 appeared the standard octavo edition in seven volumes, with the plates reduced to octavo size and the text rearranged systematically; with a later and better nomenclature than that given in the "Ornithological Biography" and some other changes, including an appendix describing various new species procured during the author's journey to the upper Missouri in 1843. In the original elephant folios there were 435 plates; with the reduction in size the number was raised to 483, by the separation of various figures which had previously occupied the same plate; and to these 17 new ones were added, making 500 in all. The species of birds treated in the Synopsis are 491 in number; those in the work, as it finally left the illustrious author's hands, are 506 in number, nearly all of them splendidly figured in colors.

In estimating the influence of so grand an accomplishment as this, we must not leave Audubon "alone in his glory." Vivid and ardent as was his genius, matchless as he was both with pen and pencil in giving life and spirit to the beautiful objects he delineated with passionate love, there was a strong and patient worker by his side—William Macgillivray, the countryman of Wilson, destined to lend the sturdy Scotch fiber to an Audubonian epoch. The brilliant French-American naturalist was little of a "scientist." Of his work, the magical beauties of form and color and movement are all his; his work is redolent of Nature's fragrance: but Macgillivray's are the bone and sinew, the hidden anatomical parts beneath the lovely face, the nomenclature, the classification—in a word, the technicalities of the science. Not that Macgillivray was only a closet-naturalist; he was a naturalist in the best sense—in every sense—of the word, and the "vital spark" is gleaming all through his works upon British birds, showing his intense and loyal love of Nature in all her moods. But his place in the Audubonian epoch in American ornithology is as has been said. The anatomical structure of American birds was first disclosed in any systematic manner, and to any considerable extent, by him. But only to-day, as it were, is this most important department of ornithology assuming its rightful place; and have we a modern Macgillivray to come?

The sensuous beauty with which Audubon endowed the object of his life was long in acquiring, with loss of no comeliness, the aspect more strict and severe of a later and maturer epoch. Audubon was practically accomplished in 1844, the year which saw his completed work; but I note no special or material change in the course of events—no name of assured prominence, till 1853, when a new régime, that had meanwhile been insensibly established, may be considered to have closed the Audubonian epoch—the Audubonian period thus extending through the nine years after 1844.

While Audubon was finishing, several mentionable events occurred. I have already spoken of Bonaparte's "List" of 1838, and of the 1840 edition of Nuttall's "Manual." Richardson in 1837 contributed to the Report of the Sixth Meeting of the British Association for the Advancement of Science an elaborate and important "Report on North American Zoology" relating in due part to birds. The distinguished Danish naturalist, Reinhardt, wrote a special treatise on Greenland Birds, 1838; W. O. Peabody one upon the birds of Massachusetts, 1839. The important Zoology of Captain Beechy's Voyage appeared in 1839, with the birds done by N. A. Vigors. Maximilian, Prince of Wied, published his "Reise in das Innere Nord-America" in 1839-41. Sixteen new species of birds from Texas were described and figured by J. P. Giraud in 1841, and the same author's useful "Birds of Long Island" was published in 1844. This year also the bird volume of DeKay's "Zoology of New York." The Rev. J. H. Linsley furnished a notable catalogue of the birds of Connecticut in 1843. A name intimately associated with Audubon's is that of J. C. Townsend, whose fruitful travels in the West in company with Nuttall in 1834 resulted in adding to our list the many new species which were published by Townsend himself in 1837, and also utilized by Audubon. Townsend's "Narrative" of his journey appeared in 1838; and the same year saw the beginning of a great work which Townsend projected, an "Ornithology of the United States," which, however, progressed no further than one part or number, being killed by the octavo edition of Audubon. In 1837 I first find the name of a friend of Audubon which often appears in his work—that of Dr. Thomas Mayo Brewer, who wrote on the birds of Massachusetts in this year, and in 1840 brought out his useful and convenient duodecimo edition of Wilson in one volume. In 1844, Audubon's last effectual year, the brothers Wm. M. and S. F. Baird appear, with a list of the birds of Carlisle, Pennsylvania, having the year previously, in July, 1843, described two new species of fly-catchers, in the first paper ever written by the one who was to make the succeeding epoch; and it is significant that the last bird in Audubon's work was named "*Emberiza bairdii.*"

Such were the aspects of the ornithological sky as the glorious Audubonian sun approached and passed the zenith; still more significant were the signs of the times as that orb neared its golden western horizon. In the interval between 1844 and 1853, Baird and Brewer continued; Cassin and Lawrence appeared in various papers, and round these names are grouped those of William Gambel, with new and interesting observations in the Southwest; of George A. McCall and S. W. Woodhouse in the same connection; and of Holboll in respect of Greenland birds. The most important contributions were the several papers published by Gambel, in 1845 and subsequently, and Baird's Zoology of Stansbury's expedition, 1852. But no period-marking, still less epoch-making, work accelerates the setting of the sun of Audubon.

THE BAIRDIAN EPOCH: 1853–18—

(1853—1858.)

The Cassinian Period.—While much material was accumulating from the exploration of the great West, and the Bairdian period was rapidly nearing; while Brewer and Lawrence were continuing their studies and writings, and many other names of lesser note were contributing their several shares to the whole result: the figure of John Cassin stands prominent. Cassin was born September 6, 1813, and passed from view in the Quaker City, January 10, 1869. Numerous valuable papers and several important works attest the assiduity and success with which he cultivated his favorite science to the end of his days. I think that his first paper was the description of a new hawk, *Cymindis Wilsoni*, in 1847. Among his most important works are the Ornithology of the Wilke's exploring expedition; of the Perry Japan expedition; and of the Gilliss Expedition to Chili. Aside from his strong co-operation with Baird in the great work to be presently noticed, Cassin's seal is set upon North American ornithology in the beautiful work begun in 1853 and finished in 1856, entitled, "Illustrations of the Birds of California," etc., forming a large octavo volume, illustrated with fifty colored plates. His distinctive place in ornithology is this: he was the only ornithologist this country has ever produced who was as familiar with the birds of the Old World as with those of America. Enjoying the facilities of the then unrivalled collection of the Philadelphia Academy, his monographical studies were pushed into almost every group of birds of the world at large. He was patient and laborious in the technic of his art, and full of book-learning in the history of his subject; with the result, that the Cassinian period, largely by the work of Cassin himself, is marked by its "bookishness," by its breadth and scope in ornithology at large, and by the first decided change since Audubon in the aspect of the classification and nomenclature of the birds of our country. The Cassinian period marks the culmination of the changes that wrought the fall of the Audubonian sceptre in all that relates to the technicalities of the science and consequently the beginning of a new epoch.

The peers of this period are only three—Lawrence, Brewer and Baird. The former of these, already an eminent ornithologist, continued his rapidly succeeding papers and was preparing his share of Baird's great work of 1858; though later his attention became so closely fixed upon the birds of Central and South America, that a "Lawrencian period" is to be found in the history of the ornithology of those countries rather than of our own. Dr. Brewer's various articles appeared, and in 1857 this author so well known since Audubonian times became the recognized leading oologist of North America, through the publication of the first part of his "North American Oology"—a work unfortunately suspended at this point. Though thus fragmentary, this quarto volume stands as the first systematic treatise, published in this country exclusively devoted to oology, and giving a considerable series of colored illustrations of eggs. But a larger measure of the world's regard became his much later, when, in 1874, appeared the great "History of North American Birds," in three quarto volumes, all the biographical matter of which was by him; and, even as I write, two more volumes are about to appear, in which he has like large share. Thus closely is the name of Brewer identified with the progress of the science for nearly half a century—from 1837 at least, to 1884, some four years after his death, which occurred January 23, 1880. He was born in Boston, November 21, 1814.

Baird published little during the Cassinian period, being then intent upon the great work about to appear; but the number of workers in special fields attests the activity of the times. S. W. Woodhouse published his completed observations upon the birds of the Southwest in an illustrated octavo volume. Zadock Thompson's "Natural History of Vermont" (1853) pays attention to the birds of that State. Birds of Wisconsin were catalogued by P. K. Hoy; of Ohio, M. C. Read and Robert Kennicot; of Illinois, by H. Pratten; of Indiana, by R. Haymond; of Massachusetts, by F. W. Putnam; and various other "faunal lists" and local annotations appeared, including President Jefferson's Virginian ornithology, three-quarters of a century out of date. Dr. T. C. Henry and Dr. A. L. Heermann wrote upon birds of the Southwest; Reinhardt continued observations on Greenland birds; Dr. Henry Bryant published some valuable papers. The since very eminent English ornithologist, Dr. P. L. Sclater, appeared during this period in the present connection. The series of Pacific Railroad Reports, which were to culminate, so far as ornithology is concerned, with the famous ninth volume, were in progress; the sixth volume, containing Dr. J. S. Newberrys's valuable and interesting article upon the birds of California and Oregon, was published in 1857. Thus the Cassinian period, besides being marked as already said in its broader features, was notable in its details for the increase in the number of active workers, the extent and variety of their independent observations, and the consequent accumulation of materials ready to be worked into shape and system.

(1858—18—).

The Bairdian Period.—The ninth volume of the Pacific Railroad Reports was an epoch-making work, bearing the same relation to the times that the respective works of Audubon and Wilson had sustained in former years. A great amount of material—not all of which is more than hinted at in in the foregoing paragraph—was at the service of Professor Baird. In the hands of a less methodical, learned, and sagacious naturalist, of one less capable of elaborating and systematizing, the result would probably have been an ordinary official report upon the collections of birds secured during a few years by the naturalists of the several explorations and surveys for a railroad route from the Mississippi Valley to the Pacific Ocean. But having already transformed the eighth volume of the Reports from such a "public document" into a systematic treatise on North American Mammals, the author did the same for the birds of North America, with the co-operation of Cassin and Lawrence. This portly quarto volume, published in 1858, represents the most important and decided single step ever taken in North American ornithology in all that relates to the technicalities of the science. It effected a revolution—one already imminent in consequence of Cassin's studies—in classification and nomenclature, nearly all the names of our birds which had been in use in the Audubonian epoch being changed in accordance with more modern usages in generic and specific determinations. While the work contains no biographical matter—nothing of the life-history of birds, it gives lucid and exact diagnoses of the species and genera known at the time, with copious synonymy and critical commentary. Various new genera are characterized, and many new species are described. The influence of the great work was immediate and widespread, and for many years the list of names of the 738 species contained in the work remained a standard of nomenclature from which few desired or indeed were in position to deviate. The value of the work was further enhanced in 1860 by its republication, identical in the text, but with the addition of an atlas of 100 colored plates. Many of these plates were the same as those which had appeared in other volumes of the Pacific Railroad Reports, notably the sixth and tenth and twelfth (the two latter volumes having appeared in 1859); others were those contained in the "Mexican Boundary Report" which appeared under Professor Baird's editorship in 1859; about half of them were new.

I have spoken of the collaboration of Cassin and Lawrence in the production of this remarkable treatise. Considering it as only one of a series of reports upon the Pacific Railroad Surveys, I should bring into somewhat of association the names of others who contributed the ornithological portions of other volumes, as the fourth, sixth, tenth and twelfth—Dr. C. B. R. Kennedy, Dr. J. S. Newberry, Dr. J. G. Cooper and Dr. George Suckley. Nor should it be forgotton that numberless other collectors and contributors, whose specimens are catalogued throughout the volume, brought their hands to bear upon the erection of this grand monument.

But what of the genius of this work?—for I have not measured my words in speaking of Wilson and Audubon. Can any work be really great without that mysterious quality? Certainly not. This work is instinct with the genius of the times that saw its birth. This work is the spirit of an epoch embodied.

But here I must pause. My little sketch is brought upon the threshold of contemporaneous history—to the beginning of the Bairdian period, of the close of which, as of the duration of the Bairdian epoch, it is not for me to speak. When the splendid achievements of American ornithologists during the past quarter of a century shall be seen in historical perspective; when the brilliant possibilities of our near future shall have become the realizations of a past; when the glowing names that went before shall have fired another generation with a noble zeal, a lofty purpose and a generous emulation—then perhaps, the thread here dropped may be recovered by another hand.

THE SPIKEHORN.

Editor Forest and Stream:

In one of the elaborate and highly interesting papers on "Deer in the Adirondacks," by Dr. Merriam, published in your journal of May 8, the subject of the spikehorn deer is treated at considerable length. In the article in question, a quotation is given from the "Antelope and Deer of America," by Judge Caton, whose truly exhaustive treatise I have read with singular pleasure and profit. I am well aware of Judge Caton's ability to give a sound, scientific and practical opinion upon any point connected with the morphology of the genus *Cervidæ*, and it is with much diffidence that I venture to differ with such a learned and distinguished specialist, in so far as the spikehorn is concerned. Judge Caton holds that the spikehorn is a yearling, or only a youny animal.

In that portion of my paper on the "Deer of the Ottawa Valley," published in FOREST AND STREAM on the 27th of March last, I gave a brief description of the spikehorned deer, as I have found him, seen him, known him and shot him, at various times during the last forty years. The peculiarities of this elegant deviation in that beautiful branch of the deer family, specifically designated *Cervus virginianus*, as given in the article to which I have referred, I believe, and know from the experience of others, and my own experience and research, to be substantially and literally correct. I may repeat, that the spikehorned buck, as we have him here in Canada, is shorter in the legs, rounder and thicker in the body, and has a much more elegantly shaped head than the buck of the generic animal with branching horns. The venison of the spikehorn is much finer and more delicious than the other. The buck of the spikehorned variety—if the term legitimately applies—has usually straight horns, from six inches to a foot long, sharp-pointed and prongless, set backward on a line with the face. Occassionally, however, the horns are found slightly curved inward, in which case they are far less formidable weapons than such as are perfectly straight. The spikehorn grows to fully 200 pounds in weight, as he stands. No Virginian deer of one, two, or three years old attains this weight.

By those well acquainted with this deer, even the doe of the spikehorn class can readily be distinguished by her characteristic peculiarities. The track of this animal can also be distinguished from the track of the branching horn, being somewhat rounder and less pointed.

I do not know how many Virginian deer Judge Caton may have had altogether in his acclimatization grounds; but I believe it quite possible that even among hundreds kept in a state of domestication he may not have had a single specimen of the true spikehorn.

The spikehorn has always been a puzzle to me; nevertheless, there he is. I cannot ignore his existence, notwithstanding the fact that it is almost a species of zoological heresy to question the experimental deductions of such a well-established authority as Judge Caton.

There may be, after all, some grounds for the story of the spikehorns driving the branch-antlered deer out of the Adirondacks. There can be no question whatever as to the fighting capabilities of the former. I believe that the moose, or even the wapiti, would be compelled to fly from his dangerous attack, as the bison has to retreat from the battering charge of the ponderously-horned Rocky Mountain cimmarron, or the domestic bull from the ordinary tame ram.

I have written this letter, not through any feeling of a captious nature or in the spirit of dogmatism. I have been simply endeavoring to prevent my old and beautifully-interesting acquaintance, the spikehorned buck of the Ottawa Valley, from being scientifically exterminated.

WM. P. LETT.

OTTAWA, May 17, 1884.

THE WILLET BREEDING IN DELAWARE BAY.—For the information of "Homo" I would say that on one of my collecting tramps (May 19) I discovered a nest of the willet (*Symphemia semipalmata*) containing three beautiful fresh eggs, and they now form a valuable addition to my collection. This nest was found in the long grass on the marsh, near the Warner house, on the Delaware Bay, and what we Jerseymen call Big Island. The mother bird would not leave her nest until I had my hand almost upon her. This is the first nest of the willet I have ever found, and I have collected in the same locality for several years.—CHAS. E. BELLOWS, PH. G. (Bridgeton, N. J., June 2, 1884).

HEATED SPARROWS.—Hollidaysburg, Pa.,—While standing in the casting house of a blast furnace at this place I witnessed a striking illustration of the well-known pugnacity of the common English sparrow. The two birds engaged in the battle fell from the rafters of the building to the heated surface of a large cake of slag, on which they continued to fight, until a distinct smell of scorching feathers was noticed, when a workman with a broom served them notice to quit.—JUNIATA.

Game Bag and Gun.

EARLY ACCOUNTS OF THE GRIZZLY.

THE exploring expedition of Captains Lewis and Clarke across the western territory of the United States, along the Missouri and Columbia rivers, early in the present century, probably gives the earliest description of the grizzly bear now accessible. Thinking some extracts from their journal may prove interesting to readers of the FOREST AND STREAM, after the lapse of eighty years from the time the incidents occurred, I have compiled the following pertaining to the animal named:

The expedition set out from the mouth of the Wood River, near St. Louis, Mo., May 14, 1804. It consisted of the officers of the United States Army above named, and forty-two men, provided with three boats of twenty-two, seven and six oars respectively, with sails to be used when practicable, and two horses, "to be led along the banks of the river." Those who have seen the Missouri River need not be told that progress up its turbid current, with row or sail boats, was very tedious.

The first mention of the grizzly occurs October 20, when they were just above the mouth of Cannonball River, in speaking of the game observed: "We have seen great numbers of elk, deer, goats and buffalo, and the usual attendants of these last, the wolves, who follow their movements, and feed upon those who die by accident, or who are too poor to keep pace with the herd; we also wounded a white bear, and saw some fresh tracks of those animals, which are twice as large as the track of a man."

No further mention of the grizzly is made that year. Nov. 3, they established winter quarters about midway between the mouth of Cannonball River and that of the Little Missouri River; built cabins protected by a stockade and called it Fort Mandan. More or less of the men were engaged in hunting most of the winter but no mention of bears occurs. April 7, 1805, the expedition resumed its tedious voyage up the Missouri. April 10 they "saw the track of a large white bear." April 13, "two white bears were seen." April 17: "Around us are great quantities of game, such as herds of buffalo, elk, antelope, some deer and wolves, and the tracks of bears." April 27 they passed the mouth of Yellowstone River.

April 29: * * "Capt. Lewis, who was on shore with one hunter, met about 8 o'clock two white bears. Of the strength and ferocity of this animal the Indians had given us dreadful accounts; they never attack him but in parties of six or eight persons, and even then are often defeated, with the loss of one or more of the party. Having no weapons but bows and arrows, and the bad guns with which the traders supply them, they are obliged to approach very near to the bear, and as no wound except through the head or heart is mortal, they frequently fall a sacrifice if they miss their aim. He rather attacks than avoids man; and such is the terror he has inspired that the Indians who go in quest of him paint themselves, and perform all the superstitious rites customary when they make war on a neighboring nation. Hitherto those we had seen did not appear desirous of encountering us; but, although to a skillful rifleman the danger is very much diminished, the white bear is still a terrible animal. On approaching these two, both Capt. Lewis and the hunter fired, and each wounded a bear. One of them made his escape; the other turned upon Capt. Lewis, and pursued him for seventy or eighty yards; but being badly wounded he could not run so fast as to prevent him from reloading his piece, which he again aimed at him, and a third shot from the hunter brought him to the ground. It was a male, not quite full grown, and weighed about three hundred pounds; the legs were somewhat longer than those of the black bear, and the claws and tusks much larger and longer. Its color was a yellowish brown, the eyes small, black and piercing. The front of the fore legs of the animal, near the feet, is usually black, and the fur is finer, thicker and deeper than that of the black bear; added to which, it is a more furious animal, and very remarkable for the wounds which it will bear without dying."

May 6: "Captain Clarke and one of the hunters met this evening the largest brown bear we have seen. As they fired he did not attempt to attack, but fled with a most tremendous roar; and such was his tenacity of life, that although he had five balls passed through his lungs, and five other wounds, he swam more than half across the river to a sandbar, and survived twenty minutes. He weighed between five and six hundred pounds at least and measured eight feet seven inches and a half from the nose to the extremity of the hind feet, five feet ten inches and a half round the breast, three feet eleven inches around the neck, one foot eleven inches round the middle of the foreleg, and his claws, five on each foot, were four inches and three-eighths in length. This animal differs from the common black bear in having his claws much longer and more blunt; his tail shorter; his hair of a reddish or bay brown, longer, finer and more abundant; his liver, lungs and heart much larger even in proportion to his size, the heart particularly, being equal to that of a large ox; and his maw ten times larger. Besides fish and flesh he feeds on roots and every kind of wild fruit."

May 11: * * "About 5 in the afternoon one of our men * * came running to the boats with loud cries and every symptom of terror and distress. For some time after we had taken him on board he was so much out of breath as to be unable to describe the cause of his anxiety; but he at length told us that about a mile and a half below he had shot a brown bear, which immediately turned, and was in close pursuit of him; though, being badly wounded, he could not overtake him. Captain Lewis, with seven men, immediately went in search of him; and having found his track, followed him by the blood for a mile, found him concealed in some thick brushwood and shot him with two balls through the skull. Though somewhat smaller than that killed a few days ago, he was a monstrous animal, and a most terrible enemy. Our man had shot him through the center of the lungs; yet he had pursued him furiously for half a mile, then returned more than twice that distance, and with his paws had prepared himself a bed in the earth two feet deep and five feet long, and was perfectly alive when they found him, which was at least two hours after he received the wound. The wonderful powers of life which these animals possess render them dreadful; their very track in the mud or sand, which we have sometimes found eleven inches long, and seven and a quarter wide, exclusive of the claws, is alarming; and we had rather encounter two Indians than meet a single brown bear. There is no chance of killing them by a single shot unless the ball goes through the brains, and this is very difficult on account of two large muscles which cover the side of the forehead, and the sharp projection of the center of the frontal bone, which is also thick. The fleece and skin of this bear were a heavy burden for two men, and the oil amounted to eight gallons."

May 14: * * "Toward evening the men in the hindmost canoes discovered a large brown bear lying in the open grounds, about three hundred paces from the river. Six of them, all good hunters, immediately went to attack him, and concealing themselves by a small eminence, came unperceived within forty paces of him. Four of the hunters fired, and each lodged a ball in his body, two of them directly through the lungs. The furious animal sprang up and ran open-mouthed upon them. As he came near, the two hunters who had reserved their fire gave him two wounds, one of which, breaking his shoulder, retarded his motion for a moment, but before they could reload he was so near that they were obliged to run to the river, and before they had reached it he had almost overtaken them. Two jumped into the canoe, the other four separated, and concealing themselves in the willows, fired as fast as they could reload. They struck him several times, but instead of weakening the monster, each shot seemed only to direct him toward the hunters, till at last he pursued two of them so closely that they threw aside their guns and pouches and jumped down a perpendicular bank of twenty feet into the river; the bear sprang after them, and was within a few feet of the hindmost, when one of the hunters on shore shot him in the head and finally killed him. They dragged him to the shore and found that eight balls had passed through him in different directions."

May 19: * * "Our game consisted of deer, beaver and elk; we also killed a brown bear, which, although shot through the heart, ran at their usual pace nearly a quarter of a mile before he fell."

May 22: * * "We killed a dear and a bear; we have not seen in this quarter the black bear, common in the United States and on the lower parts of the Missouri, nor have we discerned any of their tracks, which may easily be distinguished by the shortness of its claws from the brown, grizzly or white bear, all of which seem to be of the same family, assuming those colors at different seasons of the year." This is the first reference to the animal under the name grizzly. This was just below the mouth of Judith River.

June 2: * * "The hunters who were out the greater part of the day, brought in six elk, two buffalo, two mule-deer, and a bear. This last animal had nearly cost us the lives of two of our hunters, who were together when he attacked them. One of them narrowly escaped being caught, and the other, after running a considerable distance, concealed himself in some thick bushes, and, while the bear was in quick pursuit of his hiding place, his companion came up, and fortunately shot the animal through the head."

June 14: Captain Lewis, alone at the time, was exploring the country about the falls of the Missouri when "he met a herd of at least a thousand buffalo, and, being desirous of providing for supper, shot one of them. The animal immediately began to bleed, and Captain Lewis, who had forgotten to reload his rifle, was intently watching to see him fall, when he beheld a large brown bear which was stealing on him unperceived, and was already within twenty steps. In the first moment of surprise he lifted his rifle; but remembering instantly that it was not charged, and that he had no time to reload, he felt that there was no safety but in flight. It was in the open, level plain; not a bush nor a tree within three hundred yards; the bank of the river sloping, and not more than three feet high, so that there was no possible mode of concealment. Captain Lewis, therefore, thought of retreating with a quick walk, as far as the bear advanced, toward the nearest tree; but, as soon as he turned, the bear rushed open-mouthed, and at full speed, upon him. Captain Lewis ran about eighty yards; but, finding that the animal gained on him fast, it flashed on his mind that, by getting into the water to such a depth that the bear would be obliged to attack him swimming, there was still some chance for his life; he therefore turned short, plunged into the river about waist deep, and, facing about, presented the point of his spoutoon. The bear arrived at the water's edge within twenty feet of him; but, as soon as he put himself in this posture of defense, he seemed frightened, and, wheeling about, retreated with as much precipitation as he had advanced. Very glad to be released from danger, Captain Lewis returned to the shore, and observed him run with great speed, sometimes looking back, as if he expected to be pursued, till he reached the woods. He could not conceive the cause of the sudden alarm of the bear, but congratulated himself on his escape, when he saw his own track torn to pieces by the furious animal; and he learned from the whole adventure never to suffer his rifle to be for a moment unloaded."

June 25: * * "J. Fields was sent up the Missouri to hunt elk; but he returned about noon and informed us that, a few miles above, he saw two white bears near the river, and, while attempting to fire at them, there came suddenly a third, which, being only a few steps off, immediately attacked him; that, in running to escape from the monster, he leaped down a steep bank of the river, where, falling on a bar of stone, he cut his hand and knee, and bent his gun; but; fortunately for him, the bank concealed him from his antagonist, or he would have been most probably lost."

June 27: The hunting party killed nine elk and three bears. "As they were hunting on the river, they saw a low ground covered with thick bushwood, where, from the tracks along the shore, they thought a bear had probably taken refuge; they therefore landed without making any noise, and climbed a tree about twenty feet above the ground. Having fixed themselves securely, they raised a shout, and a bear instantly rushed toward them. These animals never climb, and, therefore, when he came to the tree and stopped to look at them, Drewyer shot him in the head. He proved to be the largest we had yet seen; his head appeared to be like that of a common ox; his fore feet measured nine inches across, and his hind feet were seven inches wide, and eleven and three quarters long, exclusive of the claws. One of these animals came within thirty yards of the camp last night, and carried off some buffalo meat which we had placed on a pole."

July 3: "Having completed our celestial observations, (this was at the head of the Great Falls of the Missouri) we went over to the large island to make an attack upon its inhabitants, the bears, which have annoyed us very much of late, and were prowling about our camp last night. We found that part of the island frequented by the bear forms an almost impenetrable thicket of the broad-leafed willow; into this we forced our way in parties of three, but could see only one bear, which instantly attacked Drewyer. Fortunately, as he was rushing on, the hunter shot him through the heart within twenty paces, and he fell, which enabled Drewyer to get out of his way; we then followed him one hundred yards and found that the wound had been mortal. Not being able to discover any more of these animals we returned to camp."

July 24: * * "We saw a large bear, but could not come within gunshot of him." Again, under the same date, "On this island we saw a large brown bear, but he retreated to the shore, and ran off before we could approach him. These animals seem more shy than they were below the mountains." The expedition was now in the neighborhood of the Three Forks of the Missouri, and bears are rarely mentioned. They appear to have been very numerous from the mouth of Judith River upward to the head of the Great Falls of the Missouri.

July 25: * * "While crossing the island they killed two brown bears, and saw great numbers of beaver."

On Aug. 26, the expedition passed over the summit of the Rocky Mountains and reached the waters of the Columbia. From here onward game was very scarce and bears are not mentioned at all. Horses, dogs and roots procured from the Indians, became the chief food. Nov. 16 they reached the mouth of the Columbia. A few days later they established winter quarters a few miles south of the Columbia, on the sea coast, naming it Fort Clatsop.

March 23, 1806, the return march was begun, retracing substantially the route pursued in going west the year before. On May 14, when well up toward the head waters of the Columbia, the journal says: "The hunters killed some pheasants, two squirrels and a male and female bear, the first of which was large and fat and of a bay color; the second meager, grizzly, and of a smaller size. They were of the species common to the upper part of the Missouri, and might well be termed the variegated bear, for they are found occasionally of a black, grizzly, brown, or red color. There is every reason to believe that they are of precisely the same species. Those of different colors are sometimes killed together, as in the case of these two, and as we had found the white and bay associated together on the Missouri; some nearly white were seen in this neighborhood by the hunters. Indeed, it is not common to find any two bears of the same color; and if difference of color were allowed to constitute a distinct species, the number would be increased to almost twenty. Soon after they killed a female bear with two cubs. The mother was black, with a considerable intermixture of white hairs, and a white spot on her breast. One of the cubs was jet black, and the other of a light reddish brown or bay color. The fur of these variegated bears is much finer, longer, and more abundant than that of the common black bear; but the most striking difference between them is that the former are larger, have longer tusks, and larger as well as blunter claws; that they prey more on other animals; and that they lie neither so long nor so closely in winter quarters, and never climb a tree, however closely pressed by the hunters. The variegated bear here, though specifically the same with those we met on the Missouri, are by no means so ferocious, probably because the scarcity of game and the habit of living on roots may have weaned them from attacking and devouring animals. Still, however, they are not so passive as the common black bear, which are also found here; for they had fought with our hunters, though with less fury than those on the other side of the mountains."

May 31: "Two men visited the Indian village where they purchased a dressed bear skin of a uniform pale reddish brown color, which the Indians called *yackah*, in contradistinction to *hohhost*, or the white bear. This induced us to inquire more particularly into their opinions as to the several species of bears; and we produced all the skins of that animal which we had purchased. The natives immediately classed the white, the deep and the pale grizzly red, the grizzly dark brown, in short, all those with the extremeties of the hair of a white or frosty color, without regard to the color of the ground of the fur, under the name of *hohhost*. They assured us that they were all of the same species with the white bear; that they associated together, had longer nails than the others, and never climbed trees. On the other hand, the animals with black skins, those which were black with a number of entire white hairs intermixed, or with a white breast, the uniform bay, and the brown and light reddish brown; they ranged under the class *yackah*, and said they resembled each other in being smaller, in having shorter nails than the white bear, in climbing trees, and in being so little vicious that they could be pursued with safety. This distinction of the Indians seemed to be well founded, and we were inclined to believe, first, that the white or grizzly bear of this neighborhood form a distinct species, which, moreover, are the same with those of the same color on the upper part of the Missouri, where the other species is not found. Second, that the black or reddish brown, etc., are a second species, equally distinct from the white bear of this country, and from the black bear on the Atlantic and Pacific oceans, which last two seem to form only one species. The common black bear is indeed unknown in this country; for the bear of which we are speaking, though in most respects similar, differs from it in having much finer, thicker, and longer hair, with a greater proportion of fur mixed with it, and also in having a variety of colors, while the common black bear has no intermixture or change of color, but is of a uniform black."

July 10: The expedition was now again on the head waters of the Missouri, and near the scene of their long delay of the year before at the Great Falls of that river. A party had been sent in advance with the camp and reported at night that "they had been pursued as they came along by a very

large bear, on which they were afraid to fire, lest their horses, being unaccustomed to the report of a gun, might take fright and throw them. This circumstance reminded us of the ferocity of these animals when we were before near this place, and admonished us to be very cautious."

July 15: "During the day we were engaged in drying meat and dressing skins. At night McNeal, who had been sent in the morning to examine the *cache* at the lower end of the portage, returned, but had been prevented from reaching that place by a singular accident. Just as he arrived near Willow Run he approached a thicket of brush in which was a white bear, which he did not discover till he was within ten feet of him; when his horse started, and, wheeling suddenly round, threw him almost immediately under the animal. McNeal started up instantly, and, finding the bear raising himself on his hind feet to attack him, struck him on the head with the butt end of his musket. The blow was so violent that it broke the breech of the musket and knocked the bear to the ground; and, before he recovered, McNeal sprang into a willow tree which he saw close by, and remained there, while the bear closely guarded the foot of it, till late in the afternoon. He then went off, when McNeal came down, and, having found his horse, which had strayed to the distance of two miles, returned to camp. These animals are, indeed, terribly ferocious; and it is matter of wonder, that in all our encounters with them we should have had the good fortune to escape unhurt."

July 16: * * "As we came along we met several white bears, but they did not venture to attack us." From the head waters of the Columbia, Captain Clarke, with a portion of the command, diverged southward, and crossing the head waters of the Missouri, reached the Yellowstone and descended that stream. Under date of July 31, narrating the progress of this division the journal says: "Having made sixty-six miles, they stopped for the night; and just as they landed, perceived a white bear, which was larger than any of the party had before seen, devouring a dead buffalo on a sand bar. Though they fired two balls into him, still he swam to the mainland and walked along the shore. Captain Clarke pursued him, and lodged two more balls in his body; he bled profusely, but still made his escape, as the night prevented them from following him."

Aug. 2: * * "The bear, which had given them so much trouble at the head of the Missouri, they found equally fierce here. [Along the Yellowstone.] One of these animals, which was on a sand bar as the boat passed, raised himself on his hind feet, and after looking at the party for a moment, plunged in and swam toward them; but, after receiving three balls in the body, he turned and made for the shore. Toward evening they saw another enter the water to swim across, when Captain Clarke directed the boat toward the shore, and just as the animal landed shot it in the head. It proved to be the largest female they had seen, and was so old that its tusks were worn quite smooth."

This is the last mention of the grizzly in the journal. The divided party reunited below the junction of the Missouri and Yellowstone and on Sept. 23, 1806, reached St. Louis.

W. N. B.

DENVER, Colorado.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

Your correspondent "Hammerless" in issue of May 15, must have very limited chances of observation or else he has never really tried to find the gun that did not fall short of the target given by the maker. I have never yet tried an American gun that didn't make, with the proper load, as good, if not better target, than that given by the maker. Parker's guns are universally so, by common report among gun dealers and others who handle a great number of them. Remington's and Colt's also usually make a better target than that marked on the tag, if properly loaded. I lay great stress upon the loading, as the pattern depends almost entirely upon that, and it is unreasonable to suppose that any gun will shoot in the same manner, regardless of gauge, length of barrels or choke. I have a 10-30-10 that has made the following targets, off-hand shooting, which is not the best way. Distances were measured: Forty yards, with five drams Eagle duck powder, one ounce No. 8 shot (my measure gives 460 to ounce) 318 pellets in a 24-inch circle, 330 in a 24-inch square. At 50 yards, 244 in a 24-inch circle; using this time 1¼ ounces of shot. I would have tried a 30-inch circle, but could get no paper large enough. These are probably better than a long series of shots would average, but am satisfied that I can very nearly do as well every time. I consider that the secret of all this lies in the loading. I use two pink-edge wads over powder, not quite down, the powder being left rather loose. In this way I can burn 6½ drams in my gun every time and get the full force of the charge. I don't want my powder all crushed to fine dust as I have seen done by forcing the wads down as hard as they can be driven. I have found by experiments, too, that coarse powder is better for pattern than fine, and as for close cover or snap shooting I use Electric, and find about the same pattern at 18 yards as with coarse Eagle Ducking at 40.

Q. U. AIL.

ORLANDO, Fla.

Editor Forest and Stream:

I will have to give it up for the present that fire and gunpowder have some kind of an understanding mutually that under certain peculiar circumstances they lay aside their well-known antipathy to each other and occupy the same space at the same time without the one interfering with the other. "D. W. C.," in issue of May 15, says that this peculiar condition of affairs comes about when a gun is overcharged with coarse powder. "P." says that the same thing happens when the rifle is overcharged with powder. These gentlemen would hardly write so pointedly and positively unless they had carefully experimented and proven their position absolutely. But have they experimented? I am well aware that this inquiry casts a reflection, but the idea is simply so preposterous on its face is my excuse for asking the question. I have experimented in this line carefully, but perhaps crudely. "D. W. C.'s" own words, "a long blaze of burning powder," should set the matter at rest, for how can in any possible way a grain of powder that did not take fire in the gun escape this "long blaze of burning powder?" By what hocus pocus do these two things occupy the same space at the same time and the fire not explode the powder?

I did not say, nor do I pretend to say, that each and every grain of powder is entirely consumed in the gun when it is overcharged and fired. I know that such is not the fact. But I did think I knew that each and every grain "took fire" and began to burn—explode—before it reached the muzzle of the gun, or, at least, before they got out of "the long stream of burning powder beyond the muzzle." I said in this paper, April 24, that gunpowder was a compound substance, made up of three very different things just simply mixed, with the result that no powder has two grains exactly alike (the proofreader in the other article made me say "things" instead of "grains," in that way spoiling my meaning); some of them—the extremes—differing very materially from others. If all the powder grains in a charge had exactly the same and the right proportions of saltpeter, sulphur and charcoal, and these were mixed the same in each, then all would be changed into their gases in the same length of time; but it is impossible to mix these three substances so intimately together in mass, that when the mass is grained into powder all will be the same. Some grains will be nearly pure sulphur, which we all know burns very slowly and does not explode, others will be sulphur and charcoal; they will also burn slowly, etc. These pellets of sulphur and of sulphur and charcoal will be projected from the muzzle of the gun afire, and fall to the ground afire. Here is a sample—the common 22-caliber, rim-fire cartridge, short, containing three grains of very fine and strong powder. I have often seen when firing these from a 30-inch Ballard after dusk, grains fall clear to the ground ablaze. Once I was standing up and firing this rifle over an open dish of powder—about a pound—from which a party were loading shells. The dish was about eight feet in front and six feet below the muzzle of the gun, when one of these sparks of slow-burning compound—we can't call it powder—dropped into the dish and got up a regular "picnic" among some ten or fifteen of the boys, scorching some of them severely. Now, if there ever was a gun overcharged with coarse powder (FG), it was that tin cup. But I think it all burned inside or outside of the cup, at least I do not recollect of an individual grain getting away. Possibly if there had been white paper spread around sufficiently, we might have gathered at least a charge or two.

But why say more on this subject until after careful experiment. Assertions prove nothing. I shall experiment in this line as carefully as possible and if I find that I am wrong I will own up. It may be that nearly all of us have been wrong, been laboring under foolish delusions. For if an overcharge of powder don't all burn, we have been very foolish for thinking that our guns would "kick us heels over head" if we put in ten drams of powder instead of five, for according to this newer philosophy no more than five drams can possibly burn in a ten-bore gun.

BYRNE.

LACON, Ill., May 17.

Editor Forest and Stream:

I have just been testing my pair of wildfowl guns to see what I can get out of them. (Inclosed targets.) These guns are of no use except for wildfowl, as they shoot so close at short distance as to tear quail or young chickens all to pieces. I have just cleaned them up and put away till next November. I consider I am at fault if I do not kill geese or ducks at 80 to 100 yards on the wing. The chances of holding far enough ahead on swift game are great; it takes long practice. It takes me three or four days every season before I get the hang of it. Red River for sixty miles is one vast bed of sand, making the best goose ground I know of this side of the Rockies, and from November till March a sportsman can get his fill of goose shooting. For other shooting I presume that my guns make as poor a pattern as a man could find in a month's ride. I use a plain cylinder for quail and most of the time on turkey. No one could persuade me to use a choke on quail over a dog, or even snipe, yet the mania for close-shooting guns increases. I know hundreds who use 10-pound 10-bore close choke on quail when a 16 or 20-cylinder would be the weapon.

ALMO.

HENRIETTA, Tex.

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

The articles on "Choice of Hunting Rifles" tell pretty plainly that the majority want a rifle with a bullet heavy enough for good execution and the flattest possible trajectory. In the May 22 number of FOREST AND STREAM the article from "C. D.," which overflows generally with good sound sense, contains one statement which is the object of this letter to disprove, viz.: "The number of repeaters thus far developed that fill the bill can be counted on the thumbs of a one-armed man," and all "because they shoot with too high a trajectory, throw too much lead with too little powder." Not knowing what repeater is to be counted on that thumb, it is supposed to be the one that shoots the least lead with the most powder. Now let us see. It is the old, old story of condemning a good rifle on account of its ammunition or lack of ingenuity in preparing it. "C. D." points it out all through his article, but at last does the very thing himself. He says: "There are times when a man has nothing else to do, and he may very pleasantly and profitably inspect his ammunition. If he reloads it himself, then the reloading, if properly done, is an inspection." With the above I decidedly agree. I think I have loaded every shell I have used hunting for four years, and in doing so I keep in view a flat trajectory. I put in all of my .45-75 Winchester shells 90 grains of powder and 300-grain bullet hardened 1 to 11; but what I prefer to do is to buy new cartridges, draw out the bullet and put in 20 grains of Hazard No. 3 ducking powder, and then seat the 300-grain bullet aforesaid.

I do not know just the trajectory at 200 yards, but venture the assertion that it will compare favorably with any other. Another thumb, please.

I can take any empty government shell and load it with 90 grains powder and the 300-grain Winchester bullet; but, better still, take out the bullet from a new cartridge and put in 85 grains of powder above named, or some equally as good, and seat the bullet. This I have repeatedly done and work them perfectly through the magazine. The recoil is not as much as before changing, and they are perfectly safe in any rifles that will take the United States government shell, which are several. So several more thumbs are required. The last-described ammunition I used hunting deer with a Marlin rifle in Northern Minnesota three years ago. I do not know that the new .45-85-285 cartridges, so favorably spoken of and used and advertised by the Marlin Arms Company, was the result of my experience, but it tickles my vanity to know I led off "in that direction." Two years ago, while hunting in Montana in company with a friend who had a .45-60 Winchester, I had two rifles, the .45-75 Winchester, with modified ammunition, as before described, and a Hotchkiss, with 90-300 (government shell). After shooting over a deer's back at 100 yards and under his belly at 200 yards until he got tired of it, I persuaded him to try my Winchester and I would use the Hotchkiss. At the end of one day he was so pleased with the result that he wrapped his rifle up in a gum blanket and hid it in the sage brush and used mine the remainder of the hunt.

I wrote the Winchester Arms Company two years ago about loading 1,000 cartridges to order for me containing 90-300. They answered they would, but cash must accompany the order as the goods would be worthless for any one else, evidently thinking the inquiry came from a crank. Now, I certainly predict that in less than three years just such cartridges will be on sale everywhere, the same as the .45-85-285 are now (which, by the way, is nothing but the government shell with modified charge, and not a special rifle, as a great many think), and such cartridges will not "be worthless for any one else."

In all my use of a Winchester I never got "balked," except where it was clearly my own fault by reloading my shells so many times that they were swelled and would not enter the chamber or would not extract after firing. The .45-90 I prefer to the .40-90, for the reason that when an animal is shot clean through, the .45 hole is the most deadly, one of your correspondents to the contrary notwithstanding. As for comparison of the recoils, trajectories, etc., I know nothing, never having seen a .40 90, but the recoil of the .45 90-300 is not so unpleasant as the .45-75-350 with the same weight of powder and lead as the express Winchester .50-caliber. Is not the .45-caliber entitled to the name "express?" I think so.

C. M. SKINNER.

MINNEAPOLIS, Minn.

PHILADELPHIA NOTES.

PERSONS living in the section of Pennsylvania lately visited by forest fires state that damage has been done to the ruffed grouse of that section. One farmer, who resides about ten miles from the Lehigh River, told your correspondent he had found two or three nests of scorched and deserted eggs, and from all I could learn during a trip to the Lehigh Valley (from which I have just returned), the prospects of good pheasant shooting in that region for the coming autumn is very poor. Deer have been coming to neighborhoods from which it was thought they had long since been driven. The same gentleman informed me that several had been frequenting his rye field within the past two weeks, and that he had on more than one occasion seen them. This is within ten miles of a town of at least fifteen hundred inhabitants.

Mr. Harry Parker's estate is now offering for sale a number of semi-domesticated deer, which have been for a few years running at large within the inclosed park this gentleman took so much pride in at Mauch Chunk, Pa. The Bloomingdale Park Association should secure these specimens, as they are fine ones.

The stay of the bay birds on our near New Jersey shores was a brief one. Many were killed during their short sojourn. The professional market gunners at the different sea side resorts have now put away their guns and are getting their yachts and sailboats in trim for the summer season, and their attention will mostly be given to "waiting upon the boarders" unless the demand for gulls and water birds for hat ornamentation should offer a more lucrative occupation. If the rage is to continue another year, millinery establishments will send to New Jersey coast, as they did last season, taxidermists who will remain at the different hotels the whole summer and purchase everything in the shape of feathers, from a strand snipe to a blackheaded gull, and better wages can be earned by the baymen than sailing sea-side visitors at $3 or $4 per day. It is hoped the fashion spent itself last year, and the gulls and beach birds may be spared to ornament the sea side and not the hats of the city belles.

HOMO.

MAY 31.

THE COST OF GUNS.

Editor Forest and Stream:

"Wells's" article on "English and American Guns," reminds me of a conversation I had some years since with my late colleague on the New Hampshire Fish Commission, Mr. A. H. Powers, of Grantham, N. H.

Mr. P. had for some time the superintendence of the forging department for the Providence Tool Company, at the time they were deeply engaged in the manufacture of military rifles for foreign governments, and he informed me that the cost of gun barrels was a mere trifle compared to the common opinion of their expense, and that the material, forging, rough boring and turning, all of which can be done by machinery, would amount to but a very few dollars for a pair of first-class barrels. Of course a large amount of hand-labor can be put on them afterward to get a high finish, and if all the work was done by hand it would be still more expensive, but still, he told me a pair of barrels does not cost anything like as much as they are supposed to.

"Wells" is right also about the cost of locks. It is the fashion among the old school gunsmiths to decry "machine-made" guns, but as a practical mechanic, I beg to say that no hand-work can equal the precision of a machine. Witness the military rifles and revolvers, all made by machinery of American invention, to say nothing of the sewing machine, machine tools, agricultural implements, etc., into the cost of which hand-labor scarcely enters, and at best forms but an insignificant item.

SAM'L WEBBER.

SHOOTING NEAR NEW YORK.—I have never seen so many partridges and quail as at Nyack. I lived near center of village. Last November in one day I put up five bevies of quail and sixteen partridges within two miles of my house. They are all to be found along the ridge which runs from Oak Hill Cemetery north to Hook Mountain—partridges on top of ridge on Maxwell farm and north of it, and quail on eastern slope of ridge. We will have fine quail shooting here this fall. I hear them whistling in every direction. There are three broods on our place alone. East of Cresskill station, on the Alpine road, is the best woodcock ground I have ever seen. My dog found four nests in one place there this spring, and he is a youngster, never been trained at that. He did not flush the old birds, just pointed, and I am told it was a beautiful sight. I think this will do for so near the city.—N.

MASSACHUSETTS.—Salem, Mass., May 30.—I was at Ipswich Beach the 22d. There were a good many "peeps," and I also saw eighteen beetleheads (*S. helvitica*) and fourteen of the greater yellowlegs. I also saw a least bittern that had been shot and thrown away by some one, and as it was "ripe" when I found it, I much regretted the loss. Woodcock are hatching, and some quail are heard whistling. I don't think hawks have been as numerous this season as usual. The season thus far has been wet, and if it continues it will have a tendency to help fall gunning. Of course, now things are between "hay and grass" so far as shooting goes. —X. Y. Z.

MANITOBA GAME LAW.—Several changes have been made in the game laws. The various close seasons during which game and fur-bearing animals must not be shot at, hunted, trapped, taken, killed or had in possession within the Province of Manitoba are as follows: All kinds of deer, including cabri, or antelope, elk or wapiti, moose, reindeer or caribou, or the fawns of such animals, from Jan. 1 to Oct. 1. The following varieties of grouse, commonly known as prairie chickens or pheasants, and partridges, from Jan. 1 to Sept. 1. Woodcock, plover, snipe, and sandpipers, from Jan. 1 to Aug. 1. All kinds of wild duck, sea duck, pigeon, teal, wild swan, or wild goose, except the variety of wild goose commonly known as the snow goose or the wavy, from May 1 to Aug. 15 Otter, fisher or pekan, beaver, muskrat and sable, from May 15 to Oct 1. Mink and marten from Oct. 15 to Nov. 1. Any such animal or bird may be had in possession for the private use of the owner and his family at any time, but in all cases the proof of the time of killing, taking, purchasing or purpose for which had in possession shall be upon the person so in possession. This provision merely applies to animals or birds killed during the open season, and kept over until the close season, and does not permit any of the animals or birds above mentioned to be killed or taken during the periods in which they are protected. No eggs of any of the birds above mentioned shall be at any time disturbed or had in possession. None of the animals or birds above mentioned shall be exported from Manitoba at any time whatever. Any person violating any of the provisions of the game laws is liable to a fine of $50 and costs for each offense, with imprisonment in default of payment. The Department of Agriculture has already appointed about two hundred game guardians in different portions of the Province. This number will be increased as rapidly as possible. In order to enforce the law in the city of Winnipeg, which heretofore appears to have been the principal place in which violations occurred, owing to dealers purchasing and selling during the close season, a sum has been placed in the estimates to provide for the payment of expenses which may be incurred in prosecuting offenders, and securing their conviction and punishment.—H. A. P.

GAME IN THE SOUTHWEST.—Fort Bowie, Arizona Territory.—In Arizona and New Mexico the deer are growing so scarce that it is almost impossible to see one. You may travel for days and never see any, where a few years ago you could sit in your cabin doors and shoot them at any time. It is almost impossible to see an antelope at all, and they are growing more scarce every day. At the rate they are disappearing inside of five years there will be no such animal in the Southwest. There are more white-tail deers in the country than of black-tail, for the former are so wild that the hunter and trapper cannot get near them. The black-tail deer is almost as scarce as the antelope. Wild pigeons, ducks, partridges, prairie chickens and wild turkeys are found in abundance, but the reason for this is that there are very few shotguns in the country, and the hunters prefer large game to fowl. Of course, there are laws for the purpose of prohibiting the killing of game in certain parts of the year, but they are not enforced. About the only place large game can be found at the present day is away up on the mountains and along the Mexican line. As soon as large game disappears, the country will be flooded with shotguns and the small game will disappear. Even now shotguns are becoming very plentiful.—OLD TIMER.

FISHING AND SHOOTING RESORTS.—The Erie Railway (J. N. Abbott, General Passenger Agent, New York) and the New York, Ontario & Western Railway (J. C. Anderson, General Passenger Agent, New York) have published guide books to summer resorts reached by their lines. For sportsmen's aid they give particulars like these: "Rutherford, N. J., fine fishing in the Passaic; woodcock and snipe shooting near Passaic, N. J., fine fishing on river; Lake View, N. J., good fishing at Dundee Lake; Hohokus, N. J., woodcock, quail and pickerel, very good lake fishing; Suffern, N. Y., bass and pickerel fishing, partridge, quail and woodcock; Ramapo, N. Y., good fishing and gunning; Sloatsburgh, N. Y., a paradise for sportsmen, bass and pickerel fishing, good hunting, partridge, woodcock and quail; Lorillard's, N. Y., black bass, pickerel and perch, privilege of fishing, liberal price per rod per day, boat included; Southfield, N. Y., partridge, quail, rabbits, duck and woodcock, good fishing in lakes near by; Turner's, N. Y., a retreat for sportsmen, partridge, quail, woodcock, bass, pickerel, perch; Monroe, N. Y., black bass, pickerel, perch, woodcock, quail, rabbits." And so on through the catalogue.

LET THE TRAPPERS BE HEARD.—*Editor Forest and Stream:* I notice a letter in your last number signed "Tillicum," from Olympia, W. T., regarding liability of present style of Newhouse steel trap to throw out the foot of the animal, and asking for an improvement. In my opinion a steel trap should always be set lengthways in the path for beaver and otter, and by so doing they will not set their foot on the catch that holds the jaw down, but will set their foot fair on the pan, and as the trap is sprung their foot will not be lifted up by the jaw of the trap. I think myself some improvement might be made by having the jaws wider and higher, retaining the same size of spring, and I think, too, that an entirely different style of catch to hold the jaw might be advantageously substituted. It is to be regretted that trappers as a class are not much given to writing. Your readers miss much valuable and interesting matter thereby. For the experience of many a remote trapper, if written in a plain, undemonstrative manner, would add very much to the pleasure so many brethren of the craft derive from your good paper.—J. LEE SMEDLEY (Dugdale, Pa.).

SNIPE FLYING FROM THE WATER.—Glendale, O.—In reading Forester's "Field Sports" revised ed. p. 164), I see he notices the fact that snipe swim across narrow streams, etc., and wonders whether they could take wing from the surface of water. He doubts it. A recent experience of my own may therefore be of interest. While shooting one day this spring, I marked down an English snipe on the edge of a large open pond. Upon walking it up, it flew out directly over the water, and fell to my second barrel. I had no dog with me, and so after replacing my shells and preparing myself to wade, all of which time the snipe lay in the water, I started out after it. I had gone perhaps fifteen yards, and the water was already above my knees, when the bird rose clear of the water into the air and flew about a hundred yards and dropped again. By wading again I secured it, and proved it to be beyond a doubt a snipe. There was no grass nor weeds in the water from which it could have sprung. Of this I am positive. Is not this an unusual feat for a *Scolopax wilsoni*?—T. P.

PATERSON, N. J., has a new ordinance which forbids the capture or sale of trapped nighthawk, whippoorwill, sparrow, thrush, meadow lark, skylark, finch, martin, swallow, woodpecker, robin, oriole, red or cardinal bird, cedar bird, tanager, catbird, bluebird, snowbird, or other insecticerous bird. It also forbids nest robbing. This is a wholesome law. Hundreds of song birds have been killed daily in Paterson, a city covering a large amount of territory, but the efforts of the officers of the Passaic Association under the ordinance has put a stop to this. The State law is worthless, as it permits killing of birds for stuffing.

OFF THE CHESAPEAKE BAY—May 26.—The shooting this spring is very fine. The curlew are unusually plentiful, the willets very scarce. Calico backs and graybacks are in profusion. A trio of us killed, one evening off Cape Charles bar, fifty-two curlew. The robin snipe have just made their appearance, and a very late one. The prospect for summer shooting, judging from the number of sportsmen here this spring, will not be very good, as a large flight of spring baybirds generally is followed by a small flight in summer, and *vice versa*.—CHASSEUR.

PENNSYLVANIA PROSPECTS.—Hollidaysburgh, May 27.—Prospect for summer shooting is fair. Black bass and catty fishing is already begun, with satisfactory results.—JUNIATA.

Sea and River Fishing.

CAMPS OF THE KINGFISHERS.

Black Lake, Michigan.—IV.

WE roused Merrill out and were on the way to the lake before sun-up, through green fresh woods, vocal with bird melody and redolent with all the sweet smells of an early morning in the pines and cedars.

Three quarters of a mile over a rough road, part of which was swampy, brought us to the lake, where four boats, pulled up on the shore, awaited our use, and Merrill pointed out the location of the camping place he had selected for us, a couple of miles below, which, he said, could be reached with the wagons by driving along a narrow strip of sandy beach which lined the shore down this side as far as we could see.

We did not expect to fish any that day, and started with only two of the boats; Frank, Old Dan and the Deacon in one boat and neighbor Merrill and I in another, the others preferring to stay with the wagons. Before we had gone a hundred rods a shout from Frank's boat ahead proclaimed that something had happened, and looking in their direction we saw the Deacon, who had before leaving home concealed a trolling line and spoon somewhere about his person, hold up a shining small-mouthed black bass that, when weighed, pulled down the scale to nearly four pounds. This was a symptom, a very large-sized symptom, of good things to come, and then we all shouted and felt better than we did the night just passed. But we had our opinion of the Deacon for snaking in that first bass on us in such a surreptitious manner, and with a hand line, too. Shade of gentle Thad Norris! A solemn conference was held that night around the flickering camp-fire and the Deacon was voted a pot-fisher of the deepest dye, and fit only to rank with a man who will fish for black bass with worms.

In crossing the mouth of a little creek (Rocky Creek) near where the bass was taken, one of the horses attached to the spring wagon took it into his cranky old head to mire in the soft sand and fall down. The driver and the boys in the wagon jumped out and into the water; a couple of feet deep, and yanked him to his feet before any damage was done, and putting their strength to the hind wheels, quickly had all safe on the beach across the creek with no more serious consequences than a partial wetting and a slight scare; thus pulling out of a "category" that might have been a calamity had the horse drowned. A few hundred yards further down the wagons came to a halt where a couple of trees had fallen across the strip of beach, and as they could not drive around them through the wood nor around the tops lying in the water, we were forced to unload and take to the boats. The other two were brought down and all four were loaded and started to camp, the drivers stopping long enough to feed the horses before starting back, but declining our invitation to go to camp and take breakfast.

Two trips of the boats heavily loaded took the traps to the camping place, and after a hurried breakfast, of which the Deacon's bass formed a toothsome part, we decided that this place Merrill had selected was just no camp at all, and we would hunt for a better one.

He had hacked out with his axe a small square in a dense cedar swamp within a few feet of the water, which was barely large enough for a good sized tent, to say nothing of four, and a kitchen fly, and the ground was lumpy, damp and spongy; in short a spot that Dick said would be "very dilatorious to our health."

The only redeeming feature was a little stream running into the lake at one side of this opening; but even this was a small inducement to stay, as the water in it tasted flat and swampy.

The place would not do, and, taking a boat, Merrill, Jim and I started down the shore to look at a spot about a mile below, that M. said was dry, grassy, free of underbrush, and "big enough to hold fifty tents, or a hundred of 'em if we had 'em;" a place he would have picked on in the first place only the drinking water was not handy, he thought. Arriving at the spot a hasty glance satisfied us, and, leaving Jim to cut tent poles—we had brought the axe with us, thanks to the Scribe's usual forethought—Merrill and I went back, and the work of moving began again.

Two hours of hard work completed this last move, and as old Ben lent a hand to get the last box out of the last boat he was moved to warble a line from an old song, slightly altered to fit the occasion, "Sich a gittin' to a camp I never did see"—agreed to on the spot without a dissenting voice.

In two or three hours more the four tents were up in good shape, a fly stretched for the dining-room, stove put up, and supper and dinner at once under way, and we began to feel at home and well pleased with our surroundings. A nice level, dry place, five or six feet above the lake level, plenty of grass for a carpet, no underbrush, trees enough for shade, abundance of firewood along the beach, and a cold spring branch within fifteen or twenty rods of the "kitchen door"—what more could heart of camper-out hanker after? A few rods back of us a strip of cedar swamp ran along the foot of the low hill, and from the brow of this, stretching away toward Little Black River, was another vast tract of plains—and huckleberries.

A hundred yards below us stood an old roofless loggers' camp, back a short distance from the water, which may serve as a land mark for any wandering brother who may some time want to find about the best camping ground on Black Lake.

After supper was over and pipes lighted for a resting smoke, neighbor Merrill gave us a taste of his quality as a talker "of many parts." He was wound up to the last notch, and as this was no doubt the first opportunity presented for some time to unburden himself, "he jest turned himself loose," as Ben said afterward, "and let the old machine buzz till it run down."

He said the plains back of us were a great resort for the black bear during huckleberry time; in fact they were regular "summer resorters," and as this fruit was just now in its prime, we were liable to see a bear most any day that we would take the trouble to go a half mile from camp in the burnt district.

And then he told us how, a few days before our arrival, one of his boys and one of the Stewart boys had been out on the plains, not far from our camp, bringing in a pair of stray oxen, and how they came suddenly on a monstrous bear eating berries by the roadside, and how one of the boys put a load of birdshot into him at short range and the bear got away, and how in the evening he and the boys and the dogs had picked up the trail and run him half the night, finally losing him in a cedar swamp not far from his house, after he had "jest licked the daylights out o' all the dogs."

Without giving us time to catch a breath after this story, he gave the crank another turn and proceeded to dilate at length on Turk's merits as a bear dog, and dog for the "general run of all kinds o' varmints." Turk was a splendid specimen of Scotch terrier, very large for this breed, sinewy and wiry looking as a wildcat, and possessed of rare dog sense and intelligence. He sat on his haunches near his master's knee with eyes half closed, as though he had heard this story before, and as the narration of his many exploits was volubly rehearsed and his name occasionally mentioned, he would look up at the old man with one eye shut and the other half open, as much as to say, "Draw it mild, old pard—a leetle milder, ef you please."

After giving us a long history of Turk, he called him and said, "Turk, show the boys that scar."

We could see an old scar that began near the top of the head and extended down back of the left ear under the jaw, which had healed so well that it was barely noticeable unless closely observed.

"Bear done that," said Merrill. "One night a bear came a smellin' around the house—spect after a deer I'd killed an' hung up that day, and you bet Turk jest went for him. If there's anything Turk likes to fight it's a bear, and as I was a sayin' he went fur that bear like a house afire, and the way they kicked up the sand around them was a caution. 'Twas after night, and before I could git up and git my gun they had fit across the clearin' into the bushes, and sich a yelpin' an' snarlin' an' thrashin' around in the brush you never heard. Before I could git to 'em the bear had laid Turk out an' got away, an' when I got the poor feller back to the house he was the wust used up dog you ever see, but gentlemen, he never whined, no, siree, he was too gritty for that. One leg was bad hurt an' he was all over blood, an' one side of his head was jest cuffed loose—that's the scar—but he never whimpered. I patched him up an' nussed him for three weeks before he could git his jaw in workin' order agin, but he's all right now, an' would tackle a bear jest as quick as he would a mink; fact is, he 'pears to hev a grudge agin bears ever since, an' I b'lieve he would swim the lake any day if he thought there was a bear on t'other side waitin' for a fight. Why, I've bin offered twenty dollars for that dog, but money won't buy him, no, sir, he'd be war up to old Merrill's if I'd sell Turk, for if you b'lieve me, boys, the young uns and my wife thinks more o' that dog than they do o' me." All this was rattled off in about the words I have written, as near as I can now recall them, and as he "run down," he broke into a quiet chuckle that could have been heard half a mile, Turk, meanwhile, snapping aimlessly at an imaginary fly and dozing through it all with the air of a martyr.

Here the Scribe in the goodness of his heart offered the old man "a drap to moisten his thrapple" after all this expenditure of wind, but to his utter amazement he declined with the terse statement, "I never drink liker," which scored a point in his favor with at least one of his auditors. The sun was now down, and straightening up from the campstool he said, "Well, boys, I must be goin' back; I'll take one o' the boats an' bring that lumber down in the mornin' to make your table."

"Speakin' o' bears," as he dipped a cup of water out of the bucket, "there's one thing about bears that mebbe you don't know. Sometimes they come smellin' 'round a man's camp in the night, an' sometimes they git into mischef, break up things an' carry off any kind o' loose vittels layin' 'round, but you needn't be scared of 'em to-night; there's one thing about bears, they never come botherin' 'round a man's camp the first night, it's most allays the second night, or mebbe the third or fourth night, an' if they don't come then, they ain't a goin' to come at all, but they won't come to-night, they allays come the second night, you can bet on that," and with this comforting assurance he shoved off in his boat and went up the lake singing, "Come all ye galyant sailyers," or some such ancient ditty, in a camp kettle tone of voice that I confidently believe could have been heard clear across the lake, a distance of six miles.

Turk was indeed a splendid dog, the finest Scotch terrier I think I ever saw, and without a doubt deserved all the praise his master bestowed on him. He was a hard dog to get acquainted with, but as he got the hang of the camp, kind treatment got the better of his surliness and Turk took his place as a favorite, his bright eye and the wag of his stump tail always insuring him a welcome from the boys.

Old Ben sat for some time holding his campstool down, one leg over the other, looking up the lake at Merrill's receding boat, something evidently on his mind, and as he got up and knocked the ashes out of his pipe he said in his deliberate way, "Boys, it's a heap o' comfort to know them bears ain't a comin' 'round to-night; it's mighty good in 'em to give us a rest the first night, for we're too tired to entertain 'em." Here a few whiffs to start a fresh pipe. "To-morrow we'll hev the camp all fixed up slicker'n grease, an' ef they drap in on us in the evenin', we'll git up a reception fur 'em. Receptions is one of my best holts." A few vigorous puffs to keep the pipe from going out seemed to develop a new idea, and he went on. "But maybe they'll come 'round to-morrow night, an' maybe they won't. Old Merrill 'pears to hev 'em down fine, been studyin' their points some, it's likely, but you kin just put up your last nickel that he kin smell a camp further'n a bear kin, an' mind ye he'll be here oftener'n the bears will."

Dick thought "if Merrill's predilections about the bears were likely to come to pass, we had better hunt another camp, as they were a little too adjacent for him, but he could bear it if the rest could."

Old Knots said if trouble was "bruin" it behooved him to meet it with spirit, and by certain sounds (with which we were somewhat familiar) coming from his tent a minute or two later,. we knew he and the Deacon were "meeting it." The talk was mostly "bear," till old Dan growled something about this bear joke being worn about threadbare, which checked the unexampled display of smartness and turned our attention to getting things in shape for a full night's needed sleep and rest.

If there is a place, to use Ben's favorite expression, "on the face o' this livin' earth" where one can enjoy sweet and refreshing sleep, it is in these wilds of Northern Michigan after a hard day's work getting into and fixing up a camp. Happily the mosquitoes and "no see 'ems," like Merrill's bears, were second night varmints and our first night in the brush was one of solid comfort. We were under shelter none too soon, as rain began to fall some time during the night, and continued nearly all of next day, which had a rather depressing effect on the camp; but we put in the forenoon in stretching a fly for Frank to cook under, putting the two stoves in place, overhauling tackle, smoking, cracking dismal jokes, wishing it would stop raining and blessing Merrill for not bringing the lumber for the table.

A rainy day in camp; drizzle and drip. The patter of rain on a well-pitched tent is always musical; sweeter and more soothing perhaps after a week's pleasant angling, but when it comes on a first day in camp, before you have wet a line, when all is eagerness and expectancy and every fiber in you is crying out to "go out and fish," the melody loses a trifle in sweetness, and the accompaniments jar and grumble and seem all out of tune.

Recollections of that afternoon are rather dim, but I recall the fact that the fever so possessed some of us that we went a-fishing—and I believe there were only two of the party so badly affected—old Dan and the writer. We made ourselves believe we were ravenously "fish hungry," and this was excuse enough for going out in the rain to procure this one necessity to the peace and well-being of the camp—fish for supper.

We had little time to hunt up the good feeding grounds or study the water, as the pattering rain so disturbed the surface of the lake that we could not get a good view of the bottom and surroundings along shore, nor tell where the water looked "fishy," but before time for supper we had taken enough pickerel to keep the camp "sortin' bones" for a week.

No bass, however, were taken, although the most tempting of speckled frogs and a trolling spoon were held out as special inducements to provoke a difficulty.

Back again in camp we found neighbor Merrill had not come with the lumber, and Ben accounted for it by saying, "Guess he's been hidin' round in the woods to-day notifyin' them bears that they'd better be a little peart or they'd make him out a liar, fur you know this is the night they was to git in their work on us."

But neither Merrill nor the bears disturbed the quiet of our slumbers that night, although I am not quite sure his confident air about the promised visit had nothing to do with the excuses made for overhauling the firearms belonging to the party, for I confess to slipping a cartridge in a .44-caliber Wesson rifle and placing it in easy reach, and Dick and Ben under the thin subterfuge of getting a shot at a duck a half mile down the beach loaded their shotguns heavily with buck, instead of duck shot, as it transpired next morning when one challenged the other to a trial of skill at a mark.

[TO BE CONTINUED.]

TROUT AND WATER SNAKES.

WE used to think that the water snakes could not catch a trout, but knew that they could take bullheads. We have seen them often as they worked and strained to get the horns down their throats, and this even when these projected nearly an inch on each side of their jaws. And they always succeeded. But as for catching a trout, this we considered was beyond them. May be we thought they would not dare to pursue such a kingly fish. But they will, and will capture them, too.

It is several years since we had an opportunity of witnessing how this was done. We will give it as we saw it, though since that time we have seen more than one trout disappearing between a snake's jaws, and found many a scarred one where, no doubt, they had escaped the almost fatal "strike" of the water snake. But the period in question was one pleasant morning in June. We were on a walk, and crossing a stone bridge, that extends north and south over a spring stream. A stream, we might remark, too, that was once quite celebrated for its trout fishing. Just above the bridge was a small pond, about fifty feet long and twenty wide, with a depth of six feet in the deepest part near the bridge, while it shallowed away to eighteen inches at its upper end. The pond was in the very position for observing what took place in its depths. This bridge was fifteen feet above it, and the nine o'clock sun lighted up its waters, so that when the wind did not blow, everything was almost as transparent beneath the surface as in the air above. This morning it was especially clear, and one standing on the bridge could see every old tomato can, fragment of china, iron hoop, and white pebble that lay scattered along the bottom. For the pond was quite near the owner's residence, and not far from a village.

In this place were some fifteen or twenty trout, and they frequented this deep hole near the bridge. It was only necessary for one standing on the bridge to look over the low stone parapet that guarded it, and he would see the fish hurrying and scurrying, either to the upper end of the pond or under an old log that lay close to the abutments of the bridge. Among those fond of looking at the fish was the writer, perhaps sometimes with longing eyes. But we liked to put our head suddenly over the parapet and see the fish pass out of sight, almost as a shadow, and then return, if no movement was made, after a few minutes.

This morning, as we have said, the pond was especially still and transparent, and everything almost as clear as in daylight, and as usual when we looked over, away went the trout. Only they were congregated, we noticed, not in the place where they generally lay, but some six or eight feet to the right of it. But what is that swimming or crawling in the mud there? Is it an eel? No, it has no fins; then its tail is different, and the body is too slim in proportion to its length. Then that eye and head are not those of an eel; and see, its skin is mottled, which even appears through the mud and sediment in which it seems to be burying its body. It is a large water snake. Let us watch; yes, let us watch. Here come the trout back. How carefully they come, as though they were suspicious of something besides the eyes looking at them over the parapet. Now they are going right up to that old piece of stick; and there lies the snake close alongside of it, and I declare he has either changed his color or covered his scales with mud. It must be mud, for there is a little patch, like an oozy bed, near him. But now look out. Here come the fish. Snap! snap! he strikes at them. My! no toad's tongue ever went swifter than that snake's head. He must have caught one. No, he did not. And there he strikes again at that little fellow. We cannot stand this. We raise our hands and the fish hurry away. But see the snake. He seems to be burying himself in the mire and sediment again, while we run to the entrance of the bridge and bring a stone as large as we can carry, and toss it over the place where he hides. When the ripples have subsided the stone is where we meant it should go, but whether the snake was under it we never learned. Most likely not.

Our next experience with water snakes was nearly half a mile further up this same brook. This time we were trying, in July, to get a few fish for a sick girl in the neighborhood. We knew a 'good hole" by a stump where there were some low willow bushes to screen the fisherman. Before we got to the place though, we saw through an opening in the banks that the water was quite agitated and at times the head of a trout or something would appear. They are having a good time jumping there, thought we, and we will get some. Hurry, now! But let us look at this "coachman" though, before we cast. All right! Go carefully, and throw back-handed. Now, ready? No, stop! What is that? Why see that trout! What in the world does he keep his head above the water for? It must be he is sick and trying to get under. I declare he is coming this way, too. I wish he would keep still. What does make him bob so? And a "ten-incher," too. Oh, I see! An immense water snake has him in his mouth, and he is to trying to drown him. He has caught him just above the tail. I cannot stand this. I will kill that snake. Give me a stick. That fish would weigh three-quarters of a pound nearly. Here! Slap! whack! The trout is gone, and here comes the nasty snake straight for my legs and I cannot pull this foot out. It is caught between the rocks and I will go over directly. Get out you beast. I don't want you to wind around my legs Ah! It is the large rock that my right foot is resting on that you want, is it? You are hurt a little, too, and mean to hide. I am glad. And now I will have another peg at you I can see half your body. You are only a foot under water and I will drop this rock on you. That is good, you will catch no more trout.

This snake was a yard or more in length, and the next time we visited the stream, his body, nearly twice its natural size, was lodged against a stone a few rods below the place where we killed him. We congratulated ourselves when we saw it that he did not get a chance to wind around our legs and that the lives of many trout had most likely been saved.

But since that time, as we have said, we have seen several snakes with trout between their jaws. They succeed best in capturing them in August, when the streams are low, and in small brooks where the trout have little chance to escape. They pursue them over and under everything and it is hard to tell the injury they do, especially when the water is shallow.

A. H. G.

PENNSYLVANIA ANGLING NOTES.

IT did not surprise me at all to learn while on a late trip to the Lehigh Valley that large trout in some numbers have been taken in waters which it was thought had long since been depleted of fish. One stream in particular which to me always looked very "trouty," and which I was always told contained only chub, was fished by an intimate friend on being informed by less expert anglers than himself that large fish kept stripping off their flies and breaking their leaders, and to his astonishment, trout of good dimensions were basketed.

There are many large streams in Pennsylvania flowing into the Lehigh which have been given up as troutless by the native anglers simply because the fish do not respond to their bungling efforts to catch them, when there are many favorable days during the season, when an expert fly-fisherman can take a fair number, at least enough educated ones, to furnish good sport. We know how long the Sauken Creek at Hellertown, Pa., gave sport to a few scientific fly-fishermen, when to even the natives of its banks it was thought the trout had years ago disappeared from its waters. Because the country beanpole and horse hair line and worm bait cannot at once yank trout from a stream, it is no reason the waters do not harbor the fish and cannot be taken by the angler who imitates nature and is cautious.

HOMO.

Mr. A. M. Spangler, of the Anglers' Association of Eastern Pennsylvania, has been telling a Philadelphia *Times* reporter about the fishing in the neighborhood of Philadelphia. He says:

Bass can be caught in the Schuylkill all the way to Royer's ford, but at Reading and below that point they are poisoned by the sewage. They can be caught in the Delaware and its tributaries, from Trenton to the headwaters. There are not many bass found in the Lehigh. The Susquehanna, at a number of accessible points, has, within a few years, become noted for the excellence of its bass fishing. Both the striped and black bass are caught. Beginning at Port Deposit, striped bass are taken weighing as high as fifty pounds and black bass range in weight from two to seven pounds.

The bait used varies according to circumstances, as the black bass will sometimes take a fly readily and then again he won't. Crawfish and minnows are often used and the ugly black worms called helgramites are good. The best bait are small fish brought from Baltimore called "mud dabbers." At Port Deposit one can get boats and men to go with you for very moderate sums. June and July are the best months, but there is no restriction under the laws of Maryland, and you may fish the year round without molestation. Above Port Deposit there are many good fishing points, of which Conowingo Bridge, Bald Friar, Peach Bottom, White Eddy and Safe Harbor occur to me now. Further up are Columbia, Marietta and many other excellent spots all the way to Harrisburg and up the east and west branches of the Susquehanna. The Juniata is full of black bass, and they are good-sized ones, too. Bass are the gamiest fish caught, and when a ten-pound, striped fellow gets hold of your hook it doesn't take you long to find it out.

Below Havre de Grace, at the mouth of the Susquehanna, fine sunfish or moccasin are caught with a fly. They are also taken in the Northeast River in the channel at some stages of the tide and at Spesutia Island, further down the bay. Perch fishing is especially fine at the mouth of the Sassafras River. To get there you take the Philadelphia, Wilmington, and Baltimore Road to Clayton and go by way of Still Pond to Betterton. The perch there vary greatly in size, the heaviest weighing a pound and a half. Perch can be caught along the Delaware on the bars, but they are rather small. Early in the season good-sized ones can be caught up the stream in the shallows. Timber Creek and Newton Creek, near Gloucester, are good perch fishing grounds, if one knows his business. The piers at Chester, Marcus Hook and at the mouth of Christiana Creek are famous places to catch catfish, rock and perch. Pennsboro, on the other side of the bay, is equally good. Sturgeon and shad roe are the best bait. Further down the bay, say seventy-five miles, to Sea Breeze, reached by the steamer John A. Warner, you can go off in a boat to Ship John Light and catch your boat full, if the day is right. And close by is Fortescue Beach, famous for fishing and mosquitoes. All the way down the bay, where there are shell beds, you can find good weakfishing, especially at Fishing Creek, eight miles north of Cape May light. Big drumfish are caught here. Matt Quay, you know, devotes much of his time to these fellows. But for real sport go to the Breakwater and you can catch blackfish, weakfish and sheepsheads in any quantity.

Outside on the Jersey coast are the bluefish, now gradually disappearing, and immense weakfish and croakers. It is a curious fact that thirty years ago the croakers were to be found in great numbers, but the bluefish drove them out and destroyed them. Now the bluefish are going and the croakers are coming back. The best time to catch these fish is from the middle of August until quite late in the season I have caught a barrel of weakfish a day. All the sounds and inlets from Cape May to Barnegat are alive with weakfish, kingfish, and sheepshead. Off Townsend's Inlet last season the blue sharks were very troublesome. They would bite off our fish just about as fast as we hooked them. I believe more fish can be caught along the Jersey coast than any other waters in the United States. The good fishing points are Rio Grande, Townsend's Inlet, Somers Point and Beasley's Point. Then if you take the Long Branch road to Barnegat there are Long Beach, Short Beach, Barnegat Inlet, Tom's River and Weirtown, all good resorts for fishermen. But the finest fishing here for seabass and blackfish is found outside, especially off Long Branch. The fisherman launch their boats through the surf early in the morning and on a reef a mile or so off they catch enough for use in the hotels.

Trout fishing is very nearly at an end in this State. In the northern counties patient anglers manage to catch a few small ones now and then, but to do very much trout fishing one must go outside of Pennsylvania.

BLACK BASS IN TENNESSEE.

Editor Forest and Stream:

If you will kindly suggest in your paper, or by private letter to me, how black bass can be shipped, and the proper size, etc, I can make arrangements with fishermen on Reelfoot Lake to supply the United States, if necessary to do so. I have lately talked with some leading fishermen, and in answer to some of my questions they inform me that they can supply them in any quantity and of any size on short notice. This town is only three hours' drive to the lake and to the rapid Reelfoot Bayou, and is from one to eight miles of the Obion, the Forked Deer and South Fork rivers, all of which are abundant of bass, white perch, channel cat, salmon trout, pike, etc., etc. I saw even in last February 600 pounds of bass and perch in one wagon, selling at six cents a pound. If any of your readers want good summer fishing, let them come to this place, via C. O. & S. W. R. R., and go to the lakes or basins, formed by the earthquakes of 1811, and they will find good fishing, good spring water, fine camp ground, fine scenery, clever people, and can have a good time.

I own no land, except my home, and have no nets, no seines, nor any axe to grind; but enjoy rod and minnow fishing, and like for my friends to enjoy it with me. I would take pleasure in answering a limited number of letters, where stamps are sent for reply. I have nothing to sell, but will do my best to give any information in my power about fish and fishing in West Tennessee.

T. L. WELLS.

DYERSBURG, Tenn., May 19.

RED SPOTS ON SALMON.

Editor Forest and Stream:

I notice in this week's number of FOREST AND STREAM, a paragraph headed "What Fish is This?" In your answer you state that "salmon and landlocked salmon are black spotted and have neither red spots nor splashes."

Permit me to correct you. The young fry or parr of both salmon and landlocked salmon have the same red spots as the brook trout, during the first year of their existence. They do not put on the black and silver livery until the end of the second summer, so far as my experience goes.

They have, as your correspondent says, sharper noses and forked tails, and are very active, and rise to the fly readily.

We have taken numbers of them in that way, experimentally, in the Penigewasset River, near the Massachusetts and New Hampshire hatching house, and know that hundreds of them were so taken and called trout by the boys, until the difference was explained to them.

I do not recognize the "red splashes," but the red spots of the young salmon in their "parr" state are even more brilliant than those of the trout, and they are only to be distinguished from trout at a casual glance by the forked tail, and more general sharpness and slenderness of outline.

They have also the same dark cross bands, like those of the common perch, which mark the brook trout in their first year. I should be much inclined to think the fish spoken of were young salmon.

I have just got Messrs. Orvis & Cheney's new book—"Fishing with the Fly"—and must beg leave to say a word in praise of its beauty. The plates of flies are exquisite, and worth more than the price of the book, and the letter press is equally good. The selections are capital, and the new matter by Messrs. Orvis & Cheney equally good, and Mr. Orvis's "Suggestions" eminently practical, as much so as Ness muk's "Woodcraft." Can I say more?

SAM'L WEBBER.

LAWRENCE, Mass.

ARRIVAL OF SALMON.—The first salmon from the Restigouche arrived in New York on Friday last. A few from the Miramichi are also coming. The fish look bright and are bringing fair prices These rivers are the only ones on the Atlantic coast that have yet sent salmon to market this season.

ROD AND REEL ASSOCIATION.

FOR the coming Tournament of the Association, to take place on October 7 and 8, President Endicott has appointed the following Committee of Arrangements:

Hon. Henry P. McGown, Cuttyhunk Club, Chairman; James Benkard, South Side Club of Long Island; E. G. Blackford, New York Fish Commission; S. M. Blatchford, Squibnocket Club; Dr. E. Bradley, Blooming Grove Park Association; Martin B. Brown, Wa-Wa-Yanda Club; D. W. Cross, President Oneida Club; Francis Endicott, President (*ex-officio*); C. B. Evarts, American Fishcultural Association; Hon. James Geddes, Onondaga Fishing Club; William C. Harris, St Lawrence Fishing Club; Dr. J. A. Henshall, Cynthiana, Ky.; Dr. C. J. Kenworthy ("Al Fresco"), Jacksonville, Fla.; William Blair Lord, Oquassoc Club; Thatcher Magoun, Jr., Massachusetts Game Protective Society; C. H. Mallory, Ichthyophagous Club; Prof. A. M. Mayer, Stevens Technological Institute; J. C. McAndrew, Restigouche Club; Hon. R. B. Roosevelt, New York Fish Commission; Isaac Townsend, West Island Club; James L. Vallotton, Pasque Island Club; J. S. Van Cleef, Willowemoc Club; C. Van Brunt, Willowemoc Club; Edward Weston, Greenwood Lake Association; Locke W. Winchester, Restigouche Club; Louis B. Wright, Westminster Kennel Club; Rev. H. L. Ziegenfuss, Christ Church, Poughkeepsie, N. Y.

FRED MATHER, Secretary.

GREENWOOD LAKE.—The fun has begun. The black bass season in New York and New Jersey opened June 1. The season for nabbing poachers opened some days before that date. The Passaic County Fish and Game Protective Association sent a posse of officers to the lake. They had warrants for the arrest of several notorious violators of the law; but these persons had taken fright, and one of them had left the country for good and is not expected to return. In fact, although the neighborhood of the lake was thoroughly searched, none of those for whose arrests warrants had been issued could be found. The lake was examined for setlines, but the lines which were in the lake last week had been removed. The weirs or traps for catching fish were the next attended to. A man named Jacob Ryerson had a weir in the outlet of the lake and he was notified at once to destroy it or be placed under arrest and taken to Paterson. He agreed to comply with the request. Mr. Keenan then proceeded to a large weir run across the Wynockie River, immediately below the outlet from the lake. This weir belongs to a Swede, who was not to be found, having apparently made himself scarce on hearing of the approach of the officers. The fish warden proceeded at once to destroy the weir. This weir consisted of two wings of stone walls built in the Wynockie River, and joined together by a large trap in the middle of the river. In this way every fish which left Greenwood Lake was captured except the very smallest. Mr. Keenan had come prepared and he and his assistants waded into the stream, reached the trap and made kindling wood out of it, which was allowed to float down the stream. There was no opposition whatever to this work of the fish warden's. The party then returned to Ryerson's weir. It was found that Ryerson had taken an axe and had apparently destroyed the trap. Investigation showed that only a foot below the surface of the water had been removed and that the "basket" at the bottom still remained intact. In this way some of the fish might escape, but the larger ones and the larger portion of the smaller ones would still be caught. Ryerson was informed that this would not do, and that he would at once be arrested and taken to Paterson if he did not make a good job of the work of destruction. He needed no further urging and destroyed, in view of the party, the whole trap. The association proposes to keep a close watch on these traps and other contrivances about the lake, but from present appearances the violators of the law have been thoroughly impressed that the association means business and intends to see that the law in relation to fish and game is enforced.

AMATEUR ROD MAKING.—I wish to thank Mr. Wells for the information that his interesting articles in late numbers of the FOREST AND STREAM has conveyed, and by which I have been benefited. I am an amateur rodmaker myself and make all my own fly-rods, and have made quite a number for friends about here. I have just been fastening the ferrules on a rod with guttapercha gum as he recommended, and believe it will hold them in place much better than any thing heretofore found. This has always troubled me in the past more than anything else in making rods. For the benefit of amateur rodmakers, let me say that T. H. Chubb, whose advertisement is in the FOREST AND STREAM, will supply them with rod material and trimmings of the best quality at prices about one-fourth of what most other dealers in such articles charge. And those ordering by mail sending money in advance, will get just as good an article as they would were they there to pick it out for themselves. This is more than can be said of some dealers. Some time ago, I ordered from a certain dealer by mail, some lance and bethabara wood, and I found when I received it that a stick of each kind of wood had a knot near the middle of each the full size of the sticks, one being ¾ and the other ½ inch square. The lance stick was marked on the knot with a cross X, and the word "cull" was written with pencil on one side. I paid the price of the wood in advance, besides paying postage and registering fee, and the wood was perfectly useless to me. I claim that doing business in this way is downright robbery and nothing else, and that a dealer who serves a customer so after receiving his money in advance and knows they cannot help themselves, is actually a robber. But those who do business in this manner are sure to lose more than they make in the end, for no one will long deal with any one who serves them in such a manner.—ADIRON ONDACK.

SALMON.—Mr. S. J. Martin reports to the U.S. Fish Commission that a salmon weighing 21½ pounds was taken in a trap net at Kettle Island, on the Massachusetts coast, just south of Gloucester, on the 21st of May. The Bangor, Me., *Commercial* says: "The king of all the salmon is on exhibition at A. E. Jones's market on Kenduskeag Bridge. The label attached to the fish says it was caught by R. French, Sandy point; the weight is forty-six pounds. Not even the oldest inhabitants can remember of so large a salmon being caught in the Penobscot. The salmon fishing at Grand Lake stream is reported to be good."

TROUT NEAR NEW YORK.—Sing Sing, N. Y., June 2.—The hills hereabout afford most excellent trouting. My friend Mr. H. W. Ambler, of this place, a most devoted Waltonian, made a creel of twenty good brook trout, the largest of which measured 14 inches.—CANONICUS.

TROUT AND BASS NEAR NEW YORK.—If you can coax big trout, and are not afraid of water and mud, take the Northern Railroad of New Jersey, to Cresskill. Just west of the station you will find a good sized creek, keep on the east bank and fish north for four miles. I have heard of several two-pounders being taken from this stream this season and know personally that there are large fish in it. One gentleman had 1,500 large trout weighing from one to three pounds washed out of his ponds into the creek the past spring, and one of the best natural streams in the State empties into it just north of Cresskill. I have never noticed you mention Rockland Lake in your paper. During the past year some fine catches of black bass and pickerel were taken there, one bass of eight pounds. The East Reef opposite old ice house at the southern end of the lake, is best for early morning, and West Reef, directly opposite, for afternoon for bass, and crawfish is the only bait for them, though they will sometimes take the fly. The northwest shore, just on the edge of the lily pads, abounds with pickerel from one to seven pounds, also yellow bass of large size. I have had fine sport on this water; it is easy of access, and a few days' fishing costs but little. Take Northern Railroad of New Jersey to Nyack, four miles to lake, and either hire conveyance or do as I do, foot it. There is another place quite near by which I have not seen you mention. The Hudson River from Luzerne, on Adirondack Railroad, to Corinth, seven miles of as fine black bass fishing as one can wish for. Minnows or small suckers are the bait. On the west bank a number of fine trout streams come in. My cousin and friend took two hundred good sized trout from these streams one day last week, none of the fish were trout hog size either, and all were eaten. We get a fish in the Hackensack above Oradel called "wind fish," from the fact that they are taken most readily when the wind blows. In shape it resembles the trout, also in gaminess, takes the fly readily and is a good table fish. The back is dark olive, sides dull gold, belly white, fins underneath edged with red, weigh from eight ounces to two pounds. Can you tell from this poor description what they are?—N.

TAKING BIG TROUT.—Hallock, Minn., May 28.—*Editor Forest and Stream:* The fishing for the "whoppers," described by "Homo," in the issue of May 15, with minnows for bait, is legitimate and justifiable. These big fellows are gourmands, feeding on young trout from choice. Their appetite is insatiable and demand a constant feeding to keep up their appearance. We consider a flight similar to those invented by Mr. A. N. Cheney, and used by him for lakers with a minnow for a bait, will kill them every time. We have pursued just this course when fishing for *Salmo fario*, and without any lashing of conscience. These big trout are cannibals in every sense of the word, growing ugly in appearance as they grow older. They should be exterminated by all fair and honorable means. Our system is to make a flight of three hooks, using one for a lip hook, on this I put my minnow for bait and then spin this across the hole. If "Homo" wants to kill these big fellows let him cut out the ventral fin of one of the small brook trout, put it on the lip hook, and if he spins it carefully he can readily kill the monsters.—NORMAN.

TROUT IN CHENANGO COUNTY, N. Y.—Smithville Flats, N. Y., June 2.—I reply to the inquiry of "Niagara," in FOREST AND STREAM of May 29, relative to trout in Chenango county. There are very few trout left in any of our public waters; however, some very fair catches were reported in April. As a general thing there are two fishermen for every three trout. What is known as the Wheeler Brook, about a mile and a half below Greene, contains nearly all the trout in the immediate vicinity of the town. "Niagara" could find good bass fishing in the river and excellent pickerel fishing in most any of the numerous natural ponds or lakes of Greene or Smithville.—E. L. R.

BOOTLESS BUSINESS.—Grand Rapids, Mich., May 27.—You will see by the inclosed clipping that we are doing something all the time to protect for the legitimate use of the people the public property represented by our wild game animals. Yet it is a bootless business, to expend personal time, money, and mental and physical labor for the protection of public property in the hope of getting a fair share of the benefits of such expenditure, and then to see that property gobbled up by lawless poachers is getting monotonous.—E. S. HOLMES. [The slip reports that one James M. Bryant of Grand Rapids had been arrested and fined for taking trout of less than the lawful size.]

LITTLE AND BIG.—The Manton, Mich., *Tribune* of recent date reports: "Some very fine specimens of the trout specie are being taken from Cedar Creek this season. A Sherman man caught 88 trout one day last week, and rumor says he carried the entire lot home in a four-quart pail. Last Wednesday, A. Newkirk succeeded in bringing in a trout which turned the scale at three pounds and two ounces."

RAINBOW TROUT IN GREENWOOD LAKE.—Mr. W. H. Schiper brought to our office last Monday a specimen of the California rainbow trout (*Salmo iridea*), which he caught while fly-fishing for bass near the west shore of Greenwood Lake. Several thousand fry were put into the lake three years ago, and this is the first that has been heard of them since. The fish would weigh about four ounces.

Fishculture.

COLUMBIA RIVER SALMON HATCHING.*

BY LIVINGSTON STONE.

[Read before the American Fishcultural Association.]

EVERY ONE has heard of the immense quantities of salmon that are annually canned on the Columbia River. It is not necessary to go into details. The general facts known to all prove that an enormous number of salmon have been accustomed to ascend the Columbia River every year and it is probably safe to say that the Columbia has been the most productive salmon river in the world.

This is one side of the subject. The other side is this: Such enormous quantities of salmon taken from a river must ultimately endanger the productiveness of it. The situation is not, however, quite as bad as it looks, for it seems at first sight as if the stock of a salmon river would be diminished in proportion to the number of salmon taken out of it, but this is not wholly true, for a compensating element of great weight comes in to disturb the calculation. Nature, perhaps more aptly speaking, providence, in the case of fish, as well as with numberless other creatures, produces great quantities of seed that nature does not utilize or need. It looks like a vast store that has been provided for nature to hold in reserve against the time when the increased population of the earth should need it and the sagacity of man should utilize it. At all events nature has never utilized this reserve, and man finds it already here to meet his wants.

If this were not so, if there were no reserved stock of seed provided beyond what nature uses every year, or to apply the hypothesis to the subject before us, if the salmon produced no more eggs every year than what are needed to keep the places of the parent fish filled, then it would be time that a river's stock of salmon would diminish just in proportion to the number of salmon or salmon eggs taken out of it. As it is, the parent salmon in a state of nature probably produce three thousand times as many eggs as would be needed if all became full-grown reproductive fish. The calculation is a very simple one. For instance, the quantity of salmon in any specified river, before they were molested at all by man, unquestionably remained constant from year to year. Making allowance, of course, for exceptional years, the average of any one decade has been, without doubt, about the same as that of the previous or next succeeding decade. It follows, of course, that every pair of full-grown fish have produced during their lives just two, or their own number of full-grown fish of the next generation in order to keep the whole river supply good from year to year.

If they produced more uniformly, the salmon in the river would increase till the river would ultimately become full of fish; if less, the stock for the reverse reason would be ultimately exhausted.

Now, as one pair of salmon produces yearly, say six thousand eggs, it follows that there are deposited each year three thousand times as many eggs as would be needed, supposing that every egg became a full-grown, reproducing parent. I should add that this computation is based on the supposition that all the parent salmon die after spawning and never reproduce again. This is true of the bulk of the Pacific coast salmon. If any do live to get back to the ocean after spawning and reproduce again, it increases the ratio of the number of eggs deposited to the number of salmon that reach maturity.

The value to food-requiring man, of this reserve seed stock, becomes particularly apparent when we consider the effect of the fishing of a salmon river. The first thousand fish taken out of the river, though it deprives the river of three million eggs, makes no perceptible difference with the future supply, because there are so many eggs left that this abstracted quantity, great as it is, absolutely is relatively insignificant, the number of eggs left being so vastly greater.

The first hundred thousand salmon taken from the river makes no difference, partly because there are so many eggs left and partly because one of nature's compensations comes in by making the struggle for existence among the diminished number so much easier that the eggs that are left go as far toward replenishing the river's stock as the larger number did under the less favorable conditions of a comparatively over-crowded river.

So great is the reserve stock of seed originally provided, and so effective are the compensations of nature, that even the first million of parent salmon taken from a great river like the Columbia seems to make no difference in the annual run of salmon up the river.

We might go further, perhaps, and say that the first two million would make no difference, but we need not take the trouble to prove this, for it would not help to illustrate the point if we did; the point being that if the annual catch goes on increasing, the limit will ultimately be reached when the number of eggs in the fish that are left will not be enough, even with the help of nature's compensating agencies, to keep up the river's stock.

I need hardly remind a body of fishculturists and Commissioners that when this limit is passed, the decrease of the fish proceeds at a rapidly accelerated rate. It is burning the candle at both ends, for while the diminished stock of the river keeps diminishing from an inadequate supply of seed, the destructive capacity of the engines of capture are constantly increased to offset the poorer fishing that results.

Then begins a geometrical ratio of yearly decrease which is startling, and of which the end is complete extinction.

Some intelligent people thought that the limit just mentioned had nearly been reached in the Columbia several years ago. Many more persons think it has now. Still, the resources of the great Columbia are so wonderful that, although upward of two thousand million eggs are annually abstracted from the river, there seems to be a doubt remaining yet whether the eggs that are left are not sufficient to keep up the stock.

However, if the fish-eating world does not go backward, the danger limit will soon be passed, if it has not been already, and it is none too soon to consider the question of taking measures to guard against the danger by artificial propagation.

What has been done in the Sacramento in this direction is well known. I take the liberty to quote from an article bearing on the subject, by Mr. C. A. Smiley, of the United States Census Bureau:

Mr. Smiley, after mentioning some of the difficulties of fishculture, says:

"I will close with citing one of the most remarkable of the successes thus far attained. The salmon canneries of the Sacramento River annually increased in number until by 1870 the entire run of salmon was being caught and utilized. The greatest natural capacity of the river under these circumstances may be considered to have been reached in 1875, when the yield to the canneries was 5,096,781 pounds.

The first possible fruits of fishculture were in 1876, when the young of 1873 may be supposed to have returned.

The United States hatchery was established in the latter year at Baird, Shasta county, California, and a half a million young released in 1873 and again in 1874.

In 1875 the number was increased to 850,000, in 1876 to 1,500,000, and during each of the years 1878, 1879, 1880, 1881, two million young fry were placed in this river. From an annual catch of 5,000,000 pounds the river has come up to the annual catch of over 9,500,000 pounds, which figure has been maintained during the past four years.

The figures were:

	Pounds.
1880	10,837,000
1881	9,600,000
1882	9,605,000
1883	9,580,000

Allowing the three years which it takes for salmon to come to maturity and enter the river for spawning purposes, the increase in yield to the canneries for ten years has been almost exactly proportionate to the increase in the disposition of fry. Taking into consideration the cost of hatching 2,000,000 salmon annually, and the value of the increase of 4,500,000 pounds, it will be seen," Mr. Smiley concludes, "that there is a very large per cent. of profit in artificial fishculture, when conducted under circumstances as favorable as these."

What man has done man may do, and what has been done in the Sacramento can be duplicated in the Columbia, and in as much larger proportion as the Columbia is larger than the Sacramento.

An effort was made in 1877 to hatch salmon on the Clackamus River, a tributary of the Columbia.

This location seemed to combine every advantage for the hatching of salmon on a large scale. The river heads, as you are aware, in the perennial snows of Mt. Hood, and the coldness of its snow-fed waters is very attractive to the ascending salmon. Just above its mouth, on the Wilhamette, into which it empties, are the impassable falls of Oregon City, which pre-

*The salmon referred to in this paper is the *Oncorhynchus choutka*, the spring salmon of the Columbia, the chinook salmon, quinnat salmon, the common salmon of the Sacramento River.

vent the salmon from going up the Wilhamette any further, and naturally turns them back into the Clackamus, if they missed that river in the first place. Then, if necessary, the Clackamus can be so obstructed that every salmon coming up can be stopped in front of the fishery. The river is a favorite resort of the salmon, as it must necessarily be, with its cold, clear, and swift running water and, before canning on the Columbia began, the Clackamus was famous for its hundreds of thousands of magnificent spring salmon that used to swarm up its channel to spawn.

But the establishment of the station came too late. Already—this was in 1877—there were fifteen or twenty canneries on the Columbia below the mouth of the Wilhamette, and with their thousand miles or nearly of drift nets waylaying the ascending fish, the main river became so depleted of parent salmon that those that reached the Clackamus in 1877 were but a sorry fragment of the immense shoals that originally came up the stream to spawn.

It was too late. Had the station been established twelve years before, twenty million eggs of the best variety of salmon in the Columbia River could have been taken there every year. The time has gone by now for that, and only a few million eggs can be taken in a season on the Clackamus, until some legislation allows a larger proportion of the parent salmon to reach the river.

This station was partly destroyed by a hurricane a few years ago, and has been abandoned for the present.

Unfortunately the same objection which applies to the Clackamus River as a hatching station for producing young salmon on a large scale, viz., the enormous yearly catch of salmon on the Columbia below the Clackamus, also applies to all other good locations in the Columbia River basin, or rather what were originally good locations. Twenty years ago there were scores of places on the affluents of the Columbia where ten to twenty million salmon eggs could have been obtained annually, because such an enormous quantity of salmon ran up the Columbia that they swarmed in thousands into each of these spawning streams to deposit their eggs.

Now that every season as the salmon come up to spawn, hundreds of thousands of them, I might almost say millions, are caught for canning, there are not enough left to distribute themselves in very great numbers in each of their thousand spawning beds up the river, and it will never again, in my opinion, be very easy to find more than one or two places in the Columbia River basin, where twenty million salmon eggs can be annually obtained unless some legislation protects the salmon on their upward journey, or artificial hatching, simultaneously carried on at various independent localities, increases the number of salmon in the river.

I have made three explorations of the Columbia River for the purpose of finding a good place for getting salmon eggs on a large scale, the last time under the direction of the United States Commissioner of Fisheries, following the Columbia, except around the Great Bend, all the way from the Rocky Mountain divide, where you can step across it (here called Deer Lodge River), to the bar at its mouth where it is fifteen miles across, and I am convinced that the salmon do not now come up to any one of their famous original spawning grounds in such quantities as to make it an easy thing to get twenty or even ten million eggs a year from any of them.

I must except some places (notably the foot of Shoshone Falls in Idaho) on the tributaries of the Snake River, now difficult of access, where it is possible perhaps, if the attempt is made soon enough, to obtain sufficient spawners for large operations in hatching. I will also except the mouth of the Little Spokane River in Washington Territory, where there is a most excellent location for a hatching station, and where perhaps ten million eggs a year could be collected, if the statements made about the number of salmon that come up the river are at all true. These statements have not been substantiated yet for want of opportunity, and all we can say is that thousands and thousands of breeding salmon used to frequent this natural and favorite spawning ground, and perhaps the canners leave enough now in the Columbia to still make the Little Spokane a good collecting place for their eggs. As my report to Prof. Baird recommends this point as a favorable location for a hatching station, a description of some of its advantages may not be out of place here, and the first I will mention is its accessibility. Eight miles from the mouth of the river, over a remarbably hard and level road, is the town of Spokane Falls, a new, but thriving and promising settlement of perhaps 3,000 inhabitants. This town is situated on the line of the Northern Pacific Railroad, and is in daily communication with the rest of the world by mail, telegraph and railroad, the railroad being one of the great trans-continental thoroughfares of the country.

These general facts alone are sufficient to show the accessibility of the location without the necessity of mentioning details.

The water suppiy at the mouth of the Little Spokane for hatching the eggs is practically unlimited. As there is a strong current in the river, and as the water does not rise till after the spawning season and hatching season are over, the water can be safely raised from the river itself by a current wheel, as at the McCloud River Station, and this being the case, any required quantity of water can be brought to the hatching house at a small expense. The location is also favorable for obtaining water conveniently. The river does not ever rise more than a few feet, and consequently the hatching house can be erected not very far above the low water mark. A small current wheel will, therefore, be sufficient to raise the water to the hatching house, and the adjacent land is so favorable for building on that the wheel can be placed very near the hatching house, which will render unnecessary the construction of a long flume from the wheel to the hatching house. As the river does not rise till the hatching season is over, the wheel need not be protected from drift wood, nor arranged with reference to the rising and falling of the water.

These are great conveniences, and on the whole it may be said that the water supply may be safely depended upon in every respect. The location is also remarkably favorable as to availability. Fortunately the adjacent country is still in its primitive state. When I visited the place in July, 1883, many Indians were encamped on the river bottoms, but I saw no white men. It is true some claims near the river have been taken up by white men, but they are not valuable and and could be bought without much expense. It is therefore very probable that the site of a salmon building station could be obtained without much cost, and as there are very few settlers up the river and no towns or villages, no objection would probably be raised to collecting the parent salmon during spawning season by means of a dam across the river.

The Little Spokane is also of such a character that it would be an easy matter to capture the breeding fish. Indeed, I think a seining ground could be arranged so that nearly all the spawning fish that come up to the river could be caught, and furthermore, it being close to the main Spokane River it would not be difficult to run two seining grounds, one on each side, which would undoubtedly somewhat increase the yearly catch of breeders.

It would be a very easy matter to build a dam or salmon rack across the river to keep the breeders on or near the seining ground. Indeed the frail structure that we saw the Indians successfully erecting across the river shows how easy it would be for white men, with their superior appliances, to put a salmon rack across the river, such as would be required to answer the purpose of a breeding station. There being no drought or freshet on the river during the season's operations at the station, and, indeed, no material change at all in the river, a very simple and readily-constructed dam would be perfectly safe. This is a great advantage, as it often proves a very difficult matter in a river subject to freshets in the hatching season to put in an obstruction that is perfectly safe.

And last, but not least, the maximum rise of the river during the year is so inconsiderable, that there will never be any danger of the hatching house and other buildings being washed away, even if they are placed, as it is desirable that they should be, close to the river.

Besides possessing the essential qualification just enumerated for a salmon breeding station, the Spokane location has many convenient features about it to recommend it. In the first place, it is in a good timber country, where lumber can be easily and inexpensively obtained for building. Then the roads in all directions are hard and good, even during the rainy season, which is a merit which can be fully appreciated only by those who have lived in other parts of the Pacific coast, where the roads become practically impassable during the rainy season on account of the great depth of the mud. The ground is also almost level from the mouth of the Little Spokane to the town of Spokane Falls, which would make communication with the town and freighting to and from the breeding station very easy. The climate is also a great recommendation to this place. It is never very cold nor very hot, but the temperature is quite even, and consequently very favorable for work of any kind.

By glancing over what has just been said about the mouth of the Little Spokane, it will be seen that it is known to be in all essential points an unusually favorable location for a salmon breeding station. If it should prove to be capable of furnishing an abundance of breeders, I should not hesitate to recommend it emphatically as one of the best situations to be found anywhere for taking and distributing salmon eggs. If, however, it should fail to supply the required quantity of spawning salmon, I do not know where we could look for any one place on the Columbia River or its north fork which, by itself, would be adequate and satisfactory, and I think we should be reduced to the necessity of going further from the railroad, or erecting two or three separate stations at different points.

Before closing, allow me to mention a fact which may possibly be as much of a surprise to many of you as it was to me. It is that there are no salmon in the whole of that portion of the North or Clark's Fork of the Columbia, which flows through Western Montana and Idaho, including that magnificent body of water, Lake Pend d'Oreille in Northern Idaho.

This fork of the Columbia, known as it flows westward under the various names of Deer Lodge River, Hellgate River and Missoula River, has a length of about three hundred miles before it reaches the Falls of Senniacwateen, just below the outlet of Lake Pend d'Oreille, where it is believed the ascending salmon are finally stopped from going any further, and in the long stretch of river above this point clear to the Rocky Mountains no salmon whatever are found. I was not aware of this fact, and when we had crossed the Continental divide, which was accomplished then in a wretched mud wagon (called by courtesy a stage), and had descended the western slope of the Rocky Mountain range far enough for the Deer Lodge Brook to have become a respectable river, I expected to find salmon very abundant, but to my great surprise the people there were as unfamiliar with salmon in their natural haunts as the people of this city are, and were nearly as far from them.

I found that there were three principal obstructions which kept the salmon from ascending the river. The first one from the ocean is Kettle Falls, in Washington Territory, on the main Columbia, 711 miles from its mouth. These falls are about twenty-five feet in height at low water, but they are not wholly impassable, for on the east side they are broken into a series of cascades, through which the salmon can and do get above the falls at certain stages of the water and possibly at all times.

Forty-two miles above Kettle Falls, the Pend d'Oreille River (Clark's Fork of the Columbia from Lake Pend d'Oreille to the main river is called Pend d'Oreille River) empties into the main Columbia. Near its mouth, at a distance variously stated from a few rods to twenty miles, is another fall, which is undoubtedly a serious obstruction to the salmon. This fall (it being on the Great Bend, I did not see it myself) is said to be ten or fifteen feet in height.

I heard of salmon being caught all the way up to the falls of the Senniacwateen, so the salmon are obviously not all stopped at the falls of the Pend d'Oreille, though probably not a very large proportion get by them.

About one hundred and fifty miles above these nearly impassable falls and not far below the outlet of Pend d'Oreille Lake are the falls of the Senniacwateen, which, though not over eight or ten feet in height, probably head off the comparatively few salmon that reach them and mark the highest point, the *ultima thule* of the upward migration of the salmon of Clark's Fork of the Columbia. I mention these facts, partly because when I was in Idaho and Montana, there was a strong feeling among some of the residents on Clark's Fork in favor of opening a way for the ascending salmon through the obstructions just mentioned, and allowing them to come up into Idaho and Montana, which they would undoubtedly do if they could, although it is nearly twelve hundred miles from the mouth of the Columbia to Deer Lodge City.

I will merely add in this connection that a movement has been started for obtaining the intervention of the Territories interested, and if possible of the United States, for the purpose of opening a passage for the salmon through the formidable obstructions at the mouth of the Pend d'Oreille River, but in my opinion these falls will be found to lie in British territory, and the undertaking mentioned will require the co-operation also of the Dominion government.

I need hardly say in conclusion that in my judgment the sooner we get about this work of hatching salmon on the Columbia the better. We have waited too long already. The great opportunities of twenty years ago are all gone, and every year makes the matter worse.

Mills are going up, settlements are forming, railroads are being built in this trans-Rocky Mountain region with surprising rapidity—all accelerating the decrease of the salmon—and in a short time we may be glad to even get opportunities that we scorn now. A great industry as well as an immense food supply is at stake, and something ought to be done very soon.

FISHCULTURE IN CANADA.

MR. W. F. WHITCHER, formerly Commissioner of Fisheries for Canada, whose article condemning the system of fishculture pursued in the Dominion, created such a stir some time ago, now writes to the Montreal *Gazette* as follows:

SIR—Referring to "Hansard," of the 9th instant, I respectfully bring under notice the following part of a recent discussion in parliament relating to fish hatcheries in connection with an item of supplementary estimates. At p. 1536 it is reported thus:

"Mr. McLelan.—* * * I stated to the house when the estimates were under discussion, my opinion as to the success of the fish hatcheries, and the grounds upon which I hold the belief that they have been successful. I take it from the reports of all the fishery overseers, and I find from these reports that in the salmon rivers, wherever we have placed and have been for years placing the young fry, these rivers have held up or increased in their production, while rivers that have been continuously fished through that period and have not been supplied with fry are nearly fished out and have decreased in the yield. *And so with reference to the figures given by the Commissioner. They show a considerable increase of between 30 and 40 per cent. in the total catch between 1871 and 1881.* Taking the whole there is that increase, but while there has been an increase in the whole, there has been a large decrease in the rivers that have not been supplied with the young fish and fed from the hatcheries, while all the reports from the officers for 1883, and for 1882 as well, show that the rivers that have been supplied with fry have maintained their yield or largely increased it."

The words italicized are those to which I beg leave more particularly to refer. "The figures given by the Commissioner," are for the provinces in which fish hatcheries exist, and were taken by me from Vol. 3, pages 286-87 of the census returns for 1870 and 1880 respectively. They showed an increase, as correctly stated, but chiefly in districts unaffected by hatcheries. Having since more carefully examined the fisheries' schedules of the census for 1880, I have discovered (and called official attention to) a serious error in the summation of sub-districts, under the salmon column—15,935 barrels being reckoned in mistake for 7,232 barrels. The erroneous figures, by which I was myself misled and have unconsciously misled the Minister of Marine and Fisheries, gave 3,187,000 pounds of salmon, while the corrected figures give 1,446,400 pounds. Artificial operations are carried on extensively in that vicinity. The comparative totals "given by the Commissioner," I may add in perfect good faith, which are adduced as evidence of an increased catch of salmon within the decennial period of "between 30 and 40 per cent.," and which increase is alleged to be due entirely to artificial hatching, would, therefore, prove as corrected, a local difference of 1,740,600 pounds, and a general *decrease* of very nearly a quarter of a million of pounds. I take the earliest opportunity that my health will admit to amend this fault, lest the error should creep into other calculations affecting the Canadian salmon fisheries before its correction can be incorporated in the publications of the statistical department.

Under ordinary circumstances it might be supposed that such difference would not materially affect any deductions from the total salmon yield of 1880 in the maritime provinces, as the reports of the fisheries department should afford an exact or corrective basis of computation. Unfortunately the salmon catch for 1880, as given in the fisheries statements, is 63 per cent. less than that given in the census returns, even as corrected. There was every advantage, therefore, in preferring the census tables to compare data affecting artificial fishculture, although any person actuated by improper "motives" would obviously prefer the former. If, however, the fishery returns for 1870 and 1880 be taken as a basis of comparison the whole decline amounts to 2,304,347 pounds. The figures "given by the Commissioner" may, I reasonably submit, be viewed as evidence not only of a desire to be accurate, but also of the utmost fairness toward artificial fish hatching. Knowing also the defectiveness of the departmental returns, to which I so often and so vainly drew attention when in office, and have of late years for that reason refused to sign, I thought it safest to quote the census tables in preference to the others. Altogether, therefore, the census affords a just and even a generous measure as illustrating the practical results of artificial salmon hatching in Canada during ten concurrent years.

Allow me, sir, in your columns, to apologize for having been the innocent medium through whom the Hon. Mr. McLelan has thus accidentally adopted data supplied by the blue books, which, as revised, indicate a condition of things quite contrary to the desired result, and which may possibly have assisted in producing the erroneous conclusion embodied in the foregoing extract. Permit me, at the same time, to point out that the case of Nova Scotia was instanced "by the Commissioner" to show that in ten years, from 1870 to 1880, the salmon catch had declined over fifty per cent., as shown by the census, while, according to the fisheries statements, it had fallen from 1,345,905 pounds to 383,150 pounds. Above six millions of salmon fry were distributed from the Nova Scotian hatcheries during this time. Here, again, advantage was given to the claims of artificial hatching.

The fact that a decrease in salmon of 168,200 pounds according to the census returns, and of 2,304,347 pounds, according to the fisheries statements, as admitted by the official reports, forcibly suggests the advisability of revising whatever other information purports to establish that "there has been an increase in the whole."

Regarding the alleged specific increase of produce from rivers in which salmon fry artificially bred have been placed, and the corresponding decrease from rivers dependent on natural propagation, it is of primary importance that if such realization is true, the fact should be clearly established. If it can be proved there would be every reason to substitute artificial for natural methods of cultivation. Its co-existence with a general decrease is not incompatible. In order to test such a theory the individual instances must be judged by the relative proportions of natural and artificial supply forming the mature stock. That a fluctuating decline of the salmon fishery since 1874 has occurred throughout the easterly section of the Dominion of Canada it is useless and unwise to deny. A table appended proves this conclusively. The precise extent to which this declension has been arrested during a series of years on the one hand by reserving and guarding the natural spawning grounds, eradicating abuses, imposing restrictions in the modes and curtailing the periods of fishing, by constructing fishways and removing obstructions to the ascent of salmon, by opening up new and extensive breeding areas, and regulating and protecting the inland fisheries generally, and on the other hand by planting salmon fry artificially hatched; all of these elements form a fair subject for impartial inquiry from which much useful and reliable information might be derived. But any attempt to prove that all other endeavors to augment or to maintain the salmon supply from natural sources have entirely failed, and it is only from the output of the hatcheries that improvement has been effected or that normal production has been maintained, conflicts at once with the whole history of the business, extending over a series of laborious years, since 1852, and disputes recorded facts and figures existing in the journals of the House of Commons and the departmental files, which if honestly examined tell quite a different story. It also runs counter to the knowledge and unwritten experience of many sportsmen and observers acquainted with the salmon fishery in all parts of the country. The general and special reports of the principal fishery officers, including those actually in charge of hatcheries, reinforce and confirm the entire record.

Attention is drawn to the following table condensed from the fisheries statements. It gives the gross produce of salmon fishing in the river, estuary and coast districts of the provinces of Quebec, New Brunswick and Nova Scotia for each year from 1869 to 1882, both inclusive. The particulars of 1883 are not yet published, but the preliminary report of the fisheries department announces that in New Brunswick and Nova Scotia there is a considerable decrease, and a slight increase in the Province of Quebec, principally in districts remote from the hatcheries. In the Miramichi and Restigouche districts, where the best hatcheries are located, the yield is reported to have been worse than anywhere else.

TABLE OF SALMON CATCH IN QUEBEC, NEW BRUNSWICK AND NOVA SCOTIA FOR FOURTEEN CONSECUTIVE YEARS.

	Pounds.		Pounds.
1869	2,466,920	1876	2,615,555
1870	4,012,993	1877	3,332,934
1871	3,646,475	1878	3,712,476
1872	3,745,302	1879	3,102,638
1873	5,542,929	1880	1,708,645
1874	6,047,994	1881	1,282,669
1875	3,413,192	1882	2,142,886

The foregoing exhibit proves that in the three provinces named, under the natural system there was a gradual increase in the yield, indicative of progression up to the date when artificial fish hatching was resumed in Eastern Canada, namely, in 1873-74, and that, coincident with the artificial operations, a steady dimunition is observable to the latest date, 1883. It will be perceived that the quantity fell in 1881, after eight years of artificial hatching, 38 per cent. below the smallest catch under the natural system. The inclusion of earlier operations in Western Canada is not essential, as it is notorious that in Ontario salmon have been simply improved out of existence. It is a mercy to the cause of genuine fishculture to omit details.

In mentioning artificial salmon hatching as having been re-

newed in 1873 in the eastern provinces I speak by the card. Breeding salmon and trout by artificial process was first practiced in Canada by Richard Nettle, Esq., then Superintendent of fisheries, in 1858, in a Government hatchery at Quebec. The experiments were measurably successful. Mr. Nettle was enabled to deposit vivified eggs in considerable numbers and to hatch out and distribute a large proportion of living healthy fry. He also transported impregnated ova to Australia. This enterprise was authorized by several ministers, the Hon. Mr. Cauchon, Judge Sicotte and the Hon. William Macdougall. It was not continued by the latter because the limited means provided by the Legislature were absorbed in controlling and improving the salmon rivers proper, all available resources being required to guard the streams against destructive practices which had brought the salmon fishery in the Province of Quebec to the verge of ruin. Mr. Nettle, however, succeeded single-handed and with a very meagre outfit in proving the feasibility of breeding salmon and trout by artificial means, and he deserves the credit of initiation and perseverance involving severe exposure and strong personal enthusiasm. Another successful instance of artificial salmon hatching occurred in 1867, under instructions from the Hon. P. Mitchell, on the Miramichi River, N. B., conducted by Messrs. Stone and Goodfellow, assisted by W. H. Venning, Esq., Inspector of Fisheries for that Province. The system now on trial is not, therefore, a novelty; it is merely a resumption of the original operations; it was not discovered, invented nor introduced by Mr. Samuel Wilmot, although he claims the paternity and usurps the credit. The documents of the fisheries department contain all the particulars requisite to do justice in the premises.

This, however, is a small matter compared to the assertion that while natural hatching has failed to improve or even to keep alive the salmon fishery, artificial hatching has rescued and restored it. It is well known that such an idea has been familiarized by Mr. S. Wilmot to serve his own ambitious aims. He has not contented himself with unduly crediting his own share of work, but has unjustly ignored or decried the labors of others. In his reports and pamphlets this is most conspicuous. It was always to the fore in the International Fisheries Exhibition, and the proceedings of conferences and the columns of the London *Canadian Gazette* (see No. 19), attributed all the prosperity of the salmon and whitefish fisheries of the Dominion to "Mr. S. Wilmot's well-directed system of fishculture," of which he unscrupulously claimed to be the author. A recent pamphlet reiterates pretensions which now assume a semblance of authority from the conclusion above announced in parliament.

As a comparison to the table inserted above, I propose to tabulate the yearly deposits of fry in rivers and districts in juxtaposition to the annual catch in the same rivers and districts, and to compare them with each season's catch in similar streams and divisions wherein no fry from the hatcheries have been distributed. Extracts from the reports of the fishery officers in each section will also be arranged. These will be compared in another form with the production in every case before artificial hatching was applied. It should then appear intelligibly to which the salmon fishery of Canada owes most—legislative and administrative protection or artificial stocking.

Sir Alexander Campbell may be said to have laid the foundation of the system of organized protection for the inland fisheries in 1865, although, of course, the work of his predecessors was utilized away back to the time of the Hon. P. M. Vankoughnet, and throughout the able officiate of the Hon. Wm. Macdougall. Sir Alexander well knows through what difficulties he upheld a policy founded in moderation instead of radical change, and the legislature's debates of that day testify to the masterly way in which he treated the whole subject, and the peculiar interest taken in it by many other legislators. There could be no better proof of the thoroughness of the Fisheries Act than the knowledge that it has never needed amendment. While there have been passed in England since then some twenty different salmon acts, and twelve royal commissions have investigated the British salmon fisheries, the Canadian system has been worked under the same law, and all the information has been procured and the improvements have been made through the regular official staff, without imposing burdensome restrictions on fishermen or devolving extra burdens on the public. Recollecting with what virulence I was assailed for seconding (some said advising) this careful course, Sir Alexander at least can understand the spirit in which at this distant day I defend it bravely from the implication of failure. The same system was adopted by such earnest and able men as Mr. Mitchell, Sir Albert Smith and Mr. Pope. It has been successfully carried out by as zealous and useful a staff of officers as ever served under any government. Is it conceivable that all of these experienced public men and all of those energetic and intelligent subordinates who have served under them inside and outside of the fisheries department were wrong, and that only Mr. Samuel Wilmot is right? Let the facts and figures answer.

W. F. WHITCHER.

RIDEAU BANK, Ottawa, April 22, 1884.

BLACK BASS FOR HOLLAND.—On the 4th inst. the steamer Schiedam sailed with twenty-four black bass sent by Prof. Baird to the Zoological Society of Amsterdam. The fish were obtained by Mr. Blackford. Special tanks for the fish were fitted up in the steamer.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

CATBOAT.—Old paint can be removed by first burning with a painter's "torch" and then scraping with a steel scraper. Use the commonest grade of vaseline for the mast. There are a number of compositions for ships bottoms to prevent fouling. They can be obtained of shipchandlers in the large cities.

NIMROD.—1. What fish are in season at Lake George from July 15 to Aug. 15. 2. What method is used in capturing, first, lake trout, second, bass? 3. What bait, artificial or live, is used at above named locality? Ans. 1. Black bass, lake trout, pike and perch. 2. Lake trout are fished for by trolling in deep water, and by baiting a buoy and fishing it a day or two after. Black bass are taken with both the fly and with bait. 3. Minnows, frogs, crickets, etc.

W. H. C., Worcester, Mass.—What kind of ammunition did Mr. Farrow use when he made the score in Milwaukee, mentioned in your paper? Did he use patched or naked bullet? And did he clean after each shot, or shoot the score without cleaning? Ans. Mr. Farrow used the 40-cal. Bullard cannelured bullet, 300 grains. Laflin & Rand's 1 FG. powder. He did not clean in the score, but used a rubber tube to breathe in the barrel.

M., New York.—I am told that an occasional mascalonge is taken in Saratoga Lake. Please describe the tackle, bait, etc., used in fishing for them. Ans. We think it doubtful if the mascalonge is found there. The great lake pike, *Esox lucius*, is caught in Saratoga Lake, and this fish when large is often confounded with the mascalonge. Use an eight or nine-foot trolling rod, a reel holding at least 300 feet of bass line and either a gang of hooks with a minnow for bait, or a spoon. Row and troll. The fish are sometimes taken by keeping close to the weeds and at others in the middle of the stream.

INFORMATION WANTED.

Can you tell me of some good place where I can spend the last part of August and first part of September and find good partridge shooting and bass fishing? If cannot have both shooting and fishing, should prefer to give up fishing. Would like to go somewhere in the northern part of Pennsylvania or in the southern part of New York. Do not care to go as far as the Adirondacks.—W. C. M.

IN DAYS OF HEALTH prepare for sickness; in youth prepare for old go; which means *insure in the Travelers*, of Hartford, while you are saithy and can get insurance, and while you are young and can get t cheap.—*Adv.*

The Kennel.

FIXTURES.

BENCH SHOWS.

June 10, 11, 12 and 13.—The Second Annual International Bench Show Chicago, Ill. Mr. Charles Lincoln, Superintendent.

Sept. —.Bench Show of the Philadelphia Kennel Club. Mr. P. C. De Saque, Secretary.

Oct. 8, 9, 10 and 11.—Third Annual Bench Show of the Danbury Agricultural Society, Danbury, Conn. E. S. Davis, Superintendent, Danbury, Conn.

Oct. 14.—Non-sporting Bench Show of the Westminster Kennel Club, Madison Square Garden, New York. Mr. Charles Lincoln, Superintendent.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1213.** Volume I., bound in cloth, sent postpaid, $1.50.

THE PHILADELPHIA SHOW.

Editor Forest and Stream:

In the section of Pennsylvania round about Lancaster there are at least one hundred foxhounds, belonging to several hunting farmers, who keep them for the purpose of chasing reynard, and pride themselves on the trueness of their dogs. These gentlemen, I understand, own some splendid specimens, not valued especially for the good looks they possess but for hunting qualities, and have never exhibited them at shows, nor, indeed, have the owners ever attended an exhibition, when they really have a very good chance of winning with their animals. An effort has been made by the writer to have at least six couple of the best of these hounds brought to the bench show of the Philadelphia Kennel Club, to be held, in connection with the fair of the Pennsylvania State Agricultural Society, in September next. These hounds and representatives form the Rose Tree Hunt's pack as well as animals about West Chester and Chester, Pa., and it is hoped the Essex and Queens Counties Hunt, of New York, would make a grand feature of the show.

The beagle men, we are assured, will be out in force. New importations will have reached the United States by September, and this class will be very large. Mr. L. D. Sloan, of the American English Beagle Club, a few days since received by the steamship Indiana, from England, two additions to his kennel of little hounds—Bannerman and Myrtle—of which you will receive a descriptive account.

Why is it that the English harrier is so poorly represented at the shows in this country? Doubtless for the reason they are scarce in the United States. I know of but two genuine harriers ever having been exhibited in the States. It strikes me that good working dogs of this breed would be valuable in some sections. I will venture to prophesy that the breed will not long be neglected by Americans. Should importations be made a proper standard for judging should at once be adopted so that a well-defined difference would be established between them and the numerous cross-bred rabbit dogs, small foxhounds and so-called beagles, of which we have no many in the United States.

HOMO.

ARE DOGS DOMESTIC ANIMALS?

THE Supreme Judicial Court of Maine says no. A dissenting opinion is given by ex-Chief Justice Appleton. We are indebted to a correspondent for sending us the report in full as published in the Gardiner *Home Journal:*

STATE OF MAINE *vs.* CLIFFORD J. HARRIMAN.

Lincoln. Opinion Feb. 9, 1884.

Dogs. Domestic animals. R. S., c. 127, § 1.

Dogs are not recognized in the law as belonging to the class denominated "domestic animals."

One cannot be convicted under R. S., c. 127, § 1, (which relates to the killing or wounding of domestic animals) for killing a dog.

APPLETON, C. J., dissenting.

ON EXCEPTIONS by the respondent to the ruling of the court in overruling a demurrer to the indictment.

(Indictment.)

"State of Maine, Lincoln, ss.—At the Supreme Judicial Court, begun and holden at Wiscasset, within and for the county of Lincoln, on the fourth Tuesday of October, in the year of our Lord one thousand eight hundred and eighty-two.

"The jurors for said State, upon their oath present, that Clifford J. Harriman, of Waldoboro, in said county of Lincoln, on the twenty-fourth day of July, in the year of our Lord one thousand eight hundred and eighty-two, with force and arms, one Newfoundland dog, called 'Rich,' of the value of one hundred dollars, of the goods and chattels of John D. Miller, then and there in the inclosure and immediate care of his master being, did then and there wilfully and maliciously kill and destroy, against the peace of said State, and contrary to the form of the statute in such case made and provided."

R. S. Partridge, county attorney, for the State. *J. E. Moore*, for the defendant.

DANFORTH, J. Demurrer to an indictment found under R. S., c. 127, § 1, which provides for killing or wounding "domestic animals." The indictment alleges the killing a dog. Therefore the question involved is, not whether any particular dog or any number of dogs have become so domesticated as to be called domestic animals, but whether as a class they may properly be so called in distinction from that class known in law as *ferœ naturœ*. If the dog belongs to the latter class the indictment must fail, for the statute does not cover that class. A distinction has been recognized in the law between the two classes from the origin of the common law, from the earliest date of authentic history, when the wealth of individuals was reckoned by the number of their flocks and herds.

That by the common law the dog belongs to the wild class of animals is recognized by all the authorities, and in that state he was and is utterly worthless, his flesh even being unfit for food, so that legally he was said to have no intrinsic value, and "though a man may have a bare property therein, and maintain a civil action for the loss of them, yet they are not of such estimation as that the stealing them amounts to larceny." 4 Bl. Com. 236; 2 Bishop's Crim. Law, § 773. It is true that dogs have extensively become domesticated, so that it is usual and perhaps not an improper use of language to call them "domesticated animals," but as they still retain in a great measure their natural propensities, they may more properly be called domesticated animals with vicious habits. They still keep their wild characteristics, which ally them to the class of *ferœ naturœ*, so much so that in their domestic state they furnish no support to the family, add nothing in a legal sense to the wealth of the community, are not inventoried as property of a debtor or dead man's estate, or as liable to taxation unless under a special provision of the statute; but when kept it is for pleasure, or if any usefulness is obtained from them it is founded upon this very ferocity natural to them by which they are made to serve as a watch or for hunting.

From his greater attachment to his master in the domestic state, from which arises a well-founded expectation of his return when lost, the law gives the owner the right of reclamation, but in all other respects the owner has only that qualified property in him which he may have in wild animals generally.

These continuing instincts, from which arises the danger that he may at any time relapse into his savage state, have made it necessary in all states to have a code of laws peculiarly applicable to the dog and not applicable to domestic animals; not for the protection of his life, but rather for the protection of the community from his ferocity. *Smith* v. *Forehand*, 100 Mass. 140; 20 Albany Law Journal, 6. Under these laws the dog is recognized as property so far as to afford a civil remedy for an injury, but seldom, if ever, any other. In many cases it is made lawful for a man to kill the dog of another, as when he becomes a public nuisance. 1 Bishop, Crim. Law, § 1080, and note; and in various other instances as provided in our own State. R. S., c. 30.

Thus it will be perceived that originally the dog belonged to the class of animals *ferœ naturœ*, and that up to the present time the law has treated him as continuing in that class and has never recognized him as belonging to the domestic class. The two statutes, c. 30, R. S., and c. 127, the first relating to dogs and the latter to domestic animals are so different that they cannot be reconciled. If a person is liable to be convicted for killing a dog under c. 117, he may be punished for what he has a legal right to do under c. 30.

But as dogs have never been recognized in the law as belonging to the class denominated "domestic animals," and as domestic animals alone are mentioned, it would be contrary to all rules of construction to extend the meaning of a statute so highly penal beyond its exact terms.

Exceptions and demurrer sustained.

Barrows, Virgin, Peters, Libbey and Symonds, JJ., concurred:

DISSENTING OPINION BY

APPLETON, C. J. This is an indictment against the defendant for malicious mischief, under the provisions of R. S., c. 127, § 1, which provides that "whoever wilfully or maliciously kills, wounds, maims, disfigures or poisons any domestic animal . . . shall be punished by imprisonment not more than four years, or by fine not exceeding five hundred dollars." It will be perceived that the largest discretion is allowed in regard to the punishment to be inflicted or the fine to be imposed.

The indictment alleges that the defendant on July 24, 1882, at Waldoboro, in the county of Lincoln, "with force and arms one Newfoundland dog, called 'Rich,' of the value of one hundred dollars of the goods and chattels of John D. Miller, then and there in the inclosure and immediate care of master being, did then and there wilfully and maliciously kill and destroy, against the peace of said state and contrary to the form of the statute in such case made and provided."

To this the defendant has demurred, thereby admitting the truth of the allegations contained in the indictment.

The main question is whether a dog is a "domestic animal," for if he be, the defendant is guilty by his own admission and should be held criminally liable.

A dog is the subject of ownership. Trespass will lie for an injury to him. Trover is maintainable for his conversion. Replevin will restore him to the possession of his master. He may be bought and sold. An action may be had for his price. The owner has all the remedies for the vindication of his rights of property in this animal as in any other species of personal property he may possess.

He is a domestic animal. From the time of the pyramids to the present day, from the frigid pole to the torrid zone, wherever man has been there has been his dog. Cuvier has asserted that the dog was perhaps necessary for the establishment of civil society, and that a little reflection will convince us that barbarous nations owe much of their civilization above the brute to the possession of the dog. He is the friend and companion of his master—accompanying him in his walks, his servant, aiding him in his hunting, the playmate of his children—an inmate of his house, protecting it against all assailants.

It may be said that he was "*ferœ naturœ*," but all animals, naturalists say, were originally "*ferœ naturœ*," but have been reclaimed by man, as horses, sheep or cattle; but, however tamed, they have never, like the dog, become domesticated in the home under the roof and by the fireside of their master.

The dog was a part of the agricultural establishment of the Romans and is treated of as such. There were the *canes villatici* to guard the villa of the Roman senator, *canes venatici* accompanying him in his hunting expeditions, and the *canes pastorales* by whom his flocks were guarded. Virgil, in his Georgics, has given directions as to their management and education. To-day, in many countries they are used for draught, as in France and Holland, and everywhere regarded as possessing value and as the subject matter of traffic.

The language of the statute is most general, "*any* domestic animal." The words are not technical or words of art. They are the words of the common people and should be construed as such. Nothing would more astonish the people for whom the laws are made than to learn that a bull or a hog was a domestic animal and that a dog was not.

The lexicographers define a dog as a "domestic animal." "A well known domestic animal of the genus *canis*." Worcester's Dictionary. In Bouvier's Law Dictionary, he is defined as "a well known domestic animal." Otway the poet, says of them:

> "They are honest creatures
> And ne'er betray their masters, never fawn
> On any they love not."

So, in the encyclopedias he is *canis familiaris*, and called a domestic animal; so that in the ordinary use of language he is within the clear provisions of the statute under which this indictment was found. "The *domestic* dog has occasioned many legal disputes and the presumption of the common law of England is that he is tame." Campbell on Negligence, § 27.

By R. S., c. 6, § 5, a tax is imposed on dogs. This is a distinct and statutory recognition of their being property and having value, and that the owner has the same rights to their protection that he has for anything else he may own. In New York, dogs were taxed and this was held to be a statutory recognition of them as property and that they were the subjects of larceny. In *The People* v. *Maloney*, 1 Park (N. Y.), Cr. 598, the court say that if there was no statute on the subject, they should feel bound by the rules of the common law, "but the revised statutes are inconsistent with the common law rule. By them dogs are so far regarded as property as to be in certain cases the subject of taxation. The owner is made liable for the acts of his dog, thus recognizing that the dog has an owner and consequently that the thing owned is property. For every civil purpose, not only by statute, but by the decisions of courts, a dog is regarded as property." "All of the distinctions as to animals *ferœ naturœ*," observes SETTLE, J., "as to their generous and base natures, which we find in the English books, will not hold good in this country.

We take the true criterion to be the value of the animal, whether for the food of man, for its fur or otherwise."

In the present case the Newfoundlad dog, "Rich," of the value of one hundred dollars, was "in the inclosure and immediate care of his master." He was domesticated.

Whether the property of the master was originally of a qualified nature or not is immaterial. The dog was under his dominion and control. "While this qualified property continues, it is as much under the protection of the law as any other property, and every invasion of it is redressed in the same manner." 2 Kent's Com. 349.

A dog being a "domestic animal" and property an indictment is maintainable under R. S., c. 127, § 1, for his malicious destruction. When the statute made malicious mischief indictable, it was held that a dog was the subject of absolute property and the killing of one under the act prohibiting malicious mischief was an indictable offense. *State* v. *Sumner*, 2 Porter (Ind.), 377. There is such property in dogs as to sustain an indictment for malicious mischief. *State* v. *Latham*, 13 Iredell, 33. In *State* v. *McDuffee*, 34 N. H. 523, which was like this, for maliciously shooting a dog, FOWLER, J., says, "We can see no reason why the property of its owner in a valuable dog is not quite as deserving of protection against the wilful and malicious injury of the reckless and malignant, as property in fruit, shade or ornamental trees, whether standing in the garden or yard of their owner or in a public street, or any other species of personal property." Dogs have been included under "property" and their malicious destruction has been held indictable. 2 Wharton's Cr. Law, 1083. *A fortiori* is it so, when the owner is subject to taxation for his dog.

It is objected that the indictment does not describe the dog as "a domestic animal." But that is not required, if he be one, any more than it would be to say that a bull, a ram or a sow is a domestic animal. When the statute made it indictable "maliciously" to wound, kill, etc., any horse, cattle or other "domestic beast," an indictment for wounding a hog, without averring that it was a "domestic beast," was held on the English authorities to be good. *The State* vs. *Enslow*, 10 Iowa, 115. If the court will take cognizance that a hog or a bull is a domestic animal or beast without its averment in an indictment, much more will they that the dog is such animal.

Reliance is placed on R. S., c. 30, § § 2, 3 and 4, which impose certain liabilities on the owners of dogs. But these provisions, instead of sustaining, negative the defense. They imply ownership and liability on the part of the owner. They assume the relationship of the household. They recognize the domesticity of the dog—as having an owner or keeper, and of minors and servants as owners and keepers, and make the parent guardian, master or mistress of such minor or servant responsible for the damages done by the dog so owned. The dog appertains to the household of which the master or mistress is made liable for his misdoings. The owner or keeper thus made responsible for the misdoings of his taxable dog or that of his children should not be left without legal protection when this property is wilfully and maliciously destroyed.

It is true that by § 2, any one may kill a dog under certain conditions therein set forth. But the very section impliedly negatives the right to kill except only when those conditions exist. By its provisions "any person may *lawfully* kill a dog that assaults him or any other person when *peaceably* walking or riding, etc. But it gives no general right to kill dogs. The killing is only *lawfully* done when the person killing is peaceably walking or riding, etc., and not otherwise.

It is said that "if a person is liable to be convicted for killing of a dog under c. 127, he may be punished for what he has a legal right to, under c. 30." Not so. He cannot be punished under c. 127, if the killing was justified under the provisions of c. 30. The statutes are perfectly consistent.

But it is argued that the indictment should negative the authority

to kill in the cases mentioned in § 2. Such is not the law. The indictment follows the statute. It sets forth clearly an offense. If committed, it is for the accused to establish a justification. When the enacting clause of a penal statute describes the offense with certain exceptions it is necessary to state in the indictment all the circumstances which constitute the offense and to negative the exceptions. *State* v. *Keen*, 34 Maine, 501. But this principle is not applicable here.

It is to be remarked that the statute, c. 209, of the laws of 1877, requiring the licensing and registration of dogs and that they should wear a collar round the neck with the owners' name thereon; was repealed by c. 72, of the laws of 1878. If it would have been necessary; had the first named statute been in force to have set forth in the indictment, as in *State* v. *McDuffee*, 34 N. H. 527, the facts of such license and registration, which we think it was not, the statute being repealed, those allegations would no longer be required.

The decisions cited in support of the defense do not apply. In *Blair* v. *Forehand*, 100 Mass. 137, and in the other cases in Massachusetts, the killing of dogs was justified under the police laws of the State authorizing the killing of dogs not licensed nor having a collar. But there are no such statutes in this State—hence their utter want of applicability. *Exceptions overruled.*

ENGLISH KENNEL NOTES.

WE have got through the field trials at Shrewsbury, and those of the Kennel Club at Stafford. There is now the usual diversion of opinions. It seems to be generally agreed that the club's were a bad second. The Shrewsbury people who have never acknowledged nor submitted to the aggresive patronage of the Kennel Club were hardly treated by the weather, and partly to the weather must it be ascribed, I think, that the pointers results show up so handsomely against their long-haired field colleagues.

Our *Field* has drawn attention to the fact that setters are certainly first favorites on the bench and also points out with regret that so few Gordon setters are seen in the trials. This is the more surprising because on the continent, and in France particularly, they are quite the favorite sporting dogs. The *Field* reporter also utters a very old plaint, "that the handsomest dogs on the bench are not the best in the field." But I really attach no value to that. I should scarcely expect the contrary with a dog that requires so much care and attention as a show dog does. What time can there be to break or work him? Against this, however, I set up that from these beautiful prize winners you can breed handsome pups to break to your gun. It is the old argument in another more special form that for intelligence and usefulness no patrician of the canine race can hold his own against the thorough bred mongrel, but I don't think this trite saying which is seen through with a little trouble could ever induce me to change my noble mastiff for my butcher's yard dog.

By far the best report that has appeared of the trials is that in the *Stock Keeper*. General regret was expressed that Mr. Llewellin should have been out of it this year, but it speaks well for the conscientiousness of this gentleman that he did not send one entry from his kennel where distemper existed, to jeopardize the lives of other people's dogs. In this honorable action he showed a very different feeling to that displayed by the chief actor in the unpleasant case that is at present engaging doggy men's attention in the columns of the *Field* under the heading or "Kennel Club Justice."

Besides their excellent report the *Stock Keeper* this week prints some interesting notes on the competitors in the trials from the pen of Mr. G. Morpe Bartram, who ought to be at home on this subject. The result of the Derby can hardly be considered satisfactory apart from the disappointment to Dr. Salter it seems barely just that his young pointer Paris should have lost a good chance of winning such a valuable stake for being only four minutes late on the ground. The winner of the Derby was beaten in the all-aged stakes and Malt solaced his owner for the loss of the Derby by winning the first prize. Mr. Wm. Richardson has written to the papers to complain of an unusual occurrence, that of Mr. Shirley declining to be guided by the rules of the Kennel Club of which he is chairman. It was about an undecided heat that should have been run off first of all next day, and Mr. Shirley ignored the rule to this effect.

Mr. Herbert Watson, an undergraduate of Cambridge, has taken up the cudgel on behalf of Lawrence, a very respectable dog dealer of that town, who was lately convicted before a county court judge of stealing a lady's black and tan terrier. The judgment was quite in opposition to the evidence, and shows what a lottery it is to take a dog or horse case before a law judge. The evidence proved clearly to a doggy man that Lawrence's terrier could not have been the one lost by Mrs. Murray. Part of the evidence in Lawrence's favor turned upon how long cropped ears take to heal. One of the marks by which Mrs. Murray said she would know her dog was an enlarged navel. This is well known to be a very common thing indeed, but the judge, being an outsider, did not know it; and he made up his mind directly he saw the dog look pleased to see Mrs. Murray and lick her hands. He felt quite happy in the precedent of Solomon and the babe. There are lots of pet dogs with little character who will fawn on anybody who speaks to them, and especially on ladies. A good many of our dogs would pass out of our possession if this trait were to be accepted as a certain indication that dogs belong to those they jump and fawn upon.

It is very hard lines upon Lawrence, who loses his dog and character, purse and reputation, from the specialist ignorance of a lawmonger.

Dr. Forbes Winslow and Messrs. Taunton and Portier are still arguing over the award of the last-named at Warwick, where he gave the breeders' prize to the progeny of Crown Prince and the stud prize to Cardinal. This is a smart reversal of judgment. Messrs. Portier and Taunton are racking their brains weekly to reconcile the contradiction with common sense, but the Doctor wins easily.

To those behind the scenes the joke of the matter is that Dr. Winslow was lately the main stay of the British Kennel Association. This curious body was founded by Mr. Taunton, who, till then, had only been known as the runner of an amateur menagerie of foreign dogs. He founded the B. K. A. for what purpose except to make himself known has never been made clear. The Association adopted the rules of the K. C., undertook to publish a register of dogs for sale and hold two shows a year. A good many men joined it, as they always will anything new. They held a show at Aston, which is so near Birmingham as to lead one easily to surmise that it was in opposition to the annual town show. The schedule was the most perfect of its kind that has been composed, and the result was a fair entry, but nothing in proportion to the expectations of the B. K. A. Their greatest disappointment, though, was in their "gate," which produced an insignificant sum. The result was a big deficit to the society, which then, for all practical purposes, ceased to exist.

It would be churlish not to admit the extraordinary capacity for hard work displayed by Mr. Taunton in the hour of their distress. Although not a popular man among his fellows, he is shrewd and practical.

The Association has not been formally dissolved, but the resignations have flowed in so freely from its independent members, who did not relish the role of bottle-holder to the K. C., that I think only two are left, Taunton and Portier, whose common tie is brindle-mastiffs and black and tan terriers. Now and then one sees in the schedules, "A medal given by the British Kennel Association;" but medals are cheap, and the outlay can't ruin the dual control.

The latest *on dit* is that Mr. Taunton has joined Mr. Morrel (of inky fame), one of his late B. K. A. supporters, in business.

Mr. Portier is doing good work in the papers by standing up for the Black and Tan Terrier Club and natural ears. His most zealous opponent has been a Mr. Henry Lacy, of Manchester, who champions cropping, and gave all those who disagree with him a wholesale slanging a fortnight ago. He has since been effectually sat upon, and I think he must wish he had burnt his pen and broken his ink bottle.

To put down cropping is, I am afraid, more than lies in the power of a specialist club, but I commend their humane spirit for trying. The Kennel Club could do it—but won't. One good reason for their not moving in the matter is that the chairman is an active supporter of cropping by his own deeds. Why does not the Society for the Prevention of Cruelty to Animals take it up? Let them make Mr. Shirley their test case, he won't deny it, he will candidly inform them that he crops all his own bull-terriers. The Society is an influential one, and as it is backed by the Baroness Burdett-Coutts, they are not likely to want for funds to carry out what would most certainly be a successful prosecution.

The Baroness Burdett-Coutts, true to her instincts of kindness to all dumb animals, has expressed her appreciation of the Black and Tan Terrier Club's intention of prohibiting cropping by offering to become its patroness. I heard lately a very pleasing anecdote of her ladyship's good nature. She had learned that fortune had frowned severely on a veterinary surgeon in the west end of London, a man whose name had become endeared to many slaves of their pets. She wrote to the vet. that she wanted a mastiff. In a few days he sent her one, with a note saying he had bought the accompanying dog for her ladyship for £14. The Baroness kept the dog and sent a check for it with a nought at the end of the figures, and a kind little note hoping his luck would turn.

The show organized by Messrs. Sanger, the menagerie people, at Margate, has passed over with the usual amount of unpleasantness. It has always been a third-rate affair, organized only to put money in the pockets of Messrs. Sanger and the hotel keepers of Shoreditch-on-Sea. Each year they tempt exhibitors with the same false bait, one being to advertise thas the railway will carry exhibitors and their dogs at single fares, and when it is complained that this is not the case, the exhibitor is roughly referred to the railway company, which "knows nothing about it." They practice also the trick of refusing the money prize to a dog that wins the cup. One year an extraordinary disclosure of their meanness was made. An exhibitor picked up a five-guinea prize (a cruet) off the stand and found the price marked in plain figures underneath—fifty shillings! This year the management and the keepers insulted exhibitors right and left. One gentleman, a member of the London Stock Exchange, was coolly called a liar by one of the keepers, and in complaining to a member of the committee was bluntly informed that he had no time to bother about it. In a competition for bad manners it is hard to say who would win, the men of Margate or those of Hertford.

I observe in your issue of the 8th inst., a report of the Warwick dog show; your readers will have the amusement of comparing my notes with the opinion of your reporter. From the prize list of the New York show I see you had a remarkable entry. I have not heard yet who won in St. Bernards, but I would lay liberal odds against the Rev. Cumming Macdona. Your late importations have gone beyond his kennel.

The schedule for the Crystal Palace is out. It contains one improvement, that is, rescinding the rule that if four dogs compete in a class only one prize would be awarded; all will be given now. This is liberal and right; now I wonder whether they will abolish another objectionable feature of their shows which was far more reprehensively grasping; that of charging re-admission, half a crown at a time on judging days. As there was no accommodation in the show it was more than avaricious, it was brutal.

The York show is very near and sportsmen wish them success and a big entry for their new class for pointers and setters that have run at field trials, it is an excellent idea and deserves support to make it worth copying at other shows.

Mr. Murchison continues the Lochinvar correspondence in the *Field* this week, and to the inexpressible astonishment of on-lookers has effectually secured the support of the editor A few new replies have been vamped up, but Mr. Murchison cannot get away from the fact that he suspected his dog to be sickening for distemper two hours before the judging and only thought it expedient to get him removed after he had won a prize. The Hertford Committee will be blamed for the offensive manner in which they have defended their manager's conduct and the Kennel Club Committee for the partiality shown to one of themselves who was charged with a serious offense. Mr. Percy Reid is charged, tried and condemned by public opinion.

Correction.—In my notes of April 8, for Dr. Maurier read Du Maurier. LILLIBULERO.

MAY 20, 1884.

BEAGLES AT NEW YORK.

Editor Forest and Stream:

As the beagle judging at the late New York show seems to have given rise to some discussion among the members of the A. E. B. C., perhaps it would be well timed to quote a description of this interesting little hound from some of our acknowledged best authorities on dogs. First let us quote Stonehenge; he distinctly says: "The points of the beagle are similar to those given for the foxhound, except as to head and ears, the former being much larger proportionally, both in width and height, while the latter are almost like those of the bloodhound in size and hanging."

Dalziel gives as an illustration "measurements of two good dogs," viz.: Mr. H. A. Clark's Comely—Weight, 27½ pounds; height at shoulder, 14½ inches; length from nose to set on of tail, 30 inches; length of tail, 11 inches; girth of chest, 21 inches; girth of loin, 18 inches; girth of head, 13½ inches; girth of forearm, 5½ inches; length of ears from tip to tip, 17 inches. Mr. H. A. Clark's Crowner—Weight, 26½ pounds; height at shoulder, 15 inches; length of nose to set on of tail, 31 inches; girth at chest, 22 inches; girth of loin, 18½ inches; length of ears from tip to tip, 17½ inches.

Vero Shaw says: "In the present day the average height of the working pack is about 14½ inches, which is sufficiently small for the purposes for which they are required," and further, "As regards a standard of points for judging this breed, we cannot do better than refer our readers to that given in the foxhound chapter, as the beagle, with the exception of its size, can be satisfactorily judged by the scale used in judging foxhounds." In writing of the dwarf specimens, he says: "One of the most remarkable little packs which ever came beneath our notice, was shown by Mr. G. H. Nutt, of Maidstone, at the Alexandra Palace show of 1877. During the progress of the exhibition Mr. Nutt treated his friends to a glimpse of his pigmy pack at work, for he ran them a short drag in the grounds, much to the delight of many lady visitors. Mr. Nutt has since informed us that he has been compelled to give up his pets, as the difficulties he had to encounter in his breeding operations, from the small size of his bitches, fairly tired him out. As he somewhat pathetically remarked: "They had hardly the strength to produce their young, and when they succeeded in doing so, were actually too weak to bring them up." And again, speaking of Mr. Crane's noted pack, he says: "The standard is kept up with much difficulty, many of his mothers do not rear their offspring, and distemper carries them off in troops, specimens are found excessively dwarfed, and proportionally deformed."

The opinions of the above authorities should convince intelligent breeders, and by that I mean those who are trying to breed a useful hound, that an average height of fourteen inches is sufficiently small for all available purposes. Let the A. E. B. C. endeavor to improve the form of the beagle and breed out the open feet, weak pasterns, bad chests and weak loins that are too prevalent, and produce a dog that will give the keenest enjoyment in the chase and the least anxiety in the breeding kennel. Delicacy of scent and perseverance are essential qualities in the beagle, and the tongue should be rich and melodious, and to get the deep, rich note there will always be more or less dewlap or throatiness.

The writer has enjoyed many capital runs in the west of England, and knows of no more beautiful sight than to see a pack of these little fellows on the side of a hill, where a sheet would almost cover them, and although it was tolerably easy to keep with them on a hilly country, they would test the staying qualities of our most fleet-footed runners on the

FLAT.

POINTERS AT NEW YORK.

Editor Forest and Stream:

I could hardly believe my eyes when I saw in your pages that Beaufort, the dog whom no less an authority than FOREST AND STREAM pronounced one of the best dogs of his kind in America; the dog whom some of the most experienced of breeders have found to be almost the ideal of a pointer, answers (in the opinion of Mr. Cornell) to this description: "His legs are extremely bad, being crooked fore and aft, his pasterns are bent in so that the dog is actually bow-legged, and his hocks are likewise also bent." Besides, "he is too long on the legs and stilty, and has a very heavy throat." Can it be possible that so many of us, FOREST AND STREAM included, have been admiring a pointer with such outrageous defects as these? Have we been worshipping an idol so clumsily defective as this? Our ignorance has certainly been pitiable, and kindly Mr. Cornell desires to remove the scales from our eyes. Not having seen Meteor and Bang Bang, I shall certainly not disagree with Mr. Cornell in his good opinion of them. But if his vision is as crooked with regard to them as it is with regard to Beaufort, they may not be perfection after all. Either Beaufort has become fearfully deformed since I saw him last, or Mr. Cornell studies certain dogs through defective glasses, which distort the appearance of the object. Let Mr. Cornell back up Mr. Sterling's judgment if he chooses, but let him not try to do so by maligning Beaufort. I do not own a hair of Beaufort, but I love the dog for himself alone and am ready to defend him against all comers. That Mr. Sterling was wrong in his decision I, not having seen Meteor, do not pretend to say. That Mr. Sterling is no judge of a pointer, his opinion that Faust II. was superior to Beaufort was enough to thoroughly convince me. T. B. DORSEY.

ELLICOTT CITY, Md.

THE DOG POUND OPENS.—Mayor Edson yesterday reappointed John McMahon keeper of the dog pound, at a salary of $75 a month, with the following assistants: Edward J. Dunn, clerk, $75 a month; Michael Dempsey, Thomas Gillam, and Patrick Goodwin, workmen, $2 a day, and George Riley, John Vandewater, and Michael Murtha, catchers. Last year the catchers received a fee of 40 cents for each dog caught. This year Mayor Edson fixed the same fee, despite the requests of the catchers that it be made 50 cents. When the catchers learned of the Mayor's actions they promptly declined the positions, but were finally induced by the Mayor's clerk, Mr. Augustus Walsh, to at least begin work at the price offered by the Mayor. In determining whom he should select to fill the important positions connected with the capture and disposal of stray dogs the Mayor was materially assisted by a number of distinguished gentleman, among them Sheriff Davidson, Senators Plunkitt and Cullen, Assemblyman Haggerty, and Aldermen McQuade, Dempsey, and De Lacy. So earnest have these gentleman been in their desire to assist the Mayor in his arduous labors that they have, unwittingly, of course, made the Mayor's life a burden to him and caused Mr. Walsh, who has had this subject upon his mind, to fear that he would lose his reason. The ground taken by Senator Plunkitt was that while the position of dog-catcher might be considered a pretty small matter for a Senator to worry himself about, yet he was obliged to "protect his district." Senator Plunkitt's "man" was not appointed, but Senator Cullen's was and so were those of the three Aldermen named. All the appointments were made subject to the appointees passing the civil service examination. Accordingly, yesterday afternoon the newly appointed city officers appeared before Civil Service Examiners Arthur H. Dundon, Chairman; Daniel B. Smith, and James Moir, in the College of the City of New York. Mr. Dundon did not consider it necessary to examine the gentlemen regarding their acquirements in trigonometry or the exact sciences, but he interrogated them regarding their moral fitness for the capture of dogs. He questioned Mr. McMahon to learn if they were ever sober, and after a course of sprouts he came to the conclusion that their intellectual and moral sensibilities just about balanced each other. The dog-catchers were informed that any well-grounded complaint against them would insure their immediate dismissal from office, and they were required to furnish references of character. The pound will be opened with imposing ceremonies to-morrow.—*N. Y. Times, June 2.*

IMPORTATION OF BEAGLES.—Philadelphia, May 29.—*Editor Forest and Stream:* The steamship Indiana, which arrived at this port from Liverpool May 25, brought a couple of beagles consigned to Mr. Louis D. Sloan of West Philadelphia. They were purchased of Edwin S. Carew-Gibson, Esq. of Sussex, England, the noted beagle breeder, and were selected expressly to order. The dog Bannerman, bred by Mr. J. Crane, of Southover House, I will describe first. Bannerman is a white dog with lemon head markings; he is eighteen months old, and stands eleven inches high; his head is of the highest beagle type, and his ears, which have a spread of full fourteen inches, are grandly hung. In fact, they are a striking feature. Bannerman is clean in throat, not a suspicion of dewlap, his neck, shoulders, chest and ribs are of the best, while his legs and feet are simply perfect, and a strong back and well arched loin gives him a harmonious finish. In coat he is wonderfully good. His tail is the true beagle's, well brushed and elegantly carried. In general appearance he is jaunty and stylish. I consider him the most desirable beagle dog I have ever seen. He cost his owner a high figure, but the best are almost beyond purchase, and his owner may congratulate himself on having a dog he may well be proud of. Bannerman's full pedigree with particulars will appear in a later issue of the FOREST AND STREAM. It need only be mentioned here, that he is a worthy son of the famous English beagle champion Marchboy. After Bannerman the best will suffer in comparison, so we will merely glance at his kennel companion, the bitch Myrtle, to say that she is a neat beagle of about thirteen inches height, nice in color, excellent ears and good in general appearance, but being heavy in whelp (to champion Marchboy) is in no shape to submit to an extended criticism, therefore will be left for future comments.—RUSTICUS.

THE RETRIEVING PRIZE AT NEW YORK.—The special prize for the best retriever at the New York show was awarded to Mr. A. C. Collins's Fritz. After the award was made it was discovered that owing to a clerical error his number was the only one entered in the steward's book. As there were other entries, the class was rejudged and the medal was awarded to Mr. Luke W. White's Grace. Mr Collins having gone home, did not compete. We received letters from both gentlemen last week, but too late for us to ascertain and publish the facts in the case.

BLACKSTONE KENNEL.—Mr. W. Tallman, in connection with Mr. C. Fred Crawford, of Pawtucket, R. I., has fitted up extensive kennels at South Attleboro, Mass., for the purpose of breeding dogs. With champion Foreman and Mack B. in the stud, and the well bred bitches owned by them, they should succeed in turning out some fine animals.

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, of breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Obo G. By Mr. A. W. Griffiths, Newmarket, N. H., for black, with white on breast, cocker spaniel dog, whelped Jan. 28, 1884, by Obo II. (A.K.R. 432) out of Ace of Spades (Lantern—Midnight.)

Jolly Planter and Lady Nimble. By Mr. E. W. Jester, St. George's, Del., for blue belton English setter dog and lemon belton bitch, whelped March 22, 1884, by champion Plantagenet out of Countess Flirt.

Dashing Foreman. By Mr. C. Fred Crawford, Pawtucket, R. I., for black, white and tan English setter dog, age not given, by champion Foreman out of Nellie II. (Count Noble—Rosalind).

Slam Bang and Princess of Thule. By Mr. Edward Dexter, Buzzard's Bay, Mass., for black and white pointers, dog and bitch, whelped Jan. 6, 1884 (Bang Bang, A.K.R. 394—Fan Fan).

Fairy. By Mr. E. M. Crouch, Thomaston, Ct., for lemon and white pointer bitch, whelped Jan. 1, 1884, by Sam, Jr. (Sam—Countess Nelly, A.K.R. 913) out of Quilley (Spot—Countess Nelly, A.K.R. 913).

Editor Forest and Stream: In your issue of May 22, in claiming the names Count Ranger, Prince Ranger, Bang Ranger, Drake Ranger, Minnie Ranger, Drab Ranger and Nell Ranger, you give the color lemon and white. That is an error; it should be liver and white.

ROSENDALE, Wis., May 24, 1884. S. B. DILLEY.

NAMES CHANGED.

☞ *See instructions at head of this column.*

Dashing Armand to Doctor T. Black and white English setter dog, 1yr. old (Dashing Monarch—Armida), owned by Mr. Wm. Tallman, South Attleboro, Mass.

BRED.

☞ *See instructions at head of this column.*

Whiskey—Nattie. Mr. Charles Lincoln's (Detroit, Mich.) fox-terrier bitch Whiskey to Mr. R. C. Cornell's Nattie (Gamester—Feefee), May 25.

Elgg—Tweed II. Mr. Thomas H. Terry's (New York) collie bitch Elgg (Gillie—Watch) to his champion Tweed II. (A.K.R. 894), May 22.

Roberto Laverack—Dash III. Dr. J. R. Housel's (Watsontown, Pa.) English setter bitch Roberto Laverack (A.K.R. 1071) to Mr. A. M. Tucker's Dash III.

Honor Bright—Friday Night. Mr. H. W. Smith's (Worcester, Mass.) black greyhound bitch Honor Bright (A.K.R. 902) to his champion Friday Night (A.K.R. 753), May 29.

Doe—Chief. Mr. Max Wenzel's (Hoboken, N. J.) red Irish setter bitch Doe (Buck—Floss) to his Chief (A.K.R. 231).

Beulah—Zanzibar. Mr. E. W. Jester's (St. George's, Del.) English setter bitch Beulah (Count Derby—Dashing Countess) to his Zanzibar (A.K.R. 1182), May 25.

Jessie Turner—Dashing Lion. The Ohio Kennel's (Washingtonville, O.) English setter bitch Jessie Turner (Druid—Ruby) to their Dashing Lion (Dash II.—Leda), May 14.

Armida—Dashing Lion. Dr. R. F. Tull's (Elkton, Md.) English setter bitch Armida (Leicester—Pocahontas) to the Ohio Kennel's Dashing Lion (Dash II.—Leda), May 2.

Roxie—Dashing Lion. The Ohio Kennel's (Washingtonville, O.) English setter bitch Roxie (Leicester—Nellie) to their Dashing Lion, May 4.

Gipsy Belle—Foreman. Mr. Wm. Tallman's (South Attleboro, Mass.) English setter bitch Gipsy Belle (Gladstone—Pearl) to champion Foreman, April 24.

Forest Dora—Foreman. Mr. Wm. Tallman's (South Attleboro, Mass.) English setter bitch Forest Dora (A.K.R. 500) to champion Foreman, May 20.

Cliney Carter—Foreman. Mr. J. J. Scanlan's (Fall River, Mass.) English setter bitch Cliney Carter (Cashier—Flake) to champion Foreman, May 11.

Daisy II.—Young Toby. Mr. W. D. Peck's (New Haven, Ct.) pug bitch Daisy II. (Major—Beauty) to the Chequasset Kennel's Young Toby (A.K.R. 473), April 18.

Jet—Black. Mr. C. F. Keys's (Washington, D. C.) Gordon setter bitch Jet (A.K.R. 960) to Mr. H. Malcom's Black (Malcolm—Dream IV.), May 29.

Lady Mab—Knickerbocker. Mr. H. C. Miller's (Hudson, N. Y.) pointer bitch Lady Mab (A.K.R. 1044) to champion Knickerbocker (A.K.R. 19), May 27.

WHELPS.

☞ *See instructions at head of this column.*

Daisy Deane. Mr. Elliot Smith's (New York) pointer bitch Daisy Deane (Old Zip—Lady Flora), May 21, eight (one dog), by the Westminster Kennel Club's Bang Bang (A.K.R. 394).

Rose. The Westminster Kennel Club's pointer bitch Rose (A.K.R. 214), May 15, ten (five dogs), by their Bang Bang (A.K.R. 394).

Leah. Dr. J. R. Housel's (Watsontown, Pa.) English setter bitch Leah (Roybel—Livy II.), May 26, six (three dogs), by Mr. Thos. Blythe's Robin Hood (Carlowitz—True).

Annie Laurie. Mr. W. A. Faxon's (Dorchester, Mass.) collie bitch Annie Laurie (Marcus—Isle), six (five dogs), by Rattler (Tweed II.—Lassie).

Brenda. Dr. M. G. Elizey's (Washington, D. C.) English setter bitch Brenda (Pride of the Border—Kirby), May 22, eight (seven dogs), by Mr. N. Jensen's Cossack (Morford's Don—Fairy).

Flake II. Messrs. Wheeler & Davis's (Rockland, Mass.) English setter bitch Flake II. (A.K.R. 367), April 24, nine (four dogs), by Ben B. (A.K.R. 363).

Dashing Jessie. Mr. E. W. Jester's (St. George's, Del.) English setter bitch Dashing Jessie (A.K.R. 815), May 28, six (one dog), by his Zanzibar (A.K.R. 1182).

Winnie. The Kilmarnock Collie Kennel's (Boston, Mass.) imported collie bitch Winnie (Gairlock—Laurie), May 25, nine (five dogs), by their Bruce (Marcus—Isle).

Gem. Mr. Geo. L. V. Tyler's (West Newton, Mass.) cocker spaniel bitch Gem (Snip—Feather), April 27, six (five dogs), by Obo II. (A.K.R. 432); all black; two dogs dead.

Queen Anna. The Ohio Kennel's (Washingtonville, O.) English setter bitch Queen Anna (Zanzibar—Lady Elgin), May 15, sixteen (ten dogs), by their Dashing Lion.

SALES.

☞ *See instructions at head of this column.*

Sensation—Rose whelps. Lemon and white pointers, whelped Oct. 29, 1883, by the Westminster Kennel Club, a dog to Mr. D. G. Elliot, New Brighton, S. I.; a bitch to Dr. Twomly, Baltimore, Md., and a bitch to Mr. Elliot Smith, New York.

Robin Hood—Countess H. whelps. Lemon and white English setter dogs, whelped Jan. 18, 1884, by Dr. J. R. Housel, Watsontown, Pa., one to Mr. B. W. Prentice, Worcester, Mass., and one to Mr. A. S. Oliver, Elberton, Ga.

Lady Mab. Black pointer bitch (A.K.R. 1044), by the Knickerbocker Kennel Club, Jersey City, N. J., to Mr. H. C. Miller, Hudson, N. Y.

Doncaster. Liver and white pointer dog (A.K.R. 563), by the Knickerbocker Kennel Club, Jersey City, N. J., to Mr. Jas. H. Hildebrandt, Johnstown, N. Y.

The Banshee. Scotch deerhound bitch, 3yrs. old (Grab—Ready Money), by Mr. H. W. Smith, Worcester, Mass., to Mr. C. B. Gilbert, New Haven, Ct.

Obo G. Black cocker spaniel dog, whelped Jan. 28, 1884 (Obo II.—Ace of Spades), by Mr. Geo. H. Gilbert, Boston, Mass., to Mr. A. W. Griffiths, Newmarket, N. H.

Warren. Red Irish setter dog, whelped Sept. 6, 1883 (Elcho, A.K.R. 295—Zelda, A.K.R. 240), by the Shamrock Kennel, Beach Bluff, Mass., to Mr. A. O. Brewster, Boston, Mass.

Nip and Tuck. Red Irish setter dogs, whelped Sept. 6, 1883 (Elcho, A.K.R. 295—Zelda, A.K.R. 240), by the Shamrock Kennel, Beach Bluff, Mass., to Mr. Edward Jewell, Boston, Mass.

Chief—Maud S. whelp. Red Irish setter dog, whelped April 8, 1884, by Mr. Max Wenzel, Hoboken, N. J., to Mr. McMicken, New York.

Hector. Mastiff dog, whelped Jan. 26, 1884 (Diavolo, A.K.R. 543—Madge, A.K.R. 548), by the Ashmont Kennel, Boston, Mass., to Mr. Dwight Holbrook, Clinton, Ct.

Teddy Barr—Vic whelp. Liver and white cocker spaniel dog, whelped March 6, 1884, by Mr. Archibald Gordon, Middletown, N. Y., to Dr. J. Corbin, Brooklyn, N. Y.

Dixie and Silk. Foxhound dogs, by Mr. R. B. Houghton, Boston, Mass., to Mr. W. C. Crandall, Springville, N. Y.

Toby. Pug dog, whelped Dec. 3, 1883 (Napoleon—Beauty), by Mr. W. D. Peck, New Haven, Ct., to Mr. A. C. Wandor, Hartford, Ct.

Bess. Pug bitch, whelped Dec. 3, 1883 (Napoleon—Beauty), by Mr. W. D. Peck, New Haven, Ct., to Mr. Fred. E. Parker, same place.

Calypso. Mastiff bitch (E.K.C.S.B. 10,567), by Mr. Jas. Hutchings, Exeter, Eng., to Mr. W. D. Peck, New Haven, Ct.

Ashmont. Red Irish setter dog, whelped March 17, 1884 (champion Nimrod, A.K.R. 631—Romaine, A.K.R. 638), by the Ashmont Kennel, Boston, Mass., to Mr. Chas. S. Davol, Warren, R. I.

Dashing Armand. Black and white ticked English setter dog, 1yr. old (A.K.R. 585), by Dr. R. T. Tull, Elkton, Md., to Mr. Wm. Tallman, South Attleboro, Mass.

Dashing Prim. Orange and white English setter dog, 1yr. old (A.K.R. 586), by Dr. R. F. Tull, Elkton, Md., to Mr. Wm. Tallman, South Attleboro, Mass.

Gypsy Belle. Black, white and tan English setter bitch, age not given (Gladstone—Pearl), by Mr. F. J. Kinney to Mr. Wm. Tallman, South Attleboro, Mass.

Pride. Liver and white pointer dog, 2yrs. old (Croxteth—Royal Fan), by Mr. Wm. Tallman, South Attleboro, Mass., to Mr. F. Tiernan, Fort Scott, Kan.

Monarch S. Orange and white English setter dog, whelped Oct. 29, 1883 (Foreman—Jennie), by Mr. Wm. Tallman, South Attleboro, Mass., to Mr. J. K. Smith, Waterbury, Ct.

Foreman II. Black and white English setter dog, whelped Oct. 29, 1883 (Foreman—Jennie), by Mr. Wm. Tallman, South Attleboro, Mass., to Mr. N. Wallace, Waterbury, Ct.

Foreman—Jenny whelp. Black and white English setter bitch, whelped Oct. 29, 1883, by Mr. Wm. Tallman, South Attleboro, Mass., to Mr. N. Wallace, Waterbury, Ct.

Carl. Orange and white English setter dog, age not given (Waters's Grouse—Daisy Dale), by Mr. W. Thayer, Boston, Mass., to Mr. P. P. Lewis, New York.

PRESENTATIONS.

☞ *See instructions at head of this column.*

Sensation—Rose whelp. Lemon and white pointer bitch, whelped Oct. 29, 1883, by Mr. Elliot Smith, New York, to Major H. Platt, Bangor, Eng.

DEATHS.

☞ *See instructions at head of this column.*

Bugle. Black, white and tan beagle dog, 1yr. 10mos. old (Deacon—Midget), owned by Mr. W. H. Moller, New York, from dysentery.

Dashing Prim. Orange and white English setter dog, 1yr. old (A.K.R. 586), owned by Mr. Wm. Tallman, South Attleboro, Mass., May 23.

Rifle and Trap Shooting.

FIXTURES.

June 2 to 9.—Annual Tournament Louisville Sportsmen's Association, Louisville, Ky. J. O. Barbour, Secretary, 157 Third avenue, Louisville.

RANGE AND GALLERY.

CREEDMOOR.

THE programme of the matches at Creedmoor during the present month include the following:

The Champion Marksman's Class Match, June 7 and 18.—Open to all members of the N. G. S. N. Y. (except as hereafter noted), and members of the National Rifle Association, the latter, however, not being eligible to win the principal prize; 200 and 500yds., five shots at each distance; the Remington Rifle (New York State model); standing at 200yds., lying head to target at 500yds.; entrance fee 50 cents, competitors allowed re-entries in each competition at the discretion of the executive officer, but only one score to count. Members of the N. G. S. N. Y., in uniform (jacket, cap and belt), may record their scores in this match as qualified for the New York State marksman's badge, provided that if ordered they have attended (or do once during the season attend) general practice, and provided they have previously qualified in the second class (100 and 300yds. See qualification match). First Prize—A gold marksman's badge for 1884. The badge to become the property of the competitor who, at the close of the season of 1884, shall have won it the greatest number of times. Ten other prizes (medals) presented by the National Rifle Association to the ten highest competitors in order of merit. Winners with a score of 39 points and over to receive a silver, and winners having a score of under 36 to receive a bronze medal. The same man can only win one medal during the season. In case of a tie the highest aggregate score of all the competitions participated in up to that time to decide. Winners of champion marksman's badges for the years 1876, 1877, 1878, 1879, 1880, 1881, 1882 and 1883, namely, Messrs. A. B. Van Heusen, William Robertson, James L. Price, W. J. Underwood, Jr., Thomas J. Dolan, H. T. Lockwood and G. W. Munson, winner of the gold marksman's badge for 1883, are not eligible to win the principal prize in this match.

The Qualification Match of 1884, June 7 and 18.—Open to members N. G. S. N. Y., and N. R. A.; the former being in uniform (jacket, cap and belt) may count scores made as qualifying them to shoot for New York State marksman's badge, provided that they use the State Remington rifle; 200 and 300yds., standing at 100 kneeling at 300yds.; five shots at each distance with any military rifle, special military rifles excepted; entries 50 cents each; re-entries permitted at the discretion of the executive officer, but only the highest score to count; to the competitors in each competition making the five highest aggregate scores, sixty per cent of the entrance money will be equally divided. On the days which the Q. and M. C. B. matches are to be shot the sale of entries will close at 5 P. M., and no shooting will be allowed after 5:30 P. M.

Any Rifle Long Range Match, June 14.—For any rifle within the rules. Distance, 900 and 1,000yds.; 20 shots at 900yds. and 25 shots at 1,000yds.; entrance fee, $1; time limit, 2½ minutes to each shot; prize, a bronze medal of the National Rifle Association, value $25; to be won by the competitor making the highest aggregate score in three matches; match to commence at 3 P. M. Pool open at 900yds. from 1 to 2:55 P. M.

Off-Hand Match, June 25.—All-Comers' match, distance 200 and 300yds., 7 shots at each distance, any rifle; entrance fee, 50 cents to members of the National Rifle Association, to others the fee will be $1. Prizes to the value of at least $50 will be given at each match. The prizes are in duplicate sets: one set for the five best scores made with military rifles, and one set for the five best scores made with rifles not military. The fishing tackle prize in the off-hand matches have been kindly donated for competition by Messrs. Abbey & Imbrie, No. 48 Maiden lane.

Military Rifle Long Range Match, June 28.—Open to military rifles only; distance, 600, 800, 900 and 1,000 yards; 10 shots at each distance; entrance fee, $1. Prizes: First, a Remington M. B. L. rifle complete with 250 rounds ammunition, to be won by the competitor making the highest aggregate score in any three matches. Five matches to be shot during the season, and four prizes in each match, as follows: To the four competitors making the best scores on each day $25, to be divided in order of merit—to first, $10; second, $7; third, $5; fourth, $3. Time limit, 2½ minutes for each shot. Match open at 11 A. M. Pool open at 600 and 800yds. from 9:30 to 10:50.

CALIFORNIA RIFLE ASSOCIATION.

SAN FRANCISCO, May 12.—The spring meeting of the California Rifle Association was held yesterday at Shell Mound Park, Berkeley. The weather was clear, and as a result the shooting was good. Following are the complete scores:

Directors' Match, 200yds.

S I Kellogg, Jr.	4555554—33	L R Townsend	3444444—29
H T Sime	4544441—29	H D Ranlett	4334344—27
Charles Nash	4553444—29	W B Collier	5440445—26

Governor's Medal.—For the medal presented by Governor George C. Perkins, open to all members of the asscirtion, the National Guard of California, army and navy. Entries unlimited. Rounds, ten, any military rifle. 200yds. Ten cash prizes in addition to the medal, which is the first prize. To become the property of the marksman who shall first win it three times at regular meetings of the C. A. R.

P D Linville	5555555545—49	Sergt McDonald	4544544355—45
Lieut S I Kellogg	4555555455—48	Lieut G N Brown	4415555545—45
F Barrere	4554555455—47	Lieut J C Klein	5544454545—45
F Carson	5545545155—47	Priv C F Waltham	4544555445—45
F Kuhnle	4554544355—46	Priv C Cummings	5554454554—45

Ring target.—Open to all comers, 200yds., 7 shots with any military rifle, at a ring target, entries unlimited, 10 cash prizes:

Lieut F Kuhnle	10 10 11 10 11 10 12—74
T C Carson	9 10 12 10 8 8 9—66
Lieut J A C McDonald	7 10 8 6 12 12 10—65
Lieut J C Klein	10 10 4 10 12 11 7—64
Lieut S I Kellogg	9 11 10 12 7 7 2 9—60
F Cummings	7 7 8 6 9 8 10—55
Sergt C Nash	9 5 10 7 8 4 10—53
D Gerry	10 6 1 10 10 7 9—53
C F Waltham	9 11 4 9 11 4 4—52
Lieut Mangels	10 3 7 8 7 7 9—51

California Powder Works Medal.—Five prizes, 200yds.—Open to all members of the Association, the National Guard of California, army and navy, distance 200 and 500yds., 7 shots at each distance with any military rifle. entries limited to one each, to become the property of the marksman who shall first win it three times at regular meetings of the C. R. A. Competitors for this trophy to use powder manufactured by the California Powder Works. Four cash prizes:

	200yds.	500yds.
P D Linville	4555544—32	5554455—33—65
Priv E Pierce	4455455—31	5445554—33—64
Officer Peckinpah	4444445—29	5455555—44—63
A F Fields	4545554—32	4544455—31—63
Lieut S I Kellogg, Jr.	5555544—33	5544444—30—63

Open Team Match.—Open to teams of six representatives from any military company, field and staff, board of officers, police department or rifle club now in existence; with any military rifle at 200 and 500yds.; rounds, seven at each distance. First prize a trophy. Four individual prizes.

Company A, San Francisco Police.

	200yds.	500yds.
D A Peckinpah	5544454—31	5554455—33—64
G L Gano	4434554—29	5554555—34—63
C Nash	4454445—30	4545545—32—62
N T Fields	4445445—30	4554445—31—61
P D Linville	5544444—30	4235553—39—59
J P McCarthy	4424344—25	4454534—27—52—351

Board of Officers, Second Artillery, C. N. G.

Lieut J Warren	4434554—29	4454655—32—61
Lieut Laufenberg	4454445—30	3454455—30—60
Lieut H T Sime	4544435—27	5553535—31—58
Capt Ed Sprowl	4544544—30	4444444—28—58
Lieut Mangels	5454545—32	4433444—26—58
Lieut Last	4443445—28	4445434—28—59—351

Company A, Fifth Infantry, C. N. G.

Sergt Macdonald	5444454—30	5555555—35—65
Priv C Waltham	4454444—29	3545445—30—59
Priv Ed Pierce	4544454—30	4454444—29—59
Priv Moore	5445434—29	3445534—28—57
Priv McEwen	3344443—25	3544554—29—54
Priv Carroll	3333444—24	3434454—26—50—354

Field and Staff, Fifth Infantry, C. N. G.

Lieut Kellogg, Jr.	5454544—31	5544444—30—61
Lieut F Kuhnle	4444544—29	4543455—31—60
Sft Ed Hover	4454455—31	4454344—27—58
Lieut G H Brown	5545544—31	4543354—26—57
Sgt M Williams	4455445—31	3444354—25—56
Maj T Parsons	4434454—28	2245335—24—52—344

Presidio Rifle Team.

Connell	4344455—29	4435454—29—58
Sergt Brackin	4444544—29	4533455—29—58
Nelson	4333343—25	5434545—30—55
Yearsley	4444445—29	5454335—29—56
Dougherty	4455444—38	0333434—19—49
Muler	5443544—29	0040341—17—45—321

Military Team Match.—Open to teams of six men from any company of the National Guard or Army and Navy, with Springfield rifles, at 200 and 500yds. Rounds, seven at each distance; 3 individual prizes; first prize a trophy, and second prize a trophy, to become the property of the winning teams; 3 prizes, 2 medals.

Battery B, Second Artillery.

	200yds.	500yds.
Priv Nolte	4445541—30	2445353—23—56
Geo Johnson	5444244—27	4352453—26—53
Lieut H J Sime	4444554—30	3353404—22—52
Sergt McClintock	4433443—28	4433433—23—48
Priv Ewell	3423403—23	4204435—22—45
J B Beaty	4442444—26	2203342—16—42—296

Company C, Second Artillery.

Lieut Mangles	5545545—32	5553533—29—61
Priv Lierbach	4454434—28	3545554—31—59
Priv Robertson	3553444—28	2345433—24—52
Sergt Lempke	4444454—29	2223455—23—52
Corp Marcus	3444543—27	2300244—15—42
Lieut Huber	4445442—27	2033200—10—37—303

Collier Team Match.—Open to teams of six men from any company of the National Guard who have never made more than 70 per cent. in any of the California Rifle Association matches. Four individual prizes. Rounds seven, with Springfield rifles, at 200yds. First prize, a trophy given by Captain W. D. Collier, Company B, Second Artillery Regiment, N. G. C.

Co. C (Petaluma) Fifth Infantry.		Battery B, Second Artillery.	
Priv Houx	5545454—32	Priv Elliott	4435455—30
Priv St. John	5444455—31	Priv Ewell	3444444—27
Priv Smith	4444544—29	Priv Cummings	4244454—27
Corp Wallace	4443554—29	Sergt Beatty	4342443—24
Priv Zartman	4444544—29	Priv Johnston	4543423—23
Capt Fairbanks	5444243—26	Priv De Villers	4233433—22
	176		153

Company C, Second Artillery.

Priv Robertson	4443444—27	Priv Koch	4344343—25
Priv Brooks	4434444—26	Priv Thresern	2343445—25
Corp Markus	3443434—25	Priv Sebe	2233323—18—146

"Duffer" Team Match.—Open to teams of six men from any company of the National Guard who have never made more than 60 per cent. in any of the California Rifle Association matches. Individual prizes. Rounds seven, with Springfield rifles, at 200yds. First prize a trophy.

Company C, Fifth Infantry.		Company C, Second Artillery.	
Priv St John	5554554—33	Priv Ralph	4444544—29
Priv Aausc	5444445—30	Priv Koch	3443455—28
Priv Smith	4444554—30	Priv Werguran	0444444—24
Corp Wallace	4444444—28	Priv Ruth	3334443—24
Capt Fairbanks	4433453—26	Priv Robertson	4443044—23
Priv Zartmann	4442443—25	Priv Siebe	0343243—19
	172		147

Company B, Second Artillery.		Company B, First Infantry.	
Priv Johnson	3548445—28	Priv Nixon	3453445—29
Priv Elliott	4344443—26	Sergt Burdick	3344544—27
Priv Cummings	4343445—26	Priv Knowlton	3244444—25
Priv Ewell	3543443—26	Capt Taylor	2433422—20
Priv Pringle	4433453—23	Priv Casey	0234023—14
Priv De Villers	2332444—22	Priv Rignold	0043203—11
	151		126

Mid range match, open to teams of five men from any regiment, battalion, N. G. C. or N. N. G., U. S. Army, or company of police, any military rifle, at 600yds. Rounds seven. First prize, a trophy; 5 individual prizes:

Police Team, No. 1.		Fifth Infantry Battalion Team.	
Officer Gano	4545545—33	Lieut S I Kellogg, Jr.	4555444—31
Officer Peckinnah	4555545—32	Priv C F Waltham	3423345—23
Officer A F Fields	3355544—28	Lieut F Kuhnle	0435343—22
Officer McCarthy	5534434—28	Priv Ed Pierce	2344422—21
Officer N T Fields	4533344—26	Sergt J Macdonald	0024553—19
	146		116

Police Team, No. 2.		Presidio Rifle Club Team.	
Officer Linville	4455445—31	Priv Yearsley	5355544—31
Officer Flemming	5345534—29	Priv Nelson	5443544—29
Officer C Nash	4343054—28	Priv Brackin	2425343—21
Officer Geary	4543402—17	Priv Muller	2005324—16
Officer Hook	0033405—14	Priv Connell	0233002— 9
	114		100

Second Artillery Regiment.

Lieut Sime	5455243—28	Priv Last	2303023—12
Lieut Mangels	3533554—27		
Capt Sprowl	3343044—19		104
Priv Lodds	2255400—18		

CAMDEN, N. J., May 21.—The Passyunk Rifle Company and Cosmopolitan Rifle Club of Philadelphia, shot a friendly match to-day at the Stockton Rifle Range. The conditions were ten men from each club, off-hand, open sight and 200yds. distance. The score is appended:

Passyunk Rifle Company.		Cosmopolitan Rifle Club.	
Wm Kirshner	3534433434—36	Dr Shimwell	3444402434—32
H S Hoffner	4444543344—39	F Jesser	0545233342—30
W M Hoffner	3433345433—34	L Dubois	3424344434—35
J D Hoffner	5324434438—37	J Dixon	3234444222—30
Jas B Hoffner	4445454454—42	Peter Woods	3434434544—34
David Shetzline	0443434434—33	C Greenfield	3444353444—33
J T Dunlap	4442443443—35	Capt C H Jones	2403444442—31
T Hayes	4334414334—36	George W Coulston	5544535435—43
J Hinchman	4343253433—35	W Chambers	4444444454—41
Capt J D Vautier	4444545444—42	C Bowers	5340420042—24
	369		342

MANCHESTER, N. H., May 24.—The wind blew strong from northwest this afternoon, and for a time offered an effectual barrier to the riflemen, who assembled at the West Manchester range, preventing them from raising their records of the three days' meet. Towards evening, however, the wind blew less fiercely, and Messrs. Dodge, Palmer, Leighton and Angell improved their records in the Creedmoor prize match, the first named using a Maynard 32-caliber, new style cartridge, making the magnificent string of 49 out of a possible 50, and taking the lead in this event over all competitors who have participated in it since the match opened six weeks since. Mr. Bixby

is second with 48 to his credit. Messrs. Palmer, Leighton and Drake have made 46 each, Mr. Potter has 45 and there are a large number tied on 44. The best scores made to-day are given below:

Creedmoor Practice Match.—J. Fuller 27 and 26, F. H. Waring 23.

Creedmoor Prize Match.—A. B. Dodge 47 and 49, C. D. Palmer 44 and 46, G. A. Leighton 44 and 46, A. R. Angell 42 and 44, J. A. Baker 43 and 43, B. Cline 42 and 43, C. M. Henry 40 and 43, John Lawrence 43 and 43, James Fuller 35 and 35, J. S. Cole 33.

BOSTON, May 31.—The third and last day of the spring meeting at Walnut Hill brought the largest attendance of the week. A strong baffling wind gave considerable trouble throughout the day, and but little improvement was made in the records over those of the two previous days. The prize winners with their three highest scores are appended:

Creedmoor Match.

G F Ellsworth	34	34	35—103	P Wallace	33	33	32—98
J N Frye	34	34	35—103	J B Thomas	33	33	32—98
R F Richardson	34	35	34—103	S A Johns	32	32	33—97
H G Bixby	34	34	34—102	G Warren	31	34	32—97
W Charles	34	34	34—102	G D Hart	32	33	32—97
A Mathews	34	34	34—102	E Burleigh	33	32	32—96
J B Fellows	33	33	34—101	A D Alden	31	31	33—95
A C White	33	34	34—101	R Davis	31	31	32—95
N W Arnold	33	33	34—100	W Fisher	31	32	32—95
A L Brackett	33	33	33—99	W H Morton	31	32	31—94
C E Berry	33	33	33—99	S E Noyes	32	31	31—94
E J Cram	33	33	33—99	A Low	32	32	30—94
O M Jewell	33	33	33—99	L W Farrar	31	31	31—93
G H Wentworth	33	33	33—99	H Worthington	29	33	30—92
J Francis	32	33	34—99	G Whitcomb	31	29	31—91
M Price	32	33	33—98	C H Dunlap	30	28	27—85
R Reed	32	34	32—98	S E Ring	29	29	26—84

Herald Cup Match.

E J Cram	66	61	65—192	A Matthews	60	59	57—176
W Charles	62	62	64—188	J Francis	58	57	58—173
G F Elsworth	61	61	63—185	A C White	60	57	55—172
E F Richardson	61	59	61—181	R Reed	59	47	50—156
J N Frye	56	62	59—177	G Warren	50	50	55—155
O M Jewell	56	57	63—176	R Davis	47	48	50—145

600-Yard Match.

J Francis	38	38	39—115
S Wilder	37	38	39—114
J B Fellows	31	32	36—99

WALTHAM, Mass., May 31.—The Hillside Rifle Club, of Waltham, at its weekly shoot to-day, made the following scores out of a possible 50: Creedmoor practice, off-hand—L. O. Dennison 45, E. A. Emerson 44, H. L. Whiting 43, G. W. Bassett 43, Frank Dunlap 42, W. A. Coughey 42, W. H. Stone 42. J. F. Williams 42, J. K. Lowe 41, W. Mitchell 38, E. F. Webster 33. Creedmoor rest match—J. R. Monroe 49, L. O. Dennison 49, W. H. Stone 46, W. A. Coughey 45, W. W. Green 45, H. L. Whiting 44, G. W. Bassett 44, C. H. Gray 44, J. K. Lowe 43, G. W. Strickland 42, W. Mitchell 40, E. F. Webster 41.

BULLSHEAD RIFLE CLUB.—Thursday, May 22, 12-ring target, possible 120: G. Zimmermann 118, C. Rein 115, B. Walter 88, D. Loutzki 97, H. A. Wasmuth 97, J. Shaw 102. Thursday, May 29.—G. Zimmerman 116, C. Rein 113, J. Schrarder 112, J. Campbell 101, J. Jordan 102, D. Loutzki 104, S. F. C. Weber 95, J. Shaw 102, G. Wettzie 102.—A. LOBER, Secretary.

THOMASTON, Conn., June 2.—The shoot on Saturday last was held with a tricky ten o'clock wind blowing across the range, the result being low scores. W. H. Dunbar won the badge with a score of 99: C. L. Alling 95, E. Thomas 94, C. F. Williams 93, G. A. Lemmon 91, F. Carr 85. A. Fox 83, G. P. North 81, B. W. Pease 73, Barlow 68.—F. A. PERKINS.

NEWARK, N. J., May 30.—William Hayes, of this city, Henry Oehl and M. Dorrler, of New York, and George Joiner, of Brooklyn, shot a match at Schuetzen Park to-day, 200yds., 100 shots each, any rifle. Oehl won the contest, making 2,207 out of a possible 2,500, distance 200yds. Dorrler scored 2,163. Hayes 2,130, and Joiner 2,076. Oehl used a Brown's breechloader of .38cal.

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

THE CLAY-PIGEON TOURNAMENT.

Editor Forest and Stream:

The long talked of clay-pigeon tournament has passed into the category of the have beens. And it will be long remembered by those who participated as a most successfully conducted affair. The attendance was such as to make the gathering fairly national in its character, and the prizes are pretty well distributed over the country.

Owing to the absence of one of the Chicago shooters, the championship match was postponed from the first day to the second, and the first sweepstakes were substituted. There were 56 entries, 5 clays each, 15yds. rise:

O. B. Still, W. S. Perry, Fred Kimball, Geo. Williams, J. O. Jenkins and H. S. Taylor tied on five straight birds, and divided first money.

C. A. Calhoun and F. Drake tied on four birds and divided second money.

Geo. Wilson, M. E. Taber, G. S. Sampson, D. C. Powers and Abe Kleinman tied on three birds and divided third money.

Second match, sweepstakes. 74 entries, 7 clays, 18yds., J. A. Prechtel, of Cleveland, O., took first; W. S. Perry, Worcester, Mass., second and F. Gastright, of Newport, Ky., and E. W. Wick, of Colorado, divided third. Following are the scores:

O B Still	0011000—2	Herman	1000100—2
M F Kennedy	0000100—1	Roof	1100000—2
Crawford	1011000—3	J J Kleinman	1010101—4
Woodruff	0010111—4	Anderson	1101000—3
Walker	0000100—1	Alger	0101010—3
Van Slyck	0010110—3	Duncan	1010100—3
Mills	1110110—6	Mack	1101011—5
Tinker	1001001—3	Riley	1111010—5
Sherley	0000010—1	Parker	0011011—4
Newberry	1110011—5	Valentine	0100110—3
Williams	0000101—3	Wilson	1110001—4
Gillespie	0010010—3	Miles	0101000—2
Watts	1110100—4	Taylor	0100000—1
Watkins	1111101—6	Smith	0010111—4
Tucker	0110111—5	Gifford	0010011—3
Wagner	1100110—4	McKevitt	1101111—6
Perry	1111110—6	Dorland	1110100—4
Calhoun	0101110—4	Eaton	1101010—4
Tabor	0101010—3	Runderson	0100110—3
R Kennedy	1100110—4	Lampon	0110100—3
Snyder	0011000—2	Powers	1111010—5
Prechtel	1111111—7	Davis	0011110—4
Stark	0100011—3	Cooper	1100111—6
Jenkins	0110110—4	Smedley	1001111—5
Bailey	0310100—2	Bradley	0100000—1
Ackerman	1101000—3	Gilman	0100000—1
Chamberlain	0111010—4	Holden	1100000—2
Sheldon	0101110—4	Hayward	1110101—5
Rupert	1100000—2	Wheal	1001111—5
Geo Kleinman	1000011—3	Linneman	0100000—1
Phillips	0110010—3	Walker	0000000—0
Denman	0111100—4	Yelton	1001000—2
Drake	0000100—1	Koehler	0100101—3
Houghton	0101001—3	Eckert	1100000—2
Gerrish	1110110—5	Miller	0110100—3
Eager	1100101—4	Beauvis	1001010—3
Folsom	0100000—1	Caster	1100000—2
Bandle	1100011—3	Caywood	1000000—1
Gastright	1111010—5	A Kleinman	0101111—5
Wilcox	0111100—4	Airey	0111111—6
Closse	0100100—2	H S Taylor	0000010—1
H Miller	1011100—4	Kimball	1111011—6

Ties on 6, at 3 clays—McKevitt 2, Cooper 2, Mills 1, Watkins 2, Perry 3. Ties on 5—Newbery 0, Tucker 2, Gerrish 2, Gastright 3, Mack 2, Riley 3, Powers 2, Smedley 1, Hayward 0, Wheal 0.

Third match, miss and out sweepstakes, 20 entries, prize divided by G. T. Gastright and O. J. Jenkins.

International championship match, clubs of 5 men each, 10 single clays per man, 18yds., and 5 pairs at 15yds. rise. Following is the single bird shooting:

Blue Island Gun Club.		Jacksonville Club.	
Geo Rirvy	0110110101—6	C Henry	1111001001—6
G Roeber	0101101000—4	J Stice	1011101101—7
F Bushnell	0001100111—4	B Stage	0110001100—4
T Igelhardt	1001000111—5	T Taylor	0000000011—2
Lichtemeyer	0001001001—3—22	C Strong	1011100001—5—24
Chicago Shooting Club.		**Chicago Diana Gun Club.**	
A Kleinman	1011010001—5	J C Muther	1000011111—6
Wilson	1010001110—5	H Ehlers	1110100010—5
R B Wadsworth	1101101111—8	P Smith	1111010000—5
Norton	1000000001—2	O G Egger	0000001001—2
B Gillespie	1011001010—5—25	Burmeister	0101110311—6—24

Bradford Team No. 1.		Bradford Team No. 2.	
F Drake	1001001000— 3	F Bradley	1010001111— 6
F Gifford	0010101110— 5	W L Yelton	1100001101— 5
A Smedley	0010110000— 3	A B Walker	0010 00110— 4
J Denman	1100111110— 7	J Sherley	0011000101— 4
J. Linneman	0010110010— 4—22	C McKivett	1111111111—10—29
Farmington Gun Club.		**Chippewa Gun Club.**	
G Woodruff	0001000100— 2	Duncan	1110111001— 7
J Brunner	0110110010— 5	Dorlan	0100010110— 4
J Anderson	1001100010— 4	Snyder	0000100010— 2
L Scales	1100100100— 4	Kennedy	1001010001— 4
S Caynard	0100010010— 3—18	Herman	1111110001— 7—24
Kirtland Club.		**Capital City Gun Club.**	
C M Roof	0010000011—3	E L Mills	0100111111—7
M Eaton	0001101011—5	W Wagner	1100001110—5
J A Closse	1100011101—6	McKildan	0110100100—4
A Alger	1100110111—7	Bailey	1110001100—5
C F Wheal	1110010111—7—27	Smith	1110110000—5—26
Worcester Gun Club.		**Cleveland Gun Club.**	
H W Eagar	1111000011—6	M Silsby	1011110110—7
E T Smith	1010000111—4	F Chamberlin	1001101100—5
G A Sampson	1001011010—5	C A Calhoun	1101100010—5
E B Holden	1111101011—8	D C Powers	0011000111—5
W S Perry	1010001110—5—28	R E Sheldon	1100111010—6—28
Exeter Sportsman's Club.		**Cincinnati Independent Club.**	
Dr. Gerrish	1100011110—6	A Bandle	1111000101—6
O Jenkins	1111101111—9	J E Miller	1101000000—2
A F Cooper	1101111101—8	C Eckert	1111110101—8
C M Stark	1110111110—8	Parker	1111000010—5
H S Taylor	1110001000—4—35	H McMurchy	1111110001—7—29

The double-bird shooting, 15yds., was as follows:

Blue Island Gun Club.		Jacksonville Club.	
Geo Rirey	00 00 10 00 10—2	C Henry	10 01 00 10 10—3
G Raiber	00 10 00 00 00—1	J Stice	10 11 11 11 10—8
F Bushnell	15 00 11 00 00—3	B Sage	10 00 00 01 01—2
Igelhardt	00 10 10 11 00—4	T Taylor	10 00 10 11 11—6
Lichtemeyer	10 00 10 00 00—2—12	C Strong	11 10 01 10 00—6—24
Chicago Shooting Club.		**Diana Club.**	
A Kleinman	11 11 00 11 10—7	Muther	10 01 01 01 01—5
Wilson	10 11 11 10 10—7	Ehlers	00 10 00 10 00—2
Norton	11 10 00 01 10—5	Smith	10 00 11 10 11—6
Gil espie	10 00 10 00 10—3	Eagen	01 00 10 10 10—4
Wadsworth	11 01 01 11 01—7—29	Burmeister	00 00 10 00 00—1—18
Bradford Team.		**Bradford Team No. 2.**	
F Drake	01 10 11 01 01—6	Bradley	00 01 00 11 11—5
Gifford	10 10 10 10 01—5	Tilton	10 00 01 10 11—5
Smedley	01 10 11 10 00—5	Walker	10 00 10 11 10—5
Denman	10 10 10 00 10—4	Shirley	10 11 11 10 00—6
Linneman	00 10 11 10 00—4—24	McKeath	10 01 10 00 00—4—25
Farmington Team.		**Chippewa Gun Club.**	
Woodruff	01 10 01 11 00—5	Duncan	01 10 00 10 11—5
Brunner	00 11 10 01 10—5	Darlan	01 10 10 10 00—4
Anderson	10 00 00 10 11—4	Snyder	11 00 00 00 00—2
Scales	00 10 10 00 10—3	Kennedy	00 00 11 10 00—2
Caywood	00 00 10 00 11—3—20	Herman	10 01 10 00 00—3—16
Kirtland Shooting Club.		**Capitol City Gun Club.**	
Roof	01 11 10 00 01—5	Mills	10 11 10 00 11—6
Eaton	01 01 00 00 00—2	Wagner	10 01 00 11 11—6
Closse	10 10 10 10 10—5	McKeldon	11 10 11 10 10—7
Alger	00 00 11 10 10—4	Bailey	01 01 00 01 01—4
Wheal	10 00 10 00 00—2—18	Smith	00 00 10 00 00—1—24
Worcester Club.		**Cleveland Gun Club.**	
Eagar	11 11 10 11 10—8	Silsby	10 10 01 10 00—4
Smith	00 11 11 00 10—5	Chamberlin	01 11 11 11 11—9
Sampson	10 10 00 10 10—4	Calhoun	01 00 11 11 01—6
Holden	01 00 10 10 00—3	Powers	00 00 11 10 10—4
Perry	01 11 10 11 11—8—28	Sheldon	11 11 11 11 01—9—32
Exeter Club.		**Cincinnati Independent Gun Club.**	
Gerrish	11 11 10 11 10—8	Bandle	10 11 11 01—9
Jenkins	10 00 01 10 10—4	Miller	10 00 01 11 00—4
Cooper	01 01 10 01 10—5	Eckert	00 10 01 11 10—5
Stark	10 11 11 10 11—8	Parker	11 01 00 11 10—6
Taylor	11 11 01 10 11—8—33	McMurchy	00 10 01 10 00—3—27

	Single.	Double.	Total.
Blue Island	22	12	34
Jacksonville	24	24	48
Chicago	25	29	54
Diana	24	18	42
Bradford	22	24	46
Bradford (2)	29	25	54
Farmington	18	20	38
Chippewa	16	24	40
Kirtland	27	18	45
Capital City	26	24	50
Worcester	28	28	56
Cleveland	28	32	60
Exeter	35	33	68
Cincinnati	29	27	56

The Exeter Sportsman's Club took first prize, $750. Cleveland (O.) Gun Club, second, $105. Worcester (Mass.) Sportsman's Club, third, $73.75. Cincinnati (O.) Independent Shooting Club, fourth, $52.50. Chicago Shooting Club and Bradford (Pa.) Shooting Club divided fifth, $26 25. C. M. Stark, of the Exeter team, won the diamond badge by a score of 16 out of 20. The scorers were: Houghton, of Worcester, and Limberg, of Cincinnati. Judges: Anderson, of Denver, Col., and Folsom, of New Haven, Conn. Referee: M. D. Gilman, Worcester, Mass. Left judge: Fred. Kimball, Peoria, Ill.

Match at 8 live birds, 20 yds., 96 entries.—Meadows and Gastright tied on 8 birds and divided first money. Carter took second money with 7 birds killed. In the shoot off of ties for third money, it was divided between Linneman and Stice.

Match at 2 pair double clay-pigeons.

Bandle	11 00—3	Prechtel	00 11—2
Perry	11 11—4	Wheal	11 10—3
Jenkins	10 01—2	Gastright	11 11—4
Eager	11 10—3	Mills	11 00—2
Williams	11 11—4	Stice	11 00—2
Carter	01 10—2	Minor	00 00—0
Smith	11 11—4	Taylor	00 00—0
Stark	11 01—3	Verges	00 01—1
Gerrish	00 11—2	McKevitt	11 11—4
Beamis	11 10—3	Bradley	11 11—4
Mack	11 10—3	Newberry	10 11—3
Eckert	1 00—1	Carmannas	00 00—0
Sampson	11 11—4	Calhoun	01 00—1
Tinker	10 01—2	Geo Raisch	00 00—0
Sheldon	11 01—3	Long	01 00—1
Chandler	01 00—1	Denman	11 11—4
Powers	11 00—2	Meadows	10 11—3
Valentine	11 01—3	Watkins	11 11—4
Closse	11 11—4	Tucker	11 01—3
Parker	11 11—4	Me-singer	01 01—2
Linneman	11 11—4	G T Mills	01 11—3
Silsby	01 11—3	J E Doran	11 11—4
Alger	11 11—4	H Ehlers	11 10—3
Davis	11 01—3	Sandys	01 00—1
Cooper	11 01—3	Petmecker	10 11—3
Wagner	11 01—3	Yelton	01 01—2
Kennedy	11 00—2	Shirley	11 11—4
Snyder	00 10—1	Tabor	11 11—4
		Wilson	11 11—4

Ties of 4—Perry 6, Williams 1, Smith 6, Sampson 6, Jones 1, Closse 3, Parker 6, Linneman 2, Olger 6, Gastright 3.

Match at 5 single clay-pigeons, teams of 3:

Stice	1 1 1 1 1 } 10	Jenkins	1 1 0 1 0 } 7
Kimball	1 1 1 1 1 }	Taylor	0 1 1 1 1 }
Cooper	1 1 1 1 1 } 9	Tabor	1 1 1 1 1 } 8
Stark	1 1 1 0 1 }	Van Slyck	0 0 1 1 1 }
Smith	1 1 1 0 0 } 7	Sandys	0 1 1 1 1 } 6
Houghton	1 1 0 1 1 }	Herman	0 1 1 0 0 }
Eager	1 1 1 1 1 } 9	Williams	1 1 0 1 0 } 5
Perry	1 1 1 0 1 }	Wilson	1 0 0 1 0 }
Sheldon	1 1 1 1 1 } 9	Gilman	0 0 0 1 0 } 6
Calhoun	1 0 1 1 1 }	Tinker	1 1 1 1 1 }
Gastright	1 1 1 1 1 } 9	Eich	0 1 1 1 1 } 5
Teipel	1 0 1 1 1 }	Gillespie	0 0 0 1 0 }
Alger	1 1 1 1 1 } 9	Still	1 1 1 1 1 } 6
Closse	0 1 1 0 0 } 6	Hickey	0 1 1 0 0 }
Meaders	1 1 0 1 1 }	Rausheck	0 0 1 0 0 } 1
Watkins	1 1 1 1 0 } 8	Messinger	0 0 0 0 0 }
Valentine	1 1 1 0 1 }	Dorland	1 0 1 0 0 } 2
Mains	1 1 1 0 1 } 8	Ackerman	1 1 1 1 0 } 6
Sampson	0 1 0 1 1 }	Kleinman	1 1 0 1 0 }
Holden	1 1 1 0 1 } 6	Price	1 1 1 0 0 } 6
Smedley	0 0 1 1 1 } 8	Powers	1 1 1 1 1 }
Linneman	1 1 1 1 1 }	Newberry	0 0 1 0 0 } 6
Mack	0 1 0 0 1 } 6	Sylvester	0 1 0 0 0 } 3
Bandle	1 1 0 1 1 }	Hewitt	1 0 1 0 0 }
Olson	0 1 0 1 0 } 5	Wheal	1 1 1 1 0 } 8
McGetchin	1 0 0 1 0 }	Roof	1 0 1 1 1 }
Denman	0 0 0 0 1 } 8	Wilcox	0 0 1 1 0 } 4
McKevitt	1 0 1 0 1 }	Will	1 0 0 1 1 }
Brower	1 1 0 1 0 } 7	Stice & Kimball 1st, Sheldon & Calhoun 2d, Meaders & Watkins 3d	
Minor	0 1 1 1 1 }		

Match at five single clay pigeons, 18yds. rise:

Gastright	11111—5	Bradley	11010—3
Meaders	11111—5	Stice	01111—4
Watkins	10111—4	Closse	11100—3
Still	11111—5	Wheal	11111—5
Davis	00101—2	Alger	11110—4
Perry	10111—4	Anderson	11110—4
Verges	10011—3	Gilespie	10110—3
Williams	11011—4	Sheldon	11111—5
Wilson	01110—3	Stark	10111—4
Eager	11111—5	Gerrish	11110—4
Jones	01011—3	Jenkins	10110—3
Beauvis	11011—4	Taylor	10010—2
Parker	10001—2	Prechtel	01101—3
A Calhoun	00011—2	Bandle	10111—4
Tinker	11111—5	Teipel	10111—4
Valentine	01001—2	Thorne	01110—3
Sampson	1000 w.	George	11101—4
Linneman	11111—5	Newberry	10111—4
Nelson	11111—5	Denman	11011—4
Holden	11111—5	Mack	11101—4
Olson	11111—5		

Ties on 5, miss and out: Gastright 2, Meaders 2, Still 1, Eager 3, Tinker 0, Linneman 0, Nelson 1, Holden 3, Olson 1, Wheal 1, Sheldon 3. Ties on 4: Watkins 3, Perry 0, Williams 0, Beauvis 2, Still 1, Alger 3, Anderson 1, Stark 3, Gerrish 3, Bandle 0, Teipel 4, George 1, Newberry 0, Denman 2, Mack 0.

Match at 5 single live birds, 4 ground traps, 30yds., both barrels:

A Kleinman	11111—5	McKevitt	11111—5
Nelson	11110—4	J Smith	10101—3
Perry	11110—4	Jones	11111—5
Still	10110—3	Mills	11110—4
Stice	11110—4	Bradley	11011—4
Linneman	11111—5	E Watkins	01011—3
Bailey	11110—4	Meaders	11101—4
McKeldon	10111—4	Millington	01000—1
Taber	10001—2	Taylor	01101—3
Pardington	11111—5	Wagner	10111—4
Sheldon	10111—4	Sage	10100—2
Gastright	10100—2	Thorn	10101—3
A Olson	10110—3	Hewitt	00100—1
John Kleinman	11101—4	Parker	11001—3
Mack	01110—3	Eager	10111—4
Calhoun	00111—3	Williams	11111—5
Teipel	11100—3	Wilson	11111—5
Bandle	11111—5	Carter	01110—3
Strawn	11010—3	Walker	00011—2
Wheal	10111—4	Riley	11101—4
Stark	10110—3	Beamis	10111—4
Prechtel	11101—4	Tucker	11110—4
Denman	01111—4		

First money divided by Abe Kleinman, Linneman, Bandle, J. Partington, McKevitt, Jones, Williams and Wilson. For second money; on the shoot-off thirteen men dropped out, leaving six, who drew out $15 each and shot for the balance. Third money was divided in the same way among four shooters.

A committee was appointed to draft a constitution for a National Sportsman's Association.

THE ONE BALL COMPLAINT.—*Editor Forest and Stream:* We notice an article in your last issue from "A. C. G.," Poughkeepsie, N. Y., trying to make a great stress on his experiments with our balls, and seeking to condemn them because they would not in every instance break with a single pellet of No. 8 shot at 40yds. We wonder why he did not try the same thing at 60yds. We think that "A. C. G." makes a display of his ignorance, and shows that his expectations are far greater than his realizations when he thinks a target of any kind yet produced should break into atoms with a single pellet of No. 8 shot at 40yds. We know that our balls can easily be broken by a single pellet of No. 8 shot at a reasonable distance, and the representative trap-shooters of Western New York, from Syracuse to Buffalo, whose names appear in this issue and scores show that the balls are all we advertise and more. We will gladly furnish the address of any or all of these gentlemen, that are not beginners in the shooting art, and leave the verdict in their hands regarding the superiority of our target balls. This learned gentleman from Poughkeepsie should take the kind advice of the editor of this paper and learn to load a gun, and then learn to shoot it, or else get up the target alluded to "that will break automatically whenever a gun is pointed at it." Capt. Bogardus and sons, with the Buffalo Bill Wild West; Capt. E. E. Stubbs, of Gainesville, Kan.; Messrs. Butler and Oakley, "premier shots," with Sell's circus, and many others of professional fame, use our balls exclusively for their ball shooting, and that glass must go is a certainty. To kill birds in the field, to kill them from the trap, to break clay-pigeons or ball pigeons or target balls of any kind with a single pellet of shot is unreasonable, to put it in its mildest form.—F. J. MOYER (Secretary Target Ball and Ball Pigeon Co., Lockport, N. Y.).

LOCKPORT, N. Y., May 25.—Second match of a series of twelve under the management of the Target Ball and Pigeon Company. The shooting was by far the finest the city has ever seen, quite a number of noted marksmen from different parts of the State participating. The first contest was for 10 target balls, rotary trap: Geo. Luther 8, E. Smith 8, J. Andrews 10, H. Howard 6, H. Whitney 10, J. H. Jewett 6, E. M. Moody 9, Dr. Moyer 9, John Pierce 7, R. G. Woods 9. Andrew and Whitney divided first money, Moody and Moyer second money, Luther and Smith third money.

The second contest was for 10 ball pigeons: Luther 9, Smith 8, Andrews 7, Howard 10, Whitney 10, Jewett 7, E. Moody 10, Moyer 9, G. Moody 9, Pierce 8, Woods 7, Coombs 5, Isbester 10, Freeman 7. E. Moody took first money in shooting off. Dr. Moyer and G. Moody divided second money, Smith and Pierce divided third money, Andrews and Jewett fourth money.

The third contest was for 15 ball pigeons: Luther 14, Smith 13, Andrews 11, Howard 13, Whitney 14, E. Moody 12, Moyer 15, G. Moody 15, Pierce 14, Jewett 12. Dr. Moyer and Geo. Moody divided first money, Luther and Whitney divided second money. Smith and Howard third money, E. Moody and Jewett fourth money.

The fourth contest was for the championship ball pigeon badge of 20 pigeons divided into 2 sweeps: Smith 20, Andrews 17, Whitney 20, E. Moody 18, G. Moody 16, Woods 4, Luther 16, Freeman 16, Jewett 17, Howard 16. Pierce 16, Moyer 19. In shooting for the badge, Whitney won, taking first money and champion badge, Dr. Moyer took second money.

The fifth contest was a double rise, 5 balls and 5 pigeons: Andrews 9, Smith 8, Whitney 10, Jewett 6, Pierce 10, E. Moody 10, Howard 8, Luther 9, Moyer 9. In shooting off Whitney won first money, Andrews and Moyer divided second money, Smitu and Howard divided third money, Jewett won fourth in shooting off.

The sixth contest was 10 balls from a ball pigeon trap; Whitney, Smith and G. Moody 10, Pierce 6, Andrews 9, E. Moody 9, Coombs 9, Isbester 8, Moyer 9, Luther 8, Howard 8. In shooting off Whitney took first money, Moyer and Andrews divided second money, Howard third money, and Pierce took fourth money.

SYRACUSE, May 29.—In a shooting contest at the Syracuse Driving Park this afternoon, sweepstake prizes were competed for. Following is the score in the first shoot at 10 glass balls: Morehouse 10, D. Walters 7, C. Walters 9, G. West 8, Emmett 7, Remer 4, Courtney 8, Chapman 7. Morehouse took first money. C. Walters second. In shooting off ties on eight, Courtney beat G. West, taking third money. The second contest resulted: Morehouse 8, D. Walters 8, C. Walters 8, Emmet 8, G. West 7, Chapman 6, Courtney 8. In shooting off the ties on eight Courtney and C. Walters tied on four and divided first money. Emmett made a count of three, taking second money. Morehouse and G. West broke two each. The third shoot resulted: Wilkins 2, G. West 5, Morehouse 2, C. Walters 4, D. Walters 4. A grand glass ball and clay-pigeon tournament is advertised to be given at the Syracuse Driving Park, on June 4 and 5, under the auspices of the Onondaga Sportsman's Club. Two hundred dollars in prizes is guaranteed. Special prizes for proficiency are offered by Messrs. Lodder, Prettie and Dugard.

MILFORD GUN CLUB.—This club reorganized this week, taking in four new members. Our club is now composed of practical sportsmen. We have a Card's and also a Davenport combination trap for clay-pigeons. Will practice weekly and will respond to all challenges. On Friday, June 6, the club will meet the Schenevus Gun Club for a friendly contest. Other neighboring clubs are invited to confer with us as to future contests. Address either L. E. Sexton, Sec., or Chas. Armstrong, Pres.

PUBLISHER'S DEPARTMENT.

THE BILLIARD BALLS manufactured by F. Grote & Co., 114 East Fourteenth street, this city, are the most perfect made. The firm does an immense business.—*Adv.*

EVERYBODY wants to know the news. The latest is that Esterbrook is still making those delightfully easy writing and reliable pens that are so popular everywhere.—*Adv.*

Yachting.

FIXTURES.

Secretaries of yacht clubs will please send early notice of proposed matches and meetings.

June 7.—Larchmont Y. C., Pennant Match.
June 9—Portland Y.C., Challenge Cup.
June 9.—Savannah Y. C., Opening Cruise.
June 10.—Atlantic Y. C., Annual Match.
June 11.—Hudson River Y. C., Annual Match.
June 12.—New York Y. C., Annual Matches.
June 14.—Seawanhaka Corinthian Y. C., Annual Match.
June 16.—Newark Y. C., Opening Match.
June 16.—New York Y. C., Race around Long Island.
June 17.—Quaker City Y. C., Review and Harbor Cruise.
June 19—New Jersey Y. C., Annual Match.
June 21.—Hull Y. C., Pennant Match.
June 23.—Newark Y. C., Open Matches.
June 24.—New Haven Y. C., Spring Match.
June 26.—Salem Bay Y. C., First Championship Match.
June 27.—Eastern Y. C., Annual Matches.
June 28.—Boston Y. C., Ladies' Day.
June 30.—Manhattan Y. C., Annual Cruise.
June 30.—Quincy Y. C., Second Match.
July 4.—Larchmont Y. C., Annual Open Matches.
July 4, 5, 6.—Quaker City Y. C., Corinthian Cruise.
July 5.—Hull Y. C., Review and Annual Cruise, five days.
July 9.—Beverly Y. C., Marblehead, First Championship.
July 12.—Boston Y. C., Second Club Match.
July 12.—Hull Y. C., First Club Match.
July 19.—Hull Y. C., Ladies' Day.
July 24.—Eastern Y. C., Annual Cruise.
July 26.—Beverly Y. C., Nahant, Second Championship Match.
July 30.—Quincy Y. C., Third Match.
Aug. 4.—Quaker City Y. C., Review and Harbor Cruise.
Aug. 9.—Boston Y. C., Annual Matches.
Aug. 11-25.—Quaker City Y. C., Annual Cruise in Chesapeake and Delaware Bays.
Aug. 16.—Salem Bay Y. C., Open Matches.
Aug. 16.—Hull Y. C., Open Matches.
Aug 28.—Quincy Y. C., Fourth Match.
Aug. 30.—Hull Y. C., Second Championship Match.
Sept. 3.—Hull Y. C., Third Championship Match.
Sept. 4.—Salem Bay Y. C., Second Championship Match.
Sept. 13.—Boston Y. C., Fall Matches.
Sept. 14.—Quaker City Y. C., Review and Cup Race.
Sept. 28.—Quaker City Y. C., Review and Harbor Cruise.
Oct. 5.—Quaker City Y. C., Closing Review and Cruise.

KNICKERBOCKER Y. C.

THE spring matches of the Knickerbocker Y. C. were sailed on Friday, May 30, the course, except for the smaller boats, being around the Gangway buoy.

Forty-four of the seventy-six entries were ready at the starting line at 11:30 A. M. The yachts were divided into eight classes. The wind was fresh from the southwest at the start, and there was enough all day to make the races interesting, besides some heavy squalls that came in, which disabled several of the boats, the Amazon losing her topmast, Lizzie R. springing her mast below deck and finally losing it, and Nettie Thorp splitting her mainsail.

The times of the first ten boats at the Gangway buoy were: Lizzie R. 1:41:02, Gracie 1:42:10, Rosetta A. 1:44:00, Adele 1:44:10, Daisy 1:44:50, Nellie R. 1:46:30, Susie A. 1:46:35, Corinne K. 1:47:00, Nettie Thorp 1:51:28, Narrioch 1:52:50.

The run home with a free wind to Fort Schuyler, was followed by a beat up against the ebb tide, the finish being made at 4:30. The times of the yachts were as follows, the winners in the first and second class not being known, as they have not yet been measured under the new sail area and length rule.

	Start.	Finish.	Elapsed.	Corrected.
Wacondah	11 32 53	4 40 39	5 07 46	
Undine	11 32 34	4 22 31	4 49 59	
Peerlesss	11 31 58	Not timed.		
Sara	11 31 59	4 18 00	4 46 01	
Lena	11 31 59	4 37 45	5 05 46	
CLASS II.				
Whimbrel	11 33 25	4 35 31	5 01 16	
Elise	11 31 05	Not timed.		
Supervisor	11 31 59	4 35 52	5 03 53	
Mamie	11 31 47	4 45 40	5 10 53	
Reckless	11 32 33	4 31 19	4 58 49	
Amazon	11 31 59	4 41 52	5 09 53	
Gil Blas	11 33 44	4 40 15	5 06 31	
CLASS III.				
Nettie Thorp	11 29 36	Di-abled.		
Gracie	11 36 13	3 56 01	4 25 48	4 18 43
Nellie W	11 27 53	Not timed.		
Susie A	11 27 05	4 12 37	4 45 32	4 38 17
Mamie H	11 27 16	Not timed.		
Edna K	11 27 05	4 19 50	4 42 45	4 34 35
Liddy N	11 26 33	4 54 45	4 28 12	5 16 37
Rosetta A	11 28 01	4 10 26	4 42 25	Not meas'd
Vida	11 27 08	4 49 22	5 22 14	5 12 24
CLASS IV.				
Why Not	11 26 41	4 52 11	5 25 30	5 24 05
Nimrod	11 28 18	4 46 15	5 17 57	Not meas'd
Minnie R	11 27 36	4 40 36	5 13 00	5 12 00
Nettie	11 28 38	4 46 55	5 08 17	5 03 02
Vaddie	11 27 57	4 46 18	5 18 18	5 10 24
Daisy	11 27 44	4 13 41	4 45 57	4 44 27
CLASS V.				
Lizzie R	11 27 14	Dismasted.		
Nellie R	11 26 45	4 07 37	4 40 54	4 35 54
Black Hawk	11 34 04	4 42 05	5 08 01	5 00 01
CLASS VI.				
Gilt Edge	11 23 13	4 28 12	5 04 59	5 02 01½
Mayotta	11 22 00	4 29 00	5 07 00	5 05 25
Lurline	11 22 43	Not timed.		
Adele	11 22 34	3 58 38	4 36 04	4 34 46½
Narrick	11 20 15	4 27 37	5 07 22	5 00 29½
Gyp-ie	11 22 20	4 46 50	5 24 30	5 23 07½
Alice	11 20 21	4 36 23	5 16 02	Not meas'd
CLASS VII.				
Rex	11 25 52	4 25 19	5 00 27	4 50 01
Bon Ton	11 24 55	4 29 39	5 04 43	5 01 28
Susie B	11 22 45	5 05 45	5 43 00	5 37 00
Alert	11 20 10	4 56 41	5 36 31	5 27 56
Kittie B	11 23 13	Not timed.		
CLASS VIII.				
Foam	11 20 25	4 04 40	4 43 50	4 41 20
Hattie	11 22 10	4 04 42	4 42 32	4 46 13½

The iron steamer Sirius accompanied the yachts and carried a large number of guests.

SEAWANHAKA CORINTHIAN Y. C.

THE opening day of the Seawanhaka Y. C. proved to be anything but a "cutter day," as the term is usually applied, at least so far as weather is concerned. The light southerly wind proved just sufficient to carry all the boats out into the strength of the tide, after which it left them at intervals to anchor or drift back as they saw fit.

Bedouin was detained at Newburgh, where she passed the winter and fitted out, so Commodore Rogers transferred his flag to the Ossabair, better known as "No. 100," from which orders were given for a start, after which he went aboard the schooner Nokomis.

Starting at 11:15, the schooners Wanderer and Ray; cutters Wenonah, Ileen and Oriva; sloops Mischief, Fanny, Sagitta and Kelpie, and the little yawl Aneto, passed down between the club house and the Nokomis, dipping their colors as they passed. Ileen and Wenonah, working down out the tide, caught a breeze which carried them on down the Bay, and finally around the Scotland light, the course ordered for the entire fleet; but the others, less fortunate, drifted about the Lower Bay until all idea of going over the course was abandoned, and Vice-Commodore Tompkins signalled to return. Coming home there was rather more wind, and the fleet came to anchor off the club house at 5:30.

The fourteenth Corinthian race of the club will be sailed on Saturday June 14, and will be open to the second class schooners, first, second, third and fourth class sloops and cutters, of the Seawanhaka, New York, Atlantic, Larchmont, Eastern, and New Bedford yacht clubs, under the sailing regulations of the Seawanhaka Corinthian Y. C.

The following prizes are offered, besides personal prizes to members of the winning crews:

Schooners—Second class, under 85ft. corrected length; value of prize $150.

Cabin Sloops and Cutter: First class, 55ft. corrected length and over, $150; second class, 45ft. corrected length and under 55ft., $125; third class, 35ft. corrected length and under 45ft., $100; fourth class, under 35ft., $100.

Entries.—Entries must be made in writing, and filed with the chairman of the sailing committee, Louis P. Bayard, 167 Broadway, by 3 o'clock P. M., on June 12, accompanied by the measurement of the yacht entered, according to S. C. Y. C rules, certified to by the measurer of the club from which she enters or by her owner, together with a list of the proposed crew, their several occupations and address. Blank forms of entry with the club rules for measurement will be furnished by the secretary, on application.

Yachts may carry as crew, besides the helmsman, one man for every five feet or fraction thereof of length on deck, but must be manned exclusively by amateurs, except on schooners and first-class sloops and cutters, on which members of the regular crew, to the number of five on schooners and four on sloops and cutters, will be allowed. Their names must appear in the entry, and be subject to the approval of the Sailing Committee.

The following sails may be carried: Schooners—Mainsail, foresail, forestaysail, jib, flying jib, jibtopsail, fore and main ga topsails, main topmast staysail and spinaker. Sloops and Cutters—Mainsail, forestaysail, jib, flying jib, jibtopsail, gafftopsail and spinaker. Any of the above sails may be carried as balloon sails, gafftopsails excepted. Sloops and cutters of the fourth class may carry topsails extending above the truck.

The start will be a flying one, as near 11 A. M. as possible.

The course will be as follows:

Course—For schooners and first and second class sloops and cutters: from an imaginary line between the committee steamer and Fort Wadsworth, to buoy 10, on the S. W. Spit, keeping it on the port hand, thence to and around buoy 8½, keeping it on the port hand, thence to and around Sandy Hook Lightship, keeping it on the starboard hand, and return over the same course to buoy 15, keeping to the eastward of buoys 9, 11, 13 and 15, on the west bank, and outside of buoy 5, on the point of Sandy Hook, going and returning.

For third class sloops and cutters: from the same starting line, to buoy 10, on the S. W. Spit, keeping it on the port hand, thence to and around buoy 8½, keeping it on the port hand, thence to and around the Scotland Lightship, keeping it on the starboard hand, and return over the same course to buoy 15, keeping to the eastward of buoys 9, 11, 13 and 15 on the west bank, and outside of buoy 5 on the point of Sandy Hook, going and returning.

For fourth class sloops and cutters: from the same starting line to buoy 10, on the S. W. Spit, keeping it on the port hand, thence to and around buoy 8½, keeping it on the port hand, thence to and around buoy 5 on the point of Sandy Hook, keeping it on the starboard hand, and return over the same course to buoy 15, keeping to the eastward of buoys 9, 11, 13 and 15 on the west bank, going and returning.

The finish must be made across an imaginary line between the committee steamer or station boat, and buoy 15.

The management of the races will be in the hands of the Sailing Committee: Louis P. Bayard, 167 Broadway; Francis O. de Luze, Walter L. Suydam, Alexander H. Stevens, S. Nelson White.

Copies of the rules and blank forms of entry may be had of the secretary, Mr. L. F. D'Oremieulx, No. 67 Exchange Place.

ATLANTIC Y. C. OPENING CRUISE.

THE Atlantic Y. C. opened the season with a sail down the Bay on Decoration Day, in which nearly forty yachts took part. In accordance with the programme, the fleet formed in two lines off the club house at 11 A. M., the offshore line, in which were the schooners and larger sloops, having the Enterprise, Vice-Commodore Moffat at the right, while Rear-Commodore Wintringham, in his new sloop Nomad, was on the right of the inner line of smaller sloops.

In the matter of wind the Atlantic was rather more fortunate than its neighbor across the Bay, as the boats were able to get over the course, though the light and variable winds prevented anything like a test of the boats. The schooners present were the Agnes, Montauk, Crusader, Varuna, Republic, Triton, Grayling, Haze, Leona and Tioga. The sloops were the new Athlon, Vertie and Nomad, the Thistle (lately rebuilt), Gracie, Mistral, Enterprise, Roamer, Truant, Parole, Fanita, Viola, Stella, Crocodile, Penguin, Kaiser, Venture, Ildeun, Pilot, Hilda, Lois, Amelia, Nita, Elephant, Daisy, Viking, Romeyn and Nancy C.

A gun was fired from the flagship at 11:30, and fifteen minutes later all were under way. The wind throughout the day was light and unsteady, and when Buoy 8½ was rounded the signal was given from the flagship to return, the yachts finding a little more wind toward the close of the day, all coming to anchor off the club house about 5 P. M.

LADIES' DAY, JUNE 2.

Nearly all the yachts that took part in the opening sail of Friday were ready again on Monday afternoon for the "Ladies Day" of the Atlantic Y. C. The boats of the various yachts and the little launch of the club were busy carrying visitors aboard; at 3:30 the first gun was fired, and ten minutes later a third gun gave the final signal, by which time most of the twenty-two boats in the race had crossed the line.

The course was from the Atlantic Basin to a stake boat, moored off Oyster Island up the Bay, thence to another stake boat off Tompkinsville, and home, a distance of nearly eight miles. The wind was light from the south, and with a good flood under them the yachts strung out in a line, the larger schooners leading the way over toward Bedloe's Island.

The first to turn was the Triton, at 4:00:08; followed by Grayling at 4:00:25; Agnes, 4:01:02; Thistle, 4:01:03; Athlon, 4:02:12. On the short beat to the second mark the wind freshened, and Grayling took the lead, rounding at 4:24:03; the Triton next at 4:25:10; Thistle at 4:25:25; Athlon, 4:26:38; followed by Roamer, Agnes, Crocodile, and Enterprise.

This order was maintained on the short run home, the time of the race being as follows:

	Elapsed.	Corrected
SCHOONERS—CLASS A.		
Grayling	0 59 15	0 59 15
SCHOONERS—CLASS B.		
Agnes	1 07 25	1 06 10
Triton	1 02 15	1 02 15
Leona	1 19 58	1 16 02
SLOOPS—CLASS C.		
Athlon	1 04 15	1 04 15
Thistle	1 03 57	1 03 57
SLOOPS—CLASS D.		
Viola	1 05 03	1 04 10
Roamer	1 00 45	1 00 45
Enterprise	1 02 50	1 02 00
SLOOPS—CLASS E.		
Kaiser	1 12 45	1 12 38
Mistral	1 16 40	1 15 07
Elephant	1 06 14	1 04 01
Crocodile	1 04 51	1 04 51
Amelia	1 22 10	1 21 41
SLOOPS—CLASS F.		
Tourist	1 14 40	1 13 38
Daisy	1 09 32	1 09 32
Viking	1 10 15	1 10 07
Nomad	1 16 56	1 16 39
Romeyn	1 08 18	1 08 03
SLOOPS—CLASS G.		
Venture	1 21 43	1 21 43
CAT RIGS—CLASS H.		
Wanda	1 35 00	1 35 00
Hypatia	1 21 00	1 21 00

After the return an entertainment to the guests of the club was given at the club house. The annual matches of the club will be held on June 10.

ANOTHER BLOW AT THE SANDBAGGERS.

A FEW weeks since we noted the action of the Knickerbocker Y. C. in the adoption of the sail area and length rule, and in limiting the crews to one man to every 3ft. of deck length, both of which steps tend to the exclusion of the sandbaggers, and now the New Jersey Y. C., as will be seen from the following letter, put themselves squarely on record as opposed to shifting ballast and unlimited crews, the reasons for which are clearly given below.

If the clubs interested will but try the experiment of limiting their crews and prohibiting shifting ballast, there is no reason why New York should be so far behind in small boat racing. It is certain that this kind of yachting is at the lowest ebb here, and equally certain that it cannot be revived as it is at present conducted, and the sooner the unsafe, oversparred sandbagger disappears from our waters, the better for true yachting.

The influence of the sandbag boat on our yacht models has retarded yachting about a dozen years in this country, and though it is now at an end and virtually dead as far as large yachts are concerned, its evil effects will be felt for some time. We have the men and the money to promote small safe yachts, and for every trap that disappears from the races we may expect in a few years half a dozen trim little ships, safe, speedy and roomy, with a crew of sailors to man them. The New Jersey Y. C. deserve all praise for the step they have taken. Who will be first to follow them?

NEW YORK, May 6, 1884.

Messrs. Frank McCown and C. W. Boughton, Committee:

GENTLEMEN—Your communication relating to a union regatta during the coming summer was submitted at a meeting of our club on Thursday evening, 24th ultimo. After considerable discussion relative to the matter, a committee was appointed to ascertain the facts as far as possible, and to state the condition upon which our club would co-operate.

It may not be unknown to you that the New Jersey Y. C. is by its constitution and by-laws confined to stationary ballast, and a limited crew for the first regatta of each year; and it is a fact that no race or regatta has ever been authorized by the club during its existence of thirteen years except with fixed ballast and limited crews. As a consequence, but few of our boats have large sails and spars such as are necessary to secure success in a race where shifting ballast and unlimited crews are allowed. Furthermore, a very large proportion of our members are imbued with the idea that our sailing rules are more in accordance with the advanced ideas of yachting, and better calculated to develop a genuine love for the sport among men of all classes and conditions of life, than the old-fogy notions that have prevailed for the last fifty years with owners of small yachts.

It is apparent to every thoughtful mind that such a system has ceased to have any great amount of vitality. The strongest evidence of this was manifested last year in the effort made to bring small boats together.

In the race for 20ft. boats, only three started, notwithstanding the immense amount of effort made; and in the race for 27ft. boats, but six could be gotten together, while in Eastern waters, where fixed ballast is the rule, no less than two hundred boats started in a single race, and we rarely hear a Union regatta in the vicinity of Boston with a less number than fifty participating. Why is such the case? Is it because we lack means, courage, seamanship or water facilities? No, nothing of the kind. We have them all; and when sailing regulations similar to those adopted by the New Jersey Y. C. become the rule and not the exception, there will be no difficulty in bringing together in the bay of New York, a fleet of boats equal in every respect to that of any other city in the world.

The New Jersey Y. C. has made an effort in that direction during the past two seasons, by giving open regattas in the fall, with only partial success, due to the fact that most of the clubs for small boats within convenient distance sail their races with shifting ballast and no limitation as to crews.

The reason generally urged against stationary ballast is the danger of sinking in the event of a cap-size. It's an old saying, "to be forewarned is to be forearmed," and our members fully appreciating this adage, have provided their boats with galvanized air tanks, sufficient to buoy the greater part of the dead weight, thereby rendering them safer than sandbag ballast without air tanks.

To capsize is a possible event; yet such an occurrence has not happened in our races with stationary ballast in six years, and never have we lost a life in consequence, while no less than three boats out of the six starting in the shifting ballast sweepstakes race of last summer were turned over, and a fourth carried away the mast.

In this communication, so far we have presumed that your efforts would be directed toward a regular old-fashioned sandbag race. It may be that in this we are mistaken, and that in the Oceanic Y. C. we are to have an ally in our struggle for fixed ballast and limited crews. If so most cordially will we extend a welcome, and you will find us ever ready and willing to co-operate with you in any effort you may make in that direction.

To be perfectly candid, we have given much consideration to this communication, in the hope that we might induce you to co-operate with us—if not at present—at least in the near future.

In conclusion we must say, that under no circumstances could we be induced—as a club—to act in concert with you, in the interests of a Union Regatta that permits shifting weight and unlimited crews.

Very respectfully,

WM. H. DILWORTH, } Com'ts
ED. A. STEVENS, } N. J. Y. C.

SOUTH BOSTON Y. C. SPRING MATCHES.

THE cold weather of last week had ended by Friday morning in a brisk northwest wind, which, though acceptable to the yachtsmen, had sufficient frost in it to make the opening match of the South Boston Yacht Club anything but summer sailing.

The flagship of the South Boston Y. C., the North Star, was moored off City Point, to do duty as judges' boat, the course being, for the first class, from the judges' boat, leaving on the starboard hand Thompson's Island, Rainsford's Island, and Toddy Rock buoy; Long and George Islands and Point Allerton buoy to port; and on the return, leaving Toddy Rock, Fort Warren, Gallop Island, bell buoy, Long and Spectacle Islands also to port, finishing abreast the judges' boat, making fourteen miles.

The second, third, and special classes were to leave Cow Pasture buoy to port, buoy No. 7 to starboard, leaving Sculpin Ledge buoy to port, buoy No. 6, lower middle, and buoy No. 9, upper middle, also to port, and finishing at start. Distance nine miles. The fourth class were to leave to port, Cow Pasture buoy No. 6, Fort Independence buoy No. 7, and buoy No. 9, upper middle, finishing at start. Distance six miles.

The yachts were signaled at 1:45 to take positions, and soon formed in three lines.

The first and second classes were started at 2:10, the third and special classes at 2:15, and the fourth at 2:20. To avoid any mistake in timing the 68 yachts starting, each was provided with a card bearing the number assigned to her, which card was displayed on passing the judges' boat.

Over the first part of the course the big fellows carried spinnakers and balloonsails. But few mishaps occurred, the most serious being off Sculpin Ledge Buoy, where Niobe fouled Parole, and stove a small hole in her quarter, giving occasion for a protest. The times of the 38 yachts that finished are:

	Length.	Corrected.
FIRST CLASS (CENTERBOARDS).		
Clytie, F. Cunningham, Eastern	34 08½	2 37 24
Magic, E. C. Neal, Lynn	31.10	2 19 37
Shadow, J. Bryant, Boston	31.06	2 25 08
Mabel, F. T. Clayton, Hull	33.08¾	3 48 08
Nimbus, B. Jenny, Jr., Boston	31.05	2 20 41
FIRST CLASS (KEELS).		
Lillie, J. P. Gale, South Boston	36.11½	2 38 35
Ægir, William McCormick, Jeffries	35.04	2 43 57
Altaire, A. J. McLeod, South Boston	38.08	3 03 09
SECOND CLASS (KEELS).		
Zulu, C. L. Braman, S. B	27.08½	1 29 45
Judith, E. T. Pigeon, Jeff	28.10¾	1 33 48
Banneret, J. F. Brown, H	25.01	1 29 55
Critic, Otis D. Dana, B	23.02	1 40 59
Kitty, Tarbell & Adams, B. and H	23.09	1 26 57
Nydia, J. J. Galvin, S. B	23.00	1 30 48
Gem, Osgood & Savage, S. B	26.07	1 33 52
Celeste, Capt. Thomas, B. and H	26.00	1 51 48
Thelma, A. Thyyer, H	22.09	1 48 26
Trinket, W. H. Buckley, S. B	22.00	1 33 02
SECOND CLASS (CENTERBOARDS).		
Lizzie Warner, T. Luttard, S. B	25.08½	1 30 42
Rita, A. T. Bliss, S. B	25.07½	1 43 58
Greta, J. W. & W. S. Hill, Dorchester	23.04½	1 36 45
Alda, W. H. Wilkinson, B	24.00	1 43 26
Posy, H. J. McKee, S. B	22.00	1 37 25
THIRD AND SPECIAL CLASS.		
David Crocket, J. H. Putman, H. & B	21.04½	1 30 23
Parole, J. J. Bowers, Washington V	13.10½	Injured, withdrawn.
Joker, George Coffin, H	20.07	1 32 11
Niobe, P. L. Dunne, H	20.05	1 27 58
Spray, H. M. Faxon, H. and Quincy	18 11	1 28 54
Pet, J. McFarland, Q	19 10	1 26 48
Thisbie, S. B. Freeman, S. B	21 01	
FOURTH CLASS (CENTERBOARDS).		
Nancy, J. P. Grose, Jr., Wash. Village	17.00	0 49 46
Flora Lee, David Lincoln, S. B	17.00	0 42 15
Whiff, F. J. Bullard, S. B	16.00	0 46 15
Nana, Whitcomb & Gay, Dor	17.05½	0 52 16
Elsie, D. Hardwick, Q	16.09½	0 51 05
Crescent, T. M. Alley, W. Ly	17.03½	0 52 08
FOURTH CLASS (KEELS).		
Cimbria, W. H. Wedger, Phœnix	21.00	1 46 49
Belle, Gifford Bros., Jeff	20.09½	1 43 08
Vesper, R. M. Bonner, W. Ly	19.02½	1 42 46
Zetta, Fowle Bros., Jeff	20.00½	1 48 04
Carrie B., Will Cherrington, Jr., S. B	21.07½	withd'n

Following is a list of winners and prizes:

First class: Centerboards—First prize, $25, Magic; second prize, $10, Shadow. Keels—First, $25, Lillie second, $10, Ægir.

Second class: Keels—First, $20, Kitty; second, $10, Zulu. Centerboards—First, $20, Lizzie Warner; second, $10, Greta.

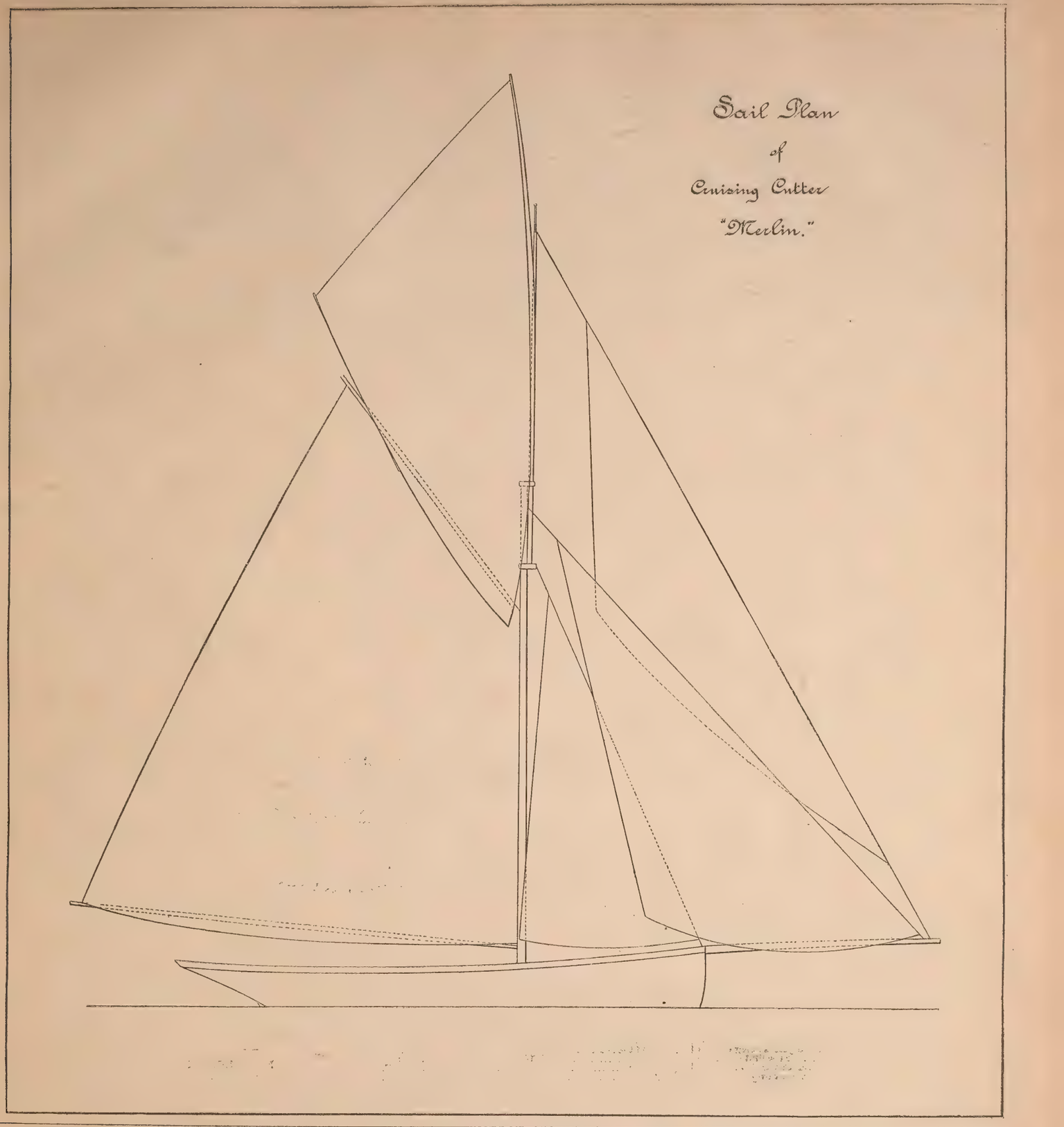
Third class—First prize, $15, Thisbie; second, $10, Spray; third, $5, Pet.

Fourth class—First, $10, Flora Lee; second, $7, Whiff, third, $5, Nancy.

Special keel class—First, $15, Vesper; second, $5, Belle.

After the races the skippers of the competing boats and a number of invited guests were entertained by Com. Hussey on board the North Star.

The Regatta Committee in charge of the races were John Bertram, C. McKenna, J. E Chandler, H J. McKee, F. G. Cooley, R V. King and S. A Crowell. The judges were E. G. Robinson, W. Hutchinson, G. Conant, T. Christian and William Morris.



THE MERLIN.

WE give this week the sail plan of the Merlin, 5 tons, the drawings of which appeared in the previous issue. The mainsail, though shown with a loose foot, is laced to the boom. The sail area is about 760ft., and not as given last week:

Mast from fore side of stem	10ft.
Mast deck to hounds	23ft.
Mast diameter at deck	6in.
Topmast, fid to sheave	19ft. 6in.
Boom	26ft.
Gaff	17ft.
Bowsprit outboard	13ft.
Masthead	5ft.
Angle of gaff	51°
Area lower sail	760sq. ft.
Center of effort forward of C.L.R.	6in.

Mainsail—Foot, 25ft. 3in.; luff, 19ft.; head 16ft. 6in.; leach, 33ft. 4in.; tack to peak, 33ft. 6in.; clew to throat, 30ft.
Jib—Foot, 15ft. 10in.; luff, 30ft. 8in.; leach, 22ft. 3in.
Staysail—Foot, 10ft. 4in.; luff, 21ft. 6in.; leach, 19ft. 8in.
Topsail yard, 23ft.

LARCHMONT Y. C.

THE first pennant matches of the season will take place on Saturday, June 7, over the club course. Commodore Munroe offers a special prize of the value of fifty dollars to the first yacht in each class in which are four starters. These prizes, which will be of silver, are to be held by the winners, and are not subject to challenge. Notices of entries must be given to the Regatta Committee at the club house by Saturday morning, and all yachts must procure numbers, which must be carried on the sail. The race will start at 10:45 A. M. The races will be sailed under the following rules: The Regatta Committee are Messrs. Chas. E. Jenkins, T. B. Brown and Capt. J. B. Miley.

Pennant regattas shall be held in June and September of each year, on a day to be fixed by the regatta committee.

Each yacht enrolled in the club shall be considered as entered for these races.

There shall be a challenge pennant awarded to the winning yacht in each class. To be held by such yacht for the rest of the season unless challenged therefore, as hereinafter provided. If, in any class only one yacht comes to the starting line, she shall be entitled to the pennant of her class.

Any yacht winning the pennant in her class, shall be entitled to hold the same for thirty days from the date of the race in which the same was awarded to her; after which time she may be challenged by any yacht of her class as follows:

The owner of any yacht desiring to challenge the yacht holding the pennant in the same class shall give a written notice to the owner of such yacht, and shall serve upon the commodore and corresponding secretary a copy of such notice. The commodore shall thereupon appoint a time for the race, not earlier than one week nor later than two weeks thereafter, and shall inform the corresponding secretary, who shall thereupon notify all the members of the club.

Any yacht of the same class may compete for the pennant by filing with the regatta committee an entry in writing, in the manner provided in the sailing rules and regulations of the club.

If at any time, from any cause, the pennant of any class shall be in the possession of the club, any yacht of such class may challenge for it by serving a written challenge on the commodore and corresponding secretary. The corresponding secretary shall thereupon notify all the respective owners of the yachts of that class that such challenge has been filed. In case no yacht of that class shall within ten days thereafter file an entry with the commodore or corresponding secretary for such pennant race, the commodore shall award the pennant to the challenging yacht, and give notice of such award at next meeting of the club. If one or more yachts enter, the commodore shall appoint a time for the race and the corresponding secretary shall notify all the members of the club.

The challenge pennants shall remain the property of the club, and shall not belong to the owners of the yachts winning the same, and in case any yacht holding a pennant shall cease to be enrolled in the club, the pennant shall be returned to the club.

Start: First Gun—For all yachts to approach the starting line. Second Gun—Five minutes after the first, for all classes to start, both open and cabin yachts. Flag signal on Pagoda will be lowered. Third Gun—Five minutes will be allowed to cross the line after the signal for the start, when a third gun will be fired. Flag signal on Pagoda raised. Any yacht that does not cross the starting line within the time allowed is timed from the firing of the third gun. It is particularly requested that prompt notice of intention to race be given to the Regatta Committee, Club House, Larchmont.

"VACATION CRUISING."—Just at this time, a most important question to many is "Where shall I spend my vacation?" The problem being with some how to condense the most amusement into a limited time at some fashionable resort; but with a large and constantly increasing number it takes the form of how to spend the allotted time so as to obtain the greatest amount of mental rest, healthy exercise and recreation at a reasonable cost. Among the latter is to be counted Dr. J. F. Rothrock, writer of "Vacation Cruising in Chesapeake and Delaware Bays," a book we can recommend to all who have a liking for out-door life about the water, and especially to novices in cruising and camping, to whom Chapter V, "Who Should go Cruising," as well as who should not go, is specially directed. The writer, taking Herbert Spencer for his text, preaches like him the "gospel of relaxation," and at the same time tells the story of three months knocking about in a small yacht in a way that is attractive and interesting. Dr. Rothrock is an earnest advocate of safe boats, and while a light draft was absolutely necessary for his work, he is a believer in depth, low weights, and those good qualities that FOREST AND STREAM has so long insisted on, and writes strongly in favor of the yawl rig for cruising. The book will be of value as a guide to all who visit Chesapeake Bay, and also to those who, while not yachtsmen, are interested in the places visited.

NEWARK Y. C.—This club will hold a union regatta on Monday, June 16, over the club course in Newark Bay, there being six classes, as follows: Class A, cabin sloops; Class B, jib and mainsail 24ft. and over; Class C, jib and mainsail 20ft. and under 24ft.; Class D, jib and mainsail under 20ft.; Class E, catrigged over 19ft.; Class F, carrigged 19ft. and under. A prize of $20 will be given in each class. The entrance fee is $3. The judges are: Messrs. Oliver Adams, Larchmont Y. C.; J. W. Thorp, Harlem Y. C.; William M. Clarke, Newark Y. C. Boats may be left at the Bay Shore House before the races or after they are over. Entries should be addressed to Charles E. Cameron, Treasurer, 717 Broad street, Newark, N. J.

WINDWARD.—This little yawl, the first in Newport waters, arrived at Newport on May 28. She was built for Mr. Hugh L. Willoughby by W. P. Stephens, West Brighton, Staten Island, and is 18ft. on water line, 6ft. beam, 4ft. draft, 5ft. headroom in cabin; keel 1,700lbs., ballast inside 2,016lbs., lower sails 385sq. ft.

NEW JERSEY Y. C.—As a change from the customary sail down the Bay, the New Jersey Y. C. sailed up the Hudson on Decoration Day, taking dinner at Fort Lee, and returning in the evening.

NEW HAVEN Y. C. OPENING CRUISE.

THE new club house of the New Haven Y. C. was filled with guests on Friday, besides a large number of club members who were to take part in the opening sail. The course was from the club house to Luddington Rock buoy, leaving it to starboard, thence to and around the buoy off Charles Island, and back, making a course of twenty miles.

At 10:45 ten yachts started with a fresh northwest breeze: Starlight, L. D. Chidsey; Marguerite, Messrs. Peck and Sanford; Vixen, Messrs. Beecher and Seaman; Endeavor, Rear Com. H. D. Billard; Acruse, Com. C. W. Scranton; Ceres, T. D. Ranson; Ferguson, L. T. Ferguson; Zephyr, G. E. Dudley; Rival, W. W. Converse; Wild Duck, Alex Lutz.

Nearly all were reefed at starting. Though not a regular race, the contest was lively and exciting, the Ferguson coming in first at 2:43, and the Wild Duck 2min. later. The only accidents were the loss of a couple of topmasts. The club will hold a large reception at their new house on June 4.

WILLIAMSBURG Y. C.—The fourteenth annual regatta of the Williamsburg Yacht Club was sailed Monday, the course being from Pottery Beach to and around the Gangway buoy and finishing off Hunt's Dock. The judges were Daniel O'Brien, Daniel Lockwood and William Lyons. The General Sedgwick, her attractions tripled by the presence of two bands besides her well-known calliope, accompanied the yachts, carrying the guests of the club. Twenty-seven yachts had entered, but of these, only seventeen started out at noon. The wind was very light, but the strong flood tide carried them through the Gate and on into the Sound, where they still drifted on until near Whitestone a breeze from the south came to their help. The times of turning the Gangway buoy were:

Mary Keegan	3 55 40	Lizzie V	4 44 40
Carrie Van Voorhis	4 01 40	Susie B	4 48 33
Snoozer	4 08 35	Tidal Wave	4 50 45
Armenia J. Foster	4 22 33	Sorceress	4 51 54
Grace Darling	4 27 08	James Tregarthen	4 53 12
Bulldozer	4 37 00	Lancer	4 57 35
Samuel G. Free	4 40 48	Sally Ann T	5 01 00

The road home was to windward with a fresh breeze, the times of the boats being:

CLASS A—CABIN SLOOPS.

	Start.	Finish.	Elapsed.	Corrected.
C. Van Voorhis	11 59 50	5 44 32	5 44 42	5 44 42
Susie B	12 00 00	6 26 36	6 26 36	6 20 06
Sally Ann T	12 00 00	6 40 58	6 40 58	6 33 38
Jas. Tregarthen	11 58 57	6 30 17	6 31 20	6 23 10
Lizzie V	11 59 15	6 22 10	6 22 55	6 12 55
Sorceress	12 00 00	6 28 02	6 28 02	6 18 02
W. R. Goodenough	12 00 00	Did not sail the course.		
Lancer	11 58 43	6 47 30	6 48 47	6 23 27

CLASS B—OPEN SLOOPS.

Snoozer	11 55 00	5 46 17	5 51 17	5 51 17
Mary Keegan	11 55 00	5 31 30	5 36 30	5 36 30

CLASS C—OPEN SLOOPS.

Tidal Wave	11 46 00	6 38 05	6 52 05	6 52 05
Minnehaha	11 45 50	6 50 00	7 04 10	7 02 00

CLASS D—OPEN CATS.

Samuel S. Free	11 44 31	6 22 45	6 38 14	6 38 14
A. J. Foster	11 41 30	6 20 50	6 39 11	6 30 21
Narrioch	11 43 37	Did not turn gangway buoy.		
Bulldozer	11 41 00	6 23 38	6 42 48	6 38 08
Grace Darling	11 41 52	8 34 10	6 52 18	6 32 38

ARRIVAL OF THE VERVE.—The Allan steamship Corean brought over from Glasgow, on her upper deck, the famous cutter yacht Verve, which last year won nearly all of the races for ten tonners on the British coast, and has never lowered her racing flag in token of defeat. In future the Verve is destined to sail under the stars and stripes, she having been bought from Mr. Clark, of Paisley, her original owner, by Mr. A. W. Sawyer, a grain speculator of Chicago, and formerly a banker of this city. The Verve is a perfect type of the racing yachts built on the English deep draft principle. The bows are less fine than the run, which begins rather forward of midships. The counter is prolonged almost to a point and extends some six feet over the stern post, which has a considerable rake. The ballast, ten tons of lead, is in one piece, cast to fit the keel, to which it is bolted. Captain H. Esplin, a well known and exceptionally fortunate racing yacht skipper, with a crew, has arrived here from Chicago and will see to the rigging, and when it is completed will sail the vessel to Lake Michigan. The Verve has been already entered for all of the regattas on the lakes including those at Milwaukee, Toronto, Chicago and Buffalo.—*Montreal Star.*

QUAKER CITY Y. C.—At 10:50 A. M., on Monday, June 1, the time of starting of the ninth annual matches of the Quaker City Y. C., there was only a light breeze from the northeast, veering, after the start, to southwest, and finally dying out entirely at intervals during the day, making slow time and a tedious drift for a part of the way. Twenty-two yachts started, the well-known Minerva taking the lead. At two minutes after 2 the T. J. Pratt, fourth class sloop, turned Chester buoy, the first boat around, but it was an hour later before the larger portion of the fleet had rounded. The flagship, Commodore Vallette's Floragar, lost her topmast and head sails in rounding. After a weary drift homeward, the T. J. Pratt arrived first at 5:40:29, her sailing time being 6h. 50m. 29s. The other winners were: Sunbeam, first class; Minerva, second class; M. S. Thomas, third class; Richmond, fifth class. The prizes awarded were champion flags, silver plate, and marine glasses.

NEWARK Y. C.—In common with the New York yachtsmen the sailors of the Newark Y. C. were disappointed in the weather of last Friday, as it was the same story over again, of calms and stray puffs. The race was over the club course in Newark Bay, but the entries were smaller than usual. In the first class the Grey Eagle found wind enough to carry her around the buoy when the flood tide helped her home first, leaving the Vixen and Emmie C. becalmed for a time beyond the buoy. The prize was the challenge pennant, 36ft. long. The Rambler won in the second class, beating the Leo by a few minutes. The race for third class boats was closer and more exciting, the winner being the Triton, while the Eddie won in the fourth class. After the races a brisk wind came up and hurried all of the boats on their homeward way. The union regatta of this club will be held on June 16.

QUINCY Y. C.—The Quincy Y. C. held their opening sail on Decoration Day, eleven boats, from 16 to 21ft., taking part. The courses for the three classes were 8, 7½ and 6 miles, two prizes being offered in each class. The start was made at 3 P. M. for the first class, the second at 3:10 and the third at 3:20. The David Crockett, J. R. Putnam, 21ft. 8in., the only entry in the first class, went over the course in 1h. 25m. 55s. actual time. In the second class the Pet, J. W. McFarland, was first in 57m. 29s. corrected time; Niobe, F. L. Dunne, second in 59m. 30s. In the third class Flora Lee, D. H. Lincoln, was first, time 40m. 51s.; Elsie, C. F. Hardwick, second in 45m. 59s. The judges were George Stewart, G. A. Ordway and N. B. Furnald.

JERSEY CITY Y. C.—The yachts of this club sailed down the Bay on Decoration Day, most of them having parties of ladies on board. An entertainment was given at the club house in the evening,

Canoeing.

FIXTURES.

June 14 to 16.—Merrimack River Meet.
June 19.—Rochester C. C., Summer Regatta, Irondequoit Bay.
July 9 to 15.—Chicago C. C., Annual Cruise.
July 14.—Allegheny C. C., Cruise at Conneaut Lake.
July 19.—Chicago C. C., First Annual Regatta.
July 24 to 26.—Lake George Meet, Lorna Island.
Aug. 1 to 12,—A. C. A. Meet, Grindstone Island.

THE TALE OF A BOAT.

I NOTICE the advertisement of F. D. Graves in your columns. I owned the first of these boats made, and came into possession of it after it had acquired something of a history. As many as ten years ago the boat was used in New Brunswick and Nova Scotia by our lamented friend and veteran fisherman, Mr. Alonzo Prouty, of Boston, and many a time put the Indian canoes to shame for its weatherly qualities. The same boat was used in the Adirondacks by the Rev. W. H. H. Murray, and was pronounced by him the only sectional boat he could use. With this record it came into my own possession, and I have used it during several seasons in Maine, crossing the roughest carries and running the most rapid streams. I have taken this same boat or canoe to Florida, using it there all along the west coast in hunting alligators, and never had it fail me. At one time myself and friend rolled a 12ft. "gator" into the canoe, believing we had despatched him. He came to life sufficiently to squirm in such a manner as would have used up any ordinary boat, weighing, as he did, some 400 pounds. The light elmwood, of which these boats are constructed, yielded always sufficiently to prevent staving the boat. This adventure occurred at Homosassa, and several reliable sportsmen can bear witness to the fact. I have on several occasions taken deer from the water weighing 150 pounds, which is conclusive as to the staunchness of the craft indestructible, and packed her, in fine condition, for another trip to the sunny South. This was in January last, and the means of conveyance was the City of Columbus. The poor little canoe, after its long life of adventure, met its fate along with so much of far greater value. I secured another in season to take on train with party four days after the disaster. This little boat was used in both salt and fresh water all along the west coast of Florida, and was the object of particular attention at Tampa Bay and the Anclote River.

It was afterward used as tender to the sloop yacht Breeze, and penetrated from Charlotte Harbor up the Coloosahatchie River, through the Everglades, and into the mysterious waters of Lake Okeechobee. The veteran canoeist, Capt. S. D. Kendall, formerly of Massachusetts and now of Tarpon Springs, Fla., was with this party, and many a pleasant yarn of his beguiled the camp-fire smoking hour while cruising up the beautiful Caloosa. The Boston *Herald*, of April, noticed the trip as the first ever made to Okeechobee in a sailing yacht of any size. The articles signed "Tarpon," and published in the FOREST AND STREAM, relate to this same trip. My interest in writing this is purely and only that of a sportsman, in the hope that some of the brotherhood may notice and profit by a long boating experience.

BOSTON, Mass. E. W. SOUTHER.

THE SPRING MEET AT NEWBURGH.

IF the ghosts of any of the old Continentals, who over a hundred years ago garrisoned Mecham's Fort, erected to protect the chain stretched across the Hudson, were present in the old earthworks on Thursday, Friday or Saturday nights of last week, they must certainly have wondered what army had possession of their old camp ground. Tents, flags, camp-fire and war songs bespoke a warlike gathering, but the former were mostly of a pattern unknown to soldiers, the little silk flags bore no marks of bullet or battle, the "uniforms" of the party around the camp-fire were noticeable chiefly for their variety and total lack of uniformity, while the songs, which brought back to many of the older men present memories both sad and pleasant of camp-fires of twenty years since, and of the dear companions to whose memory the holiday was dedicated, told of a later and fiercer war than that in which the Revolutionary patriots were participants.

The intentions of those present were, however, of a peaceful nature, the only struggle was a friendly one, for the occasion was the first local meet of the canoeists of the Hudson River.

Following the example of the Springfield and Hartford Clubs of last year, the suggestion made last November in the FOREST AND STREAM was taken up by canoeists, and arrangements at once made for a meet on Decoration Day. Several places were suggested, the final decision being in favor of a point about 2½ miles below Newburgh on the west bank, just above the mouth of Moodna Creek. At this place there is a high bluff projecting into the river, and shut off on the shore side by a deep cut of the West Shore railroad. At the foot of the bluff is a level stretch of ground about 100ft. wide, elevated some 40ft. above the river, and on the outer edge of this plateau are the remains of the old earthworks. A roadway leads down to the beach, which is shelving but rather stony for beaching canoes. The property belongs to Mr. Verplanck, who kindly gave permission to the canoeists to camp on it.

All the local arrangements have been in charge of Mr. N. S. Smith, of Newburgh, an enthusiastic canoeist, to whose hard work the success of the meet is mainly due. Through his exertions four beautiful flags were provided as prizes, two of blue and two of crimson silk, with deep gold borders, each having a handsome sketch in oils in the center, one of Washington's headquarters, the others of views on the river. Flags were also offered by the Mohican C. C. and Gen. Oliver, a paddle by Mr. Rushton, and a Child's folding centerboard by the New York C. C.

Dr. Neidé was one of the first to arrive, and with some canoeists from Newburgh the camp was put in order, floats anchored, and the buoys set from ranges taken on the ice last winter by Mr. Smith, and on Thursday a number of canoeists arrived and pitched their tents. Thursday night the temperature fell to an extent that made camp life anything but pleasant after a winter indoors, but after that the weather was warmer throughout the meet.

By Friday morning most of the canoeists had arrived, and the camp was full of bustle and movement. To the north, in the fort, were the Knickerbockers, of New York, who mustered ten members; just opposite were Messrs. Newman and Neidé and several others, while on the south end of the row was a large tent bearing the striking cipher of the Kit Kat Club, an association of New York artists, some of whom, Mr. Seavey among them, are also canoeists. Following the path downward to the beach, the first tent was that of the Rondout C. C., with six men present. Just below, beside a rough fireplace of stones from the beach, was the Dot and the camp equipage of her owner, and above was a tent sheltering Messrs. Whitlock, Delavan and Stephens, also of the N. Y. C. C., while further up the beach were other members of the club, making in all ten present.

The most striking picture in the entire camp was that portion of the beach below "New York" where the boats of the Mohicans, of Albany, lay in an irregular row along under the green banks, each covered with a canoe tent of striped blue and white, making—with their flags flying, a large tent here and there between, sails and paddles stacked in groups—a beautiful picture of camp life. Besides the nine men from Albany there were present members of the Lake George, Amsterdam, Rochester and St. Lawrence clubs, making over fifty canoeists in all, with forty-five canoes and eighteen large tents.

The races were in charge of Mess s, N. S. Smith, C. B. Vaux and R. W. Gibson, Regatta Committee, who selected as judges, Messrs. Bartlett and Van Dalfsen, with Mr. Harrison as timekeeper. A number of ladies were present from Newburgh, and among the spectators were Josh and Hank Ward of Cornwall, the famous oarsmen. The first race was called at 2:30 P. M.

Class II.—Paddling—Course from float to buoy, thence to buoy above the float, ending at starting point. Distance 1 mile. Prize—Silk flag.

Neversink	E. Gould		K. C. C.
Red Rover	W. P. Stephens		N. Y. C. C.
Coquago	J. L. Greenleaf		K. C. C.
Crazy	R. Tompkins		Rondout C. C.

The water was calm at the start, with flood tide; all went off well together at 2:28½. Coquago turning the lower buoy first, with Red River close behind, Neversink next. The run up was very close, each doing his best; but at the upper turn Red Rover took a handsome lead, holding it until very near the finish, when the Neversink spurting finely at the last, passed him, winning the race by 1½ feet, in 9½ minutes, with Coquago several lengths astern.

At 3:02¼ the second race was started, for Class B, sailing:

Thetis	P. M. Wackerhagen	M. C. C.
Guena	W. Whitlock	N. Y. C. C.
Aurora	C. A. Neidé	L. G. C. C.
Nettie	E. Fowler	K. C. C.
Minx	M. V. Brokaw	N. Y. C. C.

Prize—Silk flag.

The course was triangular, 1½ miles, the wind being very light from the west. The order around the first buoy was Thetis, 3:10; Guena, Nettie, Aurora, and Minx, with Thetis still leading at second buoy at 3:15¼, which lead she increased on the run home, arriving at 3:23, with Guena 1½ minutes later, and Aurora third at 3:25½.

The third race, Class A, sailing, had meanwhile been started at 3:09, over the same course, bringing out

Marion	R. S. Oliver	M. C. C.
Helena	Grant Van Deusen	R. C. C.
Dido	Grant Edgar	Newburgh.
Day Dream	W. G. Van Dalfsen	Newburgh.

Marion led throughout, winning in 21min., with Helena second, 2½; and Dido third, the time over the course being the same as in the previous race.

Following this was a paddling race, Class 4. Distance, ⅔ of a mile:

La Polka	W. P. Stephens	N. Y. C. C.
Tip	R. J. Wilkin	K. C. C.
Aurora	C. A. Neidé	L. G. C. C.
Uncas	H. Pierson	M. C. C.
Minx	M. V. Brokaw	N. Y. C. C.

Prize—Silk flag.

Aurora took the lead, setting the pace for the others with a 9½ft. maple paddle, with Tip second and La Polka close behind. All were bunched at the turn, Aurora fouling the buoy with his paddle, but still pulling ahead for first place, though barred from taking the prize. The race was very close up the course, Aurora a little ahead, Tip and La Polka alternating as second and third, until Aurora halted a moment, La Polka took first place and held it to the finish, beating Tip by three feet.

After the races the visitors departed and the camp settled into comparative quiet, the canoeists grouped in parties of three and four around their fires on the beach, one engaged with a frying pan of fish, another picking over strawberries for supper, some busy with repairs to sails and gear for to-morrow's races, others setting up their boat tents for the night.

After supper a large camp-fire was lighted in the fort around which were forty canoeists. A business meeting was first held, at which a vote of thanks was passed to Mr. Verplanck for his kindness in allowing the canoeists to occupy the camp ground. A vote of thanks to Mr. Smith and the citizens of Newburgh was also passed.

After the meeting all present joined in singing, the songs at first suggested by the day being those of the war, running as the evening wore on, into sailors' shandys and college songs, and ending with a general attack on "Roll the Man Down," which seemed to satisfy all hands. The musical portion of the performance was considerably improved by the efforts of the "windjammer" of the N. Y. C. C., whose cornet solos were much more appreciated then than when in the early morning they awoke the lazy ones.

Finally the fire burned low, the songs were followed by quiet chat and stories, one by one the tired paddlers dropped out of the circle, lights disappeared as the moon shone down through the trees on the white tents, in the shadows of the old earthworks, on the river below and the Stormking towering above, and all was quiet, save

"Like a sentinel's tread
The watchful night wind, as it went
Creeping along from tent to tent,
Seeming to whisper 'all is well.'"

SATURDAY, MAY 31.

The main interest of the canoeists was centered on the race between the Dot, C. B. Vaux, N. Y. C. C., and the Snake, R. W. Gibson, M. C. C. This race was arranged last fall, Mr. Vaux challenging the Snake at that time, but it was postponed by mutual consent until the spring meet. The prize of the winner was to be his opponent's private signal—a trophy of priceless worth to a canoeist.

The prospects for a race were very poor early in the morning, as there was no wind at all, but by afternoon a strong southerly wind came up the gorge, driving a sea before it on top of the flood tide that promised wet jackets to the daring sailors.

The course decided on was from the camp around Pollopel Island, directly opposite, a distance of two miles, to be made in one and a half hours or no race. The start was made at 3:10 P. M, at which time it was almost impossible to keep the stake boat at her moorings in the strong tide and wind, while a heavy sea was running. Mr. Whitlock, being anxious to try his new canoe Guenn, was allowed to accompany the others over the course, though not in the race.

The Snake, under a mainsail of the Stoddart pattern only, with one reef in, making a lateen, started a little ahead, but stood across at once, as her board prevented her running in on the flats, but Dot, having but a three-inch keel, stood well in toward Moodna Creek, having a single reef in each balance lug at starting, lowering the mizzen, however, after beating toward Cornwall and standing across. Guenn ran down some distance and then attempted to work across.

In the strong tideway the boats showed to their worst possible advantage, but finally worked across, though failing well to leeward of the island. All now tried short tacks down on the east shore, the Guenn finally weathering the island and rounding it, coming home flying, but the others, finding it impossible to complete the race within the time limit, came home under sail, the owners exchanging flags, as souvenirs of the contest.

The sneakboxes, for which such claims have been made, were unfortunately absent, as no better water could have been found for a trial of their merits.

At the time of the next race the wind had subsided and there was no sea. The race was for Class II. canoes. Prize, Mohican flag. Distance ⅔ mile:

Helena	Grant Van Deusen	R. C. C.	
La Polka	W. P. Stephens	N. Y. C. C.	

Both started together and turned very evenly, La Polka taking the lead home, but being passed by Helena at the finish, the latter winning by 1ft.

The next race was for Class B canoes, no limit of weight. Prize, a silk flag. Course, 2 miles:

Guenn	W. Whitlock	N. Y. C. C.	
Aurora	C. A. Neidé	L. G. C. C.	

Both boats were of the same size, 15×31, but of different models, and both were fitted with the Child's folding centerboard. The wind was very light and the time consequently slow, the course being completed in 1h. 9min.

Following this race was a sailing race for Class A boats, for a Childs's board, offered by the New York C. C., over the same course.

Helena	Grant Van Deusen	R. C. C.
Siren	R. B. Burchard	N. Y. C. C.

The Helena won in 1h. 10min.

The Class 4 paddling race, for a paddle, presented by Mr. Rushton, brought out four entries,

Snake	R. W. Gibson	M. C. C.
Aurora	C. A. Neidé	L. G. C. C.
Mosquito	E. C. Delavan	N. Y. C. C.
Tip	R. J. Wilkin	K. C. C.

The Snake won, with Aurora second and Mosquito third.

In the Class B race, without ballast, for a flag, offered by the Mohican C. C., there were two entries. Distance, 2 miles.

Thetis	P. M. Wackerhagen	M. C. C.
Annie O	H. L. Thomas	M. C. C.

Won by Thetis in 1h. 4min.

The final race was for Class B canoes, no ballast; prize, a flag given by Gen. Oliver; 2 miles.

Crazy	W. Whitlock	N. Y. C. C.
Helena	Grant Van Deusen	R. C. C.
Siren	R. B. Burchard	N. Y. C. C.
Marion	C. Winne	M. C. C.
Fior da Lice	B. Fernow	M. C. C.

Won by Crazy in 39min., with Helena second and Siren third.

On Saturday night another camp-fire was held, and on Sunday nearly all broke camp, the Rondout canoeists running up to Esopus Island to camp until Monday, the New York men sailing to Newburgh to take the steamer to New York, and the Mohicans accompanying them, some to take the steamer to Albany, while several will continue on a cruise down the Walkill and Delaware rivers, particulars of which we hope to publish later.

The view on Sunday from Newburgh was very beautiful, as the river, as far up and down as it was visible, was dotted with little canoes, while the wind was strong enough to make their motions very rapid.

Among the canoeists were a number of amateur photographers, and many views were taken. Mr. Joslin, a photographer from Newburgh, also secured five good pictures of the camp and races, particulars of which are given elsewhere.

To those who were present at the first meet of the Association, and also at this meet, the improvement in boats, gear and camp equipage, as well as in handling, was very noticeable. Many details that were new and useful must be deferred to another occasion, but mention may be made in passing of the outfit of the Mohicans, their cooking arrangements, canoe tent, deck seat, new sails, and the general completeness of boat and outfit. That the local meet was in every way a success is the verdict of all present, and it will henceforth take a place among the permanent institutions of American canoeing.

MERRIMACK RIVER MEET.

Editor Forest and Stream:

As a lover of canoeing you are cordially invited to attend a local meet of Eastern canoeists to be held on the Merrimack River, four miles below Lowell, Mass., June 14, 15 and 16. Please extend the invitation to any of your canoeing friends. A beautiful site has been selected, and permission obtained to camp, in a secluded spot near Deer Leap, on high, level land backed up by a wooded hilly water supplied by adjacent springs. It is proposed to establish a genuine camp, and individuals or parties will, therefore, provide themselves with tents, blankets and three days' rations.

Fleet will leave Lowell early in the afternoon of Saturday, the 14th, and paddle down the river, running Hunt's Falls, a half-mile series of easy rapids, en route. Sunday will be passed quietly in camp and on Monday races can be arranged if desired. Break camp Tuesday morning and paddle six miles to Lawrence, from which point canoes may be shipped home or cruise continued to Newburyport (thirty-six miles from Lowell), at mouth of river.

Ship canoes ahead, care Geo. E. Stanley, truckman, Lowell, who will transport them to river for 50 cents each. For fares and freights apply to your local railroad agent. The camp will be centrally located amid beautiful surroundings, and it is hoped that New England canoeists generally will attend. Further particulars by letter on application.

Canoeists attending this meet will please report at American House, Lowell, where some one will be in attendance to receive them, between 10 A. M. and 4 P. M., on Saturday, June 14. But come early, as fleet will leave public landing, Central Bridge, at 2 P. M. sharp. Don't get left. Milk and eggs can be obtained at farmhouse near camp; other supplies must be carried. The prospect for a good-sized party is very encouraging. Canoeists who can come are asked to advise us. Our address is Lowell, Mass. F. H. PULLEN.

LOWELL, Mass., May 30. R. F. HEMENWAY.

VIEWS OF THE NEWBURGH MEET.—Mr. J. T. Joslin, of 73 Water street, Newburgh, has for sale the following views: One 14x17, from south of camp, showing Plum Point, with canoes, Newburgh Bay, etc., mounted $1.25, unmounted 75 cents. Four views, 8x10, looking south from the camp into the Highlands—No. 1, turn of paddling race; No. 2, start in Class A, sailing race; No. 3, finish in Class A, sailing race; No. 4, finish in Class B, sailing race; price each, 75 cents mounted, 40 cents unmounted.

CLEVELAND C. C.—The cold weather of the early spring has retarded canoeing in Cleveland, but several short trips have already been made, and the first capsize of the year recorded. Canoeing is firmly established in Cleveland, and the club is growing. A cruise is projected this summer by steamer to Green Bay, by rail to Jenny, Wis., down the Wisconsin River to Portage City, carrying over to the Lower Fox River, and back to Green Bay via Lake Winnebago and Fox River.

THE MOHICAN SAIL.

Editor Forest and Stream:

I saw with great interest the article on the Mohican sail in your issue of April 24, as I have been working in the same direction as Gen. Oliver. There is one detail which I would like some information upon, namely the position of the halliard block which is usually fastened at the foot of the mast. I should judge that in the Mohican sail this block must be fastened on the boom, because the sail is arranged to be taken off the mast. But if so, I don't understand what is to prevent the boom jaw being pulled away from and off the mast when one hauls on the halliard to hoist the sail. Will Mr. Oliver please explain about this?

The Mohican sail appears to be an excellent one, and I am heartily glad to see others besides me working at the problem of combining the lateen and the lug. My own effort in that direction is called the "fan mainsail," and it has worked perfectly in the two trials I have given it. It is simple and has much less gear than the lug. It has some advantages which the Mohican sail does not appear to possess, namely, part of the sail is forward of the mast, thus lessening the weight to leeward, and the sail cannot "kick up" when canoe is running. I also think it will sit flatter than the Mohican sail. On the other hand the mast, though less than three feet high, is bifurcated, which may be considered an objection.

I hope that I may have an opportunity of seeing the Mohican sail in actual operation next August. ROBERT TYSON.

TORONTO, May 24.

PITTSBURGH C. C.

Editor Forest and Stream:

The Pittsburgh C. C. held two sailing races on May 30, which were chiefly remarkable from the fact that no competitor in either had ever taken part in a canoe race before. The Class B race was sailed in the morning with very light breeze up the river; the Class A race in the afternoon with strong wind in same direction.

The course was on Monongahela River from mouth of Nine Mile River to and around a pier of the P. McK. & Y. R. R. bridge and return, about two miles in all:

CLASS B. ALL SHADOWS.

Whiffler..W. E. Woodwell...Lateen main and dandy...Keel..43sq.ft.
Mary C...W. H. Rea.....Lateen main and dandy...Keel..37sq.ft.
Reba.....G. A. Howe.....Lateen main and dandy...Keel..37sq.ft.

CLASS A.

Marguerite..G. H. Singer....Settee main & d'dy..Goodrich b'd..64sq.ft.
Flotsam.... T. W. Bakewell..S. main & lat. d'dy..Goodrich b,d..45sq.ft.
Electa.....J. K. Bakewell..Settee main and jib..Keel.....35sq.ft.
Lady Jane..B. C. Bakewell..Lateen main& d'dy..Atwood b'd...40sq.ft.
Solitude....W. H. Mimick...Lateen main& d'dy..Keel.....40sq.ft.
——.....R. W. Bailey....Settee main & d'dy Atwood b'd...34sq.ft.

The first race was rather tame, owing to the lack of wind, the Whiffler getting the best of start, and steadily increasing her lead in the run up, and reaching the bridge about 150 yards ahead of the other two which were close together. The beat back was little more than a drift, and though Mary C. gained somewhat upon Whiffler, she could not catch that canoe and finished second, Reba paddled in.

The afternoon race had quite as much wind as the inexperienced sailors cared to encounter. The sight was very pretty just after the start, with twelve boats flying along before the wind, and the excitement began with the capsize of a non contestant in a St. Paul.

Marguerite started wing and wing, but her dandy jibed and flew off the mast, which threw her so far behind that her superior spread of canvas only enabled her to catch the fleet at the turning point. The unnamed Voyageur belongs to a member who is now in Europe, and was sailed in this race by the purser of the club who, owing to the Lansingburgh fire, has no canoe of his own at present. To help out his small sail area he hoisted a 15ft. dandy as a spinnaker on his vertical mainyard for a mast, and so managed to reach the turn with the others bunched close to his rudder.

In gybing around the pier his dandy followed the example of Marguerite's, and before he could reset it he nearly fouled the next pier, and had to go around it also, so that when he got fairly straightened away he was last boat in place of first. The beat down the river was a soaker; the water flew in sheets over the canoes, and as no one sat on deck the sails had to be kept shaking to stay right side up.

This would seem to be just the place for a sneakbox, but a 12ft. by 4ft. example of that style of marine architecture which accompanied the race was both outpointed and outrun by the three Class A canoes which managed to finish. Electa, Flotsam and Solitude all took in sail and paddled home, as did the Class B boats in company.

Lady Jane took in her dandy, after which the Voyageur passed her, but the latter and Marguerite managed to struggle home, notwithstanding two or three knock-downs, the last having a 26lb. blade to her Goodrich centerboard, which was the only ballast she carried, and which finally brought her over the line a winner with considerable to spare.

AIR TANKS IN CANOES.

Editor Forest and Stream:

The subject of air-tight tanks for canoes was very fully discussed in your journal last winter. The writer, among others, was a believer in their necessity for the safety of the canoeist, and yesterday had an opportunity of testing their value.

While sailing close-hauled in the bay from Greenville to the Staten Island Kills, he fell into the unfortunate embrace of a shad pole, with the aid of his topping lift. There was a fresh breeze and a strong tide with a moderate sea, and after a few frantic attempts to disentangle himself he found his boat filled and sails laying flat on the water. While in this position he released the sail from the shad pole which he retained in hold of, and putting his weight on the outside of the boat, righted her and lowered the sails. The water was flush with the decks inside, and the coaming was all that prevented it from flowing in as fast as bailed out; but knowing that she could settle no further, the bailer was used with great vigor and to such purpose that by the time a companion catboat had come back to offer relief, it was declined with thanks, except so far as picking up the hatch, which had floated away, and in about fifteen minutes the two were again cruising home in company.

Now it may be asked, what has this to do with tanks? The same could have been accomplished without them. I very much doubt it. The boat contained besides the iron centerboard, a hundred pounds of lead ballast. But the most valuable part of the air-tight tanks is their moral effect, the feeling of confidence that you have something under you that can't sink. I shall not seek opportunities of testing them, but when again the occasion is forced upon me, I hope to be as well satisfied with the result as on this one, and I would urge upon every canoeist who sails, to make sure that his boat will support him in the water in case of accident. SURGE.

NEW YORK, May 31.

THE CHART LOCKER.

X.—MISISSQUOI RIVER.

Editor Forest and Stream:

The Misisquoi River does not run from Lake Magog, and the nearest point is North Troy, distance ten miles or so, and from that point to Lake Champlain (distance nearly fifty miles) it is navigable for canoes. There are some carries at the mill dams, of which there are about ten, they are short carries of only a few rods at most. There is some first-class fishing in some parts of the river, most notably near the mouth. But at East Berkshire there were some fine black bass caught last year. Below Troy, where the river runs into Canada, some very nice pickerel have been caught this spring. Think that it will make a very pleasant voyage for a canceist. SNIP SNAP.

ROYAL C. C.—The first sailing race of the season, reports the London *Field*, came off on Saturday, the 10th inst., at Hendon, when the following canoes entered: Violet, W. Watney; Gladys, T. F. Knowles; Merlin, E. G. Wilkinson; Imogen, H. Church; Anonyma, R. H. Harrison. The last named did not put in an appearance. They were started at 3:30, when there was a nice breeze from the S. W., and all the little boats had a reef knocked down. Violet was first off, with Gladys on her weather quarter, Imogen and Merlin being somewhat behind-hand at gun-fire. At the buoy in the bight Violet had established a good lead, and they all settled down into their places, which were maintained to the finish. The wind in the second round fell lighter, and whole sails were now carried. Violet, however, seemed to do as well in the light wind as in the strong, and increased her lead. Merlin would probably have shown up better had her skipper given her more canvas at the start; and, as her gear has been hurriedly got together, this can hardly be considered a fair test, and she may be expected to show some of her old form later on. The times of the various rounds are as under:

	1st Round.	2d Round.	3d Round.
Violet (1st prize).....	4 5	4 45	5 30
Gladys (2d prize).....	4 10	4 52	5 37
Merlin.....	4 11	4 55	5 40
Imogen.....	4 14	5 4	5 58

A CANOE YAWL.—Mr. S. W. Burgess, of the Eastern Y. C., is having a new style of double-ended cruising canoe built at Lawley & Son's yards. The boat is from an English design, and is 20ft. long, 4ft. 6in. beam, 27in. deep. She will be rigged with a mainsail and will carry 1,500lbs. of lead on her keel.—*N. Y. Herald.*

THE CONNECTICUT RIVER MEET.—The Hartford and Springfield C. C. held their spring meeting at Calla Shasta Grove, above Hartford, on May 30 and 31 and June 1. The meeting was a success in every way, and will be followed by another later in the season.

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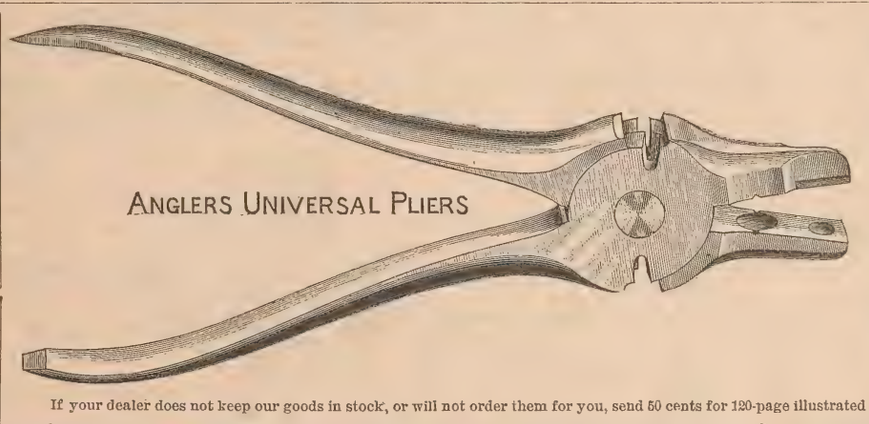
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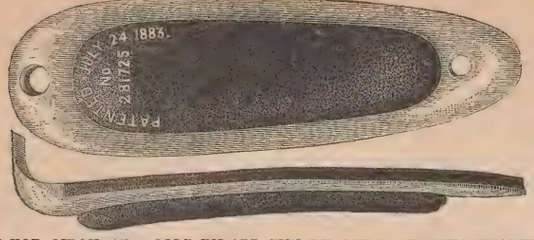
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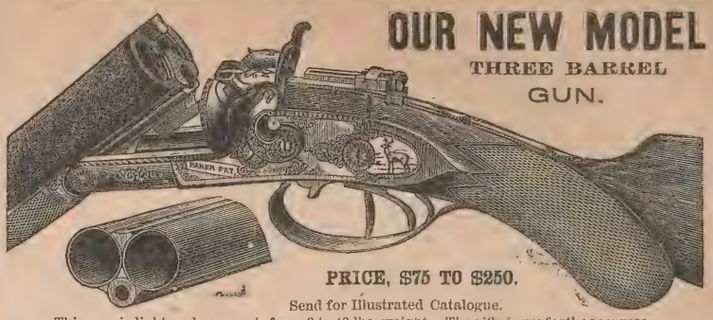
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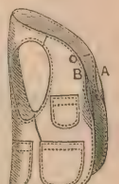
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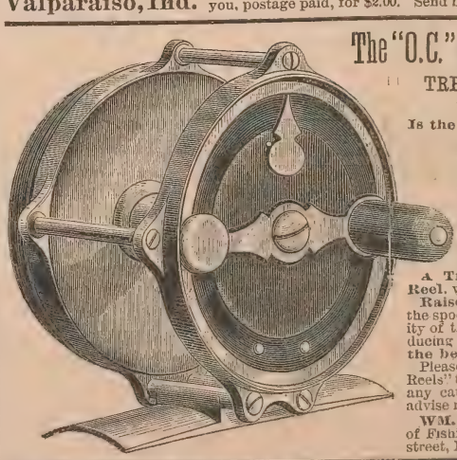
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With its compact type and in its permanently enlarged form of twenty-eight pages this journal furnishes each week a larger amount of first-class matter relating to angling, shooting, the kennel, yachting, canoeing, and kindred subjects, than is contained in all other American publications put together.

FIRST RIFLE, THEN SHOTGUN.

THE rifle goes first into a new country, then follows the shotgun. The former is a necessity, the latter a luxury. The rifle protects life and property from the marauder, savage or civilized. It supplies food for the family. It destroys the wild beasts that would prey upon the settler's stock. The shotgun is used in the hours of leisure and recreation. Food captured by its aid is a delicacy. It is the implement of sport. Such has been the course of the two weapons in North America.

The hardy pioneer disdained to kill his game with more than the single ball, which it was his boast that he could plant wherever he chose, and in his expert hands the old crooked stocked pea rifle became the terror of the savage tribes into whose territory he pushed his fearless way. Many years later, when the land had been cleared and waving fields of corn and wheat had taken the place of the wild grasses that once grew rank and thick over the prairies and along the valleys, when the larger game had almost entirely disappeared, the children or the grandchildren of the rifle man began to use the shotgun. Then the geese and ducks, the noisy grouse and the brown quail, the whistling woodcock and the twisting snipe became the objects of pursuit to those whose fathers had killed the moose, the buffalo and the elk.

The fathers hunted for meat. With them it was a fight for life, and each ball and each charge of powder was to be accounted for, and must do its work. The sons have inherited the hunting spirit from their sires, but no pressing need now drives them to the field. They shoot for pleasure—wildfowl and game birds when they can; but where these are not to be had, too often the tiny song birds become their prey.

We have seen with our own eyes the expulsion of the rifle by the shotgun from more than one section of this country. Time was—and not so very long ago either—when the shotgun was scarcely known in Central Nebraska. Then, the Sioux or Cheyennes or Arapahoes had to be fought off; and the buffalo, the elk, the deer and antelope were needed for food. Years rolled by, and now the rifle has disappeared. Either it has gone westward to the mountains with its owner, or rusty and dirty it stands neglected in a corner of the garret. But all the men and small boys have shotguns, and the geese in the river bottoms, the ducks in the sloughs and the quail in the towheads have a hard time of it.

There are many localities where, in the space of a single lifetime, the Indians and the large game have both been exterminated. The men, who in early years learned to use the rifle with deadly effect, find it difficult when middle life is past to adapt themselves to the handling of the shotgun. Such oldsters still carry the rifle, and, although the game for which the single ball is required has passed away, they are still able to do deadly execution on the tiny mammals that remain. Such men feel the mortification of a failure when they do not strike the head of a squirrel among the topmost boughs of a tall forest tree. This animal and the little gray hare now constitute the objects of their pursuit.

There is a wide difference between rifle shooting at game and at the target, and the weapons used for these two purposes are not less diverse. There appears recently to be a demand for rifles which may be used on the small mammals, and such an arm is really needed. Some rifle of very small caliber and carying a proportionately small charge of powder, would be welcomed by many of our readers in the South and Southwest, and might be an extremely useful arm.

We hear too little in the columns of FOREST AND STREAM of the sport of squirrel shooting in old-time fashion, and yet there are hundreds of riflemen to whom it is the most delightful form of sport.

In British North America the shotgun has always been the arm of the Indians of both coasts and a considerable part of the interior, but that is because the smoothbored musket was first introduced and the rifle is not to be had. The old-fashioned trade musket or the cheap double-barreled shotgun, loaded with a round ball and a few buckshot, is the deadliest weapon known to these Indians.

In the settling up of a country the weapon adapts itself to the game to be killed. So long as large mammals are abundant, the rifle will hold its own; but when these are gone, it must give place to the "scatter gun."

What shall we use when the birds too shall have disappeared?

INTERCHANGEABILITY IN FIREARMS.

AN interesting article in the current number of the *Magazine of American History* throws some light upon the origin and growth of the interchangeable system in the making of small machines, more particularly in connection with the manufacture of small arms. The system of course is applicable to many branches of mechanical art, but it is specially adapted to firearms produced in large quantities, and where cheapness and uniformity are a matter of such great consequence. There were in the development of the idea a series of men engaged, and the present system of turning out parts, which need only assembling to make the perfect arm, was not brought about without much opposition and prophecies of failure. Eli Whitney stands out prominently as having had a clear idea of the interchangeable system, and as having introduced some of its features in the Whitneyville Armory even before the close of the last century. A Yankee school teacher in the South, he saw the need of a machine to do the work which his cotton gin now so well performs. His ingenuity was turned toward firearms, and he found abundant room for improvement in the old flintlocks of the period.

The first breechloader invented by Hall was designed with particular reference to the use of a modified system of interchangeable parts, but it was a long time before the United States muskets could really be classed in the category of interchangeable arms. When in 1838 the new model musket was made by Benjamin Moore, the master mechanic at the Harper's Ferry Arsenal, model arms were made and sent out with sets of gauges. All these efforts were, however, rather in the direction of getting uniformity, than in securing what we now know as the interchangeable system.

The superior facilities of the Springfield Armory enabled it to outstrip the Harper's Ferry establishment, and it was there that the system under discussion was most vigorously pushed. Thomas Warner, now in his ninetieth year, deserves most of the credit for bringing about the changes from the old hand method to the new machine modes in the Springfield works, and the making of interchangeable breech screws by Cyrus Buckland, in 1852, completed the first chapter in the story. These pioneers may see the results of their effort in the great Yankee workshops of to-day, in the watch factories and the sewing machine works, where the turning out of single parts by machine tools, swiftly and accurately, has completely revolutionized important branches of industry.

The first step attempted in firearm making was uniformity, and the French mechanics in the National armories were very ingenious in this direction. The London Exhibition of 1852 brought revelations to the European workmen, however, in the exhibits of Robbins & Lawrence, of Windsor, Vt., and the revolvers of Colt. These showed that the American mechanics had far surpassed their transatlantic fellows in the direction of uniformity of parts, and that advantage then gained has not yet been relinquished.

A history of the manufacture of United States muskets, since the establishment of the Springfield Armory in 1795 and the Harper's Ferry shops in 1801, would include, if fully told, the story of the growth of the interchangeable system. Looking back from this date, it would seem almost as though the change was inevitable, but to many of those in authority from time to time there was a tendency to sharply snub the enthusiasm of mechanics who insisted that there was room for improvement in the methods then in vogue. There were notable exceptions, and in the long line of superintendents and inspectors of the National armories have been many officers who brought encouragement to those men having the ability to devise and the skill to construct the needed machinery. Hand-filing gave way to machine cuts of the greatest accuracy, until now the most complicated parts of the too complex arms of to-day are cut quickly, automatically and exactly. Difficulty in getting skillful mechanics had much to do with forcing this use of machinery to the front. Sharp competition, demanding cheapness of production, had much more to do with bringing about the advance, but its importance can scarcely be overrated. Compared with other outcomes of the original idea, firearms have taken a comparatively retrograde movement. There are many points of real crudity about them, and it is time for the sister art of chemistry to come to the aid of the armorer and offer a substitute for the gunpowder of former days.

It is no wonder that the writer, who, having watched the progress of this wonderful mechanical growth, should say: "Witnessing the results of the development of this mechanical idea, seeing them in the swelling tide of statistics, realizing them in their vast influences upon the conditions of human life, and dwelling with anxious concern upon their probable consequences on future culture and character, I plead no apology for ranking the mechanics among the great idealists in other fields of thought, while I reckon that the rise of many an empire is already dwarfed in historic moment by the rise of this mechanical ideal."

A SORT OF WILD CONTENTMENT.—Mr. Julian Hawthorne is a son of the man who wrote "The Scarlet Letter," and the *Century* magazine is a publication which claims to represent the better class of the periodical literature of the day. When the *Century* prints an article by Julian Hawthorne it is not asking too much to demand that it be free from twaddle. Here is an extract from an article contributed by Mr. Hawthorne to the June number of that magazine:

> The hunter and the sportsman are two very different persons. The hunter pursues animals because he loves them and sympathizes with them, as the champions of chivalry used to slay one another—courteously, fairly, and with admiration and respect. To stalk and shoot the elk and the grizzly bear is to him what wooing and winning a beloved maiden would be to another man. Far from being the foe or exterminator of the game he follows, he more than any one else is their friend, vindicator, and confidant. A strange mutual ardor and understanding unites him with his quarry. He loves the mountain sheep and the antelope, because they can escape him; the panther and the bear, because they can destroy him. His relations with them are clean, generous, manly. And on the other hand, the wild animals, whose wildness can never be tamed, whose inmost principle of existence it is to be apart and unapproachable—those creatures who may be said to cease to be when they cease to be intractable—seem, after they have eluded their pursuer to the utmost, or fought him to the death, to yield themselves to him with a sort of wild contentment—as if they were glad to admit the sovereignty of man though death come with the admission. The hunter, in short, asks for his happiness only to be let alone with what he hunts; the sportsman, after his day's sport, must needs hasten home to publish the size of the "bag," and to wring from his fellow men the glory and applause which he has not the strength and simplicity to find in the game itself.

We advise Mr. Hawthorne to stick to his novel writing.

The Sportsman Tourist.

UNCLE LISHA'S SHOP.

II.

ONE night when the November wind was growling among the stunted firs that crest old "'Tater Hill," already grizzly with more than one snowfall, the brotherhood of hunters and fishers, story-tellers and listeners came stumbling along the rough frozen roads and across the frosty fields to Lisha's shop. The little box stove was no longer cold; its red jaws grinned defiance at approaching winter, and its cheeks blushed with a ruddier glow than the summer's rust had given them, and its warmth heightened the odors of tannin, wax and moldy boots that always hold their own in the atmosphere of the cobbler's shop. The firing of the stove would have unseated two visitors if a couple of sap tubs with a board laid across them had not made room for twice as many, and this was now the coveted first place for the coldest comers to sit in and thaw out their chilled marrows and their wells of conversation. To this extent had Sam Lovel been warmed when he opened his lean jaws and said with a sigh of pent-up satisfaction, "Ah, wal, Lisher, I ketched a-nuther bear t'day."

"Dew tell!" said Lisha, drawing hard on the waxed ends with which he was closing up a ripped boot-leg. "Wal, Sam, was he 's heavy 's ole Cap'n Powerses hog was? 'Killed tew hogs terday,' sez 'e, 'both on 'em good ones, but one on 'em was a sollaker, I tell ye—weighed ninety!' Was ye' bear 's heavy 's that, Sam?"

"Wal," Sam asked, "haows three hund'ed an' seventy-seven? That's his heft ezackly."

"Real weight or guess weight?" some one asked.

"Why, real weight, 't course, an' no guessin' 'baout it."

"Where 'd ye weigh him?"

"T' hum," Sam replied shortly.

"Sho!" sneered the doubter, "ye haint got no scales nor bolances! Haow could ye weigh 'im t' hum?"

"Wal, naow, I did weigh 'im fair an' hones', an' he weighed jist ezackly what I tell ye. I c'n lift jist three hund'ed an' fifty paound, an' I couldn't lift him inter j-e-s-t twenty-seven paound. Naow 'f that don't make three hund'ed and seventy-seven, I haint got no 'rethmytic."

A long young man, whose arms and shanks seemed to have lengthened beyond his means to keep them clothed, ventured to say as he looked admiringly upon his new buck-skin mittens, too precious to be taken off his hands, but kept opening and closing and turning on them just before his eyes, "The's a painter a hantin' on Hogs Back, I dew raly b'lieve, I hearn the gol darnedest yollupin' up there t'other night, julluck a womern a hollerin', 'n' I hollered, 'n' it arnswered, an' comin' nigher, 'n' then I started my boots fer hum, I tell ye!"

"Sho! Sho! Peltier, yew git aout!" Lisha roared, for he thought it his exclusive right to see and hear all strange things first, "'Twan't nothin' but a big aowl, I bet ye!"

"Twan't no aowl," cried Peltiah, clapping his mittened palms together with a resounding smack, "'twas a annymill! Guess I know a naowl when I hear 'im!"

"Wal, mebby 'twas a lynk. A lynk 'll git up a c'nsid'able 'f a skeery yowlin', 'n mebby 'twas tew ole tomcats a fightin' up 't ye' west barn. D'ye ever hear, boys," Lisha continued without waiting for any reply from Peltiah, "baout Joel Bartlett's Irishmun 't he sent up int' the aidge o' the parster a choppin' one day? Didn't ye, none on ye? Wal, up he went, and bimeby he come a runnin' back scairt half ter death, an' hollerin' 'murther! O, murther! it's a painter I seen, sure 's me name 's Pat Murphy!' 'Show!' sez Joel, 'haow 'd he look, Patrick?'

"'Wal,' sez Pat, 'he was yolly, sur, an' he had a long tail on 'im.'

"'Wal, naow, Patrick, wa'n't it aour ole yaller tomcat?'

"'Be gob, sur, it moight,' sez Pat, an' he lit his pipe an' went back to his choppin' 's contented 's if he' hedn't never ben a painter in V'mont."

Peltiah's panther being thus contemptuously disposed of, the conversation turned for a time to owls.

"Aowls," said Lisha, as he rolled a waxed end upon his aproned knee, "'ll make a turable onairthly an' skeery noises, p'tic'ly big aowls, which the's more 'n one kind on 'em, hoot aowls, an' white aowls 'n I d' know what aowls. I've hed 'em make my hair stan' right strot up, sence I was older 'n Peltier is, tew."

"Wal, I don't keer a darn what ye say," said Peltiah, after breathing through the back of his right hand mitten to assure himself for the hundredth time that it was genuine buckskin, "'twant no aowl 't I heard, 'twas a nannymill! 'F I hed me a rifle I'd go a huntin' on 'im," but he could arouse no interest in his panther further than the offer from Jonas Gove of his rifle for half the bounty if the panther was killed, or a half a dollar a day for the use of the weapon, which was declined.

Tom Hamlin said that he had heard "a dozen gret aowls a hootin' an' a shoutin' as he come along."

"Yaas, Tawmus," said Solon Briggs, who was weather-wise as well as otherwise, "so'd I, an' the's goin' to be some kind o' fallin' weather 'fore long, you see 'f the' haint."

"Wal, yas," Tom assented, "'most allus the' is arter they hoot so. Haow d' y' 'caount for it, Sole?"

"Waal, I'll tell ye, Tawmus. I've meddytated on 't c'nsid'able an' my idee 's this"—crossing his legs and putting his right forefinger into the palm of his left hand—"D'ye ever have the rheumatiz?"

"Yas, I've hed 'em."

"'N' wa'n't they wus 'fore a storm?"

Tom nodded repeatedly, and said "they was wus."

"Waal, naow then," Solon continued, "the aowls 't we hear is big aowls, an' nat'ally they're old aowls, 'n' they've got the rheumatiz, an' when the's a storm a-comin' on the rheumatiz begin to rack 'em, an' they holler aout. Haint that re'son'ble neow, and"—looking around upon the company and bringing down his finger with a clinking smack upon his palm—"and phillysoffycable, so to speak?"

"P'haps," said Lisha, as he rasped his knife upon the sandstone, "somebuddy could tell us suthin' 'baout shootin' aowls; haow is it, Jozeff?" he asked, looking between his shaggy eyebrows and the top of his spectacles at a thickset fellow who was taking his ease in a further corner of the shop.

"Naow, Lisher," said Joseph, "yeou keep on tellin' yer stories an' lemme 'lone, if yeou please."

"Jozeff," said Lisha in a terrible voice, shaking his knife at the unwilling story-teller, "yeou tell 'baout ye shootin' the aowl, er I will!"

"Wal then," said Joseph, slowly getting into a sitting posture and knocking the ashes from his pipe, "I guess you'd make it wus 'n I would, 'n' so I'll tell it. Ye see, the' was a big aowl come, gol blast him, an' kerried off half a dozen, I d' know but more, no mebbe baout that 'maount o' M'ris' chickins, an' I tole M'ri, I did, 't I'd fix him 'fore he knowed it. So next night, I guess mebbe next night arter, one er t'other anyhaow, I looked aout the winder an' I seen him a sittin' on a close pos' an' I got my gun, I did, an' hid. M'ri open the winder kinder easy, an' I poked the gun aout an' onhitched on 'im, I did; but somehaow the gun wa'n't loaded fur aowls, er I was too fas', er suthin, an' I never teched 'im! Shot over, I s'pose, any way I thought I did. Wal, next Monday night when the close was all a hangin' aout, he come agin, he did, an' sot on the same close pos'. I hed the ole gun already, an' M'ri opened the winder agin, an' I run 'er aout, an' took dead aim a foot below th' aowl, fur sez I to myself, sez I, I won't overshoot this time, sez I, an' I let flicker, an' I be darned if I didn't miss him, but, by gosh! I blowed my harnsome shirt 't hung right below 'im all to flinders, I did. It tickled M'ri t' think 't I made sech a good shot, an' I spec' she tole on it. I didn't, not fust, I don't b'lieve, 'n' Lisher, darn his ole picter, he got holt on it." When the laugh subsided, Joseph added, "Wal, 'twa'n't a bear, 'n' he didn't tear my insides aout, if my shirt did git tore!"

Uncle Lisha tossed the mended boot to its owner, who sat nursing the stockinged foot to which it belonged, and laying aside his tools arose and took off his apron, which was a signal to his visitors to depart, and so they faded away in the starlit night.

AWAHSOOSE.

VERMONT.

LASSOING A MAN-EATER.

I SPENT the month of February in Nassau, New Providence, with two most congenial companions. While I am not much given to keeping an elaborate diary, still I could not refrain on this occasion from making a few notes of the events of each day. The following is just as it was written at the time and is merely a note book jotting:

"Johnson, what is that dark object between us and the lighthouse?" I asked as something caught my eye bobbing up and down on the waves.

"That, sir, is a dead cow, sir; they towed it out from Nassau this morning, sir, and it won't be long before the sharks have it eaten up too, sir."

Sure enough, scarcely were the words out of our skipper's mouth before I saw a black fin slowly glide around the floating carcass, then a flap of a great tail out of water, and we could see the man-eater at his breakfast.

"Quick! Johnson. Steer for it."

Nearer we came, and standing on the boat's thwart, I counted seven sharks, some feeding, some circling about and others fighting; at least they seemed to be quarreling over the choice morsel that had fallen into their jaws. Oh, for a gun, revolver, or even a large hook of some kind. Here was a chance to gratify a long-cherished wish. How many times the Judge had said: "I don't take any stock in this fishing for salt-water fish with a long hand line over the side of a boat, but I would like to catch a shark." Now here was just the opportunity and we had nary a thing to make the capture with. By this time we had made the carcass fast to the boat's stern with a light line, and the anchor had been dropped to prevent our being carried out by the tide. We sat in silence and watched these tigers of the deep for perhaps an hour. By that time they had eaten the entire head and a large part of the body. They seemed to care not a bit for us, now rubbing against the frail boat's sides, again dashing with head out of water clear on top of the cow. Some of them were monsters fully fourteen feet long, others were not more than one-half that length. The little fellows would watch their chance, when the big ones had taken their bite and retired, to rush in, make a grab and scoot, and all this time we sat and looked on and could do nothing. Once the Judge remarked:

"Billy, you have the reputation of always being loaded, or at least carrying a shooting-iron. Now I am sorry to be disappointed in you." "Frequently a man has a tough reputation, Judge," I replied, "but he is the victim of circumstances. Now I will admit I look hard and tough, but I am not the cowboy in every sense of the word, though I get the discredit of it."

At first we were rather afraid of the great jaws and wicked eyes, but the old saying, "familiarity breeds contempt," was again illustrated. I picked up a small sponge hook such as the sponge hookers of these islands use in bringing up sponges from the bottom. The staff was broken, so it was only four or five feet long, but it was strong enough to hit one a smart rap on the head with, and after rapping a few of them I had the monsters well stirred up.

I had spent a winter on a cattle ranch in Texas some years before and there learned to throw the lasso, and the thought came to me that I might rope a shark. They had no horns certainly to throw the rope over, but I once could pick up a steer's foot when said steer was under tolerably fair headway, and why not get a noose around a shark?

The wind had nearly died out. Nassau lay two or three miles to the southward, as sunny and white as always. Had there been breeze enough we would have anchored the defunct bossy and sailed to the town so near and yet so far, and got a gun or spear, and returned and filled the boat with sharks. But, of course, the wind had failed us, besides we would in all likelihood have found the cow very much wasted upon our return.

I took the main sheet, fastened one end to the mast and quickly made a noose in the other. I noticed that a number of the sharks came at a good speed, and as they neared the cutter they would turn nearly belly up, and grab a chunk from the under side. If it was not readily detached they would grab again for a fresh hold and frequently would lift the entire body nearly clear from the water.

I knew it would be no use to try for one of these underhanded chaps, but waited for one to tackle the outside hold. I had not long to wait. Some ten or fifteen rods away I saw one coming that I knew meant business. There was a sort of a ten-pounds-of-round-steak-and-give-it-to-me-quick expression about his countenance that I particularly liked. He was not as large as some of them, but would do for a starter. On he came, with no bashfulness or diffidence noticeable, and dropped his jaw or else raised his head and left the lower jaw where it was, I cannot say which, as I was becoming just a trifle excited. At any rate, about the time he had his head nearly two feet out of water and had made up his mind to grab right then, the rope was thrown and, as good luck would have it, struck in the proper place, and his head was well in it as I straightened it out with a good strong jerk; the noose tightened eight or ten inches behind his gills and then the fun commenced, also the excitement. Just imagine you were there. I yelled as the rope fetched up with a savage yank that seemed about to take the mast out of the craft, but it did the business, as it tightened it so that Mr. Shark had no other wind than that tied up in him. He pitched, tugged, plunged, twisted, reared, snorted and squirmed. He didn't skip a note, and after he had finished all of these commonplace maneuvers, he put in a few on his own hook (this is not a pun). Though the rope was fastened to the mast near the center of the boat, the terrific exertions of the choking shark sent us whirling in every direction. After awhile he began to show signs of having enough of everything except stale air and strength, and as he quieted down we pulled him alongside and belabored his head with a club and I out with my knife and stuck it into him where I thought it would do the most good. He gave up completely. I think the life was choked out of him. With a strong pull and a pull all together we brought him over the side and into the boat. We did not care to be on too familiar terms with him at first, as he might have been playing 'possom and come to, and one swish of that tail would have taken us off our pins.

After the deed was done, we shook hands, the Judge and I, and thought how we could crow over Jack, who, as usual, was afraid it was going to blow and had us put him ashore that morning after we had started. Our next move was for shore, to glory over our fellow men. "Now, Johnson, let go that bovine remnant, up anchor and for Nassau. This beats 'groupers.' No such fishing have they had here this winter." The light breeze slowly fills the sail, and we glide toward the town, and all impatience, whistle for a stronger puff, but whistling don't always bring it, so we had to wait. It seemed as though we would never reach the stone steps marked by the flagstaff in the distance, but without many more tacks we are there. Jumping ashore, a darkey is sent after a donkey cart, and the loungers always found on the wharf lend a willing hand—expecting the pennies, of course—to haul the captive ashore and onto the cart. Then the triumphal march begins. It is led by the Judge and myself, arm in arm, followed by the sleepy burro, drawing the cart, on which was laid the eleven feet and eight inches of shark; and as the papers say, "citizens on foot" brought up the rear, said citizens consisting of a string of twenty or thiry negroes in usual Nassau winter costumes, *i. e.*, pants, part of a shirt and a hat. We proceed up the narrow street into the hotel yard, and halt at the doorway of the Royal Victoria, unload the freight on the greensward beneath the "gumber limber tree, sah."

We are the heroes of the season, as we modestly relate the story of the shark. I let the Judge tell it, his reputation for truth being better than mine. Johnson and the dead fish verify his statement and no impertinent questions are asked. But where is Jack? The Judge intimated that he is probably in the shade keeping his "skin from cracking." We easily found him and dragged him forth.

"Jack," said the Judge, "what kind of fish do they catch here?" Without a moment's hesitation he named the same old string that we had heard from every darkey on the island from one to six times. "Margate fish, hamlet fish, mutton fish, yellow snapper, runner, grunt, hind," and ended as ever, "dar be de grouper."

"Well, so I have understood," replied his Honor, "come up here, we have caught a grouper." The story was gone over again, and we had a jelly cocoanut with Jack. So much for one of the most enjoyable of the many happy days at Nassau.

I have now against the wall of my den the backbone and tail, also the polished jaws with their six rows of serrated teeth of the man-eater, and they bring back to memory the sunny island with its white city set in verdure, its clean blue green waters and coral reefs, fruits and darkies, and plants, and there comes over me a wish to catch another shark ere I grow too old.

WM. B. MERSHON.

EAST SAGINAW, Mich.

HOW OLD MISTIS KILT ER BAR.

ONE bright Sabbath morning in the early spring, after eating a late breakfast, I lighted my pipe and strolled down to the border of the little lake, near which stood my modest domicile. There, squatted *à la* Turk upon two cypress logs toggled together and projecting into the lake, I found my ancient colored friend Stephen Slaughter. Sitting there upon this quiet Sabbath morning engaged in kneading cotton lint into a ball of dough, at peace with the whole world and without a single care for the future, he was doubtless happier than a billionaire would ever dare to be.

Albeit never disposed to censure my fellow man for indulging, even upon the Sabbath day, in any of those innocent pleasures or recreations that serve to lighten the burdens of life, and although in the present case I felt a sympathy with, and condoned the sin, if any, of the peaceful occupation in which my old friend was preparing to engage, yet envious perhaps of the happiness and contentment that shone in every linament of his dusky face, and hung in every fold of his tattered raiment, I began to lecture him upon its evil. He looked down shamefacedly, and listened in silence until I made an end of my sermon, by asking him if he was not aware that he was breaking one of the sacred precepts of the Decalogue. Pretending not to understand the meaning of my language, he looked around him, as if examining the stability of his seat, and replied very quietly that he did not think "dem logs were gwine ter break."

Feeling that my lecture was a failure, I sat down on the bank near him, and soon began to take an interest in his unsportsmanlike proceedings. The game he was preparing to ensnare is a habitant of the waters of the South and West, known by the name of buffalo—a scaly, sucker-mouthed fish, often attaining a weight of from twenty to forty pounds. They are rather a coarse fish and full of bones, but not unpalatable when caught at the proper season. Our colored friends sometimes jerk or dry them in the sun, but when cooked after undergoing this operation the aroma exhaled is not exactly that which is wafted from orange groves or the "Gardens of Gull." My old friend's manner of capturing these "buflers," as he called them, was as follows: To the end of a short line, which was attached to the extremity of a stout pole, he fastened several large hooks so as to have their bearded points project all around from a common center. This he called a grab. Upon the same line, above the larger hooks, he tied several small hooks, and these he baited with the dough into which I had found him kneading the cotton lint. The float upon his line, when the hooks were lowered into the water, informed him of a "nibble," when a quick jerk of the heavy pole drove the large hooks of the grab into his unsuspecting victim and he was lifted out of his element by main strength, and without either compunction or sentiment on the part of his captor.

Steve, after having baited his hooks and dropped them

into the water, looked up, attracted by the noise made by an ox cart loaded with colored women who were on their way to church by the road that ran along the lakeside. Scratching his wooly head and turning to me, he remarked that "'dem ligous fokes too good ter ketch fish sundys, but dey buys my buffers, an dey eats em too." By this time the cart had reached that point in the road where it ran nearest to the place where we sat, when an old colored mother in Israel lifted up her great black hands, rolled up her great white eyes, and in tones as if her very soul was tortured by the sight, exclaimed, "Why, bress de Lord, is dat you dar fishin, brer Steben? Fore de Lord, you is." Brer Steben did not deign to make any reply, but when the cart had passed, he said, with a low chuckle as if talking to himself, "I bets I sells dat nigger one bufler yet fore she gits home."

He had hardly ceased speaking, when the chain or fastening which held down the body of the cart in front, either broke or became unfastened, and turning upon its fulcrum, the front end of the body shot up, and hind end went down, and the pious old mother and her scandalized sisters were dumped out into the dusty road.

"Dar now," said Steve, as he witnessed the catastrophe, "I knode dat ar good oomans wer gwine ter hebin too fass." Then turning and addressing me, he continued, "Dat ole wagin turnin somerset minds me uv how my ole Mistis kilt er bar."

Knowing from experience that it required no persuasion to induce Steve to finish his yarns when once he began to spin them, I puffed away at my pipe in silence. He therefore went on with his story, which was as follows:

"Twer while we alls lived in ole Firginny, fore Mars Weyum [William] fotched us out here. One day we all black fokes wer sottin out terbarker, an Mars Weyum he wer dar wid us settin on he hoss, an he say, 'Boys, deys er shower comin up, an you alls better be gittin ter de house.' So we alls and Mars Weyum ridin long, starts fur de house. Den Mars Weyum tun roun on he hoss, an he look back ober todes de piny ole feel, an he say, 'I behanged, boys, ef yonder ain't er bar.' Only he diden say behanged (to me), you know what he say, Mars John. Well sir, we alls looks an sure nuff dar wer de bigess black bar you eber seed, des tarein cross de feel and makein fur de pines. Arter de shower wer ober Mars Weyum he tucken put Unk Bob on de gray mare, an little Pete on er mule an sont um roun fur ter reform de naberhood. Den he tell me fur ter kotch old Selim an ride ober ter ole Mistis, fur to noterfy Mars Garrett, an ter tell ole Miss, how she not ter git skeerd ef she hear um playin de dickens down in de piny ole feel. Only Mars Weyum diden say dickens, he say sumfin heap wus. Well, sir, I des jumps on ole Selim an I tuck out fassern er railroad, an when I gits dar ole Miss done gone ober ter see ole Miss Polly, an den I noterfy Mars Garrett bout dat bar, an he say, 'You lyin, you dam black scoundul you.' But I swar I aint, an den he blow he horn, an fore goodness he blow up more dem houns dan dar is fishes in dis here lake. Tis de blessed troof sir. I never did hear sich er yelpin an er yowlin. But when Mars Garrett git he whip an slosh inter em er time er too, dey des fassen up dey moufs an trot long hine us ober ter Mars Weyums.

"When we gits dar, sir, de whole endurin country done riz up. Bars diden trot roun dar like er passel er hogs, like dey does here, an de niggers dar wer des ez feer'd er bars ez dey is er lions and tagers. Dat wer one stray bar what done straggle down from de Blue-ridge Mountin. Leasways, Mars Garrett he say he speck he wer. Well, sir, dey blows dar horns, an den dey all starts down ter whar de bar jump ober de fence, an Mars Weyum he say ter me, 'You kin come er long, too, Steben.' Den I say how I ride mighty fass when I gwine ober ter old Mistis, I speck I better put ole Selim in de stable, caze I knode he wer mighty tired. But Mars Weyum say tired er no tired, I want him ter smell dat bar. An I say out loud, 'yas, sir,' an den I say ter myself how ef ole Selim smell dat bar wid me on he back, he got ter hab er better nose dan ar houn Mars Garrett got. Den I rid long slow hine all un um.

"Presenly Mars Garrett he say ter Mars Weyum, 'Billy,' he say, 'des keep dem yuther dogs back twell ole Ratler git er sniff er dat bar heel.' One time I bin hear Mars Garrett tell dat young ooman what come home wid Miss Sally from de high school dat ole Ratler nose so cole ole Marster sot he mint julups on it in de summer time, an dat how ole Miss put ole Ratler head in de milk pan ter freeze de ice cream she wer eatin, an she laff an she say she bedoggoned ef she eat any more.

"Well, sir, sure nuff fore ole Ratler git in er hundud yards uv dat ar bar track he des flung up he head, an he say come er long boys. Den dey had it. Up de hill, an by de big terbarker house, an inter de pines—way dey went, yow yow, yow yow, an evy wunst in er while I heer'd ole Music squeal out fine, des like Miss Sally do when she play on de planner. Den sir I knode things wer gittin mighty hot fur dat bar. Ole Selim he rar an he pitch an he chomp he bit, but I hilt him back twell we got inter de thick uv de pines, and den I stopt him. An I say ter ole Selim, 'Look here ole fellow, ef you hongry fur bar I aint. Den I lissen an I hear dem dogs way ober todes Roun Top mountin, goin yow yow, yow yow, an den dey went ober de mountin, an I diden hear nothin.

"I des sot dar on ole Selim and let him browse round on de grass, an I gin ter think bout dem ar bad chillun what ole Miss read er bout de bars eat up in de bible lass sundy. I git so skeer'd I des tuck dat ole pack er cards outen my hat, an all dem marvels outen my pocket, an I drap um down on de groun under ole Selim belly an den I say my prayers ober twice.

"Bout dat time ole Selim juck up he head and stick out he ears, an I lissen, an I hear dem dogs comin back ober de mountin, yow yow, yow yow, an sir dey des kep er comin closer an closer, an closer an closer, twell it look like de whole worl done tun ter houns. Fuss thing I knode ole Selim he gin er snort, an he rar right straight up, an I ketch holt de pummel er de saddle, an I snatch up my legs, an bless yer soul Mars John dat ar bar an bout two hundud er dem dogs des shot under ole Selim belly like dem menny ingines gwine fru er tunnel.

"When ole Selim come down sir, he look like he bin hear Mars Weyum say how he want him smell dat bar. He des tuck right straight arter dat bar wid me scrooched up dar wid my foots on he back, des like one dem baboons what rides round in de show.

"Presenly I hear sumfin go bou-e-e, bou-e-e, like fofe er July done come, and I looks down, an me an ole Selim wer des er flyin ober dat bar an bout er thousan er dem dogs rolled up in er knot bout big ez Mars Weyum's gin house ober dar.

"I think ole Selim muss er jump bout leas two hundud yards, but when he lit sir, I des let down my legs, an I stick my heels in he belly, an I nuver let him stop twell we git clean back ter de house.

"Ole Aunt Patsy, what wer cook, she come er runnin out, an she say, 'Name er de Lord, is dat bar done kill evybody?' I say, 'Go way, fool, I done kill dat bar so ded he done cole ez ice by dis time.' Bout dat time Mars Garrett he ride up an say how I muss git two dem mules, an put de geer on em, an drag dat bar outen de woods. I ast him easy, so Aunt Patsy cooden hear, ef dat bar wer ded sure nuff. He say how he sperience diden certerfy how menny lives er bar had. He mouten be more'n haff ded so fur ez he knode.

"Well, sir, I got dem mules an I went back wid Mars Garrett, an sure nuff dar wer dat bar stretched out flat he back, an des ez big, an des ez black ez dat pious colored ooman what roll her eyes at me while er go. Dey hitched dem mules onter dat bar, an wid me er leadin um, dey drug him outen dem pines twell dey comes ter de big road, whar it goed up Red Hill. Des fore we gits dar, Mars Garrett he say ter Mars Weyum, 'Billy,' he say, 'darn ef dat bar ar ded yet. I seed him kick.' But Mars Weyum he laff an he say ez how Mars Garrett done hang roun dat young ooman what come home wid Miss Sally, twell he think evy thing what got legs kicks. Des den dem mules drug dat bar out inter de middle er de big road, an who should be gwine up dat hill in er ox cart wid ole Unk Dan er drivin her, but ole Miss. Ole Miss wer so fat she cooden git in de carige door, so she make Unk Dan drive her bout in er ox cart, an dat how come she dar. An when she see dat bar drug out inter de road, she tell Unk Dan stop, an she say. 'Fur goodness sake, Garrett, what make you kill dat great big hog sich warm wedder fur?' Den she raise up and look ober de hine end er de cart, an fuss thing ole Miss know de chain done buss, an ole Miss come rollin down de hill des like er hogshead er barker. Bless yer soul, Mars John, ole Miss roll right smack ober dat bar, and she des spread dat bar out flat ez yer han, sir. Mars Garrett he jump down an run scotch ole Miss, an when he ax her ef she wer hurt an ole Miss say no, he say he needen ax dat bar ef he wer hurt, for he know ole Miss done squash evy breff he had outen him. An dats de way old Mistis kilt de bar," said Steve, as, seeing the water dimpling around his float, he seized his stout pole and soon landed a "bufler" for the pious old woman who had rolled her eyes at him.

TUCKAHOE.

YAZOO RIVER, Miss.

SCHOOLS OF FORESTRY.

UNTIL very lately the American ideal of a skilled forester has been a man who could shoulder an axe, go into the tall timber, and there cut and pile his two or three cords of beech or maple a day. The early settlers had to make war upon the woods because they concealed prowling Indians and occupied room needed to raise crops. Farms must be cleared before the plow could run; wood was a drug, and timber that would be worth from two to four hundred dollars an acre were it standing to-day, was burned to get it out of the way. Scarcely any one looked far enough ahead to keep belts for shelter or for future supply. Thirty-five years ago the upper part of the Genesee Valley was richly stocked with white pine and valuable hardwoods; to-day they must bring their supply from Michigan and Canada. New States have been overrun and their forests brought into market as fast as the store of the older States has been exhausted.

As settlers have gone West from the originally well-wooded regions of the East they have carried the old notions with them, and in the precious timber tracts of the new States, where it was certain that there would very soon be a high price for all the working wood within reach, farms have been cleared, without leaving shelter belts or reserves, with the same lavish thoughtlessness which marked the early settlement of New York or Pennsylvania.

We are just beginning to pay the penalties of this long-continued breach of physical law. The floods have lifted up their angry voices in warning. Pen, camera and pencil have been busy in depicting the heartrending details of deluges in the valleys of the Mississippi and its tributaries, and with few exceptions the press has attributed these floods to the true cause—cutting off the woods from steep hillsides.

It is true that, as the Cincinnati *Commercial Gazette* said, there were seven heavy snowstorms, with thaws and cold snaps coming between them in such a way that the country around the headwaters of the Ohio was sheeted in thick ice, then five great rains fell upon the impervious glassy surface, down which, as a matter of course, Undine went tobogganing at a portentous rate. But if the steep hillsides had been covered, as every such slope should be, with a thick growth of trees, for one thing the snows would not have been so firmly consolidated into ice, because the freezing and thawing would have been more moderate. Then again, the ground would have frozen very little underneath such a forest, so that when the thawed snow and rain-water began to run off, much of it, checked by the manifold hindrance of standing and fallen treetrunks, roots, moss, leaves and undergrowth, would have penetrated to the subterranean sources of springs; much would have been held, as in a vast sponge, by this undergrowth, etc., and the delivery of the remainder into the streams would have been so much retarded that by full and yet harmless stages those streams could have carried the water away to the sea.

But the same denudation that caused the excess of precipitation and its rapid delivery into the streams, prevented that excess being stored up to feed the springs, and so they will fail in the dry time when their water would be most grateful. This harm done by droughts and floods then is definite and tangible, and as was said above has been quite generally assigned to the true cause—forest spoliation.

But in the case of timber famine it is not so clear. A short supply of working wood impoverishes people in so many and such indirect ways that it is not at all sure that the real cause of the suffering will be seen by most people. There will be hard times, and folks will not know exactly why. The price of every article one uses will be a little dearer, and as every one is under the same pressure it will be harder to sell one's labor or its products. Working wood is directly or indirectly needed for the economical production of every article we use, or for its cheap conveyance and sale to the consumer. As civilization becomes more developed and complex, a great deficit like this of more than a half billion dollars a year will be distributed so that the pressure is not at one spot much more than at another; this is one great advantage in a complex civilization. But there is this danger, that the real cause of such a distributed evil will not be so clearly discerned by the great mass of people. In a strong centralized government this would not perhaps be very bad if only those controlling matters saw the true cause of any great widespread calamity and vigorously applied the right remedies. The centralized governments of Europe have taken hold of this matter of the waters and forests with the strong hand, and public sentiment has mostly come into accord with the action of the State.

But in a country like ours the legislative and executive cannot go far in advance of public sentiment. Congress has therefore done wisely in providing for such an exhaustive statistical exhibit of the amount and quality of our yet existing forest wealth as that which has been made in the Census Office of the Department of the Interior, under the direction of Prof. C. S. Sargent of Harvard University. These statistics, among other ways of putting the facts before us, are embodied in a series of maps of the whole country and of the several States. These show by colors, *e. g.*, which regions depend partly, and which wholly, on wood for fuel; and what portions depend upon coal. One is amazed to see how large a part depends altogether and how large a part of the remainder depends partly on wood. Over thirty-two of the fifty millions of our people have no fuel but wood, and it is estimated that they use about four and one-third cords of wood each in a year, or 140,537,439 cords, valued at over three hundred millions of dollars. Then for railroads, steamboats, mining and amalgamating precious metals and other mining operations, in the manufacture of brick and tiles, salt and wool, some five million of cords more are required, making a total of over $321,000,000 worth a year used as fuel. The value of the charcoal used in the manufacture of iron and the precious metals, and in the twenty largest cities is over five millions of dollars. Of course, there is a vast amount of wood used for fuel and of charcoal of which no estimate can be made, but the above immense total is that which an estimate confessedly partial shows us.

Another bulletin (No. 17) gives the value of the sawed lumber products of our forests as over $233,000,000; but this is considerably short of the full amount. Neither does this include tanbark, rosin, or turpentine, and many other forest products.

When we come to consult the maps of Michigan and Wisconsin (Bulletins Nos. 6 and 7) and see what a small part is now left of their pine forests that used to be so confidently spoken of as inexhaustible, and then remember that had proper methods of cutting and marketing been used, the vast areas which, as the color shows, were originally covered with the precious white pine, but are now cut off, would have continued for ages to yield this timber without diminishing the stock, it is not easy to feel kindly toward those who have so robbed the present and yet more the future generations. When the end of our present seeming abundance comes, every poor man will be burdened in a great number of ways in which he is not now. It will be much harder for him to get decent clothes, furniture, lodging and wholesome food for his family. Many of those now earning a good living in the thousand and one trades into whose product wood largely enters will be out of employment, and will be added to the number of competitors for work in the occupations that remain. It will take a good while for people to make up their minds to plant and plant and plant on the scale that the case demands, and then more time and means will be spent in learning the exceedingly complex science and art of forestry; and after that it will take from twenty to fifty years before enough can be raised to supply the crying need.

When that pinch comes a well equipped forest school like those which all leading and most of the smaller nations of continental Europe maintain will be an absolute necessity. Such a school is not organized and got at work in a day or a year. We cannot take the methods and curriculums and perhaps not even the teachers of the European schools of forestry and transplant them in block to American soil. All will need modification, just what and how much can only be learned by experiment.

The State of New York has either a very large elephant or a great treasure upon her hands in the extensive forests of the Adirondacks. If the lumbermen are left to do as they please much longer those forests and the underlying sponge of vegetable substance, often three or four feet in depth, is in great danger of being burned up and washed down stream by freshets. In that case it will be almost impossible to get those areas clothed again with woods, and if they are not, then the Hudson, Mohawk, Black Grass, Raquette, Saranac and other rivers which rise in that region will almost certainly become very dangerous and destructive torrents. The navigation of their now navigable portions and of the canals connected with them and fed by them will be so interrupted and so costly that it will not pay to keep it up. Very serious and permanent damage will be done to the extensive manufacturing interests connected with these streams which do so much to give New York its place at the head of the manufacturing States of the Union. Agriculture, too, will suffer from droughts, failure of springs, and climatic irregularities.

If the State is to protect this area it will cost an immense sum every year unless, by calling in the aid of forest science, it is made, as it readily can be, a permanent and lucrative source of those forest products for which there will surely be before long a famine demand. This is a solution of the much debated and exceedingly perplexing question, which will be a vast benefit to the lumberman, the tanner, the charcoal burner, the paper-pulp maker, the health-seeker and, above all, the taxpayer.

This result can never be reached unless a good forest school is established somewhere in that region, and then, either by the State, together with the present owners of the lands (who hold all but about 750,000 of the 4,500,000 acres of the whole) or by the State alone, the entire tract should be set apart and kept in the highest possible condition as a scientifically administered forest reserve.

Such a school and reservation would be a fountain head of the practical knowledge which we must before long call to our aid to deliver us from the intolerable gripe of timber famine.

S. W. POWELL.

BROOKLYN.

GAME IN THE NATIONAL PARK.—Bozeman, Montana Ter., May 31.—Concerning the list of species of animals, stated to be found in the National Park, the caribou has never inhabited that part of the country to my knowledge, and I have hunted and trapped on the headwaters of the Yellowstone and Snake River more or less since 1871, but I never have seen nor heard of any caribou being killed in that region, nor did I ever see any tracks. The same may be said in regard to mountain goats. On the western slope of the Rocky Mountain, near Bitterroot, Deerlodge and the head of Salmon River in the Saw Tooth Range of the Rocky Mountains, mountain goats are to be found, but I have never seen nor heard of any being killed in the National Park.—AN OLD HUNTER.

Natural History.

THE RED-HEADED DUCK.

BY. REV. J. H. LANGILLE.

[From advance sheets of Birds in Their Haunts.]

ON the 30th of March (1882), while Niagara River was lashed into a tempest by a raw west wind, I saw from the north side of Buckhorn Island a flock of hundreds of redheads (*Fuligula ferina* var. *americana*) riding down the middle of the current in the most perfect repose. Nearly every one had the head resting on the back, the bill under the scapulars. Only occasionally was there one which seemed to act as sentinel.

Several widgeon, also, whose white crowns rendered them quite conspicuous, were in the flock. There was something peculiarly impressive in this long line of many abreast of living creatures, rocked and tossed on the foaming billows, and yet reposing as sweetly as if on some inland lake of glassy smoothness. Long did I scan them and much did I admire them, as the powerful field-glass brought them just before me.

A more complete study of these interesting ducks was reserved for me, however, on St. Clair Flats. Here they are most abundant in the migrations, and not a few remain to breed. In the bright hot days of June very considerable numbers may be seen diving leisurely for food along the deeper and more rapid channels, thus procuring their fare of small mollusks and fishes, the larvæ of aquatic insects and the roots and leaves of certain aquatic plants. Not infrequently the males are quite noisy, loudly uttering their deep-toned *me-ow*, which is the precise imitation of the voice of a large cat. The female, especially if rising from her nest or out of the water, has a loud, clear *squak*, on a higher tone than that of the mallard or dusky ducks, and so peculiar as to be readily identified by the ear even if the bird is not in sight. The gray aspect of the wings in flight is also very characteristic of this species.

The nest is generally built in the thick sedges over the water, and consists of the leaves of the cat-tail and of various kinds of marsh grass, a slight lining of down being added as incubation proceeds. The eggs, generally about nine or ten, but sometimes as many as fifteen, some 2.45x1.75, are nearly oval or oblong oval, having a very smooth, firm shell, and of a rich light brown tinge, sometimes slightly clouded, scarcely, if ever, tinged with blue or green. When moistened a little and rubbed with a dry cloth, they are susceptible of a high polish. The young in the down has the crown of the head and the upper parts generally, of a clear olivaceous green, the cheeks and underparts bright yellow. The eggs are fresh or nearly so the first week in June.

A stately and beautiful bird indeed is the male, as with head well up he rides upon the water. A little over 20.00 long, the bill, which is about as long as the head and rather broad, is blue, shading into dusky or black at the tip; the male has the head and more than half the neck brownish red with a violaceous gloss above and behind; the lower part of the neck, the breast, upper and lower parts of the back black; beneath, white sprinkled with gray or dusky; sides, scapulars and space between, white and black in fine wavy lines of equal width, giving a gray effect in the distance; wing coverts, gray speckled with whitish; speculum grayish blue; iris orange.

Female similar, with the head and neck grayish brown and the breast more or less mixed with gray, or whitish.

Resembling the canvas-back, it is quite distinguishable by its shorter, broader bill, depression at the base of the bill, absence of black on the head and back of the neck, and broader lines of black in the penciling of the back. Abundant on the seacoast of the middle districts, but becoming less common northward and southward, it breeds in the interior northward, moving southward in October and returning north late in March or early in April.

THE COUESIAN PERIOD?

To the Chairman Section of Avian Anatomy, A. O. U.:

SIR—Your recent article entitled "The Couesian Period" has aroused in me some curiosity, and I should therefore like to ask a few questions, which I expect you will be kind enough to answer, as I am a member of the A. O. U.

1. In your paper you subscribe yourself as "Chairman Section of Avian Anatomy, A. O. U.," and date it "American Ornithologists' Union." Does that mean that the document has any official connection with the said committee? Do the members not only agree with you, but have they had knowledge of the letter before sent? The answer to this is very important, as some one might think that the title mentioned had only been appended in order to give increased weight to your propositions, as coming from the chairman of the anatomical committee of the A. O. U.

2. Is it logical to name an epoch before the epoch has expired? You have fixed as its terminus the year 1900. How do you know that it will end there, and how do you know that no greater ornithologist will impress his name on the epoch when the time comes to name it? Whence comes the right or privilege of a professor of botany to name epochs in ornithological history before they are ripe for history?

3. Is it logical to say that a period commenced with a text book (the "Key," 1882), and that it closes with another of the same author (the "Key," 2d ed., 1884)? Is this to be regarded as a condemnation of the second edition? When the first edition started a period, the second edition ought to start a second period; how then can it close it?

4. You assume that you speak in the name of all the American ornithologists; have you ever conferred with any eminent ornithologist about the matter before making your proposition?

5. When speaking of the Bairdian epoch as ending in 1872, are you aware that three volumes of the great "History of North American Birds by Baird, Brewer and Ridgway"—certainly the grandest work on North American ornithology since Audubon's days—were published in 1874, the fourth in 1884, and that the fifth is still unpublished?

6. Are not the leading features of the present North American ornithology still "Bairdian" in the broadest and best sense of the word? Who is the North American ornithologist who can proclaim himself free from the mighty influence of that great genius, and is not following in the footpath trodden by Professor Baird? What are the scientific features distinguishing the new epoch from the past?

7. And in conclusion of the last question, who is the ornithologist—not botanist—who dare say that the Bairdian epoch has ended?

Mr. Chairman, Section of Avian Anatomy, A. O. U.: If you can satisfactorily answer these questions, then are we willing to accept your propositions. If not, we will drop "the Couesian epoch" and "the Couesian period" until the year 1900, or at least until "the Bairdian epoch" has expired.

Of course, it is not our intention to depreciate Dr. Coues's great merits as an ornithologist, but we contend that these can be duly acknowledged, without detracting an atom from the honor due to the father of modern North American ornithology. We protest against prejudicing history, and we protest against the untimely and tactless intervention of a botanist seizing the opportunity of making himself agreeable.

AMICUS SOCRATES, AMICUS PLATO, MAGIS AMICA VERITAS.

BIRD NOTES.

Editor Forest and Stream:

May 1.—Observed first chimney swallow and first sand martin; also, first brown thrush and first wood pewee.

May 2.—Mourning doves, white-bellied swallows and sandpipers seen to-day.

May 3.—Saw the first white-rumped shrikes.

May 6.—Saw first bobolink this morning; first myrtle bird or yellow-sided warbler.

May 7.—Saw white-eyed vireo; wood thrushes abundant; first catbird.

May 8.—White-throated sparrows plenty.

May 9.—The orioles as punctual as ever, arrived this A. M.

May 10.—Warbling vireo and worm-eating warbler.

May 13.—Yellow-throated flycatcher abundant.

May 14.—Saw first summer yellow bird, first night hawk, first great-crested flycatcher; two male rose-breasted grosbeaks were killed to-day.

May 15.—Saw first large flock of warblers, noticed the black-throated blue warbler, American redstart, chestnut-sided, black and white creeper, myrtle warbler. Found a golden-winged woodpecker's nest in an old apple tree. First white-crowned sparrow.

May 16.—Saw first humming birds at 5:30 o'clock A. M.

May 17.—Saw first blackburnian warblers, first spotted warbler, Wilson's thrush, first hermit thrush; also, killed a wild pigeon that measured 17½ inches in length, 25½ in alar expanse. Saw first indigo birds.

May 18.—A large flock of red crossbills made a short stay in our orchard. Saw first scarlet tanager.

May 19.—Saw two blue martins by the Onondaga creek; also saw a warbler of a very curious kind—orange-colored body and dark brown wings and tail—about size of myrtle bird. First black-bill cuckoo.

From May 20 to 27 I saw a flock of crossbills each day; have never seen any until this year.

G. ALBERT KNAPP.

ONONDAGA, N. Y.

Editor Forest and Stream:

Below please find result of my observations of the arrival of *Insessores*, as recorded by request of Dr. H. K. Fisher, Superintendent of the American Ornithological Union. Though not complete, it embraces nearly all of the S. R. of this order visiting us:

March 15th, robin; 16th, crow blackbird; 18th, bluebird; 20th, meadow lark; 22d, night hawk; 23d, plover and chipping bird; 29th, cat bird; 30th, red-shouldered blackbird; 31st, chewink. April 1st, purple finch; 10th, belted kingfisher; 17th, purple martin; 20th, cedar bird. May 3d, brown thrasher; 12th, barn swallow; 15th, chimney swift; 16th, bank swallow, crimson-throated humming bird and Baltimore oriole; 17th, scarlet tanager; 18th, house wren; 19th, golden wren; 20th, kingbird; 28th, bobolink; 30th, yellowbird.

The local conditions are not favorable for noting the *Natatores* or *Grallatores*, and I know of but three of the order *Rasores* found in this vicinity, and they are all R. Of the order *Scansores* grouped as S. R., we have only the cuckoo, and it may be classed as rare. I have not observed a single individual. Of the *Raptores* found there I believe only the brown hawk, the osprey, and the "little corporal" should be considered as S. R., and I have not seen either as yet.

L. F. SPENCER.

SPENCERPORT, N. Y. June 1, 1884.

Editor Forest and Stream:

Report of bird observations during May:

T. V.

May 1—Black and white creeper (*Mniotilta varia*).
May 3—Yellow redpoll warbler (*Dendræca palmarum*).
May 4—Common American crossbills (*Loxia curvirostra*).
May 4—Yellowshanks (*Totanus flavipes*).
May 6—Water thrush (*Siurus nevius*).
May 8—Ruby-crowned kinglet (*Regulus calendula*)—female only.
May 9—Maryland yellow throat (*Geothlypis trichas*).
May 12—Chestnut-sided warbler (*D. pennsylvanica*).
May 14—Nashville warbler (*Helminthophaga ruficapilla*).
May 14—Black-throated blue warbler (*D. cærulescens*).
May 15—Black and yellow warbler (*D. maculosa*).
May 15—Blue yellow-backed warbler (*Parula americana*).
May 17—Canadian flycatching warbler (*Myiodioctes canadensis*).
May 18—Morning warbler (*Geothlypis philadelphia*).
May 19—Bay-breasted warbler (*Dendræca castanea*).
May 21—Blackburn's warbler (*Dendræca blackburniæ*).
May 21—Black-throated blue warbler (*Dendræca cærulescens*)—females.
May 23—Olive-backed thrush (*H. ustulata swainsoni*).
May 23—Yellow-bellied flycatcher (*Empidonax flaviventris*).
May 26—Blackpoll warbler (*Dendræca striata*).
May 26—Brotherly-love greenlet (*Vireo philadelphicus*).

S. R.

May 2—House wren (*Troglodytes domesticus*).
May 3—Kingbird (*Tyrannus carolinensis*).
May 4—Baltimore oriole (*Icterus galbula*).
May 5—Chimney swift (*Chætura pelasgica*).
May 6—Catbird (*Mimus carolinensis*).
May 6—Brown thrush (*Harporhynchus rufus*).
May 6—Red-headed woodpecker (*M. erythrocephalus*).
May 6—Yellow warbler (*Dendræca æstiva*).
May 6—Red-tailed hawk (*Buteo borealis*).
May 10—Black-throated green warbler (*Dendræca virens*).
May 11—Scarlet tanager (*Pyranga rubra*).
May 12—Wilson's thrush (*Turdus fuscescens*).
May 15—American redstart (*Setophaga ruticilla*).
May 15—Red-eyed greenlet (*Vireo olivaceus*).
May 15—Sparrow hawk (*Falco sparverius*).
May 16—Humming bird (*Trochilus colubris*).
May 16—Pewee flycatcher (*Contopus virens*).
May 16—Wood thrush (*Turdus mustelinus*).
May 16—Indigo painted bunting (*Passerina cyanea*).
May 17—Nighthawk (*Chordeiles popetue*).
May 19—Rose-breasted grosbeak (*Zamelodia ludoviciana*).
May 21—Green heron (*Butorides virescens*).
May 23—Bobolink (*Dolichonyx oryzivorus*).
May 23—Bank swallow (*Cotile riparia*).

J. L. D.

LOCKPORT, N. Y., June 1.

NEW BIRD BOOKS.—We are informed that the second edition of "Coues's Key to North American Birds," has been published, but as we have seen no copy of the work we are unable to review it.

HEN AND PARTRIDGE.—A Maine paper reports that a man in Damariscotta discovered that one of his hens had strayed her nest and was sitting upon eight eggs in a pasture lot, but he also found that a partridge had added to the stock twelve eggs and was sitting in company with the hen.

RECENT ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDEN.—Purchased—One hippopotamus (*H. amphibius*), two slender-billed cockatoos (*L. tenuirostris*), one roseate cockatoo (*C. roseicapilla*), two black swans (*C. atratus*), one night heron (*N. grisea*), three Garganey teal (*Q. crecca*), three tufted ducks (*F. cristata*), two red-headed poo chards (*F. ferina*), one alligator (*A. mississippiensis*), one black snake (*B constrictor*), one rattlesnake (*C. adamanteus*). Presented—One common macaque (*M. cynomolgus*), two common rabbits, eight white mice, one prairie dog (*C. ludovicianus*), eleven opposums (*D. virginiana*), three flying squirrels (*P. volucella*), one red-headed duck (*F. ferina americana*), three screech owls (*S. asio*), one broad-winged hawk (*B. pennsylvanicum*), one turtle dove (*T. risorius*), two Swainson's buzzards (*B. swainsoni*), one great-horned owl (*B. virginianus*), one land tortoise (*C. clausa*), one water snake (*T. fasciatus*), one gila monster (*H. suspectum*), two alligators (*A. mississippiensis*). Born in Garden—Twelve prairie dogs (*C. ludovicianus*), one swift fox (*V. velox*).

Game Bag and Gun.

DEER DRIVING.

Editor Forest and Stream:

I have for years obtained much enjoyment from the weekly perusal of the FOREST AND STREAM, and I have been especially interested in the articles by C. H. Merriam, M.D., on "Deer in the Adirondacks" recently published by you. I have for the past thirteen years passed from three to ten weeks yearly in camp in the Adirondacks, and fully appreciate what he says regarding the various methods of hunting practiced there. But I think a little might be added to his remarks about "driving." He says, "Of the three methods of hunting heretofore considered, driving is the least sportsmanlike, and affords the deer the smallest chance of escape. It requires neither skill nor cunning on the part of the executioner; for patience and a very ordinary amount of common sense are the only essentials." This is all very true as regards the particular method of driving which he describes, but I think that the following method, which our party and many others whom I could name generally pursued, is both sportsmanlike, and requires a considerable amount of skill on the part of the "executioner."

The last of September or first of October usually found our camp pitched either near one of the tracts of land which have been burnt over (called a slash), or on the banks of one of the smaller rivers. At daybreak we were usually around the table partaking of our morning cup of coffee and a hastily prepared breakfast. As soon as possible we depart for our watch-grounds upon the slash, taking positions where the deer are in the habit of crossing the open land. The sportsmen generally watch alone, so that as many runways as possible may be watched. After a time, from the distant mountain side comes the faint note of the hound's first bark as he strikes a fresh track; now fainter, as he circles around the hills and through the valleys. The watcher must be on the alert and cannot relax his watchfulness for a moment, for he knows not how soon the deer will rush by on the run, and if he is so fortunate as to obtain a chance, it requires a quick, sure shot, to insure venison for camp. He cannot sit on the watch-ground, read or sleep, and leave the watching to his guide, and when the deer take water, be rowed within a few feet of the deer and then bang away until he succeeds in killing him; but he must depend entirely upon himself and must be able to shoot quickly and accurately.

If one wishes to enjoy the most exciting pleasure of all Adirondack sport, let him try this method of driving and experience the keen excitement which he will feel when he sees a fine buck coming toward him and realizes that he can only shoot once or twice, and that upon his skill depends the state of the camp's larder. If any one wishes to enjoy this sport, let him camp next autumn, with good St. Regis guides, near the open land to the south of Round Pond, on the north branch of the Saranac, or upon the shores of Follansbee Junior, which is on the border of a large tract of burnt slash, and, if the deer have not been driven from that section of the Adirondacks within a few years by the great number of summer visitors (not sportsmen), he can have it in abundance.

In the case of river hunting, it is nearly the same, except that the deer runs up or down the river or crosses it, giving but a moment in which to shoot. I have known parties to camp on the Meacham River and to have venison in camp all the time and to kill no deer except in the manner mentioned above. I could name a party of quite noted sportsmen who did that very thing only last September. To be sure, it is not as lazy a way as killing deer in large waters, but it is more sportsmanlike, gives the deer a chance to escape and affords the sportsman much more real gratification if he is successful.

AMPERSAND.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

One who has been familiar with firearms almost since the time he shuffled off his swaddling clothes, as I have been, could not but be interested in the discussion in your columns concerning the performance of shotguns. I have more than once been on the point of adding my mite to the contribution, but so far have been deterred from doing so by my almost unconquerable bashfulness, and an unwillingness to vaunt my own exploits. Furthermore, I feel as all sensitive old men must, who look on this roaring, surging tide of modern progress, as if I were a lumbering old craft, stranded on the shoals of old-time ideas. However, it is possible that I may give a hint or two of value to some of those who are tossing so gaily down stream.

I have used many guns from the hands of all known and many unknown makers, and though the best gun I ever shot (except one of my own invention, described some time since in my Adventures) was a Manton-Richards-Greener-Tolly-Scott-Lefevre-Colt-Remington-Baker-Parker-Sneider-English-American hammered and hammerless, single and treble-bolted, rebounding breech, top, side, and under-snap action, muzzle and breechloading, cylinder-choke, 0 gauge and twenty-four pounds weight, ordinary charge, one pound best blasting powder and four pounds condensed shot with six gilt-edged spherical wads on powder, and two half-moon wads on shot, in paper and brass shell—I have never found any difficulty in making any gun shoot tolerably well, and just as I wished it to shoot up to a certain distance. No gun, save such rare and exceptional ones as the two above mentioned can be expected to kill a chickadee clean over one

hundred yards, and it is unreasonable to ask for greater excellence.

Now, if I wish to make a long shot, and have the pellets delivered within a small compass, at the instant of the ignition of the powder I give the gun a sharp and strong push, and in the next fraction of an instant a twirl and a slight movement backward. The first adds to the force of the powder, the second and third motions draw the shot together, and produce a close pattern. If I wish to get any small bird for a specimen without injuring the skin and feathers, at the moment of pulling the trigger I jump backward, thus diminishing the force of the charge to almost any degree I desire. In shooting at a flock, when it is desirable that the gun should scatter, I give the muzzle a flirt from right to left just so far as is necessary as the shot are leaving it. In this way I once killed fifteen wood ducks at a shot, though they were sitting on a log lying exactly at a right angle with the direct line of fire. So I once killed two deer running one behind the other, my rifle being charged with two balls, once a common practice in Adironda when muzzleloaders only were used. It took nice calculation to get the second ball out at the right instant, but I accomplished it, striking the first deer just behind the shoulder, the second in the back just forward of the hips (or perhaps I should say, one behind the fore shoulder, the other before the hind shoulder. As I often read of the fore shoulders of quadrupeds, I suppose they must have hind shoulders). If any one doubts these statements, and some people are forever doubting the most reasonable statement of hunters and anglers, I can at any time show the guns with which the shots were made, and will be most happy to exhibit them to any who call upon me at my house in Adironda. Neither gun, however, is at all remarkable to look at.

Yours for the truth,

MAJ. JOSEPH VERITY, U.S.H.M.

ADIRONDA, May, 1884.

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

The discussions in FOREST AND STREAM on the choice of hunting rifles have been very interesting to me. "Penobscot" wrote a very good article, and I corroborate his statements in regard to the .40-caliber. As I have hunted in Montana, Wyoming and Idaho for over fourteen years—part of the time for market, hides and specimens—I give you my experience

I have used rifles from .40-caliber up to .65-caliber, and the best killing gun I ever handled was a Sharps .40-caliber, 70 grains powder. In 1872 I killed two large buffalo cows with one single shot. The ball passed through behind the shoulders of the first and penetrated through the heart of the second, thus killing both. I also found this gun (.40-caliber) to be "dead medicine" on bear, more so than larger bores. The reason that most buffalo hunters out West prefer the .40-caliber is easily explained. First, according to the weight of powder and lead, the .40-caliber gives the flattest trajectory as well as best penetration. Second, a .40-caliber bullet makes a very small hole, where it enters the body, and as bear and most other kind of game are generally fat during the hunting season, the hair and fat plug up the hole and prevent the escape of blood outwardly; and experience clearly shows that a wound which bleeds inwardly will kill an animal in less time than a wound that bleeds outwardly. Theoretically the largest caliber rifles may be the best killing ones, but practically this is not so (*i. e.*, a .40-caliber compared to a .65-caliber). Like "Penobscot" I do not believe in the "shock paralyzing" theory. I have also used repeaters of .44, .45 and .50 caliber, and have never had any trouble with them. I think that a .40-75-225 or .40 90-240 or 300 will be the favorite cartridge for hunting large game.

At no distant date, the hunting rifles will have to take a rest, as the large game is fast disappearing in this part of the country. AN OLD HUNTER.

BOZEMAN, Mont.

TEXAS GAME PROSPECTS.

I HAVE just passed through four counties of North Texas and took my time to notice our prospects for next September. Fort Worth was my starting point.

All through Tarrant county quail are breeding, and Bob White is heard on every side. Prairie chickens are not doing so well.

In Cook county, quail are abundant, along the creeks they swarm, and are to be seen running along the roads just before the sun goes down. Pinnated grouse are more plentiful than in Tarrant county, and good shooting can be expected.

My next county was Montague, the noted home of Bob White. As usual, I found him on all sides. Creeks appear lined with them and the post oaks, known as "the cross timbers" are literally alive. I do not know of any county so well stocked. Whenever I pass through Montague county, it reminds me of Norfolk, England, and their large preserves. One thing, a sportsman once he finds Montague, cannot go amiss. Through the timber along the prairie creek, among the farms with a good dog, you are bound to fill your bag.

The next county is Clay, and the beautiful little city of Henrietta, the home of Northern Texas cattle kings. This is a prairie county. Young chickens are numerous, and next August they will be in good shape. Chicken shooting will be my first out, and Clay county I have concluded to make my grounds. The county is just fenced up into large pastures, and land that was cultivated turned into grass. These old fields I examined and found young chickens just hatched. I just put these fields down as where young chickens will lie like rocks. I have commenced to count the days so as to have the dogs ready. It is hard work in August, but our Gulf wind makes it cooler than the Northwest States. Along the creeks I also found quail doing well, and what little timber the county has is alive with quail. I put in half a day looking up turkey on Big Wichita and was surprised at the number left over to breed. I saw droves of them, and flushed several hens from their nests. Young turkey I have down on the Big Wichita for next November. I passed through into the Indian Nation and saw several bands of antelope. Took a look at Beaver Creek, and found turkey doing well. Went up to Cash Creek, and there I saw too many signs of old camps and turkey feathers scattered around. I put Cash down as shot out.

On my return home, I took a look at Red River. There I saw a little more corn planted than can be gathered. I put that down for geese next December. I have marked out my blinds, and if the driver kills any more geese with No. 10 after I have shot BBB I have made up my mind to keep quiet about it. I shall also mind and hold my old gun steady when drivers are around.

I took in Red River and found chickens very numerous, the dry season having driven them along the well-watered Red River Valley. Passing down the Little Wichita, I noticed the duck lakes well filled up and "yonkerpins" in bloom, showing plentiful feed for ducks. I turned back over the rolling hills into Henrietta well satisfied with the prospect of North Texas, and considered myself lucky to live in a country so plentifully supplied with game. ALMO.

HENRIETTA, June, 1884.

AMATEUR DEER SHOOTING.

FOR the ordinary sportsmen it is generally best to possess himself of the services of a guide, if he is set on killing game. But it sometimes will happen that no guide can be procured, and the sportsman must turn his back to the woods and count his journey and expenses a dead loss, or rely on his own undeveloped resources. In company with several other congenial spirits, I was camping on the shores of Connecticut Lake (second lake). Deer were numerous, but wary, because of the constant jack-shooting that had been going on. Several deer had been secured, none of them with antlers, however—all does. The old "snorters," as the guides called the bucks, suddenly withdrew at the sight of the familiar torch, leaving the sportsmen to take up with the unsuspecting females as his only reward in the chase. All the shooting had been done with buckshot, and, of course, at close range. It had occurred to me, on taking in the situation, that a change of tactics might bring better results. Why not use a rifle at long range and try them at daylight—say the early morning? The plan seemed feasible to all the party. I only waited a good opportunity to execute it.

I had possessed myself of a repeating rifle of .38-caliber, with which I was tolerably familiar, and a cedar boat, too large, however, for shooting purposes, but very light considering its size.

It was on a Monday morning, a heavy fog was brooding over the lake and surrounding woods; guides and sportsmen were wrapped in happy dreams as I sallied forth. I had called a mate, who, though he could neither shoot nor paddle, was taken along as a passenger. About two miles from camp, near the foot of the lake, a deep bay, undisturbed by campers, became my objective point. My plan was to allow my companion to row me down the lake; but, judge of my surprise, when, after going, as I thought, the required distance, I came in sight of the shore not far from where I had started. We had been moving about in a circle. This was not our only discouragement, however, for the loons allowed us to come provokingly near, and several times I brought my rifle half way to the shoulder with hopes of quieting their tell-tale screams.

Taking a fresh start, for we were not to be discouraged, we at length came within half a mile of the shore I had selected, when, requesting my friend to lay aside his oars, I took the paddle, and, without lifting it out of the water, sent it slowly but surely toward the bay. The fog had now lifted, and in a half hour more the sun would be above the treetops, and the case began to look hopeless; but on rounding the last point that hid the bay from sight my friend gave a start, as if he had come in contact with an electric battery. He was sitting in front of me, so that what he saw I saw not. On we went, however, till within forty rods of the shore, when, seeing nothing, I whispered my intention to go on and examine the shore for fresh tracks. It was now my turn to be startled, for my friend answered back in a hoarse whisper that seemed as loud as thunder, "For heaven's sake, look at that deer!"

Turning the boat a little, sure enough there stood before us a noble buck, regarding us with the greatest apparent indifference. On, on we went, my companion looking for all the world like a figurehead to a ship, so still and rigid were his muscles, though differing from most figureheads in that he wore a large white hat set well back on his cranium. I had now shortened the distance say ten rods, when the buck in his quiet feeding gave me an excellent shoulder shot, so letting my paddle slip into the water, I brought the Winchester, which had been resting across my lap, to a steady aim and fired. By good fortune the ball entered the spine and down came the noble game, to rise no more.

"Wal, now, boys," said Uncle Tom, speaking half to us and half to the guides who had come down to the boat landing to see our prize, "Wal, now, boys, that is the finest specimen of a deer that has been shot on this lake for many a year."

THE SNIPE HUNTING TRICK.

WHEN I came to this State three years ago, being fond of sport and having been born with a rod and gun in my hand, and accustomed to handle both on all legitimate occasions wherever sport was to be had, I lost no time in making inquiry as to where I could find some shooting. I may say that I was then in Sacramento. Having been directed to the tules, about forty miles from the city, but in what direction I do not choose to say at present, and, being accompanied by a friend, I took up quarters at a hotel in the neighborhood and proceeded to prospect. A goodly number of hangers-on were there, hoodlums, ranchers, etc., who, finding out that we were strangers in quest of sport, volunteered a prodigious amount of information as to the rendezvous of myriads of geese, ducks, etc. (this was in December). Perhaps we looked a little verdant; at all events, our new friends took it for granted that we were, and, soon ventured to try "tricks upon travelers," like Shandy of old. After telling of prodigious feats in the shooting line, including a tale of the fellow who killed 100 geese at one discharge of his 8-gauge muzzleloader, and who, it was said, was present, but being modest, allowed his chum to tell the tale. A fellow who claimed to be a professional hunter inquired if we ever hunted snipe. Giving my companion a wink, I replied in the negative, whereupon it was declared on all sides that the best snipe ground in the State was to be found within six miles. We expressed a wish to take a hand in, and the "boys" told us to be ready about dark the next evening.

The night came and so did the "boys," and my friend and self went off with them. As we were informed no guns were needed, and one of the boys carrying a lantern and a net we knew something was up, and lay low. After traveling about six miles we came to a "slew," across which we rowed in a flat-bottomed boat, and went on through tules and mud a mile or two further. Here on an open grassy spot a halt was called and our companions, four in number, told us to squat down and hold the net, while they proceeded to beat the grounds for the birds, which we were informed would be attracted and bewildered by the light and would fall an easy prey to the net. We promised obedience and expressed at the same time much curiosity to see how the affair would culminate.

As soon as our friends disappeared, Tom and ourself held a brief and hurried consultation, the result of which was that the lantern was fastened to a pole and we made "tall time" for the boat. Skulling ourselves across the "slew" we lay low again for developments. Soon we heard our friends coming although it was too dark to see ten paces. They were laughing and chuckling in high glee at the trick played upon the "greenies." The absense of the boat caused them a good deal of conjecture, as the lantern being up they supposed we were still holding the net. Being too far off to hear clearly or see their movements, but knowing well that they would have a good eight miles to go round ere they got on the home trail, we left, and before 10 o'clock were snug in bed.

When we came down to breakfast next morning, the landlord expressed his intention to do the treating while we remained, and the barroom habitués treated us with marked respect, but no further advice was volunteered.

About a week after, just before leaving, we learned that the fellows got back about 3 A. M., wet, dirty and full of profanity at being outwitted.

We spent a few days in that locality and had fine shooting.

LEONIDAS.

SOLANO COUNTY, California.

TWO-EYED SHOOTING.

Editor Forest and Stream:

In a late issue of FOREST AND STREAM, I note some observations on the subject of "Two-eyed Shooting," or shooting with both eyes open instead of only one. It seems to be discovered at last, after centuries of profound ignorance on the subject, that this is the only sensible way to shoot, and it is now in order for all who have practiced two-eyed shooting to come forward and crow. I notice that "A Sportsman" from Georgia crows very loudly indeed. He says he is the only man in the entire South who has ever shot in this way, as far as he knows; in other words, that of all the other millions of shooters in the South, he is the only one who has had sense enough to understand the business, "Faithful among the faithless, only he."

This is high honor, indeed; but I can assure the Georgia gentleman that he is not alone in it. I can claim an equal, if not a greater honor than he. I have been a shooter since twelve years of age, and am now almost as old as the hills. I have shot with a great variety of pistols, shotguns and rifles, and have sometimes sighted and fired a cannon. And yet I never fired a shot in my life without holding both eyes wide open. I dare say that the Georgia gentleman cannot say as much as that. If he cannot, then I claim a greater honor than he has. If he can say as much, then I claim an equal honor. Moreover, it is my opinion that I beat him in the honor anyhow, for I cannot, to save my life, shut one eye and keep the other open. I never could do it in my life. If I shut one eye, the other closes simultaneously, in spite of all I can do. Therefore, in my case, "learning comes by nature." At least it is so as regards shooting. When learning comes by nature, it is genius of the highest sort; and genius is much more honorable of all men than mere talent, which has to have the learning driven into it by birch or hazel switches, hard work or long experience. If the Georgia gentleman's two-eyed shooting has not come by nature, I am more honorable and admirable than he, in precisely so far as genius is more honorable and admirable than talent.

It is my opinion that his two-eyed shooting did not come by nature, because he maps out a line of argument by which he reached the conclusion that it is the best way. No line of argument was needed to teach me that, it came the first time I pulled a trigger, by nature or genius. The Georgia gentleman and all other youths should take this consideration into their breasts and cherish it: namely, that find as great a man as you may, you will, if you look around, find some other man somewhere, who is just as great, if not a little greater than he. If they cherish this consideration it will probably prevent them from making humiliating exposures of themselves. Greatness is by no means singular. There's lots of it in the world if one will only look around to find it. It is this consideration which withholds me from making too great a boast of myself, for while it is true that I do not know of another person in the entire South, or elsewhere, who is a two-eyed shooter by nature or genius, yet I am sure if I should boast of it I should find hundreds and perhaps thousands coming forward to dispute with and humiliate me. Therefore I wear my honors meekly, prepared to surrender them at any moment to some greater person who may prove himself to be so.

In regard to accuracy of fire, while I do not claim anything exaltive, yet it is due to science and the small brotherhood of two-eyed shooters to state the absolute fact that I am a good shot with pistol, shotgun, rifle, cannon or even hand-grenade. I have never been with a company of shooters with whom I did not hold a fair and even superior hand, so much so as to excite the envy and secret ill will of many. When a boy the other boys soon refused to go squirrel hunting with me, for it nearly always happened that they came back with nothing, or next to nothing, and I with a bag full. When a Texas Ranger, years ago, I was thoroughly hated by the brag shots of the company, for the reason that they always got left when it came to a trial of skill. One fellow by the name of John Myers quit speaking to me, and has never spoken to me from that day unto this. Fact is I believe he prayed nightly that the Indians might get my scalp. Poor fellow! Some years later the Indians got his scalp, while mine is still on my head. Even now I never go out with a company ducking, quailing or sniping without coming back quite as good a man as the best of them, and often the best. Thus it is that genius sticks to us to the last, while what comes by talent is often forgotten and lost.

If I have talked too much of myself, it is well understood who is to blame for it. The Georgia gentleman provoked me to it. If I have sinned in this respect, he caused me to do it, and is therefore the bigger sinner. If I am to be blamed, he should be blamed the more, and doubtless will be. However, we have both written in the interest of science, and it seems to me scarcely possible to sin in such an interest.

In the same interest I will state that I shoot very quickly—almost the very instant that the gun is brought to the shoulder. If I stop to "draw a bead" or take sight, my gun goes to wobbling, and then I can scarcely hit the side of a house. If I shoot instantly, the gun has no time to wobble, and then I send my lead to the spot I wanted it to go to. As to whether I take sight or not I cannot say. This is certain, however, that I see only the fore sight, and never see the hind sight. To me the hind sight is a perfectly useless incumbrance on a gun. This might not do for very long-range shooting, but it suits all my purposes excellently.

Now let us hear testimony from others on this subject. How do you aim, with one eye or both eyes? N. A. T.

PALESTINE, Texas, May 27, 1884.

HINTS ON SNIPE AND QUAIL SHOOTING.—I never hunt snipe with a dog. I use the dog as a retriever. I hunt snipe down wind, because they almost always rise up wind and come to the gun. When they are wild and are hunted up wind to give a dog chance to scent them, they will rise wild, but when they see you bearing down on them, knowing they must go toward you when they rise, they will lie, and when they do rise they rise toward you and you get your shot. In hunting quail, I never hurry after flushed birds for the reason that birds after being flushed hide. If you hurry after them they will rise in twos and threes, and sometimes most of the covey will take wing again. Let them alone for five or ten minutes, and when you go to where you have marked them they lie so close that sometimes it is a hard matter to make them rise, although you are only a foot or so away. Again, quail seem not to emit an odor immediately on alighting. I have frequently marked them down and hurried after them and I could not find one. Calling off my dogs, I would wait ten minutes and go back and get up the whole covey one by one. And again, you give your dogs a fine lesson in staunchness by making them stand till you are ready to proceed after the birds, then "fetch," and your dogs will not trouble you in their eagerness. I imagine some of your readers saying, "but it is cruel to keep your dog in a constrained position." It is not so. Dogs soon learn to shift position. My dogs will stand for half an hour or more if I do not find them (in cover), and it is not worse to make them stand for five minues. It may seem to be waste of time (when time is limited), but one can fill his bag sooner this way.—SPORTSMAN.

A BEAR IN MADISON COUNTY, N. Y.—Hamilton, N. Y., June 1.—On the morning of May 28 people in the vicinity of Lake Pleasant were startled by a report that, during the previous night, a bear had made a descent from the mountains and attacked a flock of sheep belonging to Farmer Sturges, who lives near the lake, killing and wounding three sheep and two lambs. A hunting party was immediately organized, Mr. Sturges offering a reward of $10 for bruin's scalp. The gallant Nimrods, among whom were two Auburn sportsman, Mr. C. E. Thorne and Dr. C. F. MacDonald, ascertained the line of the marauder's retreat by the aid of dogs, and then divided into couples for the purpose of surrounding and investigating the mountain, where he was supposed to be concealed. After the lapse of about two hours shots were heard in the direction taken by the Auburn sportsmen, and the remainder of the party, hastening to the spot, found the bear's lifeless body stretched upon the ground, the result of a charge of buckshot and a rifle ball from the respective weapons of Messrs. Thorne and MacDonald. The carcass was borne to the hotel, and being placed on the scales, tipped the beam at 309 pounds.

GUN RUST PREVENTIVE.—I wish to call the attention of sportsmen to the cheapest and best "anti-rust" for guns (and any other metal bodies) that exists. It is the cheapest article yet brought forward, can be obtained anywhere that an apothecary shop exists, and is not a "patent" or "proprietary" article, to wit: the common "cacao butter." A few cents' worth will last any sportsman years, as the slightest amount on a metal surface protects it effectually. It is at ordinary temperature a solid, but melts at a slight elevation of temperature, and has been found by European manufacturers of fine surgical instruments as far superior to vaseline and other compounds in protecting from rust, even when these instruments are shipped by sea as far as India, proving entirely sufficient. I use nothing else on my own gun. Had formerly tried one thing after another and given them all up for this simple, easily obtained and cheap article.—C. W. E. (Boston).

BALTIMORE AND WASHINGTON.—Your correspondent has lately returned from a trip to Baltimore and Washington and found the sportsmen of the two cities busily putting in the dull period between times on clay-pigeons (which by the by they complain of not being able to hit) and thus keep in practice for the opening of the "timber doodle" season, as woodcock are affectionately termed in those sections. I am told there are many birds round about Baltimore and Washington, especially the latter city. In Baltimore I learned there is a prospect of a good crop of celery the coming season, which, of a consequence, will make a good year for ducking.—HOMO.

ARIZONA QUAIL WANTED.—Toledo, O., June 6.—Is Mr. Brown, of Tucson, Arizona, to disappoint his friends who hoped to have some Arizona (California) quail through his kindness?—J. B. BATTELLS.

BELATED GEESE.—Concord, N. H., June 2.—Mr. Frank Battles, a well known Boston sportsman now doing business in this city, killed a pair of large Canada geese in the Merrimack to day.

VIRGINIA QUAIL.—University of Virginia, May 30.—We have had a dry spring, and I hear more partridges whistling than I have heard since I came here to live, two years ago.

WHERE TO GO.—At this season of the year the angler, whose impatience led him months ago to look over his tackle and get rods, reels and fly-books in order, is in a quandary. He is trying to make up his mind where to go for his vacation, and is balancing in his mind the attractions of different regions. And it is not remarkable that he should find it hard to make up his mind when we see how many spots there are, within comparatively easy reach, where the trout and the bass are still numerous. Going no further than our own advertising columns, we see noticed publications treating of a dozen different sections. One may obtain maps and guide books of the Adirondacks and may follow in the footsteps of glorious old "Nessmuk," may be his own guide through Northern Maine, over Moosehead, or Tim and Seven Ponds, among the Androscoggins—country of monster trout or may paddle his canoe lightly and easily among the Thousand Islands, where the bass abound and the mighty mascallonge has his lurking place. No wonder it is hard to determine where to go; but whatever the final decision it will be well for him who is about to make an outing to learn all that he can concerning the country he intends to visit. He should read up the guide books with care, and should, so far as possible, familiarize himself with the maps. He should do this, not merely because he desires to know as much as possible about the country he is going into—though this is reason enough—but also because there is a possibility always that he may have to put his knowledge to a practical use. We have known of more than one fisherman in the wilderness who has been "turned" and unable to find camp when he wished to.

Sea and River Fishing.

RHYME OF A BASS.

CLAD in the greenness wherewith hath summer them arrayed,
A clear stream the willows and bending sedges shade,
And spin down upon it slim threads of golden light
Which the quiv'ring wavelets knot in meshes bright.
In this tangled net of sunshine that ne'er holds him,
A bass swims where the swirling flood enfolds him.
As he with lazy fins the yellow meshes breaks,
Above him flits a gay-winged fly in merry freaks,
Of hue so bright and strange that he is half affrighted,
Till in the stream has the silly thing alighted,
Staggering o'er the swirling pools and rippling shallows,
As drunk with sunshine, or giddy, dodging swallows.
Then the bass bethinks him that this gay new-comer
Naught but a blossom is of the air of summer,
A chrysalis the bud, this the gaudy flower,
Drowning here its briefly blooming sunlit hour.
Then up he darts to seize it with a sudden madness,
Born part of hunger and part of that wild gladness
Which moveth all things in this glorious season,
Proving sometimes better, sometimes worse than reason.
But how this gay-clad insect his attack resenteth!
With sting so sharp that none but fiend inventeth!
No blundering bumble bee, no wasp nor buzzing hornet
Hath e'er so pierced his lip, nor e'er so torn it!
Then he spies an angler on the brink above him,
Intent upon him: does he hate or love him?
Ah! The wand he holds nods to him, but restrains him,
To its slender thread belongs the sting that pains him.
To the depths he plunges with his dear-bought treasure,
Wondering in this sport to whom belongs the pleasure.
The coolest deeps, where he has had his life-long sport,
Afford him now no help in this his sorry sort.
In vain he grinds his wounded jaw upon the gravel,
The barbed steel holds, though up or down he travel.
Then tries the upper world where birds and insects live,
To see what aid to him this higher realm shall give;
And as he cleaves the limpid wave he scatters pearls
For ransom, brighter than shine in coronets of earls.
Twice his length he leaps above and in brief survey
Sees trees and banks and man turned topsy turvey,
Their doubles quiv'ring toward him on the troubled stream,
While he shakes his head to loose the torturing fleam.
But naught he knows to try does in this stress avail,
And courage, strength and cunning all begin to fail.
Gasping, he sinks with languid fin beneath the flood,
And slowly stains the current with his oozing blood.
As down he floats, aweary and well-nigh spent of strength,
Across a sunken limb the loose line drags its length.
Last hope! He gathers all his weak remaining force,
And back beneath the branch directs his feeble course.
It holds, nor yields it to the angler's fervent strain;
The swift stream aids his flagging fins—he's free again!
Thanking, as he drifts away, this last entangler,
A happy fish leaves there a not so happy angler.

AWAHSOOSE.

RAINBOW TROUT AND STEELHEAD.

WITH OTHER MATTERS SALMONOID.

I DO not think that we should condemn the rainbow trout too severely for his supposed relationship to the steelhead. The latter creature, as I have known him, is a large trout of ten to twenty pounds weight, and looking somewhat like an Atlantic salmon. He is found in the Columbia River in the spring at the time of the early salmon run, a spent and worthless fish, apparently working his way back to the sea after a mid-winter spawning. The animal is structurally a trout and not a salmon, but it seems to live in the sea, and to ascend the rivers for a short distance to spawn, thence again returning, like a salmon.

In this steelhead condition, the fish bears little resemblance to the rainbow trout, as we know the latter in the streams of California. It is, to begin with, nearly twice as large as the largest of the latter; it is lank and slab-sided instead of chubby, and its mouth and jaws are very much larger than in the rainbow trout.

But in the study of *Salmonidæ*, we have learned how deceptive are differences in looks and differences in habits. The trout adapt themselves with wonderful readiness to differences in their surrounding, and these surroundings in turn react on them and change their "looks."

On careful comparison of the rainbow trout with the steelhead, the only structural differences which appear are these two: The rainbow trout has a mouth which is small for a trout, while the mouth of the steelhead is large, the jaws extending well behind the eye. In this regard, there is a marked difference between the largest rainbow trout (McCloud River) I have seen and the average steelhead, the caudal fin in the steelhead is truncate while in the trout it is lunate.

But in all species of trout, the mouth grows larger in old fishes and is largest in spent males, and in the same way the caudal fin becomes more truncate with age.

I do not know the young of the steelhead, nor do I know any character by which it could be distinguished from the rainbow trout.

On the other hand, if the rainbow trout ran into the sea, and there grew more rapidly, changing its appearance and habits as other fresh-water salmonoids do when they get into the ocean, they ought to make exactly such a fish as the steelhead.

My present belief is (always subject to change on the introduction of more evidence) that the steelhead (*Salmo gairdneri* Rich.) is a sea-run form of the rainbow trout (*Salmo irideus* Gibbons), and that the two are not really distinct species, but forms of one species. If so, the name of the rainbow trout should be *Salmo gairdneri irideus*.

To what degree the two forms may mix, I do not know. It is apparently certain that the great body of the rainbow trout of California and Oregon do not descend to the sea, and consequently never become steelheads, and I do not think that the steelhead matter has any great weight as an objection to the introduction of the rainbow trout into Eastern waters. Whether the species in the East will stay where it is put or go off somewhere else, we can only find out by experiment.

Something similar to the change into steelheads seems to take place in the other Pacific coast trout. In Puget Sound the red-throated trout (*Salmo purpuratus*) abounds everywhere in the sea as in the brooks, and large specimens (25 pounds) are sometimes taken, which seem to be the "steelheads" of that species. All of these spawn in fresh water; hence, they must be in some degree migratory.

Again, the "Dolly Varden trout" or charr (*Salvelinus malma*) is ordinarily a brook fish, in size, habits and appearance altogether similar to our Eastern brook trout. But it is common in the salt waters of Puget Sound, and specimens weighing 11 pounds have been several times brought to me by the Indians at Seattle and Victoria. These large fishes are silver gray in color; they live in the sea, and consequently must run up the rivers in the spawning time; but of their identity with *Salvelinus malma* there is no sort of doubt. They are, I take it, the "steelheads" of the species.

Another case of the same sort, if the matter is correctly understood, is that of the Canadian sea trout (*Salvelinus fontinalis immaculatus*). These seem to be sea-run brook trout, who have grown so large and become so peculiar in their habits, that it may be best to recognize them as a distinct subspecies, as we do the landlocked salmon. They are the steelheads of the brook trout, and their progeny, if planted in small inland brooks, would, I think, in time adapt themselves to circumstances and become brook trout again.

I am not much of an admirer of the rainbow trout, but I do not see in what important respect it is inferior to the European brook trout (*Salmo fario*). In technical regards the two species are exceedingly similar. They are "as much alike as two peas," nor do I know of any difference in habits.

A finer fish than either of these, larger, gamier and handsomer, is the species which I have called the red-throated trout (*Salmo purpuratus* Pallas). This is the trout of the Rocky Mountain region and the Great Basin, of the Yellowstone, of Utah Lake, of Lake Tahoe and of the Upper Columbia. In the FOREST AND STREAM it has been called Clarke's trout, but I submit the above "common name" as one preferable for general usage, Lewis and Clarke had little to do with it. It has been named *Salmo clarkei* and *Salmo lewisi*, to be sure, but it was well described and well named long before the days of Lewis and Clarke. In all specimens I have seen of this trout, there is a deep red blotch at the throat, between the branches of the lower jaw. This was noticed by Pallas, and it may have suggested the name "*purpuratus*" (empurpled) which he gave the species.

I believe that this trout is better worthy of experiment for fishculturists than either *Salmo fario*, or its American double, the rainbow trout.

While my pen is in this matter I would like to say a word as to the relative merits of our American brook trout (*Salvelinus fontinalis*), and the brook trout of northern Europe (*Salmo fario*).

In the English usage of these names, our trout is not a trout but a charr, and I take it the highest praise that can be given to any salmonoid fish is to say that it is a charr. That is the superlative of trouthood. The genus *Salvelinus* stands at the head of the series. In beauty, in gracefulness, in wariness and in gaminess all the true charr seem to surpass any of the trout. They are less hardy, as a whole, and inhabit only the coldest and purest waterst. Thus, where both charr and trout are found, the latter occupy a much wider range.

The red charr of Europe, the sälbling or ombre chevalier (*Salvelinus alpinus*), and its near relative, our Rangeley Lake blueback (*Salvelinus oquassa*), are delicate and beautiful little fishes, less voracious than the average trout. The least graceful and most voracious of all the true charrs is probably our American brook trout. He is more hardy and less delicate than the ombre chevalier or the blueback, but leaving these ideal forms aside, in beauty and grace none of the true trout approach him.

DAVID S. JORDAN.

INDIANA UNIVERSITY, June 2.

CAMPS OF THE KINGFISHERS.

Black Lake, Michigan.—V.

WHEN our neighbor appeared next morning with the lumber he asked about the varmints, and when told they had failed to come and see us, said: "Well, boys, guess you're all right now, for they hardly ever come after the second day. What's to be done to-day, fish? I'll row a couple of ye to-day, and show ye the good places." (Mem.—He charged $2 at the final settling up for showing the boys the good places that day, rowing thrown in.)

While getting things in readiness for the day's fishing we had a chance to look Brother M. over and size him up, not having had time in the hurry of putting the camp in shape to do so before. His age, he said, if I remember rightly, was past fifty years. He was nearly 5 feet 8 inches in height, broad-shouldered, solidly built from the ground up, and stood firmly on a pair of large, well-shaped, muscular legs. His arms were models of strength and muscle, and his hands, large and sun-browned, looked—for lack of a better comparison—like a pair of "Pride of the West" hams. A full, deep chest, with this development of limb, marked him a man of great strength and a bad customer to deal with if it came to a matter of blows. A pair of keen gray eyes, under shaggy brows, a full, reddish brown beard, slightly grizzled, and a shock of hair that had originally been a crushed sweet-potato color, but now tawny and weather-beaten, completed his make-up. This was neighbor Merrill, in physical development a cross between a buffalo bull and a cinnamon bear, and with a voice to match. He was companionable, too, and a great talker; in fact, as Ben said, "Blowin' his horn was one o' his best holts;" but we had no trouble in our dealings with him, as he filled to the best of his ability all his agreements with us, and we treated him squarely in return. By his own admission he had been one of the "bhoys" in days when he was younger and living back in "York State," having trained in the John Morrissey gang before that sweet-scented citizen aspired to Senatorial honors. The finish of many a tough scrap with the pugilistic fraternity had found him on top, but he had tired of these empty honors, and moved up here into the very wilds of Michigan to bring up his boys in a pure atmosphere, away from the wiles and temptations that had encompassed their paternal parent in his younger days; away from evil companionship and whisky. Whatever other shortcomings neighbor M. may have been possessed of, I honored him for his motives in this, and respected him for the example he set them by not touching a drop of the cursed firewater himself, and I trust his boys will honor this teaching and grow up to be useful and respected citizens of the great Wolverine State.

But we were impatient to be off, and as the morning had cleared up with promise of a beautiful day, we left the camp in the best of spirits and ready as Ben said, "for a fight with anything from a pound up that wore fins."

Our camp was located in the bight of a small bay on the southeast shore, from which point we could command a full view of the lake with the exception of perhaps three miles of the lower end, and from here, before we start out for our first day's fishing, we may as well jot down some of its

features as seen from where we stood and as afterward learned in different excursions from camp.

Sweeping around to the left the eye followed the shore northward to a point where the lake narrowed to about three and a half miles wide, from whence it trended off northwest and down to the outlet, holding a width of three to four miles. Around this point and well down to the head of Big Black River, the outflow, is a narrow strip of water running back into the woods, a matter of an eighth of a mile, rush fringed and shallow, that is dignified by the name of Sturgeon Bay, and just at the mouth of this little bay flows in Little Black River, the name suggested no doubt by the very dark color of its waters. Up lake to the right of camp the shore swept around in a graceful curve almost to the extreme head of the lake, the dark green background broken only in one place by a rugged ledge of rocks a hundred yards or so in width, cropping out of the hill nearly flush with the water's edge a short distance above the road coming in from Merrill's place. This ledge, Merrill said, extended down the lake near the center in a straight line nearly to the point where it narrowed, under water from where it cropped off at "the rocks," a depth of fifteen to thirty feet, but readily traced in a boat when the water is quiet. On either side the water dropped off deep, and along this sunken ledge he said was to be had some extraordinary bass fishing later in the season. He forgot, however, to apprise us of the existence of this bass ground until the day before we broke camp, but as it is not in the nature of the "Kingfishers" to nurse a grudge, we have forgiven him long since, and even at this late day beg to tender him our thanks for the information so tardily given, as some of us will no doubt take a notion to pay Black Lake another visit.

Nearly the whole of the southwestern shore line is fringed with a scattering belt of bulrushes that grow out into the lake from a few feet to a hundred yards, and out from the margin of this belt from 50 to 200 feet runs a bank, not rocky, however, which in places is ten to fifteen yards wide, in others only a few feet, and under water from one to three fathoms. This bank, or reef it might be termed, may be traced when the lake is quiet, nearly its whole length by the "musrat grass"—as Merrill called it—and aquatic plants that reach up in many places an inch or two above the water. Along this streak of submerged grasses and water weeds is the abiding place of that long snouted cannibal, the pickerel, and here, too, may be occasionally found the despotic king of all these northern waters, the mighty muskalonge, from whose path within the bounds of his chosen territory all fish must stand aside.

Just out in front of the camp, Merrill pointed out the spot where the year before our friend Hughes had smashed his rod on one of these monstrous fellows without as much as the fish finding out that Hughes was there.

"Yes, sir," he went on, "Mr. Hughes and another gentleman of their party—and I tell you boys that man Hughes is a gentleman—Hughes and the other gentleman—I forgit his name—was a fishin' that day an' I was a rowin' for 'em. Right out there 'longside o' that grass, Hughes hung a pickerel, mebbe a four or five-pounder, an' was havin' a mighty sight o' fun with him, an' jest as he got him wound up where we could see him, another fish that looked nearly as long as I am made a rush an' grabbed him, an' that's the last we seen o' that pickerel an' some o' Hughes's line. He jest made the water bile as he turned 'round an' started off, an' that pole o' Hughes's wasn't no more 'n a bulrush to that fish. No, sir, he jest broke it up like he would a bulrush, an' Hughes all the time a tryin' to hold him. That's jest where he missed it, an' he felt mighty cut up about breakin' his pole, but I tell you, boys, them little minny poles is no 'count fur them big muskylunge, an' the hull trouble was Hughes didn't know it. There's some mighty big ones in this lake an' you'll see some of 'em 'fore you git through, mind what I tell you."

This smacked of a very sizable fish story, but as we had begun to find out neighbor M.'s capabilities for constructing big yarns out of a mere handful of material, we left a wide margin on this one for shrinkage, and remembering the string sent us, were prepared to entertain others that might follow, with a due allowance for the old mossback's fertile resources in presenting the points and avoiding the rough places in a good fish or bear story. However, what we afterward saw with our own eyes convinced us that there were "some mighty big ones in this lake," and the tale, shorn of its embellishments, of Bro. Hughes's disastrous encounter with one of these great fish was duly credited to our neighbor as a stray case or truth.

In Merrill's pet boat, a beautiful little double-ender—"one o' them weather-boarded boats," as Ben expressed it—Dick and I took our way down shore, intending to make the circuit of the lake by nightfall if possible, and study the water carefully as we went around.

The other boats headed for the Rocks, where Merrill said "they could ketch jest as many bass as they wanted."

Clear down to the point where the shore took a turn to the northwest Dick and I fished slowly and diligently and carefully, without a solitary nibble to disturb the evenness of our pulse. This was not encouraging.

Here we concluded to let the lower end of the lake go over for another day, and heading across, a pull of nearly four miles brought us into the shoal water near the further shore. I was at the oars pulling leisurely in toward a clump of bulrushes where we thought perhaps we might find a bass hunting around for a morning meal, when Dick, who was facing the shore, whispered excitedly, "Look! Look yonder, quick, at them deer." I turned quickly, in time to see two graceful does leap lightly over a fallen tree near the edge of the water and disappear at a couple of bounds into the woods. Dick said there was a buck with them, but I was too late in turning to get a sight of him. They had come down to the water for their morning drink from the plains just back of the belt of woods bordering the lake, and were standing in the water when Dick first saw them.

The rifle was lying alongside of me on the thwart but I never once thought of it till Dick said, "What did you bring that rifle out for, to shoot pickerel?" I really had brought the gun along to try a shot at a loon, three or four of which had been laughing at us from a safe distance all the morning, but I am afraid that had I got sight of the deer in time, and thought of the rifle, the blood of my ancestors would have asserted itself and one of those innocent creatures might have come in violent contact with a .44-caliber bullet, in which case I would have been liable to a fine for infracting the game law of the great State of Michigan, besides feeling "meaner 'n a yaller stray dog" over it for the rest of the trip, for no sportsman likes to have the fact staring him in the face that he has broken a law of the land. Still, when opportunity offers for a shot at a deer, the temptation is great to shoot, so great that few of us can command perfect control over the trigger finger even though it be the middle of July and the timid creatures in the red coat. Who of us all that claim kinship in the brotherhood of sportsmen and anglers will gainsay it?

We pulled ashore to stretch our legs a few minutes and—I may as well confess it—with a sneaking desire possessing us to get another sight of the deer, although they were by this time probably a half mile away back on the plains snorting a wondering protest at being frightened from their morning drinking place.

We shoved out after a short rest and headed up the lake, Dick saying naively as he took his seat at the stern, "Well, those were the first deer I ever saw in their native element!" his Scotch ire flaming up in the same breath with, "What the divil are you laughing at now? you 'pear to be troubled with a protuberance of spirits this morning; better soak yer head in the lake awhile, it might take some o' the hilarity out of you." This caused the hilarity to break out afresh, but Dick's habitual good humor soon asserting itself he "jined in" with his high tenor and for five minutes the neighboring woods rang with a first-class laughing duett. Harmony was restored and quiet settled on the waters when he lit a fresh pipe, put on a live frog and made a long cast out to the edge of the deep deep water, remarking as he sat down, "I'll jest feel fur a bass out there." No bass being there in a feeling mood we pursued our way, keeping a shoreward eye for another deer, but all within miles of us had, no doubt, taken the alarm and "struck for tall timber," as we saw no more that day.

Along this shore we found shallow water extending out from twenty yards to nearly half a mile in places, the bottom hard sand and pebbles, and nearly free from grass or bulrushes until well up to the head of the lake.

The water gradually deepens from the shore to the outer edge of this sandy bar, varying in depth along this line from 10 to 20 feet. Here the bar pitches suddenly off to an unknown depth, the line being plainly marked by the difference in the color of the water, that outside having an almost inky black appearance, and all that shoreward a much lighter, but yet very dark hue. This body of water is rightly named Black Lake, for verily it is the "lake of the dark waters."

Along the break of this bar, straight across from our camp, the Hughes party had found their best bass fishing the year before, taking a great many of large size, but now the fish seemed to have "hied themselves," as Ben would have said, to parts remote; for here were Dick and I, two old fellows that thought ourselves "purty middlin' smart bass fishers," fishing with the loveliest of speckled frogs, toothsome to bass and pickerel alike, and not a solitary tug at the lines to gladden our hearts the livelong morning. We tried a Hill troller, a Chapman troller and a Buel spoon, but they were not spoony enough to be fooled by any such glittering shams.

Dick finally said, "I don't believe there's a durned fish in four mile of us, an' if there is, they're like some o' my customers" (Dick is a famous caterer to the public stomach in the matter of pies and things), "a little too facetious in their appetites to know when good things are offered to 'em." Dick had hooked on to the wrong word again, and I was forced to nip an incipient snicker in the bud by seizing the frog bucket and bending over the side of the boat under pretense of refreshing the croakers by sousing them in the lake, and it was only by a mighty effort that I smothered a rising snort and prevented another temporary coolness.

[TO BE CONTINUED.]

THE COLOR OF LEADERS.

BY DR. JAMES A. HENSHALL.

I HAVE been much interested in the various articles by practical anglers on leaders, rod-joints, reel-seats, etc., that have appeared during the past few months in FOREST AND STREAM, and as the subject seems to languish, lately, I wish to add my mite.

As to leaders and snells, I do not think it makes any difference, practically, as to their color. The greatest desideratum, it seems to me, is to have them as fine as possible, consistent with the strength required, and this is not much with a flexible rod. A snell, or leader that will sustain a dead weight (out of water) of a pound, or even a half pound, is sufficient for black bass or trout fishing with a suitable rod; for the amount of strain exerted by a fish on the rod and tackle is very much less than is popularly supposed.

The praiseworthy experiments to determine the color of leaders least visible to the fish as described by some of your correspondents, however commendable, are sure to end in disappointment; such, at least, has been my experience. Experiments to this end have been made by practical anglers for many years with no other result than to show that the finer the gut the better, without reference to color. My own experiments in this direction have not been few, and I have demonstrated, to my own satisfaction at least, that any color of leader or snell will answer equally well, from hyaline to black, though I confess that I am partial to a slight bluish stain, or mist color, and perhaps without any well-defined reason, except that it *ought* to be least visible to the fish.

But when we enter the province of speculation and conjecture, and try to see for the fish, or in other words, to measure their visual capacity by our own, we are doomed to disappointment, though we bring to our aid all the known resources of the science of optics. I lately read, somewhere, that an English angler declared that the salmon took the fly under the delusion that it was a shrimp, because while said angler was beneath the surface of the water, the artificial flies on the surface appeared to him like shrimps. To have made some show of proving his statement he should have first demonstrated that salmon could be taken with shrimp bait as successfully, and in the same situations, as with the fly. The only way to experiment with profit, in this direction, is to experiment with the fish themselves, otherwise our efforts will be like the play of Hamlet with the melancholy Dane left out. The sense of sight in fishes is but little understood, as is, indeed, the anatomy of their visual organs, which fact precludes all analagous reasoning from our own standpoint, alone. I have satisfied myself, however, that they see as well in their own element, perhaps better, than we in ours.

That the color of the leader is not important is very evident when we reflect that the boy with line of wrapping cord, red, white or blue, or the angler with line of twisted strands of black sewing-silk, to which the hook is affixed with leader or snell, is as successful in taking trout or black bass with bait, as others with lines of the most approved colors. And one of your correspondents affirmed that he was successful with a leader stained black, which, likewise, accords with my own experience in fly-fishing. Sharks do not hesitate to take the bait even with the huge hook and chain and swivel accompaniment, nor do codfish, and other marine fishes, refuse the bait because of the large hooks, wire snells, or coarse white lines; yet it is to be presumed that their discernment is as acute as that of a brook trout.

Still, though any color may answer, I prefer lines and leaders of neutral tints as being more in accordance with the eternal fitness of things, than for any other good reason. I have used, with success, snells and leaders of the finest silver suture wire, for trout and black bass, but, practically, they are not pliable enough, and are too heavy.

On the whole, then, I think we shall have to be content with our leaders and snells as we find them to-day, simply selecting those that are the finest, roundest, and most perfect, remembering, meanwhile, that a sight of the angler himself, is more fatal to successful fishing than a display of the coarsest leader, or of the most *outré* in color.

CYNTHIANA, Ky., June 6, 1884.

NEW JERSEY PIKE FISHING.*

NEVER caught a pike! Well, unless I am much disappointed there will be a dozen in this boat in two hours, and not of my catching either. We can't help getting them. Everything is just right. The pond is not fished much. It is large enough to give room for all sizes of fish and for their food, but not so large that the fish can get into out of the way places where one may not find them. There are deep waters for the big fish, flats three or four feet deep for the medium-sized ones, and broad, weedy shallows for the small fry.

The day is all we could ask. The gentle south wind just ruffles the water, making a screen between us and the fish. The thin clouds keep off the glare of the sun, without being threatening or gloomy. It is seldom good fishing in a bright sun. It makes the fisherman show too plainly, and throws strong shadows of him and his pole over the water.

Keep a sharp lookout for the path which the miller said would lead to the cove where the boat lies. I spent half an hour trying to find the place when I came here the first time. But I caught my share of sixty-five fish in spite of the lost time.

The boats on these ponds in Southern New Jersey are mostly very simple affairs, mere shallow boxes, and their oars are made from slabs by trimming with an axe.

Ah! there is the cove, and the boat is as I said, though the oar is better than is generally found. The boat is full of water, as usual. I never have found a boat in New Jersey that did not have to be bailed out before it could be used.

Fix up the tackle now, while I ply this tomato can. This bailing of a boat is a curious process. You dip and dip, and seem to make no impression, then, just as you think you will never get through, you find that the water is almost gone.

What hook would I use? Why, that medium sized one, as big round as the end of one's thumb, with a ring on the shank, and six inches of iron wire fastened to the ring. That hook has caught nearly one hundred fish. Some people like two hooks, one a little above the other, but I have found a simpler rig to be the surest. Never fasten the hook right to the line. A big fish may bite it off in two seconds. The only time I have tried it in ten years I lost hook and fish on the second bite.

Now for the bait: Cut a piece out of this white perch; make it like a thin, slender isosceles triangle, two and a half inches long with half an inch base, and stick the hook through quite near the large end. When it is trailed through the water it will look quite like a little fish. When we get a small pike, a piece of his white underneath part will make the best possible bait. This is what the poet, Holmes, says of it:

> "There's a slice near the pickerel's pectoral fins,
> Where the thorax leaves off and the venter begins,
> Which his brother survivor of fishhooks and lines,
> Though fond of his family, never declines.
>
> "He loves his relations, he feels they'll be missed,
> But that one little tid bit he cannot resist;
> So your bait may be swallowed, no matter how fast,
> For you catch your next fish with a piece of the last."

Now we are all ready to get aboard. Take a seat in the bow, I'll take the stern and scull. Throw in as soon as the water is two feet deep; keep the line a little shorter than the pole, and let the bait drag through the water as a fish would swim; keep it six or eight feet off from the boat. The fish won't mind us; if we go over a pike he will only sail out to the bait. Shake the pole a little, or alternately raise and lower the tip. This makes the bait wriggle and run in a taking way. Except in very deep water don't get deeper than a foot or two, and if the weeds are thick keep very near or on the surface. That heavy sinker near the end of the line keeps the bait down and enables one to have better and quicker control of it. Steer the bait through any openings in the lily vines, the pike are apt to lie there.

Watch the bait, or the place in the water where it is; if a fish takes it he almost always make a swirl. If anything stops the bait it may be a lily stem, or it may be a pike. A little experience will tell what is the cause. Bait stopped? That is only a weed; pull steady; now it is free. Ha! that was no weed. Drop the pole a little. What a pretty swirl he made. Now tighten the line gently on him. Feel him there? He thinks the little pull of the line is the struggle of his prey. Give him about half a minute to get the bait well into his mouth. When he moves off jerk sharply against the way he is going. Now! Lift him quickly. Ah! he's gone over the other side of the boat. Never mind, he was rather small and there are plenty more. In hooking a fish, strike sharply, but afterward lift steadily, though rapidly, so that the fish will just swing into the boat or into your hands. Don't seize the fish, but the line near—, another bite—Oh! don't jerk the bait right out of his mouth. Slack the line instantly, then gently tighten it and wait—there, he has it again. That's right, give him time. If he moves directly away, jerk straight up. Try to draw the hook back in the corners of his mouth. Now pull. Well landed for No. 1.

Now we will have a good bait from him. Several in fact. It don't spoil him any. It just takes away a little of the thin part.

Throw out there and draw past that old stump. See that swirl where a fish jumped at the bait as it left the water. Always draw out carefully in a good place. A fish may be following the bait, deliberating about it, and finding finally that "Blessings brighten as they take their flight," may jump just as it begins to move rapidly away. However, try for him again. Ripple the bait along the surface and look out for a big flounce. There! My! how he made the water fly.

* The pike of Pennsylvania and New Jersey is the same as the pickerel of New York and New England.

Strike quickly now. No; he's off. Never let a fish run to the end of the line without doing something. Either pay out line, or better still, strike quickly. If you just hold still he is not stopped sudden enough to set the hook, yet he thinks something is the matter and lets go the bait.

Put on a fresh bait and give him another chance. Never use a chewed or ragged bait if a good one can be had. There, he has it again. See how the water boils up as he works his fins. That is a sure sign of a large fish. Now strike. Don't try to lift him; don't get his head above water. Let him run a minute, but keep a tight line. Now tow him round to me and I will take a short hold on the line and lift quickly. There he is, and a big one, too. He is safe, but the hook fell out as soon as he was fairly on the bottom of the boat. Examine now his big jaw. See that long slit made by the hook. It would never have torn past his bony lips, but the hook could easily have been shaken out if the line had been slackened or the fish had floundered two seconds in the air. What will he weigh? Say a pound and a half, a first-rate fish.

And this is another good one; no small fish are around here. If there were, those big fellows would have some dinner.

Now, throw out beyond that group of lily leaves. Work carefully, for the water is clear and shallow. There, that is just right. And see that little swirl ten feet off, and this V-shaped ripple going toward the bait. More slowly. There, he has it.

But the water is too shallow here for very large fish. See these small ones moving off as the boat nears them. Let us go across to that cove on the other side. I hear the fish jumping there, and we may get a few on the way over. If anything bites, strike quickly, for we will move too fast to allow time for chewing. Ha! well hauled in. There—no, we were too quick for him, and as he was well lifted from the water, he will probably not bite again now. But we will mark the spot, and come around again in a few minutes, after he has had time to recover. He is pretty sure to bite again. This willingness of the pike to bite a second time, if unhurt, renders a tough bait, such as we are using, of great advantage. For if you jerk the bait out of his mouth without hooking him, you keep your bait and he loses it. He wonders what became of it, and how it happened to get out of his tight grip. Therefore, when he sees it again he is likely to take it more quickly and savagely than at first. If, however, you use a tender bait and leave it in his mouth, he will not bite again till that morsel is stowed away.

Now let us try along this deep channel. If any fish is here, he is a big one, and lies deep. So put on a large bait, and fish well under water.

Can anything be nicer than this gliding along, over the slow-moving, clear, coffee-colored, cedar swamp water, with the pine-covered banks on all sides. This is practically the primeval forest. We are fishing as the Indians might have done had they possessed our tackle. What a peculiarly delightful motion this sculling is. No noise, no apparent effort. There is no need of any hope of success to make our situation all-satisfying. But we have the hope, and well founded too. What's that, a snag or a fish? A fish. Then wait till he runs. He ought to be a big one, for this is very deep water. Whew! how he rushes. Don't pay out any line, keep the point of the rod down when he comes to the top of the water. Hold him back from those weeds. Now bring the line round slowly. There he is, a good three-pounder. Knock him on the head to stop his struggles. See how broad and deep he is, and what a paunch he has. He must have just breakfasted on a fourteen-inch relation.

Now let us turn toward the landing place, for the sun is too bright for further fishing. Straighten out the fish so that we can see them. Sixteen in all. One of three pounds, two over one pound, none of them very small. That is first-rate for a beginner. T. K. B.

FISHING AT BUZZARD BAY.

HOW often information, a direction or a letter published in your valuable journal will give great enjoyment to its readers. Let me thank one of your correspondents, "The Doctor," for pleasant fishing jaunts, and many happy days spent among the good kind people of Cape Cod. See FOREST AND STREAM, Oct. 24, 1878, page 245, correspondence headed "Bass Fishing at Cohasset," signed "The Doctor." When I read that very excellent letter it fully determined me to make the same trip. I never filed away that number of FOREST AND STREAM; it is before me now. But not till the summer of '82 did I carry out the full instructions so carefully and truthfully given in "The Doctor's" letter. I took the Fall River boat to Fall River, thence by Old Colony Railroad to Cohasset Narrows (now called Buzzard Bay) via Middleboro; stopped at Parker's comfortable hostelry; saw the fish caught as "The Doctor" describes; did not catch any ourselves, not having proper tackle for striped bass and bluefish, but determined to return next summer properly armed.

We, still following "The Doctor's" directions, took the train down to that quaint old fishing town Provincetown. Fresh salt breezes, hearty appetite and good people made the trip a joyous happy one. The outlook from High-pole Hill is indeed charming and very extensive; white breakers line the shore, pretty Cape Cod Bay, sailing vessels, and the blue ocean form a delightful picture from that eminence; and if you are a single man be very very careful of the bright eyes of those smart and intelligent young ladies of pretty Provincetown.

On my next trip to Cape Cod we varied the route, and found it a very pleasant one. July 17, '83, found me aboard the magnificent steamer the Pilgrim. A joy was in store not anticipated by me. Down the wharf came Cappa's splendid band, followed by that gallant body of gentlemen the veteran corps of New York's favorite Seventh regiment. The Pilgrim's great paddles turned, rounding the Battery, boat and corps flags flying.

Next morning we parted with the gallant corps, taking railroad to the beautiful city of New Bedford, thence by steamer to the bluffs of Martha's Vinyard, where if you wish to stop a while, pure air, comfort, elegance and good society await you. On again by steamer to quiet, sea-girt, pleasant Nantucket. Another steamboat ride carries you to Wood's Holl (salt-water fishing is said to be good here). Then a short railroad ride brings you to Buzzard Bay. Now for fish at last. Take a short stout rod, with 600 feet of cable laid line on a large multiplying reel, go to the railroad bridge, the tide rushing rapidly out to the bay, let out 100 or 150 yards of line (after baiting a strong hook with menhaden or small eel) and when a bluefish bites, you will think for a moment that a portion of Plymouth Rock has struck the end of your rod: it will test your rod and reel, and well try your strength to walk to the beach at the end of the bridge and reel your fish in against the rapid waters, combined with the power of a nine or ten-pound bluefish wishing to go the other way. And what joy (providing you get the fish in) to see his bright sides lie on the white sandy beach. It is rare, exciting sport, as "The Doctor" truly writes. His remarks are also quite correct about the striped bass fishing to be had, also off the same bridge.

Buzzard Bay is beautiful and healthy, with fresh salt water breezes constantly blowing over the cape. Yachting is excellent. Sharks can be caught if parties like that kind of fishing. We caught quite a large one off Wing's Neck. A pleasant visit can be made to Onset Bay (close by), where is held the annual camp meeting of the Spiritualists.

How I should like to see "Kingfisher" on that bridge at Buzzard Bay, with rod and reel and 100 yards of line out in the rushing, roaring out-going tide; a ten-pound bluefish on his hook, rod bending and reel buzzing. I fancy hearing him say, "Well, well, well! I only wish Ben, Dan and Frank were here. Old Massachusetts for ever!" I hope that "The Doctor" may see this note and know of the pleasure his letter has given to at least one of your readers.

WILLOUGHBY.

SPORT AT BLOOMING GROVE PARK.—On May 29 the evening train on the N. Y. L. E. & W. Railway carried about fifty members and guests of the Blooming Grove Park Association to Millville, where teams met them. Seventeen being the limit, that number of the party drove up to the club house, seven miles away, leaving the others at Mr. John Deming's comfortable and delightfully clean and tidy house, which is especially fitted for accommodating the club members who choose to remain all night. Decoration Day, all having arrived, some went fishing for trout, others walked over to the breeding park, some joined in the rifle shooting contest for a badge, others in shooting clay-pigeons ("mud birds" as Dennis called them) also for a badge. (Scores given elsewhere.) Our worthy president, H. W. Nason, captured both prizes, then "went for the boys" in fly-casting, but there met his equal in Mr. Frank Martin, who cast two feet further than any of the other contestants, Mr. Nason coming out second. There were some sweepstakes and private matches, and any amount of fun of various descriptions. Evening brought its indoor sport. Exchange of stories and very little in the line of absolute feats. As far as could be judged all were pleased with the housekeeping and gratified at John M. Stellenwerfs method of attending to the wants of members and guests. On the 31st, 20,000 trout fry, 400 yearlings and two year old trout were turned out in the streams of the preserve. Fly-casting.—D. E. Martin 58 feet, H. W. Nason 56 feet, A. J. Post 53 feet, T. W. B. Hughes 50 feet, W. D. Baldwin 48 feet, W. Fielder 48 feet, W. H. McCord 45 feet, J. A. Van Elden 45 feet, G. Hodgman 25 feet. Afterward Mr. John M. Stellenwerf, the superintendent, in a private trial of five minutes, cast 82 feet.

FISHING IN TENNESSEE.—Memphis, Tenn., June 6.—It is true, we catch no such different varieties of fish as are caught in those beautiful lakes of the North, but for black bass and speckled perch, I hardly think any lake can beat those in our vicinity. Blackfish Lake is situated due west of Memphis in the State of Arkansas, twenty-five miles from Memphis, on the Little Rock Railroad. Its name is derived from a peculiar kind of perch caught there, which is perfectly black, and a gamy little fish. I have seen black bass caught with line and troll in the lake, weighing, on pocket scales, from seven pounds down, also fine specimens of speckled perch, weighing as high as five and one-half pounds. Last season two friends and myself fished in this lake constantly and our largest catch on a two days' fish, using Skinner's fluted troll and cut bait (as we could not conveniently procure minnows) was two hundred and sixty pounds of game fish. This, I think, your readers will admit to be a splendid catch, considering we did not have live minnows. I have not been able to visit the lake this season, owing to the extreme high water, but am making arrangements to go at the earliest possible moment. Have heard of some very fine catches made this year, the parties reported black bass plentiful and biting well. We will let you hear from our party when we return, for we certainly expect to make a large catch.—J. S. K.

MISSISQUOI MARSHES.—Highgate, Vt., June 2.—The writer returned Saturday from a trouting expedition in the Megantic country. The cold weather and high water somewhat interfered with our sport, though our knowledge of the ground enabled us to make a fair catch of *S. fontinalis*, which opened the eyes of the natives. Mr. Parker Leach, of this town, and Messrs. Louis Cabot and Harry Dutton, of Boston, have leased the Bullard marsh, which lies on the south side of the mouth of Missisquoi River in this town. This gives the club complete control of the Missisquoi marshes, and they intend to protect these grounds during the close season. Our thoroughly-determined fish warden, Mr. F. H. Atherton, of Waterbury, Vt., up to May 10 had seized in this vicinity nine trap nets, three fyke nets and seven seines, and has succeeded in breaking the backbone of the gang of outlaws who have been infesting our waters. His task has not been an easy one, but his indomitable courage has given him victory in every encounter with these fish pirates, and he will pursue his work until he has completely cleared out and stopped this illegal fishing, and I trust that the sportsmen of this State will, in a suitable manner, give a public recognition of his services at an early date.—STANSTEAD.

SPORT IN CALIFORNIA.—San Buenaventura, Cal., May 24.—Our sportsmen are all turning their attention to fishing now. We have good fishing in the ocean, but few indulge in it. The Ventura River, just at the edge of the town, is a fine trout stream, and many an angler has wended his way toward its source and returned with a fine basket. As a matter of course, we have a few trout hogs here. One of them caught nearly 300 in one day. The Santa Clara, Sespe and Piru rivers, or creeks, in this vicinity also, contain plenty of trout, especially the Sespe (pronounced Ses'-pee). No very large trout have been caught, most of them averaging from six to ten inches. Our deer killing season opens in July, I believe. We have an abundance of them in some places. I know of a place within two or three miles of this place where I can get one or more almost any day, and will as soon as the season opens. But for all that they are not as "thick as hops" about here.—TYPO.

MOSQUITO AND BLACK FLY.—We have heard many commendations of the "black fly cream" prepared by A. S. Hinds, Portland, Me., as an effective insect repellent. The cream is advertised elsewhere.

MR. HOAGLAND WILL WELCOME YOU.—In response to the inquiry of a correspondent we print the following from the New York *Sun* in reference to the Pequest, a stream which traverses the picturesque valley of the same name, in the county of Warren, New Jersey: "For many years this stream has been the favorite resort of a few fishermen, who have secretly known it as one of the best trout streams in America. The hospitality of the good old farmers along the stream, with but few, if any, exceptions, is proverbial. They seem to try to outvie each other in their efforts to make the sportsman happy while he is among them. The stream, as it passes through the property of Mr. Theodore Hoagland, located about midway in the best fishing ground, is simply alive with trout of unusually large size. Two gentlemen are said to have taken 289 trout in one and a half days' fishing this spring, the smallest weighing eleven ounces and the largest three and a quarter pounds. The trout here seem to be almost inexhaustible, owing to the many large springs which empty themselves into the main stream just at this point, thus affording an excellent feeding ground. Mr. Hoagland is a wealthy, intelligent, amiable and hospitable farmer, with a jolly red face, indicative that he is at peace with himself and all mankind. Having comparatively retired from active farm duties, he loves to devote his attention to the sportsman. He watches the stream for hours in the hope of seeing an angler enter his grounds, for his most exciting amusement is to observe an artistic fisherman cast his fly, and he lends excitement to the sport by his demonstrative actions when the artist succeeds in hooking a large fish. Mr. H. is rather old to fish himself, but he entertains right royally, and expresses himself as being only to happy when a real jolly sportsman favors him with a visit. Probably the best and pleasantest way to reach this stream is by the way of Hackettstown. I have no doubt that the proprietor of the American Hotel will be pleased to give the necessary details. The ride over the mountain is very invigorating, and the view simply superb."

THE MAINE LAKES.—Farmington, Me., June 2.—I send you copy of Phillips *Phonograph*, with an item of one day's catch of trout in Oquossoc Lake: "Mr. Barry, a guest of Mr. Tuttle, at Lake Point cottage, brought in a beautiful specimen weighing 8 pounds and a fraction; Frank Bacon, a young novice, captured a plump 8-pounder; E. H. Sampson, Esq., of Boston, brought one to his net that scored 7¼ pounds; H. M. Whitney, of Boston, after a desperate struggle landed a 7-pounder, and Col. Rockwell, also from the 'Hub,' killed one of full 5 pounds weight. Besides these monster specimens a large number of lesser weight were brought in and served at the table in Kimball's best style. Within a few days there have been taken from the little steamboat wharf in front of the house one trout of 6 pounds, one of 5 pounds, one of 3½ pounds, and several of minor weight. This is a record of which our visiting sportsmen are justly proud." Oquossoc is the most accessible of the Rangeley Lakes, being only two hours' carriage drive from the end of the Sand River Railroad. A line of steamers connects with the other five lakes that comprise the chain. I think the best fishing is to be found on the second lake, Mooselucmeguntic. A gentleman told me on my down train this morning that he caught, the last day he fished (which was Saturday, May 31), three brook trout that weighed 17 pounds, being of 8, 6 and 3 pounds.—F. N. B.

TROUT AND WATER SNAKES.—Elmira, N. Y., June 7.—I noticed in FOREST AND STREAM of June 5 an account of "A. H. G.'s" experience with water snakes and trout. Five or six years since, on Tim Gray's Run, a tributary of the Lycoming, near Ralston, Pa., I was fishing down stream one afternoon, and had nearly reached the mouth of the stream. I cautiously approached a favorite pool, which was perhaps thirty feet across and four feet deep at the center, and began casting at the outer edge, gradually working toward the middle. I was surprised that I did not have a rise, as I always expected to capture eight or ten fine ones there. I was about leaving when I had a rise from a small trout at the further side of the pool. I cast four or five times at the same place, getting a rise each time, as I supposed, from the same trout, and at last fastened to him. But how hard he pulled for a small trout! As I drew him near I found a water snake over two feet long, fastened at about the middle of a six-inch trout. I drew them across the pool and as much as a yard on the sand before the snake let loose, when it made for the water before I could kill it. The marks of the teeth were plainly seen on the trout. I don't say the trout looked gratefully toward me as I tossed it back into the water, but no doubt it felt so. Now, tell me if you can, why did that trout try so persistently to take my fly?—W. M. S.

EAGLE RIVER.—Milwaukee, Wis., June 3.—Included in a party of three who were in camp at Eagle River, and who in ten hours landed twenty-eight muskallonge, the aggregate weight of which was 415 pounds, was Fred Taylor, the well-known Chicago sportsman. Twelve of the scaly monsters, weighing 195 pounds, were captured by Mr. Taylor, who took them to Chicago and for two days had them on exhibition in front of his place of business, nicely packed in ice. During the time they were so exhibited it required the attendance of two policemen to keep a passageway open on the sidewalk, so great was the crowd attracted by the muskallonge. A placard announced from whence they came, on the Lake Shore road, and it is noticeable that inquiries from Chicago made to the Lake Shore's passenger department, regarding rates, desirable fishing grounds, facilities for supplies, etc., have materially increased in number since Mr. Taylor's free exhibition.

THE AFRICAN POMPANO.—In a late number of FOREST AND STREAM is a note on the so-called "African pompano," of our Florida coast, to which I may be able to add something. This large pompano, which is rather common in Southern Florida and Cuba, is not an overgrown form of the common pompano, but a distinct species; nor, so far as we know, has it anything to do with Africa or with the African *Trachynotus goreënsis*, with which Dr. Günther, and after him several American writers have confounded it. Its right name seems to be *Trachynotus rhodopus*. It is known in Cuba as "palometa," which means dove, and in Florida as "permit," which is a corruption of palometa. There are four species of pompano known on our southern coasts and in the West Indies. (1.) *Trachynotus carolinus*, the true pompano; (2.) *Trachynotus rhodopus*, the big pompano or permit; (3.) *Trachynotus rhomboides*, the round pompano; (4.) *Trachynotus glaucus*, the gafftopsail or banner pompano.—DAVID S. JORDAN.

POUND NETS SEIZED IN THE HUDSON.—On Friday last, Mr. Matthew Kennedy, Game Protector, assisted by Deputy Sheriff Hallenbeck, of Hudson, and a representative of FOREST AND STREAM, took a steamer from Hudson and went down to Rhinebeck. They captured eight pound nets and took them back. The nets were all new and cost from $200 to $400 each. Last year there was one pound net put in the river and its success encouraged others. It is safe to say that the offense will not be repeated, as the men are mourning their loss and the prospect of being fined an amount equal to the cost of their nets. These nets were all between Rhinebeck and Claverack, and the meshes were 2¼ inch, just right to take small fish. We saw white perch in the nets which would not weigh two ounces. The drift net and seine fishermen are rejoicing.

BARNEGAT BAY.—Forked River, N. J., June 9.—Weakfish are now coming into Barnegat Bay, and a number have already been taken with hook and line. Sheepshead are now here and biting well, and in the course of a few days we shall have some fine sport. This place is about three hours from New York via Philadelphia and Reading Railroad. There are one or two good hotels and, unlike most of the places on Barnegat Bay, we are situated directly on the water, thus avoiding long rides to the bay. Parties intending to come here would do well to write a few days in advance either to Capt. Thomas Potter or Capt. Forman Mathews, so as to have bait, etc., ready, as the hotels are quite full and the boats well patronized most of the time.—A.

TROUT IN CONNECTICUT.—An official of the Hartford and Connecticut Western Railroad, writes under date of June 4: I wonder if trout fishing is as good everywhere as it is on our road this season; we are having parties from both ends daily. They go from Hartford and come from Rhinebeck on the Hudson, where we connect with the New York Central railroad, and they all report more trout than there have been before for years, very plenty and good size. Two anglers came in to Hartford the other night after one day's fishing with 200 trout. Another the next night with sixty, and the next night two with each a large string, and they all report the sport so fine it's giving us quite a travel among fishermen.—A. J. J.

NEWS FROM THE BUCKTAIL.—In camp on the Tiadatton (Big Pine Creek). Have had one glorious week anyhow. Shall go on down stream next week. Have a chance to send this out to-day, so I write. Will write up the log and forward it, if my paper has stood the pack-basket. The cruise has been a ratter on the Bucktail. Her keel and garboards look as though she had been used as a stone boat. But, as the river broadens and deepens she jumps fewer stones, and the cruise becomes more tame. So far, about the only use for the double blade has been to keep her off the rocks. I am full fed of fish, well slept on browse, and on the whole, content. It cannot last forever—more's the pity.—NESSMUK.

GUTTA PERCHA CEMENT FOR RODS.—I wish to express my thanks to Mr. Wells for the articles he has written on rod making. I can add that a gutta percha cement which does not have the horrid smell that he speaks of as so unpleasant in that used by shoemakers, etc., can be made by dissolving gutta percha in chloroform, which is a better dissolvant than the bi-sulphide of carbon, the latter being used in the common article because of cheapness. The strongest and best gutta percha is found at rubber stores in thin whitish sheets, looking somewhat like birch bark (thin). It will dissolve in the chloroform (if left a few hours) perfectly. —C. W. E.

ROCK BASS IN THE MOHAWK.—Albany, May 31.—The bass (rock) are being caught now in the Mohawk in great quantities. Two of us on Decoration Day caught about one hundred, some being about nine inches in length and quite fat. We did not see any black bass, nor did we want to.—J. K. T.

WEAKFISH are biting and the Staten Island fishing resorts are crowded with fishers. At Prince's Bay, where is the New York Fishing Club House, August Collins, of New York, this week caught a weakfish weighing seven pounds three ounces, said to be the largest taken there for many years.

ADIRONDACK PINE PLANTING.—William Pickhardt, forester and general superintendent of the Adirondack Club's tract in the southwest part of Essex county, last week sowed seven bushels of white pine seeds upon their lands. The seeds came from Maine, where they were threshed from the cones.

Fisheulture.

DESTRUCTION OF OYSTERS BY NATURAL MEANS.

BY far the greater damage done to oyster beds, in certain regions at least, result from the ravages of two natural enemies, the common starfish (*Asterias vulgaris and A. forbesii*) and the oyster drill (*Urosalpinx cinerea*). The natural history of the former and the mode of operation of both are so peculiar as well as destructive and so little known that a description of each would not be out of place.

Asterias vulgaris is the common starfish north of Cape Cod, while *Asterias forbesii* is common south of that point, but both overlapping and running into each other, while their differences are so slight that it requires an expert eye to distinguish between them. As is common in most starfishes, the number of rays or arms are five, radiating from a central disk. The aspect of the starfish above is such that the common name, starfish, can be easily accounted for. All of the rays as well as the disk, upon its upper surface, are covered with spines placed near together, upon a frame work or skeleton of calcareous matter not visible naturally and exposed only when dried and examined closely, or better by placing in weak caustic potash. A little to one side of the center of the disk and near the angle found by two of the arms, is a small plate called the "madreporic body" on account of its resemblance to madrepore coral, which, if examined with a pocket lens, will show this resemblance very well.

The object and use of this body will be explained presently. The under side of each arm contains several rows of suckers, placed in the middle and extending from the tip to the center of the under side of the disc, to which all the rows converge. Just at the center is a circular opening which serves as a mouth, and is protected by five sets of teeth, each set being composed of six spicules. Just outside of each row of suckers is a row of spines on each side, which can be and are closed over the suckers when they are not in use, meeting in the center so as to form a complete protection. Outside of these are other rows which merge gradually into the spines upon the dorsal surface. At the tip of each arm is an eye which is very primitive, but probably of some use. If one of the suckers be examined it will be found to be composed of a blind tube, opening into the interior of the animal, but presenting the closed end outward. If followed the sucker will be found to pass inside of the animal through an opening in the frame work of the under surface, each sucker passing through a separate opening. All of the suckers in each arm connect with a tube which passes through the arm, all of the five tubes meeting near the gullet and forming a tube which connects with the "madreporic body." Water enters this body, which serves the purpose of a sieve, straining the water, and thus preventing the entrance of foreign particles; then passing through the circular tube into each of the five branches, and from there into the suckers. By contraction of any sucker the water is forced out into a secondary vesicle, there being one to each sucker, and when it is needed that the sucker should be filled again, this vesicle contracts, thus driving the water back again into the sucker. By applying the end of a sucker to a rod or other object and then contracting the muscles and driving the water out, the sucker sucks, acting just like a boy's leather sucker, and it is by this means that the animal moves around from place to place, frequently with a rapidity which would not be expected from such an inanimate looking creature.

Upon all the spines of the starfish are little pincher-like objects called pedicellariæ, which serve the purpose of removing foreign particles which may happen to fall upon the back. By placing the hand near a live starfish in water, the pedicellariæ will grasp the hairs upon the hand and hold on with such power that the starfish can be taken out of water by this means. The apparently independent action of these bodies led to the former belief that they were not a part of the starfish, but parasites upon it. Other species of starfishes may have as many as thirty-six rays. In basket stars (*Astrophyton*), the primary five rays divide and subdivide toward the end, until several thousand are the result.

In regard to its habit of eating, the starfish presents its greatest peculiarity. Its mouth being small, the first supposition would be that it lived upon small animals, which is not the case, but on the contrary, oysters and mussels form its chief food. Approaching an oyster it crawls upon it and bends its arms down over, partly encircling it. The starfish then protrudes its stomach from its mouth, surrounding the oyster with it, and remaining in this position actually digests and absorbs the oyster with its stomach completely outside of the mouth. This operation can be watched at any time by placing a mussel or oyster in a dish of salt water containing a starfish. The manner in which the soft parts of a shellfish are thus digested without injuring or breaking the shell is a mystery, unless we suppose that some fluid is secreted which paralyzes the oyster. Certain we are that it does digest it without leaving any mark upon the shell, and it must have some means of opening the tightly closed shell in order that the digestive fluid may act. A species of deep sea starfish contained a large sea urchin within the mouth, and it seems from this, that certain species do eat in a normal way.

It may not be out of place to mention here the proper way to keep starfishes so that their natural shape shall be preserved, this not being well known to marine collectors generally. By simply allowing them to dry naturally they entirely lose their shape and flatten down to a shapeless mass. Kill them in fresh water and then dry in an oven, or, still better, kill in alcohol and dry in the sun or in an oven, and the natural shape will be well preserved. Upon the southern coast of New England starfishes advance in immense "schools," devastating large fields in a short time. As these animals form valuable manure, it would be worth the trouble of the oystermen to obtain them for this purpose. It was formerly the stupid habit of the oystermen to cut the starfish into two, three or four pieces, not knowing that each piece would in time reproduce itself, and form two, three or four perfect animals instead of the one started with and supposed to be destroyed.

The other pest, *Urosalpinx*, is a univalve shell, not differing in any marked respect from the ordinary marine gasteropods. It is very small and inoffensive-looking, but is capable of most disastrous work. All gasteropods possess what is called an "odontophore," or tongue. This consists of an elastic strap, upon which are arranged transverse rows of teeth. Each end of the strap is worked by muscles, which, alternately contracting, cause the toothed strap to work backward and forward over the end of a pulley. The strap consequently acts after the fashion of a chain saw upon any substance to which it is applied, and the resulting wear and tear of its anterior teeth are made good by the incessant development of new teeth in the secreting sac, in which the hinder end of the strap is lodged. As the anterior teeth are worn down they are absorbed, and others formed in the sac take their place. The "oyster drill" approaches the oyster, and, placing the end of its pulley upon the shell, begins working his apparatus, and continues until a perfectly round hole is the result, for the soft carbonate of lime resists but poorly the continuous action of these siliceous teeth. The hole is always round and prettily made. Holes made by other similar species may frequently be seen in dead valves of shells washed ashore on beaches. Once getting the hole made, the rest is easy, for by applying its strap in a similar manner to the flesh, the oyster may be literally rasped up and eaten. Of course a whole oyster cannot be eaten by one little oyster drill, but it is probable that after eating his fill he moves off and attacks another. The oyster partly killed probably allows its shell to open, and then it is devoured by crabs (*Panopeus*) and the like. The "drill" is the oyster's worst enemy, for it will flourish in brackish water, while starfish need salt. Oyster beds upon the southern coast of New England suffer much more from starfish than do those in the Chesapeake, for this very reason.

RALPH S. TARR.

DISTRIBUTION OF CATFISH.—The Potomac River catfish has at last found a place in the heart of the U. S. Fish Commissioner, and 300 of these fish are now en route to Wisconsin in the care of one of the Commission. They will be distributed among the lakes and rivers of the Badger State and allowed to grow up with the country. For many years catfish were considered poor food by Washingtonians unless it was the negroes, and they preferred any other variety, but of late they have come into the market and are extensively used for making chowder. Some residents of the capital declare they are better food fishes than the German carp, which is being so extensively propagated by the Government. The same car that carried catfish to Wisconsin also carried the last shipment of Potomac shad for this season. The shipment consisted of 950,000 young fish. They will be distributed in the waters of Colorado. The station on Sixth street and the cars will soon be arranged for the fall distribution of young German carp.—HOMO.

MOSS FOR CRAYFISH.—The Vicksburg (Miss.) *Herald* says that Capt. M. Hughes has discovered that the use of a layer of Spanish moss in a dike or dam prevents the damaging work of crayfish in boring holes through them.

There is a controversy as to whether an eagle will sit on a limb and let himself become encased in ice. Edward P. Roe related an instance of that kind, and his accuracy was questioned. John Holder now tells how, at Bloomington, Ill., he had an eagle brought to him covered by ice so completely that it could not move legs or wings, fell from the tree on which it had perched, and was captured by a boy.

The Kennel.

FIXTURES.

BENCH SHOWS.

June 10, 11, 12 and 13.—The Second Annual International Bench Show Chicago, Ill. Mr. Charles Lincoln, Superintendent.

Sept. —.Bench Show of the Philadelphia Kennel Club. Mr. P. C. De Saque, Secretary.

Oct. 8, 9, 10 and 11.—Third Annual Bench Show of the Danbury Agricultural Society, Danbury, Conn. E. S. Davis, Superintendent, Danbury, Conn.

Oct. 14.—Non-sporting Bench Show of the Westminster Kennel Club, Madison Square Garden, New York. Mr. Charles Lincoln, Superintendent.

AMERICAN KENNEL REGISTER.

OUR little monthly contemporary, the *American Kennel Register*, continues to meet with great favor on all hands. The best evidence that it was needed is seen in the anxiety of breeders and owners to register their stock. The June number runs up the entries to between 1300 and 1400, and the pressure for entries is so great that this month's *Register* is again enlarged to twenty pages. The *Register* started fifteen months ago, as a twelve page paper, but for several months now it has been regularly printing sixteen and twenty pages, which is certainly a good deal for the merely nominal subscription price—one dollar. It is a complete record of all events interesting to dog-owners and breeders.

THE CHICAGO DOG SHOW.

[Special to Forest and Stream.]

CHICAGO, June 10, 1884.

THE opening day of the second grand international bench show at D Battery Armory was all that could be desired in point of exhibits and attendance. The Hon. Carter H. Harrison, Mayor of the city, formally opened the show at 8:30 in the evening with a happy speech. The judges are Messrs. Mortimer and Taylor, and awards were made Tuesday in the English, Irish and Gordon setter classes. The champion English setter prize went to W. B. Gates's Paul Gladstone; extra champion prize English setter bitches, W. B. Shattuck's Dido II.

POINTERS AT NEW YORK.

Editor Forest and Stream:

I visited the last New York dog show with the avowed intention of examining critically and thoroughly both the large and small size champion pointers, having in view chiefly Beaufort, Meteor and Bang Bang. The attendants of the two first named dogs allowed me to see them out of their stalls, and after a most thorough examination I could arrive at but one opinion, viz., that Beaufort is by far the grandest pointer I have ever seen, barring none. I did not arrive at this conviction hastily, but studied them well from head to foot. My conviction was strengthened by corroboration on the part of several of the oldest and best pointer men, who not only have bred pointers, but won with them after they had bred them against all comers. Imagine, therefore, my surprise after the show to read Mr. Cornell's remarks, wherein he states that Beaufort's "legs are extremely bad, being crooked fore and aft." I was dumbfounded at such words, and still believe my original criticism of the dog was correct. I again examined him more critically than before, only to be convinced he has the most magnificent set of legs and feet that ever a pointer stood upon, and not only that, but his hindlegs are most beautifully crooked as they should be. Mr. Cornell is evidently much at fault here, and when speaking of Beaufort's legs must have had Bang Bang's in his mind, which are wofully straight at the stifles, a most glaring fault. It seems strange that Mr. Mason, with his extended knowledge of pointers, would pay $1,000 in good money for a dog with bad legs fore and aft.

The articles in your paper after the Washington show of 1883, both by your editor and Mr. Mason before he owned Beaufort, spoke only a part of his beauty. Mr. Cornell further adds that Bang Bang is the most strikingly handsome pointer dog in America. How Mr. Cornell, the Secretary of the Westminster Kennel Club, can make such a statement, I am at a loss to understand. He must either be sadly deficient in knowledge of the points of the dog, or is carried away with the fancied superiority of his dog as viewed by his partial eyes. The first thing that struck me as I was examining him in his stall was his "black eyes and black nose." Is this a charming attribute of a lemon and white pointer? Stonehenge says it is not admissible. Vero Shaw, in his article on pointers says, that in a lemon and white pointer this blemish is "sufficient for disqualification." How in the face of such authority as Stonehenge and Vero Shaw can Mr. Cornell still claim that "Bang Bang is the most strikingly handsome dog in America." Perhaps the first-named gentlemen are incompetent to state the points of a lemon and white pointer. Will he throw lemon and white pups? Will some black and white ones creep in mysteriously? In that unfortunate event, they should be drowned.

Heretofore Sensation has been held up as the typical pointer. If such is the case, what shall we do with Meteor? for they are opposite types. If Meteor is a good dog, how about Sensation? The first is long on the legs and short in the back, the latter short in the legs and long in the back. Which is the typical dog? Which shall I breed from? Both cannot be correct types. Who is at fault? The result is that the Westminster Kennel Club, instead of enlightening us as to correct type, has so confounded us that we are all at sea. Were I dependent upon the foregoing I should be equally at a loss how to act; but, relying upon my own judgment, I shall breed to Beaufort, as he comprehends my highest ideas of what a large pointer should be. As a stock getter Beaufort has no superior in this country, and is getting very fine stock. Bang Bang, on the other hand, I understand, gets black and white puppies from every bitch put to him. If so, why is this? It was reported at our last show that the Westminster Kennel Club offered $500 for Beaufort at the Washington show. Would they buy a dog with such glaring faults as they attribute to Beaufort? If the offer had been accepted they would have had at least one pointer to which they could have bred their bitches without being obliged to go outside their own kennel.

Mr. Cornell claims Beaufort is throaty. All large dogs are throaty, but there is no excuse for a small dog like Bang Bang being so. Let us try to improve rather than lead breeders astray by statements which are not verified, when lemon and white pointer bitches bred to lemon and white stud dogs throw black and white pups. A BREEDER OF SPORTING DOGS.

Editor Forest and Stream:

Mr. Cornell displays such lack of knowledge in treating his subject that it would seem as if his real motive were only to belittle Knickerbocker and Beaufort, and to try to support Mr. E. C. Sterling's most erroneous judging. To say the least, his letter displays very bad taste and is altogether uncalled for. His statement that Knickerbocker is "cowhocked," needs no further comment than that it would be well for Mr. Cornell to post himself on subjects of which he is ignorant, before passing public opinion.

Mr. Cornell says "Meteor was the best of the lot." Can he conscientiously say so, when Sensation was considered by him a typical pointer? Verily, I think them the extremes of one another. He further states, "His (Meteor's) one important fault is that his head is not handsome. There is almost no stop below the eyes and little depth of skull." So in head he has an important fault; is dish-faced and has no brain. His snipy muzzle, and at times badly carried ears, he forgets to mention. And a dog with a head that has not a redeeming

feature about it, not considering his other faults, he wants to see noticed at bench shows and thinks worthy of the title "champion."

That Knickerbocker is somewhat faulty in parts mentioned by Mr. Mason in his able article, "Pointers at the Late N. Y. Show," I freely admit, and that he is a better pointer than the "plain dog" is saying but little to his credit. Mr. Cornell has either forgotten a great deal about pointers or else needs a little more experience. He finds faults in others' dogs where none exists, but is oblivious to those that exist in his own. Does he consider Bang Bang's short and throaty neck perfect? He, a small and young dog! Does he consider him perfect in stifles? I must admit his tail looked nice at the late show, but when I saw him before, the abundance of coarse hair and carriage of that appendage was most marked. Besides, does he think black nose and eyes the correct color for a lemon and white dog?

On the whole, Mr. Cornell, we are well satisfied with our dog. Will admit of the faults that exist but will always defend him from abuse, and in conclusion will state that he is getting good liver and white and lemon and white stock, and we are not troubled with a superabundance of black and white pups.

GEO. L. WILMS.

Editor Forest and Stream:

Since you have opened your columns to Mr. Mason to criticise, and in my opinion, to misrepresent the pointers at the recent New York show, I feel safe in sending you the following, and while it refers only to the dogs in my kennel, I think you will accord me the same right to speak in their favor that you did Mr. Mason to speak against them. My kennel is a public one. I advertise my dogs in the stud and my pups for sale when I have them. I therefore don't question any man's right to criticise them, but I do question his right to misrepresent them, when his purpose is so palpably to detract from their market value and to bolster up the market value of his own. I take a great pride in my dogs, but I don't pretend to ignore their value to me in dollars and cents. I would continue my breeding kennel just as it is, whether or not I ever sold a pup or the service of a dog. My income is from another business, no more legitimate nor agreeable than dog breeding, but more profitable. To the pride which a breeder should feel in winning prizes with his animals in my case is the desire to add to their reputation and thus to the market value. I hope my position, therefore, will not be misunderstood. When the day arrives, which I believe it will, that I can win prizes with dogs of my own breeding, as I do now with dogs which my judgment prompted me to select and bring together to form my kennel, I will be still prouder than I now am, and I will consider them still more valuable than I now do.

To criticise Meteor unfavorably at any other point than his head is, in my opinion, either ignorance or malice. If he were a trifle deeper through the nose and a trifle higher in the skull it would add to his beauty, not a whit to his worth. His head is not defective anywhere; it simply might be improved. Not a sixteenth of an inch could be added to or taken from the length or width of it without injury. If his ears hung a trifle closer to his head I would like them better. His eyes are faultless. His neck is not equalled by any large pointer living. It is as clean and fine as a sword. From the back of his ears to the tip of his tail the dog is simply faultless, and none know it better than his defamers. When he was shown in the ring at New York in the champion class, in competition with Beaufort, there was not a well-informed pointer man among the spectators who did not see at a glance how far superior he was. Beaufort's handler pressed the dog's baggy throat up with his hand as well as he could and pushed his head up as much as possible to make him stand light on his fore feet and not expose his Durham bull chest and shoulders, and with his other hand he held the dog's tail out by the tip of it to make what otherwise naturally hung limp with a downward hook at the end look straight. Meteor was cut loose by his handler to move around and show himself naturally, and when the judge ordered Beaufort turned loose and he moved off like a cow it was his Waterloo. Meteor suffered during the four days of the show from an abscess on his cheek, which probably a thousand persons every day handled and pinched and squeezed, simply because they saw the lump so prominent, and which burst on the third night of the show. It is not to be supposed he felt in very good show fix, but when he went into the ring he was in comparison with Beaufort as a thoroughbred to a plough horse. I say very freely that I don't feel at all proud of his beating such a dog as Beaufort, for that dog's reputation rests upon not a thing but his owner's advertisement that he is the handsomest dog in America. The honor of his winnings at Washington and New Haven only needs to be scrutinized to be appreciated. Meteor's first appearance was at Cincinnati in March last, where in a class of fourteen he won first, under Major Taylor's judging. He was next shown at Toronto, in the same month, and won first under Mr. John Davidson's judging, and I am informed Mr. Davidson pronounced him the handsomest pointer he ever saw. He was next shown in St. Louis, where he won the championship without competition, the owner of Faust deciding not to show his dog against him, and he also won every special for best pointer, under Major Taylor's judging. At New York he won the championship; the sweepstakes and all specials, under Mr. E. C. Sterlings judging. The soreheads, whose dogs could not win, may cast all the reflections they please upon Mr. Sterling's interest in the dogs I exhibited at New York. I care nothing for their insinuations. Their reflections don't change the fact that Mr. Sterling is one of the best judges of a pointer in America, liable as all men are to be wrong sometimes. I did not agree with him in all his decisions at New York, but this is only my opinion against his. I certainly thought Maxim entitled to second or third in his class, where he only got vhc.

I can't see why there should be such a contemptible jealousy of my winnings. If my competitors will only spend their money and get dogs that are worth something, they can win prizes too; but just so long as they stick to the mongrels that are exhibited and advertised as pointers, just so long will they be failures. I am willing to go on record as saying that Meteor and Bang Bang are (barring the head of each, which, I think, could be slightly improved) the best pointer dogs in America, and the only type of the pointer to breed to. Had Bang Bang been shown in Cleveland in his New York form he would have won first, but I believe he was justly beaten there. To-day I don't think he can be beaten by any pointer of his weight in America; and I don't think a pointer will ever be bred in America, except by chance, from the Glenmark and Girl, and Icicle and Lily and similar mongrel breed, that will approach the true pointer type of Meteor and Bang Bang.

JOHN W. MUNSON.

ST. LOUIS, Mo.

Editor Forest and Stream:

As a breeder of pointers, I cannot sit still and see a grand dog like Beaufort criticised as has been done in these columns by Mr. Cornell. I paid a visit to Mr. Mason last week expressly to examine Beaufort, and I must say in justice to the dog and fairness to his owner, that I have never seen his equal. I failed to find more than one fault in him, a fault to be found in every large dog I have seen. He is a little throaty. His head, body and tail are perfect, and he stands on the best legs and feet I have ever seen on a big dog. I have seen some of Beaufort's get, including Fritz, winner in the large-size class at the last New York show, and I am satisfied that Beaufort is not only the best looking pointer we have, but what is of more importance, he is the best stock dog. It is worse than idle to compare Bang Bang with this dog, it is silly. Mr. Mason's criticism of Meteor was correct, he is not a show dog; his remarks about Bravo being a better dog than Bang Bang I also indorse. As a stud dog Bang Bang is a failure, I know that he gets black and white puppies from almost every bitch put to him; let Mr. Cornell deny this. If Bang Bang is a good dog why don't he win prizes under some other judges than those appointed by the Westminster Kennel Club? If he has a show with Beaufort, why did Mr. Cornell not accept Mr. Mason's challenge? Was it because Mr. Mason insisted on having a competent and impartial judge? I will now give Mr. Cornell a chance: The most successful American exhibitor and breeder of pointers is Mr. Orgill, and he is known to be a man that influence cannot reach. I will match Beaufort against Bang Bang for any sum he names, or a cup of any value, and will agree that Mr. Orgill shall decide which of the two is the better dog. Something must be done for bench shows. It is time that dogs, not owners, were judged; until this is done we must look for nothing but dissatisfaction, and improvement cannot take place.

J. H. PHELAN.

75 CLIFTON PLACE, Jersey City.

Editor Forest and Stream:

In justice to my old favorite, I will state that all who have ever seen Beaufort (with but few exceptions) unhesitatingly pronounced him the best large pointer they have ever seen. He has grand legs and feet and I have hunted him for days over the roughest of our country, and I have never yet seen him legtired or footsore, and he does not lack points necessary to make him a good field dog, for no dog possesses more natural field qualities and endurance than Beaufort. And Mr. Cornell is mistaken about his being "stilty," for he is not "stilty," no matter how you may look at him, and no pointer in America is getting finer stock than Beaufort, and I believe that he will find and point as many birds as any dog living.

G. H. NIXON.

LEESBURG, Va., May 31, 1884.

Editor Forest and Stream:

As I do not wish to be held accountable for anything I have not said I beg of you to correct a sentence in my letter to you, written last week. The printer makes me say in a sentence referring to Beaufort, "His hocks are likewise also bent." What I did say and what I say now is, "His hocks are also bent." "Likewise also" is a little too much to say.

ROBT. C. CORNELL.

NEW YORK, June 6.

Editor Forest and Stream:

I had a pointer bitch in the last bench show of the Westminster Kennel Club, which (deservedly as I think) did not take a prize.

Imagine my surprise a few days after the close of the show receiving the following letter signed by the name of a gentleman with whom I have no acquaintance, whose name has become familiar to me through various controversies carried on the past year or two in the public newspapers over the comparative merits of certain dogs owned by him and those owned by the Westminster Kennel Club and others, and over questions of the proper and correct manner of judging certain breeds of dogs, a gentleman whom I have never seen but once, and that when he was pointed out to me at a dog show.

The letter received by me is as follows:

DEAR SIR—A protest, indorsed by fifty exhibitors and breeders of pointers, is to be published against the absurd decisions at the late N. Y. show. The protest is already signed by many of the most influential exhibitors, breeders and clubs. May I add yours?

If you have any friends interested in the welfare of the breed I shall esteem it a favor if you will ask them to add theirs also.

An early reply will greatly oblige. Faithfully yours

CHAS. H. MASON.

No. 49 W. 24th St., New York City, May 21, 1884.

I did not answer the letter, but I was rather indignant at it. If it had been signed by an unknown name or by one not so publicly identified with exhibiting, breeding and judging as Mr. Mason, I should have regarded it as the effusion of a young and disappointed exhibitor, who, having for the first time a dog in a bench show, had become incensed at not receiving a prize. But coming from Mr. Mason, I was at a loss how to regard it.

In your issue of May 29 I notice that a letter, almost similar to the one sent me, was received by the manager of the kennels of J. O. Donner, Esq., who, as I have been informed, was, like me, an unsuccessful aspirant for honors at the last show.

My curiosity has become intensely aroused on this matter, and I shall not be contented until the following two problems have been solved:

First—Has Mr. Mason written to other disappointed exhibitors any more letters similar to those above mentioned, and if so, how many such letters has he sent out?

Second—What were his motives in writing and sending such letters?

The solution of these two questions is of interest, not only as a matter of individual curiosity, but also that due weight may be given to the protest when it shall appear; and, further, perhaps it may prove of value in throwing some light on the character and temper of Mr. Mason and on the manner in which he conducts, has conducted and may conduct controversies, present, past and to come, as well as on the methods adopted by him to affect public judgment.

If through you and your readers I can obtain any answers to these questions, I shall feel very grateful.

C. D. INGERSOLL.

UNIVERSITY CLUB, New York, June 7.

THE NON-SPORTING DOG SHOW.

Editor Forest and Stream:

The managers appointed by the Westminster Kennel Club to conduct the show of non-sporting dogs, greyhounds, deerhounds and fox-terriers, which will be held in October next at Madison Square Garden, New York, cordially invite all those interested in the improvement and development of these dogs to send them such suggestions as to premium list, change of bench show rules, etc., as may occur to them.

Communications may be addressed to me at Box 1,812, New York post-office, and will be carefully considered by the managers.

CHAS. LINCOLN, Supt.

THE BENCH SHOW MEETING.

Editor Forest and Stream:

We have only to-day discovered that the circular invitation to American kennel clubs asking a conference at Delmonico's on June 21, named no hour. Kindly state that the time will be 8:30 P. M.

ROBERT C. CORNELL, Sec'y W. K. C.

THE PROPER SIZE FOR BEAGLES.

Editor Forest and Stream:

Your correspondent, "Flat," in your last issue, advocates a large-sized beagle as the best suited for foot packs, while that genial writer, "Lillibullero," in a preceding number of FOREST AND STREAM, condemns fourteen-inch dogs as being too fast for the work, and cites an instance in his own experience to sustain his position. Both gentlemen being Englishmen and, therefore, presumably conversant with the topic, we are glad to have their views. But as they are arguing from a British standpoint it will be well to see how their opinions will apply on this side of the water.

Here hunting with foot packs, except in some chance locality, is entirely out of the question. The habits of our little American hare (*Lepus sylvaticus*), the game on which beagles are principally hunted, preclude the possibility of any party of hunters following the pack or seeing the beauties of the run. Our hare when started from his form, generally in some briery thicket, flies to the densest cover, the more difficult the ground the better it suits his dodging and doubling. Therefore, the only way we can use the beagle is with the gun, the shooter being stationed on a runway and killing the hare ahead of the hounds when opportunity offers.

For this purpose, I incline to think, the smaller-sized dog, say from eleven to twelve inches, is best suited, for the reason that he drives his game slower and gives more chances for shots. Larger beagles go too fast, and the hare, in danger of being run into and killed, turns down the first convenient woodchuck hole or takes refuge under a rock, and thus ends the chase.

I hope this question of the proper working size of beagles will be discussed at length in the FOREST AND STREAM, and that we will hear further on a subject so pleasantly opened by "Flat" and "Lillibullero."

RUSTICUS.

PHILADELPHIA KENNEL CLUB.—It is the wish of the Philadelphia Kennel Club that the readers of the FOREST AND STREAM should know that they are not connected with the Philadelphia Kennels. The former is an association of canine lovers, who have clubbed together for the purpose of holding yearly dog shows and field trials. Their rooms are situated on the corner of Thirteenth and Market streets, to which all communications should be addressed. The Philadelphia Kennels are owned by a firm known as the Bird Food Company, which does business on Eighth street near Locust, and deals generally in canary birds, chickens, ferrets, etc. This statement is made for the reason that the Philadelphia Kennel Club is daily receiving letters in answer to an advertisement in FOREST AND STREAM of the Bird Food Company, or Philadelphia Kennels.—HOMO.

THE BENEFIT OF THE DOUBT.—In September, 1879, I chanced to fall in with poor Dave Sanborn, who was then giving Count Noble his first field lessons in Martin county, Minn. I got quite interested in his method of training, and for several days shot to his handling. On one occasion a covey rose wild from a piece of tall corn, and on entering it we found Count and his companion lying close, both having doubtless dropped to wing. Dave instantly drew his whip and commenced lashing poor Count, although from their relative positions it was evident that the flush had been made by the older dog. Of course, I was indignant at such gross injustice, but to my warm expostulation Dave quietly replied: "It may be so; there's no telling; but in such cases I always give a puppy the benefit of the doubt."—WAUZEE (Glen Allen, Va.).

PROPOSED ENGLISH BEAGLE CLUB.—A correspondent writes to the London *Field:* "I think there would be little difficulty in getting enough members to form an English Beagle Club. As regards forming a proper standard for judging, I consider we cannot do better than judge our pets by the standard laid down by the American English Beagle Club, which I think is as near the mark of what a true beagle should be as possible. I inclose a copy of the same, and shall be pleased to send a copy to any brother fancier who would like one. I shall be pleased to hear from any brother fanciers on the club subject; and could not a meeting be arranged during the Palace dog show in July?"

CLOVER BELLE.—At the late show of the Westminster Kennel Club, the Messrs. Rutherfurd, at the request of the Clovernook Kennel, had their kennelman examine the fox-terrier puppy Clover Belle, to ascertain, if possible, her correct pedigree. He pronounced her to be indisputably by Joker out of Warren Wakeful, not by Joker out of Warren Bessie, as catalogued. The mistake came about through the fact that she, in company with some twenty other puppies, were sold by the Messrs. Rutherfurd at auction, and it was impossible subsequently to identify her without their kennelman's assistance.—CLOVERNOOK KENNEL.

NEW ENGLAND KENNEL CLUB.—This new organization, formed in Boston, has secured very fine rooms at 159 Tremont street, in the new Emerson piano building, and an opening will be given in June. The apartments are very pleasant and overlook the Common, taking in a full length of the green. A bench show, under the auspices of the club, will very probably be given some time in February next, the next sixty days deciding the matter.—HOMO.

BEAGLE IMPORTATION.—Philadelphia, June 7.—*Editor Forest and Stream:* I have entered my beagles, two dogs and a bitch, at the Crystal Palace Bench Show, July 1 to 4, 1884. Purchased from Edwin S. Carew Gibson, of Sussex, England. They will be imported at an early date, when you will receive a full description of them. They are of the celebrated Crane stock.—W. H. ASHBURNER.

SPANIEL IMPORTATION.—*Editor Forest and Stream:* I notice in your last issue that you give Mr. Laidlaw credit of importing the cocker spaniel bitch Newton Abbot Lady from Mr. Jacobs. I wish you would say in your next issue that I imported her and sold her to Mr. Laidlaw after she landed in New York.—G. W. LEAVITT (Boston, Mass., May 26).

AN IRISH LAVERACK.—The following advertisement appeared in a late Baltimore paper: "For sale. An Irish setter one year old, guaranteed of Laverack stock—father cost $500. Sold because owner is going to Europe."

HE HAS A DOG.—Capt. Robert W. Andrews, age 93, is now afoot from Sumter county, South Carolina, to Maine. He is accompanied by a dog which is not more than half as old as he is.

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal;*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, of breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Stella. By Miss Stella B. Jones, Chicago, Ill., for red Irish setter bitch, whelped Jan. 21, 1884 (Glencho—Bess).

Nelle. By Mr. Eberhard Vollmer, Trenton, N. J., for red Irish setter bitch, whelped Jan. 21, 1884 (Glencho—Bess).

Juliet. By Mr. Wm. R. Caminoni, Brooklyn, N. Y., for red Irish setter bitch, whelped Jan. 21, 1884 (Glencho—Bess).

Lou. By Mr. Jerome B. Wheeler, New York, for red Irish setter bitch, whelped Jan. 21, 1884 (Glencho—Bess).

Martha. By Mr. Walter B. Peet, New York, for red Irish setter bitch, whelped Jan. 21, 1884 (Glencho—Bess).

Norah. By Mr. Theodore Feroe, Madalin, N. Y., for red Irish setter bitch, whelped Jan. 21, 1884 (Glencho—Bess).

Fannie Obo. By Mr. H. C. Bronsdon, for black cocker spaniel bitch, whelped April 29, 1884 (Smut—Obo II.).

Belfast, Gorham, Goodwin, Seth, Tom, Lizzie and Maud. By Major Lovejoy, Bethel, Me., for red Irish setters, whelped May 16, 1884 (C. F. Crawford's Arlington—Maggie O'More, A.K.R. 981).

NAMES CHANGED.

☞ *See instructions at head of this column.*

Guard to Marmion. Mastiff dog, whelped March 4, 1884 (champion Brenda, A.K.R. 1143), owned by the Stawberry Hill Kennel, Leicester, Mass.

BRED.

☞ *See instructions at head of this column.*

Nellie—Frank. Dr. J. S. Niven's (London, Ont.) cocker spaniel bitch Nellie to his Frank.

Black Bess—Frank. Dr. J. S. Niven's (London, Ont.) cocker spaniel bitch Black Bess to his Frank.

Flora—Frank. Mr. Dan O'Shea's cocker spaniel bitch Flora to Dr. J. S. Niven's Frank.

Norah—Garryowen. Dr. J. S. Niven's (London, Ont.) Irish terrier Norah to his Garryowen.

Lady Vinem—Max Adler. Dr. G. I. Royce's white and mouse English greyhound bitch Lady Vinem (Count Custer—Lady Rose) to Max Adler, May 4.

Lady Dufferin—Croxteth. Mr. J. C. Heckscher's pointer bitch Lady Dufferin to Mr. A. E. Goddeffroy's Croxteth, May 12.

Fan Fan—Croxteth. Mr. J. O. Donner's pointer bitch Fan Fan to Mr. A. E. Goddeffroy's Croxteth, May 20.

Vinne—Croxteth. Mr. A. E. Goddeffroy's pointer bitch Vinne to his Croxteth, June 5.

Dot II.—Scamp. Mr. John A. Graham's black, white and tan setter bitch Dot II. (Rex—Dot) to Scamp (Fred—Flora), April 26.

Lady N.—Joe Hinds. Mr. John A. Graham's liver and white pointer bitch Lady N. (Marshall—Taluiah) to Joe Hinds (Hindoo—Flight), May 18.

Flora II.—Black Prince. Mr. Charles Wray's (Monsey, N. Y.) cocker spaniel bitch Flora II. (Cumming's Flora—Cumming's Snipe) to Mr. A. C. Wilmerdine's Black Prince (A.K.R. 62), May 31.

Rose—Jack. Mr. H. E. Elston's dark red Irish setter bitch Rose (Darkness—Ruth) to Mr. Geo. W. Whelen's Jack (Elcho—Nettie), June 1.

Beauty—Napoleon. Mr. W. D. Peck's (New Haven, Ct.) pug bitch Beauty to his Napoleon, June 6.

Cricket—Bannerman. Mr. Arthur M. Wood's (West Philadelphia, Pa.) English beagle bitch Cricket (Bugler—Pitts) to Mr. Louis D. Sloan's imported Bannerman, May 26.

Kitty Wells—Fritz. Mr. J. H. Thompson, Jr.'s (Patterson, N. Y.) pointer bitch Kitty Wells (A.K.R. 1043) to his Fritz (A.K.R. 268), June 4.

Grand Duke—Rosy. Hon. Edmund Sandy's bull-terrier bitch Rosy to Messrs. R. & W. Livingston's champion Grand Duke (Hink's Dutch—Young Magnet), May 11.

Ruby O'More—Nimrod. The Ashmont Kennel's red Irish setter bitch Ruby O'More (A.K.R. 689) to their champion Nimrod (A.K.R. 631), May 28.

Madge—Hero II. The Ashmont Kennel's gray mastiff bitch Madge (A.K.R. 548) to their Hero II. (A.K.R. 545), May 30.

Lizzie—Hiram. Mr. Jas. Lindsay's (Jersey City, N. J.) collie bitch Lizzie (Rex—Topsey) to his Hiram (A.K.R. 882), May 10.

Fairy—Brack. Mr. Jas. Lindsay's (Jersey City, N. J.) collie bitch Fairy (Rex—Kitty Mac) to Brack (A.K.R. 3), May 13.

Nannie O.—Darnley. Mr. Jas. Lindsay (Jersey City, N. J.) collie bitch Nannie O. (Rex—Kitty Mac) to Mr. I. Van Schaack's imported Darnley, May 26.

Chiquita—Oberon. Mr. E. S. Hawks's (Ashfield, Mass.) English setter bitch Chiquita (Druid—Pocahontas) to Mr. P. H. Foster's Oberon (Count Noble—Rosalind), May 8.

Music III.—Ringwood. Mr. E. S. Hawks's (Ashfield, Mass.) beagle bitch Music III. (Flute—Victress) to Mr. N. Elmore's imported Ringwood, May 13.

WHELPS.

☞ *See instructions at head of this column.*

Cricket. Mr. John Drus's (Little Rock, Ark.) Irish water spaniel bitch Cricket, May 10, eleven (six dogs), by cocker spaniel Lou; all solid liver.

Myrtle. Mr. Louis D. Sloan's (West Philadelphia, Pa.) imported beagle bitch Myrtle, June 1, five (three dogs), by Mr. Crane's (Southover House, Eng.) champion beagle Marchboy.

Little Maggie. Messrs. R. & W. Livinston's (New York) bull-terrier bitch Little Maggie (Hink's Dutch—Young Venom), May 29, six (five dogs), by their champion Grand Duke (Hink's Dutch—Young Magnet); three since dead.

Fleda. Mr. Jess. M. Whaite's (Chester, S. C.) pointer bitch Fleda (champion Bow—Flight), June 3, ten (six dogs), by Young Sleaford (Lort—Lass).

Graceful. Mr. Luke White's Graceful, May 22, four (two dogs), by champion Bang Bang; three lemon and white and one liver and white.

Grace. Mr. Luke White's champion Grace, June 1, seven (three dogs), by Mr. C. H. Mason's Beaufort; four liver and white and three lemon and white.

Maggie O'More. Major Lovejoy's (Bethel, Me.) red Irish setter bitch Maggie O'More (A.K.R. 981), May 16, seven (five dogs), by Mr. C. F. Crawford's Arlington.

Jeannie Nettles. Mr. Jas. Lindsay's (Jersey City, N. J.) imported collie bitch Jeannie Nettles (Old Sweep—Lassie), May 2, seven (five dogs), by champion Rex (A.K.R. 149).

Beauty, Mr. Jas. Lindsay's (Jersey City, N. J.) collie bitch Beauty (Ayrshire Laddie—Moosey), May 7, five (four dogs), by Rex (A.K.R. 149).

Nellie. Mr. Jas. Lindsay's (Jersey City, N. J.) collie bitch Nellie (Rex—Flora), April 30, nine (six dogs), by Ayrshire Laddie (A.K.R. 145).

Countess C. Mr. J. Yearsley, Jr.'s (Coatesville, Pa.) English setter bitch Countess C. (Dashing Tim—Armida), May 2, nine (four dogs), by Mr. J. M. Avent's Rush Gladstone.

SALES.

☞ *See instructions at head of this column.*

Leader. Beagle hound (A.K.R. 319), by Messrs. R. & W. Livingston, New York, to Mr. A. Winsor, Providence, R. I.

Nimbow. Red Irish setter dog, whelped April 9, 1884 (Nimrod, A.K.R. 631—Cleo), by the Ashmont Kennel, Boston, Mass., to Mr. F. M. Harris, Worcester, Mass.

Nimrod II. Red Irish setter dog, whelped April 9, 1884 (Nimrod, A.K.R. 631—Cleo), by the Ashmont Kennel, Boston, Mass., to Mr. A. L. Fooote, North Parma, N. Y.

Castelar. Fawn mastiff dog, whelped Jan. 26, 1884 (Diavolo, A.K.R. 543—Madge, A.K.R. 548), by the Ashmont Kennel, Boston, Mass., to the Philadelphia Kennel, Philadelphia, Pa.

Benedict's Boy. Solid black field spaniel (A.K.R. 130), by Mr. Herman F. Schellhass, Brooklyn, N. Y., to Dr. H. C. Eno, New York City.

Benedict's Boy—Lady Bub whelp. Black cocker spaniel bitch, by Mr. Herman F. Schellhass, Brooklyn, N. Y., to Mr. Geo. W. Whitcomb, Boston, Mass.

Glencho—Bess whelps. Red Irish setter bitches, whelped Jan. 21, 1884, by Mr. Fred. Waterman, Hudson, N. Y., one each to Mr. Walter B. Peet, Mr. Jerome B. Wheeler, Mr. Lawrence M. Kostwright and Mr. W. B. Wetmore, New York; Mr. F. Carroll Hankes and Mr. Henry M. Haner, Hudson, N. Y.; Mr. Theodore Feroe, Madalin, N. Y.; Mr. Wm. R. Caminoni, Brooklyn, N. Y., Mr. Eberhard Vollmer, Trenton, N. J., and one to Miss Stella B. Jones, Chicago, Ill.

Glencho—Daisy whelps. Red Irish setters, whelped April 2, 1884, by Mr. G. Hills, Hudson, N. Y., to Mr. F. I. Church, Concord, N. H.; Mr. F. C. Herrick, Albany, N. Y.; Miss J. Scott, Scottville, N. Y.; Mr. Chas. Epelstyn, Hudson, N. Y.; Mr. Harry W. Livingston, Livingston, N. Y.; Mr. H. Spencer, Catskill, N. Y.; Mr. J. M. Leekley, Galena, Ill., Mr. H. E. Chubb, Cleveland, O.

Guard. Yellow fawn, black muzzle, mastiff dog (A.K.R. 1143), by Mr. J. A. S. Gregg, Fordham, N. Y., to the Strawberry Hill Kennel, Leicester, Mass.

Norah Rock. Irish terrier bitch, by Dr. J. S. Niven to Mr. Aug. Jay, Nova Scotia.

Tim, Irish terrier dog (Aileen—Rock), by Dr. J. S. Niven to Mr. Henry Young, New York.

Erin Badger. Irish terrier pup, by Dr. J. S. Niven to Mr. Henry Young, New York.

Brahmin—Dolly whelp. Black spaniel, by Dr. J. S. Niven to Mr. Thos. Myers, East Saginaw, Mich.

Bayonne, Burgee and Victor. Rough-coated St. Bernards, two bitches and one dog, by Rev. J. C. Macdona, West Kirby, Eng. (through the Neversink Lodge Kennel), bitch Baronne to Mr. Pope, Boston, Mass.; bitch Burgee to the Chequasset Kennel, Lancaster, Mass.; dog Victor to Lieut. Ward, Newport.

Laverack Chief. By Mr. H. C. Waddell (through Neversink Lodge Kennels), dog Laverack Chief to Major Platt, Bangnor, North Wales.

Croxteth—Dolly whelp. By the Neversink Lodge Kennel to Mr. Lynch, Newburgh, N. Y.

Fairy. Pointer bitch, whelped Jan. 1, 1884 (Sam, Jr.—Quilley), by Major Lovejoy, Bethel, Me., to Mr. A. S. Hubbard, Thomaston, Conn.

Cork. Red Irish setter dog, whelped March 14 (Ned Elcho, A.K.R. 984—Bridget O'More, A.K.R. 964), by Major Lovejoy, Bethel, Me., to Mr. A. S. Hubard, Thomaston, Conn.

Dash. Red Irish setter dog, whelped March 14 (Ned Elcho, A.K.R. 984—Bridget O'More, A.K.R. 964), by Major Lovejoy, Bethel, Me., to Mr. A. P. Stuck, Otsego, Nich.

Help. Fawn and white collie dog, whelped June 22, 1883 (champion Ayrshire Laddie—Lizzie), by Mr. Jas. Lindsay, Jersey City, N. J., to Mr. H. Belknap, Sweetwater county, Wyoming Ter.

Major. Sable and white collie dog, 6mos. (champion Rex—Jeannie Nettles), by Mr. Jas. Lindsay, Jersey City, N. J., to Mr. G. B. Grinnell, New York City.

Fido. Black, white and tan collie dog, whelped Sept. 15, 1882 (champion Rex—Beauty), by Mr. Jas. Lindsay, Jersey City, N. J., to Mrs. Barker, Williamsbridge, N. Y.

Ivanhoe. Sable and white collie dog, whelped Aug. 4, 1883 (Robin Adair—Lark), by Mr. Jas. Lindsay, Jersey City, N. J., to Mr. Thomas Willing, Warwick, N. Y.

PRESENTATIONS.

☞ *See instructions at head of this column.*

Black Spaniel Pups. By Dr. J. S. Niven, London, Ont., to Mr. Ed. Fisher, Toronto, and Mr. J. F. Kirk, Toronto.

ACCIDENTS WILL HAPPEN, whether you like to think so or not; and if you do not wish to run in debt while disabled, or have your family suffer if you die, insure in the Travelers, of Hartford, Conn.—*Adv.*

Rifle and Trap Shooting.

ARMY RIFLE PRACTICE.

THE DEFECTS AND OMISSIONS OF THE PRESENT SYSTEM.

Editor Forest and Stream:

Having had something to say about the faults of the army system of target practice, perhaps you will indulge me in a few remarks upon modes and methods that I consider better, stating at the very outset that I can hardly present anything very new, novel or startling, but only such ideas as my experience and reading dictate.

To give my ideas I must necessarily follow and criticise our present system to some extent, in order to point out by contrast what I claim should be the proper system. The germ of our present system lies in "Laidley's Rifle Firing," and passing over all preliminary instruction as probably as good as any that can be given to establish the elementary principle, and therefore needing no criticism, we come to the application of those principles in practice upon the range.

Right here begins the fault of our system, and let me say that I never believed it to be the original idea of Laidley that such a system should have been developed, and, therefore, the fault is not his, except that he confines the first practice to five shots, whereas I think the first practice should be unlimited in order to be able to teach improvement by each successive shot, while ideas of improvement and errors to be corrected are fresh in the man's mind. By the time five shots have been fired the man may be just on the point of comprehension and success, and could he fire five more his success would be reasonably assured. But, stopping at five shots, and just at this point, before the next firing any comes around, his impressions and recollections are dulled, and he begins again almost at the same point he did the previous day, instead of at the point and with the knowledge and impressions where he left off on that day. Existing orders allow fifteen shots per man at not to exceed two ranges, but the usual practice is to have each man fire but five shots; this obtains because there is not sufficient time to shoot off every man on each firing day up to the limits of fifteen shots, and as each man must shoot his shooting becomes limited to five shots only.

With this exception, had Laidley's system been left alone, we would have been much better off, but, as stated in a previous letter, amplification of his system, under orders from the various Department Headquarters, the vicious system of reports, etc., has caused the first principles of success to be lost sight of, and the men now are crowded too rapidly over the range in order to get as many men with marksmen's, first class men's, etc., scores, in order to have a good showing and a high figure of merit at the end of the target year.

Let us analyze and explain my meaning: Laidley, par. 461 to 467, revised edition, gives the instruction for the first firing on the range at 100yds. He says nothing about 50 per cent., or 66 per cent. in two or three best scores being any qualification such as to warrant the man being advanced and firing at 200yds. In par. 468, he says: "The squad is next practiced at a target 200yds. distant, or *such members of it as have attained the required skill*" (the italics are mine), and right here comes in the vicious order. Laidley leaves it to the instructor's judgment when the man has attained the required skill. The "cast-iron" orders leave the instructor no judgment, no discretion, but the man must be advanced when he has made 66 per cent. for three best scores at this 100yd. range, even though he knows such advancement to be sheer folly and waste of time and ammunition.

Now, who is the best judge of when this man should be advanced, I, who stand and watch each shot fired, observe the errors and try to correct them, see whether the man comprehends and is applying proper principles and is bunching his shots close together somewhere on the target or is scattering them indiscriminately high, low and laterally, or the Department rifle instructor, who, perhaps, never saw either me, my men, or my target range, and who judges from his office, perhaps a thousand miles away? He gets up these orders, he is desirous of emulating with other Departments in the number of marksmen qualified, and he, therefore, with honest enough intentions too, under the system, causes this system to be followed.

Right here let me say that I know the intentions and desires of the instructors are honest, and that these orders result from other causes as well as those mentioned, and, parenthetically, I will say that, to their shame be it said, there are troop, battery and company commanders who are either lukewarm or indifferent to the requirements of target practice, who perform their duty in only the routine manner necessary to keep themselves free from censure, and they cause such orders to be originated; for, without a "cast-iron" order to compel them to exert themselves, they never would advance any one, and their men not acquiring any enthusiasm from example, and becoming disgusted with their want of advancement, "shoot and shoot, and don't hit," because they shoot in the same routine manner, simply to get the duty done, and back to their quarters, where they can read, and loaf and smoke.

But are such orders just? Is Captain John Smith to be bound down and held to an order he knows to be folly, and that does not instruct, simply because Captain Tom Jones is lazy and indifferent, and wants "punching up," finds target practice "distasteful," and not in accordance with his ideas of "dignity?" I say the order is eminently unjust. What have we post commanders for except to see that Captain Tom Jones does his duty and does it properly, as well as Captain John Smith? If post commanders are also lazy and indifferent, then what more important duty have the Department commanders to do than to "punch them up," and "ride them around with a watering bridle and pair of spurs" until the laziness and indifference is taken out of them. What have we inspectors for except to look into such things and "haze everybody around" that does not show competence, efficiency and interest in his profession? If every one was compelled to perform his duty properly by proper means, then neither I nor any other commander would be compelled to follow such an order as those given, laying out a programme that we know is not conducive to the best results in the simplest way.

Let us see what riflemen in civil life think about the efficiency requisite to be advanced from one short range to the next, as well as what my experience and judgment would dictate.

Every book I have ever read that gave methods of becoming experts in rifle shooting, lays great stress on preliminary instruction, and requires as near perfection in the preliminary exercises as possible before advancement is made, in order to properly ground the rifleman, give him confidence as well as familiarity with all the requirements of successful shooting, so that intuitively he always shoots properly and accurately at the shorter distances, and, therefore, makes more rapid advancement when he comes to shoot at those longer. Every rifleman knows that constant practice at short ranges is beneficial even at the longest range, not only from the hardening of muscles to the exercise, but the confidence acquired by the skill developed. And does 66 per cent. in three best scores give such training? Is the man ready to go back to the 200yds. range and do anything successfully who only has such qualification? Would it not be better to keep the man at the 100yds. target until he can do better, correct all his errors, and average 80 per cent. before being advanced? And when he is so qualified at 100yds., would he not then be prepared to succeed much more quickly at the 200yds. range, overcoming the increased distance, the apparent diminution of bullseye and target, and, from his training and steadiness, in a fewer shots again make a higher average? Instead of being a "smatterer," would he not soon become an expert, able to put his bullets where he pleased, instead of as now once in a while, and, as the result of hard effort, making 80 per cent.?

Instead of being a high, impossible average to obtain and maintain, I claim that 80 per cent. at 100yds. is rather a low one with our present 8-inch bullseye and 26-inch center ring. I think I can hear many riflemen say that any competent shot should be able to hit the bullseye from twice to three times out of five at this distance; but I put the average at 80 per cent because that is the best we can expect from the average man in the ranks, some of whom unfortunately are slow of comprehension, awkward in their attempt at anything, and from whom nothing else can be expected. Patience and perseverance overcome their difficulties so as to teach them to "bunch their shots" somewhere on the target, then to get them all into the 4 ring, but perhaps never succeed in getting them into the bullseye. Better this than any such scattering five as may make a 17 out of 25 and so make the required percentage for advancement, to go back to the 200-yard range and scatter so badly as to miss the target, and always be a "scatterer," even though the magical 80 per cent. is sometimes made by confining the scattering to the 4 ring. With such careful instruction and average requirements as I have mentioned, the rifleman should soon become a good shot, off-hand; but when he comes to the 300-yard range a new difficulty presents itself, which, to be overcome, needs an entire change of method.

The 100-yard practice gave him steadiness for off-hand shooting, so that he soon acquired skill at 200yds., and if allowed to try it, would soon have also acquired off-hand skill at 300yds. When I first went back to the 300-yard target, although I could make 80 per cent. or more three times out of five at the 200-yard range, and could, standing, do almost as well at the 300yds., yet I found I had something new to learn, and that too at 300yds. distance. My off-hand practice had taught me steadiness with my left elbow unsupported, and all my deviations were in a vertical direction; hence I had only this deviation to combat.

When kneeling, however, I found, my left elbow being supported, that all my deviation was horizontal; my left hand and arm would swing to right and left in spite of all I could do, and at this distance the target was hard to hit. The bullseye appeared very small, and the width of the target very narrow, and but a slight horizontal deviation carried me off the target. My first score was five "goose eggs," followed by 3, then 8, and so on with small scores for over eighty shots before I made 80 per cent. and a marksman's score. After I once "caught on" I had no further very great difficulty, but I am satisfied that I would have overcome my difficulties sooner had I been allowed to take the target at 200 yds. range as a place for my preliminary instruction in kneeling, the same as the 100-yds. range was my preliminary to the 200 off-hand; I would then have commenced a new position and new instruction at the same range where I had acquired skill off-hand. I would have not had 100yds. added on to the difficulties to be overcome in the new kneeling position, and I would soon have acquired skill in shooting kneeling at this distance, so as to again have averaged high there as I had previously at 100yds. before shooting at 200, and when I went back to the 300-yard range I would only have had the distance to overcome.

But the order and system prevents this; it does not recognize the fact that although off-hand practice is beneficial and gives a man steadiness everywhere, there is nothing new—except the greater distance—to be learned when the man begins to kneel. It only recognizes the increased distance and teaches that the kneeling position is given as the steadier position to be taken because of this increase of distance, and that before this new position has been learned and the new conditions of steadiness have become familiar. True enough it is that the kneeling position is the steadier when known; but who will say that the recruit can take it properly, and shoot properly from it, until he has had time to become familiar with it? Would it not be better to try and learn one thing at a time, "make haste slowly," and advance much more rapidly in reality than is the case now?

Then the system and order exacts another thing. No matter what a man's individual peculiarities may be, or what the condition of his strength, nerves or eyesight, of which only the instructor personally present can judge, he must follow the order. He must make a certain percentage at each lower range before he is advanced to a higher, when perhaps his ability to shoot at short ranges is a minimum or even a minus quantity, while he may be able to make a fair or even an excellent shot at longer ranges, could he only be allowed to go back there and try it. But his commander and instructor has no discretion, cannot place him at the longer ranges because he has not "qualified" at the shorter, and the man is never a good shot anywhere because he is unable to succeed at short ranges, and therefore never has the chance to try at the long. I have just such men in my troop. They cannot, from some individual peculiarity, succeed at 200yds; they therefore never have the chance to try beyond, never have a chance to learn to shoot kneeling and lying, where the peculiarity would be overcome, and hence they stay poor shots always for want of opportunity to learn the conditions necessary to be learned at the distances and positions where they could learn.

Again the orders and system are at fault in that they give no discretion to the instructor in the handling of his men under various conditions of weather. To-day may be my day to shoot, but it may be a day eminently unsuited for practice at 200yds., where the man is buffetted about by the wind that is blowing. True it is that men should learn to shoot in all winds and weathers at all ranges; but we must "creep before we can walk," and to-day it is blowing too hard for the off-hand range, and yet when lying down, good shoting can be done, and experience gained that will be of value to all.

But my men have not qualified at the short range, therefore they cannot be put to shoot at the long range, where they can lie down and be steady in the wind. Shoot at 200yds. they must, or not shoot at all, and if they do shoot, which will be the exception and not the rule, there will be so much powder and lead thrown away uselessly, so many shots used up from the total allowance per man per year, so many the less on which to continue instruction, and no advantage gained, because they have not yet advanced enough, from first shooting in light winds to have learned to acquire steadiness in the heavy breeze that is blowing.

I claim that our orders and system should recognize the fact that is known to all riflemen, namely that there are three styles of shooting, almost entirely distinct from each other, and while some can succeed equally well in all others cannot, and each commander and instructor be given the necessary use of his judgment to place the man where he can succeed the best. Short-range or off-hand, mid-range or kneeling, and long-range practice have each peculiarities of their own, and because one succeeds in one is no criterion that he will succeed in all, or because he fails in one no sure sign he will fail in all. And would not the man who can shoot at 600yds. be more dangerous at that distance than a man who can't, and who can't because he never learned from having failed at 200? The times when he will shoot at 200yds. against an active enemy may be and probably will be few and far between, while he may be called upon frequently to exercise his skill or show his want or it, at the longer distance. Let me quote Mr. Farrow on this point:

"I do really think it far easier to become an expert marksman at 800, 900 and 1,000yds. than at the shorter distance. In the former the position allowed the marksman is such that, after some practice, the rifle can be held as steadily on the bullseye as though fired from an artificial rest, and it is easier to become expert in estimating the varying forces of the wind and changes of light, which are the principal difficulties encountered at these distances.

"It is easier to do that I will say than when a marksman is standing in the open, with no rest for his rifle but his own strength of arm and nerve, to maintain a steady hold upon the bullseye, bringing the pressure on the trigger with sufficient force to cause the discharge at the right instant, and following this in successive shots to the fulfillment of a complete score. Ah, yes! I could name you many who, with the experience of one season at the long ranges, have become so proficient that scores with but few points off from the 'possible' have been repeated many times, yet these same gentlemen, after years of practice at the 200yds., had become only medium in proficiency."

My experience and observation exactly agree with the above, so far as I have observed, up as far as we have ever shot at the long ranges, and the same doubtless holds true up the longest, and we therefore see that probably many men would succeed in becoming fair shots at the long ranges for all they may have failed at the short, provided they only could get there to shoot, and I would be glad of the authority to give me the use of my judgment and discretion to use in developing men as shots where they can succeed and not have to keep them hammering away at a range where it is perfectly evident they cannot, and the waste of lead and their own discouragement and disgust as shots. And proper classification can be given such men also; they could enter into their proper place in the figure of merit of the troop, battery or company; would have their usefulness on the field of battle, and probably from the encouragement received from their success at long ranges would finally succeed at the short.

But there are other kinds of shooting necessary to the field of battle, and so far our orders and system have not developed them. We have seven targets to shoot at, calling for different styles of firing at fixed objects, and two calling for firing at moving or vanishing objects, and yet I have never seen but three of those nine targets, much less fired at them.

Beginning as we do at 100yds. at the beginning of each target year, and "dragging the men over the ranges" to make marksmen for "glory and buncombe," there has never yet been time to give the attention to anything else but the regular range firing up to and to include 1,000yds, in some few cases, generally only up to 600yds. Skirmish firing, than which there is no more important training that can be given, receives no attention whatever, except at the annual competitions by a few men selected to compete at Department, Division or Army contests, and perhaps even by these men for the first time in their lives, because why? Because all their time and energies have been devoted to making successful shots and marksmen on the regular ranges, and there being no comparative excellence established, and skirmish firing not entering into any classification, qualification or figure of merit, it is viewed with indifference, because it does not help Captain John Smith's company to excel and take a high stand as compared with that of Captain Tom Jones's company in the target reports.

I have been shooting at army target practice off and on since 1879—when first Laidley's system was inaugurated—and I have never seen targets D, E, F, G, or either the movable or vanishing targets, and have never seen skirmish firing except at target B, in competition at Department headquarters.

Laidley, par. 473 to 487 inclusive, gives the instructions for file, volley and skirmish firing, as well as at movable and vanishing targets, and an examination of these instructions shows a good system, except that only ten rounds annually are required at skirmish firing, at distances from 400 to 200yds., showing how little importance was attached to this mode of firing by him; and but little more encouragement has been given by the supplemental orders on the subject, G. O. 53—A. G. O., 1882, only mentioning skirmish competitions from 600 to 200yds., and that "skirmish competitions will be encouraged and should extend to ranges of 800, 900 and 1,000yds."

How can men compete who have never been trained at this firing? I was a competitor last fall, and I never had fired before as a "skirmisher" in my life. All my time had been spent on the range from 100 to 600yds., trying to follow the orders, and I had had neither time nor opportunity to practice as a skirmisher. I had even been refused permission to build a long range up to 1,000yds. to exercise the men at long-range firing up to this distance, even although Laidley and the orders state that "marksmen will fire at targets up to 1,200yds. range," and I was therefore debarred from any chance to practice as a skirmisher, as long-range practice for marksmen comes first in order and importance in the system and orders.

Another vital fault in the system and orders is the want of recog-

nition of the calvaryman and his carbine. The system and orders are all based on the infantryman with his rifle, and yet my troop of cavalry, with their carbines, has to compete for excellence in figure of merit with all the infantry companies in the Department, and receive censure if it does not come up to what is considered a fair degree of excellence, the infantryman with his rifle being the standard.

Now for firing on foot I hardly think there is any rifleman who will contend that the same average excellence can be obtained from a gun with a 32-inch barrel, 16½ inches between sights, and with 55 grains of powder and 405 grains of lead, as from a gun with 32½-inch barrel, 26½ inches between sights, and with 70 grains of powder and 500 grains of lead. At short ranges the shorter piece may be held more steadily by some men; but I have used both, and I know that for all distances the rifle is to be preferred as the more reliable weapon. Good shooting can and has been made with carbine, but better with the rifle, and such will always be the case, for reasons well known to every rifleman and not necessary to mention here.

The carbine is not recognized by Laidley except by a description. It is not recognized in any orders except for mounted practice, and it is excluded from all Department, Division and Army contests, even though perhaps it is the only weapon the competitor has ever shot with. Practice on the range even, with the rifle, soon begets a want of confidence in the carbine in the cavalryman's mind that is fatal to his success in the field, where he can use nothing but his carbine; and therefore cavalry commanders keep the rifle from the hands of their men, knowing that efficiency in the field depends upon their knowledge of their own arms, and in range practice try to beget confidence in and give knowledge of the carbine alone.

It is useless to say that a good shot or an expert can shoot equally well with any weapon, and that therefore the weapon is only a matter of branch of service. A good or an expert shot with a carbine has got to learn to be one in it, and success in the field with it, and a good shot with the rifle would have to use and learn the carbine also to succeed. It is granted that an expert can soon learn any weapon different from his accustomed arm, but he must learn it all the same, and become accustomed to the difference of balance, of recoil, of degree of elevation, etc., before he can hope to succeed.

Is it not, therefore, unjust to classify and qualify and compare cavalrymen and infantrymen by the same standard? Is it not folly to expect that cavalrymen who have never shot with a rifle can be expected to go to one of the annual contests, take a rifle for the first time in his life, and try to compete with men who have never shot with anything else? Last fall I saw disgusted cavalrymen for just such reasons; they had to take a new and strange arm, a kind they never had shot with before, and in three days' practice be supposed not only to learn the new arm, but miss the individual peculiarities of the particular weapon they had never seen before, and be ready for the three days' competition.

That cavalrymen have ranked high on Department, Division and Army contests is very true, but they were exceptional shots; and not only that, they had had long practiced with the rifle before they ever entered the competition, and shot with the same rifle they had used before and knew thoroughly.

From what has been thus far written in this and previous letters it is perfectly plain that I do not agree with our present system in any of the points thus far mentioned, and I will now discuss the perhaps greatest of all faults, namely the "qualification" and "classification."

Laidley, par. 532, states what such qualification and classification shall be. He says nothing short of being 80 per cent. for either two or three best scores at 200, 300, and 600 yards that makes a man a "marksman;" and my first idea on reading his book was that it was to be 80 per cent. of the "maximum possible" for all the shots fired at each of the three ranges during the year, and the same for the 66 per cent. necessary for first class men, and 50 per cent. for third class men. But orders have since defined this to be as it now is, and as before stated, no account is taken of the worst shooting.

That 80 per cent. is a high average for all the shooting at each of the three ranges I very well know, and so have shown; but cannot something more real than three best scores be taken as the necessary qualification? Cannot we have something that on its face tells the exact truth? And if a proper system from the 100yd. range up is followed, will it be so very hard to classify men on their average even though it be lower than 80 per cent., as may be shown by experience to be necessary? We have placed the man at 100yd. range and have kept him there until he began to show some evidence of proficiency, as a preliminary to his shooting at 200yds. Suppose now, when he goes back to 200 we give him a certain number of shots as preliminary practice at this range, during which he learns the elevation necessary, becomes used to the diminished size of the target and bullseye, etc., and then put him on his record, each shot to count in his annual classification and qualification, will he not try harder with every shot and not throw away a single one for fear it will spoil his average? And if he should make a "3" will he not try harder for a "5," in order to balance it and keep up his average if still kept at 80 per cent?

The same way he should begin his preliminary kneeling at 200yds., keep on firing there as has been done familiar well by the new position—but not for record in his 200yd. off-hand score—then be given a certain number of trial shots at 300yds., to there learn his elevation, etc., before he begins to shoot for record. And this same can be carried through all the ranges.

Then why should a man go back to 100yds. October 1 and begin again? If he has been properly grounded here, as he should have been before he ever fired a shot anywhere else, he needs no more practice there, and he should progress onward on October 1 from where he found himself September 30. True it is that some date is needed as ending the year and to make reports, classifications, etc., but because a man has failed to make his qualification good by midnight September 30, is he to go back and lose it all on October 1? Is he any the less a marksman because he failed to get in his last score on time, but would have gotten it in on October 1 if he had had the chance to do it? True, he cannot be classed as a marksman for that year on the reports, for the reports bar him out, being made from what was the fact September 30; but could his credit not be carried over to the next year, and he be given the benefit of it so as not to have to go back and begin over? So that if he does not come in on this year he can on next, and his certificate would show the fact that he was from Oct. 1, 1882, to Oct. 1, 1884, making his record, or whatever two or three or four years he qualified in.

It is this continual going back which bars out so much necessary practice. We "travel around in a pint pot" during the entire enlistment of the man and never give him a chance to progress. We keep on trying to perfect what should of itself have shown perfection, instead of going on to better and higher styles of shooting to obtain perfection there as well.

My idea is that once a proper marksman always a marksman, and then pass that man on to the longer ranges, or to more difficult feats of marksmanship at movable and vanishing targets, as a skirmisher, etc., believing that there is no fear that his short-range work will ever fall off: for there will be days when the wind, light weather, or what not, will preclude him from long-range or difficult practice, and he can then devote himself to short-range work to "keep his hand in."

Neither does our system recognize the fact that the *personelle* of our army is constantly changing. Fresh blood is coming in continually. There are constantly new men to instruct and take through preliminary training, and time should be given to them, leaving the old er and experienced shots to go on with their work which they have learned, and for which they have received instruction. More attention could then be given to teaching the new men, to bring them up to the same efficiency as the old, and more rapid advancement made from not having needless work to go over.

The recent orders raising the qualifications on which to qualify marksmen, etc., are, to my mind, not in the proper spirit. Increased efficiency means the retaining of the same men who acquired proficiency under the old qualifications. How many men are there left who entered it five years ago, and who last year helped swell the list of marksmen? Many, if not the most, of them are gone, and a higher qualification is set down for the recruits who take their places, and not for those who were discharged and who, perhaps, never will fire a shot again in the army.

As it affects officers it is all right, for they are in the army for life, and constant increase in efficiency should be demanded. If I made myself a marksman last year on two best scores, it is to be expected that this year I can again become one on three, next year on four, and so on; but then I do not expect my discharge until I resign, and I am not in the same category as the man who is in for five years only.

If the qualification had been raised for all those men who have yet one year to serve, and who had previously qualified as marksmen, perhaps there would have been some utility in the order; but as it is, it only increases and extends the errors of the present system, with but very little benefit to the service. It would have been better, to my mind, to have raised the qualification by including efficiency at skirmishers', movable and vanishing targets, and so have inaugurated the progressive system so badly needed.

Another point is that no allowance is made for the various climates in which our army is scattered. By a positive order the practice at this post was arbitrarily stopped last fall long before bad weather set in and when there were yet many weeks of fine outdoor weather to be expected. All this fine weather, which lasted for nearly six weeks after the cessation of practice under the order, was so much time lost on the ranges. Men who were just ready to complete their practice by successful shooting at longer ranges were arbitrarily debarred from so doing, and the time has been irretrievably lost.

Discretion should be allowed in this very matter in order to enable those who know the climate they are stationed in to be best taken advantage of. Our spring at this post is very late, and no dependence can be placed on weather being suitable for practice much before June 1. "By order" target practice begins April 1, and there was not a single proper target practice day in the month, either this year or last, on the days set apart for target practice, and I have had but two so far this month. Perhaps it would be just as well if I did not have any now until the weather has fully settled, for Laidley says "the firing, however, when fairly begun, will continue on successive days, and long intervals between the firings will be avoided," and bad weather makes long intervals at times.

The 30th of September should make no difference in the practice. That date or any other can be taken as the time on which to render reports, classify, etc.; but men should be kept on with their individual practice from where they may be on that date, striving onward for something higher and taking advantage of every fair day until winter actually stops it. Even during the winter there are many fair days when men need not be bundled up, and they should be required to take advantage of them to have to shoot under any and all circumstances under which battles may be fought. Unfortunately we have not yet that control over wind and weather so as to preclude the idea of ever being required to fight in rain, cold wind or snow, and if progression was the rule instead of retrogression, we would soon be able to acquire efficiency under these disadvantageous circumstances instead of always being "fair weather shots."

In the South, where the weather is open the year around, out-door practice can be had at all times. They of the South should therefore be much more efficient than we of the North, where snow flies for at least six months in the year. The best we can do is to keep up our gallery practice and so keep up efficiency, so as to be ready to take hold again when spring opens, where we left off in the fall. But any out-door practice we may be able to catch should count, and any scores made at any time during the target year from Oct. 1 to Sept. 30, should be accredited to the marksman. In this Department such is not now the case, and we are debarred all credit for scores made between certain dates.

Again, the system and orders, so far as they affect cavalrymen, are very defective in the means and methods for exercising the men in mounted carbine and pistol practice. Laidley does not recognize any mounted practice at all, and G. O. 57, A. G. O. 1882, is the nucleus about which all the mounted practice centers.

Much has been written much better than I can express it, upon mounted practice, and much has been done, particularly in the Department of California, in this practice; but if competition and rewards are necessary to produce excellence, as would seem to be the case from the methods adopted for dismounted practice, then this mounted practice is unrecognized, and it is only for the love of the thing and for the sake of proficiency in the field that any success whatever has been obtained, as well as its being in spite of and not because of the modes and methods recognized by orders.

As before stated, G. O. No. 57, A. G. O. 1882, is the basis, and it starts out by "taking Laidley's 'Rifle Firing' (second edition) as a guide, so far as applicable to the above named arms," while, as before stated, Laidley does not recognize either of these arms—the carbine and pistol.

Then follows the method to be followed. The degree of proficiency required dismounted with the carbine should have first been attained (50 per cent. at 200, 300 and 500 yards) before any mounted practice is had, and therefore, it will be seen that there will be men in the troop who, perhaps, will never practice mounted, for, as stated above, the faults of the dismounted system debar a man from the chance to practice at the higher ranges until he has first attained skill at the lower.

I would ask, has dismounted firing anything whatever to do with mounted practice, except the first teaching of familiarity and dexterity in the handling of the weapon, which can be taught and should be taught at gallery practice and the 100 yards range? Has my ability to shoot and make even a perfect score at any range anything whatever to do with my ability to ride a horse and "snap shoot" with a carbine from his back? I say no, emphatically no. Range firing dismounted, as every one knows, who is a rifleman, tends to disqualify a man from rapid aiming and firing; it makes or tends to make a "poke shot," one who dwells on his aim and hangs onto the bullseye until he has just the right pressure on the trigger to ' eed the bullet to its mark—just the very qualities a mounted shot does not want for success in his mounted shooting.

As I take it the very first practice for mounted firing successfully should be to teach horsemanship, with blank ammunition freely used to accustom the horses to the noise, and the men to their seats on a plunging horse, being careful to repress all careless firing in the air or to the ground, as habits difficult to overcome when once confirmed. No attempt should be made to fire at the target until a reasonable steadiness of the horses has been attained, and reasonable proficiency of the men in loading, aiming and firing their pieces from their horses' backs. Then practice at the target should commence, not for record at first, but to gradually get both men and horses accustomed to the new exercise, and preferably with reduced charges.

The order and instructions teach a point with which I am constrained to emphatically differ. This point is as follows: "The gait will be the gallop, but at first the fire will be delivered at a halt, *the trooper pulling up short to deliver it*, and then immediately resuming the gallop." The italics are mine and mark the point.

Now it may be and doubtless is a fact that horses should be trained to stop quickly for any purpose, but I will leave it to any horseman if this is the way to teach them a new exercise when the object is as expressed by the rest of the paragraph of the order: "This will be continued until the men are sufficiently advanced to fire while the horse is moving at that gait" (the gallop).

The horseman will see that the horse's training is lost sight of. This is a new exercise to the horse as well as the men. He may have become used to the noise by the preliminary practice with blank ammunition, but he has never yet been ridden at a target, for this preliminary blank cartridge firing has had no targets but from men in line, in column of files, on the skirmish line, etc., while exercising at the regular company, or platoon, or skirmish drill; the horse, therefore, sees a new object, a big white target, which of itself is hard enough to ride him at until he is familiar with it, he has every inclination to stop, and by the order he is taught to stop, so that he soon falls into the habit of halting from the gallop as he sees the man raise his piece to fire.

The object being to fire while the horse is in motion, my method (and I claim no originality for it, for it is the method practically of the cowboy or Indian brought down to practice for the men) would be to place several targets on a line, one behind the other, and with sufficient distance between for the man to be able to reload after firing at the first, before he reaches the firing point for the second, and so on, and then to move the men out individually or in columns of files and teach men and horses at the same time to keep up their gait and to fire at each successive target as the firing point for each is reached. Both men and horses would soon thereby learn and both would soon acquire steadiness and proficiency, and the horses would learn no habit of halting as they saw either the target or the man raising his piece to fire. The horse would only learn to go ahead under control, and after he had learned steadiness in this he could then be taught to halt in order to be perfectly trained for the exceptional case of a shot to be fired from a halt.

The trouble is, in all the orders and instructions, that our men and horses are supposed to be trained, and that only the necessary skill of the men is to be sought for in firing under new conditions. Unfortunately, however, our men are much more accustomed to the pick and shovel, and familiar with their use, than they are to their seats in the saddle and to riding and training their horses. The horses, too, are badly trained, or not trained at all, from the infrequency with which they are ridden, and they need as much training as the men.

With the pistol, dismounted practice is only first needed to acquire dexterity in its use and handling. Drills in pistol manual should be as much a part of pistol practice as "aiming and pointing drill" are parts of dismounted carbine or rifle firing, and thereby quickness in loading, in cocking, in aiming and in firing properly can be taught. But the pistol is only a weapon for mounted work, and everything should be made to tend to its legitimate use, and after skill in handling has replaced awkwardness then mounted practice should be exclusively followed, for he who can successfully snap-shoot from horseback can be reasonably expected to shoot well when on foot, as he may be called upon to do in exceptional cases.

But from what I have said is it not sufficiently clear that our system and orders need overhauling? Is it not plain that, even so far as affects infantry, who have only one weapon, a better system can be devised, and when cavalry is considered with their four styles of practice—carbine and pistol, both mounted and dismounted—something more rational is required? I have to have four target practices a week to the infantryman's two a week—two dismounted for carbine and two ditto for pistol. When the men become well enough trained at dismounted practice I will have to have two more to give the mounted practice required, and yet keep up the dismounted practice to make marksmen first and second class men and a high "figure of merit" in competition annual reports, as well as to teach the skill now supposed by order to be required before a man can practice mounted. That will be six target practices a week to keep my end up and stand well in annual reports and yet acquire the necessary proficiency for my legitimate work as a mounted man. Understand I am not complaining as to the amount of work, for that is what I am paid for and what I take delight in, for I would rather drill than not if I only could get the men to drill; but is it any wonder that some of it is sighted and overlooked when it is understood that it is like "pulling eye teeth" to get the men for the work? Is it any wonder that that which is recognized by a cast-iron order is what receives the most attention? Is it any wonder that that in which there is no competition or reward is neglected for that in which there is?

I believe in emulation when properly regulated, as much as any one; but I do not believe in "bunncombe." I believe I should be required to teach my men skill and proficiency both mounted and dismounted; but I also believe I should be given a reasonable method with which to do it—and reasonable competion for which to strive. Why cannot the annual competitions and reports be so arranged as to recognize me as a cavalryman, and my horse as a well-trained cavalry horse? Why should I compete dismounted with an infantryman with his weapon and he not compete with me with mine? Why should I not be placed on a basis of my own, and compete with cavalrymen as cavalrymen—both with carbine and revolver? Has not the time come for cavalry to be encouraged and brought up to the state of efficiency required by modern modes of warfare? Am I to practice as a dismounted man simply, and acquire skill to compete with infantry on foot, when my legitimate place is in the saddle, using the weapons with which I am provided with all the excellence attainable? On the field of battle has cavalry lost its usefulness, or are there not possibilities for its being put to a new use, and with carbine and revolver raining lead upon an enemy to perhaps save a battle?

I am a marksman by our system, but I am also a cavalryman and much more proud of that. Let us cavalrymen therefore have a system that teaches us efficiency in our legitimate field. We will not be any the worse for it when we should find ourselves "fighting on foot," and we would be what we should be when mounted, instead of the mounted "mob" we now are.

C. D.

FORT MCKINNEY, Wyo.

RANGE AND GALLERY.

THOMASTON, Conn., June 4.—Yesterday several members of the Empire Rifle Club went to Collinsville to shoot the first of a series of matches with the Canton Rod and Gun Club. The terms of the match were for teams of ten men each, ten shots per man, distance 200yds., Massachusetts ring target. Following are the scores:

Canton Team.

C B Hull	11	11	10	11	10	12	11	11	12	9—108
J Laubenstein	12	11	12	9	10	11	7	11	12	10—105
B C Higley	9	10	12	11	6	12	11	9	11	12—103
J H Bidwell	9	9	10	12	10	11	8	11	9	10— 99
S J Lyon	9	10	10	9	8	10	9	11	10	10— 96
J D Andrews	10	10	8	8	10	9	8	9	11	12— 94
G J Case	7	12	8	8	7	11	10	9	11	11— 94
G Barbour	7	10	12	5	10	5	10	8	12	11— 90
J B Flint	11	11	8	8	9	9	9	8	11	4— 88
G F Lewis	11	8	8	7	10	11	8	11	7	4— 85—962

Empire Team.

G Canfield	9	9	11	10	10	11	11	12	10	8—101
E Thomas	8	11	8	8	8	11	9	12	10	11— 96
A S Hubbard	7	10	10	11	10	8	6	11	11	11— 95
F Carr	8	12	9	8	6	10	12	9	10	11— 95
W H Dunbar	12	11	6	9	9	9	10	9	10	8— 93
C F Williams	11	7	8	10	11	9	11	12	5	9— 92
G Gilbert	5	9	11	7	10	10	12	8	10	10— 92
E Bennett	8	7	9	9	12	7	12	8	11	8— 91
G Lemmon	6	8	10	7	12	7	9	12	9	11— 91
G P North	6	9	9	6	10	9	9	4	9	9— 80—926

This was the first match the Empire Club ever shot, and no member ever took part in a match before.

At the weekly shoot, for some unaccountable reason the scores were very low. W. H. Dunbar won the badge with 95, C. F. Williams scored 92, F. Carr 91, G. P. North 88, G. A. Lemmon 85.

BOSTON, June 7.—Had it not been for the intense heat to-day the few shooters at Walnut Hill would probably have rolled up great scores. The attendance was small, as is usual after a semi-annual meeting, but the shooters had good weather conditions. Mr. Cushing put up two scores of 46 in the Creedmoor match, and in the rest match Mr. Berry had a fine chance to test his new 32-cal. Maynard. He scored a fine 97. Next Saturday there will be a match between teams of the Massachusetts Rifle Association and the Manchester Club, by telegraph. Following are the best scores to-day:

Creedmoor Match.

C E Berry	5455555544—47	W H Oler	4545554445—45
Re-entry	4555445455—47	S B Spooner	5544455544—45
H Cushing	5544455455—46	B A Lappen	4544545454—44
Re-entry	5554554546—46	A J Look	4451555153—44
R Davis	4555455445—46	J E Darmody, mil.	4443545554—42
C B Edwards	5554455445—46	F W Fowle, mil.	4343435535—37

Rest Match.

C E Berry	9	10	10	10	10	10	10	10	9	9—97
J Halsey	10	10	9	10	10	8	9	10	9	10—95
R Reed	9	10	7	10	10	9	10	9	10	10—94
Salem Wilder	10	10	8	10	9	9	9	10	9	9—93
J Francis	9	9	8	10	9	10	10	10	10	8—93
W Charles	9	8	9	10	7	10	10	10	10	10—93
B A Lappen	9	8	8	9	9	10	9	10	10	9—91
S B Spooner	10	10	9	9	10	7	8	9	9	10—91
P Sylvester	10	8	9	8	10	8	10	8	10	9—90
A J Look	8	9	8	9	9	9	9	9	10	9—89

GARDNER, Mass., June 5.—At the regular meet of the Gardner Rifle Club at Hackmatack Range yesterday only a half dozen of the members found the target. The American decimal was used, distance 200yds., shooting off-hand, with a possible 100. The following is the score:

G F Ellsworth	10	9	9	10	6	10	10	8	9	9—90
I M Dodge	9	9	9	9	7	8	9	10	7	7—85
A Mathews	10	9	8	10	7	7	9	6	9	9—84
W C Loveland	9	8	9	10	8	8	10	10	7	10—81
G C Goodale	9	9	6	8	10	9	10	9	10	6—74
H G Hicks	6	7	8	9	5	6	9	7	4	6—66

JAMESTOWN, N. Y., June 6.—The following scores were made today at the regular medal shoot of our rifle club, Creedmoor target, 200yds., no wind and bright light.

H Y Perry	5455454445—45	A F Ward	5533444444—40
Geo Shattuck	4344544444—40	A F Warner	4453444435—40
H A Ahlstrom	4444444444—40	R H Burns	5544444440—38

NEWARK, N. J.—The shooting festival of the Newark Shooting Society opened Monday last at the Shooting Park, and continued four days. The target of honor was open to members of all societies that had contributed prizes, each shooter obtained but one ticket and one prize. The principal prize which was offered on this target is $100 contributed by the society. On the ring target $450 will be distributed in 20 prizes; also premiums as follows for the best three tickets: $2, best three tickets; $3, best three tickets. On the main target the total amount of prizes was $275. The best target of the day was the bullseye, on which $450 was divided—for the best three bullseyes, for the second best three bullseyes, and for the third best, and so on.

FITCHBURG, Mass., June 4.—The following gentlemen were the successful competitors for the six prizes offered by G. W. Parsons, to be shot for in his rifle gallery, for the month of May. Target, 200yds., reduced to 20yds., 40 shots possible 400: Prof. C. J. Becker 397, C. C. Cutler 396, H. C. Kendall 391, W. P. Churchill 378, C. L. Jael 371, E. J. Whitney 369.

BLOOMING GROVE PARK.—Match shot on Decoration Day for prize medal:

Nason	3	43443—18	Smith	2	00033— 6
Hughes	0	22330— 9	Dillingham	2	000
Van Gelder	2	23033—11	Vyse	3	23425—16
Fielder	0	00002— 2	Hodgman	3	24244—16
Baldwin	0	00332— 9	McCord	4	03201— 7
Dennis	3	43343—17	Post	0	24232—13

BELLEVUE, O.—Gallery shooting; range, 67ft.; 7/10 bullseye, 1/10 rings, paper targets; 10 shots in succession, possible 100. Average percentage for April and May: Bodette, 89.5, 86.7; Wollenslagel, 87.1, 86.6; Ebertshauser, 87.4, 87.3; Aigler, 84, 86; Sherk, 78.6, 84; Yearick, 78, 82; Webster, 75.2, 82.5; Gera, 84.6, 82; Lewis, 81.6, 84; Mayne, 78.5, 80; Headings, 87, 79.8; Higgins, 82, Thornloe, 72.3—H. E.

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

A CLAY-PIGEON PUZZLE.

FREQUENTLY when the clearing of the smoke shows to the disappointed hunter the frightened bird unhurt, only hastened in her flight, he is conscious of a degree of surprise mixed with his disappointment. He has felt sure that he was cool and held where he wanted to, and the result should have been an addition to his bag and the satisfaction arising from a thoughtful, successful shot.

Anxious to find the fault or occasion of the miss, I think generally it is forced upon him that his judgment was in error. If really he thought he was right and if really he was cool enough to do as he thought was right, it is clear that in the judgment was the trouble. There is great chance here for many a failure, and I think that a certain natural gift, an intuitive knowledge of, or conception of, successful conditions is what places many an one easily first among his circle of sportsmen acquaintance.

An error in placing the distance of your game, the direction and swiftness of flight, is sufficient to count a miss even before your fire. Experience develops increased capacity, and so young hunters, who have everything to learn, gradually become accomplished Nimrods

and can talk of their long and wonderful shots instead of having only failures and "try, try again's" to mourn or laugh at.

But I confess that I am somewhat surprised when many of these conditions of uncertainty are removed—when, within certain limits, a uniformity of conditions is assured—that so many good marksmen fail in making more and nearly perfect scores.

I refer to clay-pigeon shooting. In this sport, it is an assured fact that the target will start from a given spot, and that it will start at a known and arranged instant, and that in all human probability there will be ample time to secure aim and to kill, and that it cannot fly beyond the range of your gun (if you have one which is what it ought to be for such sport). And yet good shots as well as poor ones will miss again and again chances which are all in favor of the shooter, and which at other times they have no difficulty in making.

In other words, I am surprised that there are not more phenomenal shooters, whose scores are continually high and nearly perfect. I wonder at myself that I do not do better; I am amazed at my friends and their failures. Some of us are fairly good shots; we burn a good deal of powder, we are enthusiastic and regular in our shoots, and "go in" for all we're worth to force the average of our scores up near the "clean" line, and we are not as yet happy.

Now, why does not this smashing of the clays become more mechanically uniform and successful to those who shoot continually?

Is there anybody "sure?" and if so will he please "rise in his place" and tell us how he loads, how he holds on or ahead; in fact, just how he does it. It will be instructive and interesting reading. B.

RECEPTION OF THE EXETER TEAM.

THE citizens of Exeter, N. H., turned out to give the victorious team a fitting reception on their arrival from Chicago, Monday, June 2. The Exeter *News-Letter* describes it as follows:

"At 8 o'clock the band, accompanied by a large number of torch bearers, marched to the armory, where the members of Company D had assembled, and the procession was formed. They marched to the depot, where the team found on their arrival a large crowd gathered to welcome them home. Each member of the team was presented with a handsome bouquet, and they were placed in an open barouche drawn by four horses, and escorted in triumph to the square. The road was thronged with people, and their congratulations of the team were enlivened with the firing of crackers and cannon. The band played well, the soldier lads looked finely, the crowd was enthusiastic and the victorious marksmen were proud, tired and happy. Mr. Getchell can congratulate himself on the complete success of the affair, for not a single suggestion of addition or change in the programme could be thought of by the most confirmed grumbler that would not have marred the reception. When the procession reached the square in front of the Town Hall, they found a huge bonfire kindled, Mr. Hervey's house and G. Weston Leavitt's store were decorated with lanterns and the windows of the house filled with admiring spectators. The sidewalks were quickly filled with the crowd, and after the carriage containing the team had stopped in front of the Town Hall, Hon. John D. Lyman made the address of welcome, as follows:

"GENTLEMEN OF THE EXETER SPORTSMEN'S CLUB: Welcome, thrice welcome home! The military and citizens, yea, and the ladies come forth to bid you welcome as victors and to rejoice with you over the blushing honors and triumphs won, while torches and illuminations fittingly light up these scenes of our congratulations. No emotion is more natural to generous souls than that which prompts them to welcome home the victors of heroic or artistic achievements. We come out to-night to welcome the victors, as the Greeks and Romans and every noble people of antiquity were wont to do. If the Greeks, the most cultured of all the ancient nations, and from off whose altars American civilization is now daily plucking live coals to add to the brilliancy of its own enlightenment, thought it not unworthy to compute their time from eras marked by their sports and Olympian games, we may well heed their example in duly developing the wonderful physical powers with which a kind Heavenly Father has endowed us. Greece is scarcely better remembered for her Socrates and Demosthenes than for the marvelous skill of her citizens with bow and javelin. The chisel of Phidias is as immortal as the pen of Homer, and in sacred story the sling of David as the sayings of Solomon.

"Gentlemen, the art of shooting is the art of national defence. It is the art practiced so well by the heroes of the old French and Indian wars, some of whose headstones are hid from view very near where we now stand; and again so well by Gen. Folsom and Light Infantry Poor and their comrades in the Revolution and the later heroes of 1812; and never better than by those whose graves bear fresh decorations and the veterans who are here to welcome you to-night. Long, long may they live to enjoy the land they saved! Were not the barrier between those departed heroes of old and the living impassable, they might be here to-night to greet those who practice so well the art of shooting, by which they maintained the national liberty. As the law of Jehovah came forth from amid the thunder and lightning of Sinai, so liberty had her birth, and is maintained by the thunder and lightning of men who shoot. So far in this bloody world, shooting has seemed to be one of the fundamentally necessary arts, and the same steadiness of nerve and accuracy of sight that hits the glass balls in your contests will cause the nation's foes to fall at our country's call.

"'Do good to those who hurt you,' say you, my good friend Chase. Well, no man on earth ever tortured me worse than you have, Dr. Gerrish. Now I apply the good pastor's rule and say most earnestly, may your joy over this triumph of the skill of yourself and gentlemen of the club be as intense and far more lasting than was my anguish when you applied your remorseless steel to my strongly-rooted molars. Language can wish no greater.

"You, my friend Stark, won the diamond badge. Well, you could do no less and keep up the reputation of that Stark who taught the Indians of our wilds and the red coats at Bunker Hill, and both at Bennington, of his shooting qualities. You, Taylor, may proudly bear the name of him before whose shooting qualities the hosts of Mexico fled in despair. Cooper and Jenkins are worthy of such associates. At Concord bridge, a century since, a few patriots fired shots that were heard around the world as quickly as horses and sails could speed, but Jove flashed your victory over continents and under oceans in the twinkling of an eye. In presence of this vast audience, standing close by the historic spot where the first government upon the American continent in independence of the mother country was instituted, facing the venerable building where Washington was entertained, near by the resting place of heroes of the old and recent times, and in the presence of veterans from battles as nobly fought as any in the annals of time, we pray that your success, gentlemen, in all noble enterprises may be as great as that of your shooting at Chicago.

"Dr. Charles H. Gerrish responded on the part of the club:

"I thank you for the kind reception you have accorded us on our return from Chicago, and can assure you this welcome is for us the proudest feature of our trip. We left here a week ago last Saturday, as you all know, to represent the Exeter Sportsmen's Club at the Ligowsky Clay-Pigeon Match at Chicago. At Worcester we met the club from that city and continued in their company until we left them at Worcester on our return. And let me pause here to pay these gentlemen a well-deserved tribute for the large part they contributed toward making our visit and our journey pleasant. Their kindly wishes for our success and their cordial congratulations when success was achieved will long be remembered by each of us, side by side with this flattering reception you have accorded us. We arrived safely in Chicago, and put up at the Palmer House, where many of the clubs made their headquarters. Tuesday the wind blew a gale, so it was decided to postpone the shoot until the next day. Wednesday morning when I arose I raised the curtain and saw a pennant standing out straight from its staff with the force of the wind. I turned to my room mates—I may remark there were three of us in the room—and said, 'Boys, it blows like the devil. Our chances are good.' We shot and scored thirty-five. It was not a large score—it was a very poor score not one of the teams who were present would have accepted. They would rather have shot. Yet when the thirteenth team finished, thirty-five led the list. The next morning when I arose I looked out of the window and saw that same pennant standing out as flat as a pancake. 'Boys,' said I, 'it is blowing hard. We have a good chance.' We shot and scored thirty-three. It was not a great score. No team present would have accepted it, yet it was enough. The team has taken in prizes over $1,400 in the tournament, including the grand prize of $750 and the diamond badge awarded to the best individual score, valued at $250. I thank you in the name of the team for your welcome home, and hope that in future your welcome will be just as cordial whether we come as victors or vanquished.

"At the conclusion of the doctor's speech, he asked Mr. Stark to arise and let the people see the diamond badge won by him at the tournament. He at once arose, amid the cheers of the large assemblage, and the badge, which was fastened to the white satin ribbon by which Mr. Stark gained admittance to the field, was plainly seen attached to the lapel of his coat. The badge is of fine gold with a large diamond in the center, surrounded by a laurel wreath finished in colors. On the top is a pigeon with extended wings, also finished in color. It was made for the Ligowsky Clay-Pigeon Co. On the reverse side is the inscription:

DONATED BY THE
LIGOWSKY CLAY-PIGEON CO., OF CINCINNATI, O.,
TO C. M. STARK,
EXETER SPORTSMENS' CLUB,
INDIVIDUAL CHAMPIONSHIP,
1ST INT. C. P. TOURNAMENT, CHICAGO, MAY, 1884.

"At the close of the tournament it was at the option of Mr. Stark to take the badge or $250 in cash. He took the badge.

The barouche containing the team was then escorted to the store of Mr. Getchell where they alighted, and the crowd slowly dispersed. At 10:30 the Sportsmen's Club entertained the "team" and a few friends at Hervey's, where a sumptuous repast was served, and an hour was agreeably spent in hearing pleasant reminiscences of the Chicago tournament. Regret was expressed by all present that Mr. Hervey could not entertain a larger number at this time, so that the club could have made the invitations more general.

The club was organized several years ago to shoot at glass balls, which took the place of live pigeons owing to a feeling in the community that the birds suffered during the sport. Before the organization of the club, there was an "annual pigeon shoot" that took place on one or more May days, and the last one was so successful that it was decided to organize a glass ball club for practice. A ground was secured through the kindness of the late Mr. B. L. Merrill, on one of his pastures near Little River, and the same sport was indulged in with more zeal than success. Messrs. Cooper, Taylor and Gerrish were among the early members and have continued their interest in the club ever since. The substitution of glass balls thrown from a trap for birds took every objection from the sport and the club flourished.

After a year or two grounds were secured on the Kensington road, and afterward they removed to the rear of the jail where permanent quarters were established, and the roll of membership increased very rapidly. A club room was secured on Water street where members could meet and transact business or talk over the incidents of the sport. This was, however soon abandoned, and the house on their grounds became their headquarters. About this time the club began to feel strong enough to meet other oragnizations. One of the strongest organizations in this vicinity was the Powow club, of Amesbury, Mass., and with them they tried conclusions several times, but were always overmatched. A short time ago a regular summer shoot was decided upon, and the first proved such a success that they have been kept up regularly. The home team has improved so steady that they have always held their own against all comers, and the interest of the annual shoot has given an impetus to the interest in the club that has carried it through the year. The club was never in better condition than at present, and the skill of its crack team won the respect of all with whom it has come in contact.'

MAINE.—Topsham, June 9.—The third match for the Ligowsky medal between the Riversides and Bethels, was shot on Tuesday, June 3, at the Fair Grounds in Topsham, resulting in favor of the Riversides, the following scores being made, under the conditions governing the medal, Bethels challenging:

Bethels.		
Wormwell	1111011010	10 11 01 10 11—14
Young	2111001111	11 00 11 01 00—11½
Clark	1011110110	01 11 10 01 10—13
Powers	1111100111	10 10 10 01 00—12
Billings	1111111221	10 10 11 10 01—15–65½
Riversides.		
A Q Goud	1111201111	11 10 11 01 00—14½
G H Goud	1112111111	10 11 11 01 10—16½
Keay	0121111211	01 10 10 11 01—14
Alexander	1122111111	11 11 11 10 11—18
Hall	0100111111	10 01 11 10 01—13—76

BLOOMING GROVE PARK.—Decoration Day matches at clay pigeons:

Van Gelder	111000010w	Nason	1111111111—10
Baldwin	001100000w	Van Gelder	0001100000—2
Vyse	0001000 w	Baldwin	1110100011— 6
Nason	0110111101—7	Smith	0010000110— 3
Hughes	0111110111—8	Hodgman	00100 w
Fielder	0000000 w	Dillingham	0100100110— 4
Hodgman	01010000 w	Vyse	1000100110— 4
Smith	011101000w	Dennis	01000 w
		Hughes	0110011100—5

KORTRIGHT SPORTING CLUB.—Kortright, N. Y.—May shoot. Conditions: Standard traps, 18yds. rise:

F J Bailey	0 0 0 1 1 0 1 1 1 1 1 0 0 1 1— 9
A Turner	0 0 1 1 1 1 0 0 1 0 0 0 1 1 0— 7
D S Jones	1 1 1 1 0 0 0 6 1 1 0 0 0 0 1— 7
E H Davis	1 0 1 1 0 0 1 0 0 1 0 1 0 0 1— 7
C E Turner	1 0 0 0 0 1 1 0 0 0 1 0 0 0 0— 4
Wm Blake	0 0 0 0 0 0 0 0 1 1 1 1 1 1 0— 6
J Haddon	1 0 1 1 1 0 0 0 1 1 1 0 1 1 0— 9
E Dibble	0 0 1 0 1 0 1 1 0 1 1 1 1 0 0— 8
C A Jones	0 0 1 1 1 1 1 1 1 1 1 1 1 0 0—11
J L Cleveland	1 1 1 1 0 1 0 1 1 1 0 0 1 1 0—10
D Robinson	1 0 0 0 0 1 0 0 0 1 0 1 1 1 0— 6

D. S. J.

WELLINGTON, Mass., June 7.—The sultry air of the city and the incitement of the medal match tended to augment the number of shootists at the Malden Gun Club at the Wellington range to-day. The various events resulted as follows:

First event, badge match—Buffum, Nicholas and Sanborn, fifteen each, taking first, second and third respectively.

Second event, five birds—Brown first, Lewis second, Hopkins third.

Third event, five birds—Dickey first, Scott and Snow divided second, Brown and Nichols divided third.

Fourth event, seven birds—Hopkins first, Adams second, Pratt and Nichols divided third, Warren fourth.

Fifth event, five balls—Dickey first, Saunders and Brown divided second, Hopkins third, Nichols fourth.

Sixth event, five birds—Dickey first, Short second, Hopkins and Warren divided third, Nichols fourth.

Seventh event, three pairs birds—Hopkins and Saunders divided first, Brown and Scott divided second, Nichols third, Pratt and Snow divided fourth.

Eight event, five balls—Dickey and Hopkins divided first, Warren and Shattuck divided second, Pratt and Lewis divided third, Scott and Short divided fourth.

Ninth event, seven birds—Dickey first. Scott and Snow second, Hopkins third, Warren and Lewis divided fourth.

Tenth event, five birds - Snow first, Short and Brown divided second, Shattuck, Hopkins and Warren divided third.

Eleventh event, five birds—Dickey and Snow divided first, Adams second.

BOSTON, June 4.—To-day was shotgun day at Walnut Hill, and notwithstanding the—for this season—unusually warm weather, the attendance was fair, and the day was much enjoyed by the admirers of the sport. All day long, with the exception of about half an hour at noonday, was spent discussing the merits of festive and nutritious baked beans and ample accompaniments provided by caterer Kendall, a vigorous and well-executed attack was kept up on the harmless, featherless birds, and many were the innocents that, by the well-directed shots of the "skillful" marksmen present, were brought to ground in a sadly disabled condition, never again so repeat their rapid and delusive flight. The interest in Wednesday's shoot was largely enhanced by the presence of several shots of celebrity from neighboring clubs. One pleasing feature of the Walnut Hill shotgun meets is the marked good fellowship that always exists among the frequenters of this popular and cheerful place of resort, for lovers of both the smooth and grooved barrels. Possibly the good nature and cheerfulness so abundant there, is largely owing to the influence exerted by the distinctive Boston diet, so freely and frequently indulged in by the patrons of the place. The "spring meeting" of the Rifle Association, which closed on Saturday the 31st ult., the details of which you doubtless have received long ere this, was in all respects successful. The attendance, although not as large as on some previous years, was fair, the financial results satisfactory, and the scores of the riflemen well up to the standard of former days. I think you are correct when you say, "You Boston people appear to keep up the rifle practice better than any other club."

The record to-day stood:

First event, five clay birds—De Rochmont and Evans divided first, Hart and Cutting divided second, Nichols, third.

Second event, five clay birds—De Rochmont first, Snow and Hart divided second, Nichols and Adams divided third.

Third event, five birds, five traps—De Rochmont and Hart divided first, Evans second, Nichols third.

Fourth event, five clay birds—Rowell first, Hart second, Snow and Cutting divided third, De Rochmont fourth.

Fifth event, five glass balls—Evans first, Snow and Rowell divided second, De Rochmont third.

Sixth event, five clay birds—Rowell and Snow divided first, De Rochmont second, Belcher third, Cutting fourth.

Seventh event, five glass balls—De Rochmont and Snow divided first, Evans and Nichols divided second, Adams third.

Eighth event, five birds, five traps—Nichols and Hart divided first, Adams and Russel divided second, DeRochmont and Stanton divided third, Evans fourth.

Ninth event, five glass balls—DeRochmont, Evans and Law divided first, Snow second, Belcher third.

Tenth event, three pairs birds—Evans and Hart divided first, Snow and Nichols divided second, DeRochmont and Russell divided third.

Eleventh event, five clay-birds—Hart and Snow divided first, DeRochmont and Cutting divided second, Nichols third, Evans and Law divided fourth.

Twelfth event, five glass balls—Law first, Snow and Rowell divided second, Evans third.

Thirteenth event, three pair birds—Law first, Snow second, Nichols and Howe divided third, Hart and Rowell divided fourth.

Fourteenth event, five clay-birds—Law and Hart divided first, Rowell second, Stanton third, Thompson fourth.

Fifteenth event, five clay birds—Law first, Adams and Rowell divided second, Stanton and Gooduow divided third, Nichols and Hart divided fourth.

Sixteenth event, three pair glass balls—Nichols first, Rowell and Evans divided second, Law third.

Seventeenth event, five clay birds—Snow and Stanton divided first, De Rochmont and Hart divided second, Evans third, Nichols and Rowell divided fourth.

Eighteenth event, five birds, five traps—Law first, Hart and Stanton divided second, Goodnow third, Nichols fourth.

Nineteenth event, five glass balls—Law first, De Rochmont and Snow divided second.

Twentieth event, five clay birds—Hart first, Law and Stanton divided second, Russell third.

SACRAMENTO, Cal., May 25.—The Pacific Sportsmen's Club held its monthly shoot at Agricultural Park to-day, at a lot of fast-flying birds, the following scores being made; first four at 20yds., rest at 21yds.: Routier 10, Graves 3, Nesbitt 7, Pedler 8, Bronner 7, Vaughan 8, King 8, Swanwell 6, Chapman 8, Davies 7. Routier won the first medal, and in the shoot-off of those killing 8 Pedler won the second medal.

The supply of live birds having been exhausted, there followed some clay-pigeon shooting, with the following result at twelve birds: Chapman 6, Kunz 7, Pedler 9, Tebbets 7, Hopper 6, King 10, Routier 9, Nesbitt 7, Davies 6, Flohr 8, Morell 4.

Another match followed, as follows, also at twelve birds: Tebbets 5, Chapman 7, Flohr 6, Pedler 6, Kunz 8, Ring 7, Routier 5, Bronner 6, Davies 6, Nesbitt 7.

EXETER, N. H., June 12.—The Exeter Sportsmen's Club will give a tournament on their grounds to-day that promises all who attend a grand, good time. The programme is: Sweepstakes at singles, entrance $1; sweepstakes at doubles, entrance $1; team match, three men, entrance $5. All at clay-pigeons, from five traps, constantly filled and changed. Sweepstakes at doubles, entrance $1, at clay-pigeons, from two fixed traps; sweepstakes at glass balls, entrance 50 cents, from single and double traps continuously throughout the day. Ties will be shot off under the same conditions as the matches in which they occur. Ties of two divide, except by consent. Class shooting, 50, 30 and 20 per cent. No postponement.

WINCHENDON, Mass., June 5.—The Winchendon Gun Club have voted to purchase a Holden glass ball trap. At the regular meet yesterday, clay pigeons, score was as follows:

L F Martin	1111111101—9	P S Davis	1110010101—6
F F Hopgood	1111110110—8	G S Loud	1110101000—5
James Sutherland	1101110111—8	F E Mann	0010011101—5

MENOMONEE, Wis., June 6.—The following is a score of a practice shoot of a few members of the Menomonee Gun Club. The low score is owing to the fact that a perfect gale of wind was blowing at the time, making it almost impossible for the shooters to stand up at the score, to say nothing of doing good execution.

First shoot, fifteen clay-pigeons each, 15yds. rise, fourth notch, use of one barrel: Wm. Wilson 13, E. F. True 13, R. J. Flint 10, L. J. Seamans 10, G. R. Brewer 10, S. J. Bailey 10, J. R. Matthews 9, G. H. Seely 8, L. J. Hausen 5.

Second shoot, 10 glass balls, 18yds. rise, rotary trap, use of one barrel: L. J. Seamans 8, Wm. Wilson 7, E. F. True 7, G. R. Brewer 6, R. J. Flint 5, S. J. Bailey 5, G. H. Seely 3, J. R. Matthews 3, L. J. Hausen 3.

Canoeing.

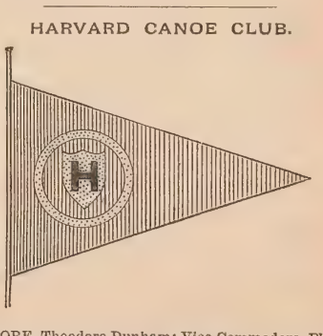
CANOEISTS *are invited to send us notes and full reports of cruises, club meets, information about canoeable waters, and other communications of interest.*

Secretaries of canoe clubs are requested to send to FOREST AND STREAM their addresses, with name, membership, signals, etc., of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to FOREST AND STREAM their addresses, with logs of cruises, maps, and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.

FIXTURES.

June 14.—Knickerbocker C. C., Spring Races, 152d St., N. R.
June 14 to 16.—Merrimack River Meet.
June 19.—Rochester C. C., Summer Regatta, Irondequoit Bay.
June 21.—New York C. C., Spring Races, Staten Island.
July 9 to 15.—Chicago C. C., Annual Cruise.
July 14.—Allegheny C. C., Cruise at Conneaut Lake.
July 19.—Chicago C. C., First Annual Regatta.
July 24 to 26.—Lake George Meet, Lorna Island.
Aug. 1 to 15.—A. C. A. Meet, Grindstone Island.

HARVARD CANOE CLUB.



COMMODORE, Theodore Dunham; Vice-Commodore, Philip L. Livingston; Secretary and Treasurer, Arthur G. Webster. Organized April, 1884. Burgee 10×15, crimson ground, gold ring and shield, black letter H.

A NEW BOATING CLUB.

Editor Forest and Stream:

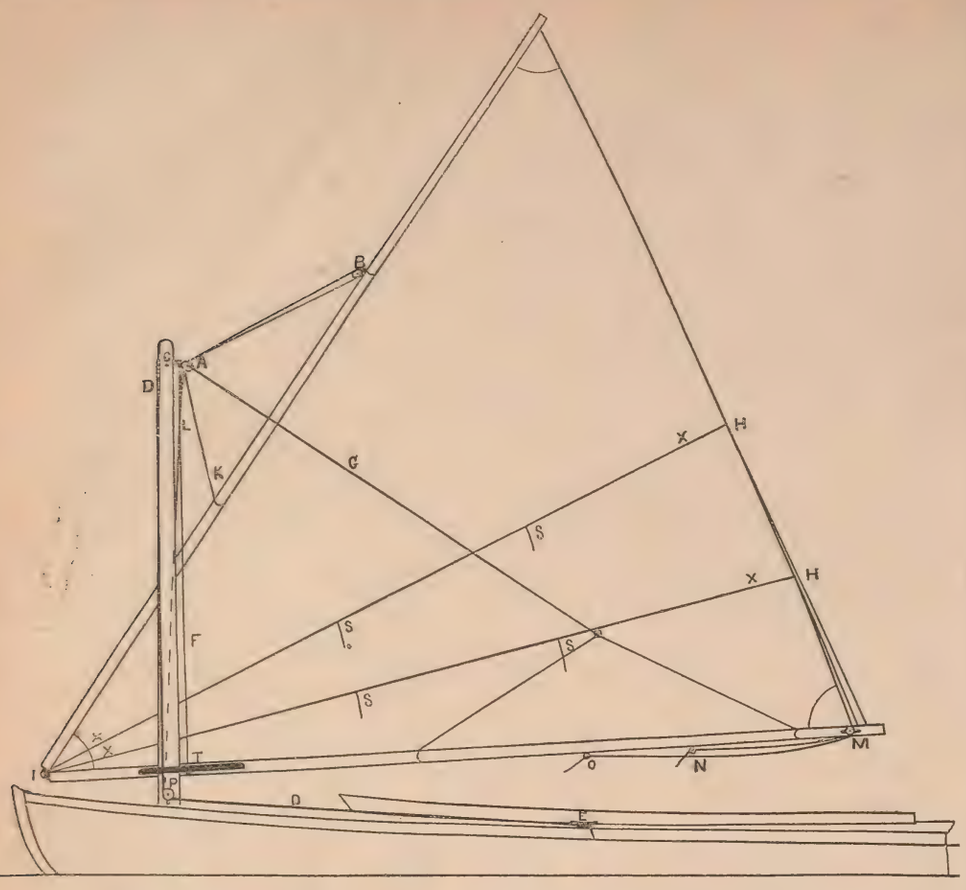
After writing many articles on the subject and talking of its advantages, a boat club has come into existence in Nashville. The practical pioneer of the movement was Capt. Fred Wright, an Englishman by birth but for many years a prominent cotton buyer in this city. True to his national fondness for outdoor sports, he was not long in the city before he had possessed himself of a new boat and enjoyed the healthful exercise of a row on the beautiful Cumberland. The temptation to follow suit was strong enough to induce others to order boats, until the number reached a sufficiency to organize a club.

The name has not yet been decided upon, though with such names as those of T. R. Thurman (president), James Bowron, H. B. Buckner, Jr., L. R. Campbell, J. D. B. De Bow, A. J. Dyas, Van Dronillard, Norman Reikman, Percy Kinnard and at least twenty more of the most reliable young gentlemen of the city, the club's future is an assured success.

As yet the class of boats and canoes owned by the members are of a composite kind, and not for racing purposes, though it is the intention of the members to secure at once shells for two, four and six oars, build boat houses, and at once establish a first-class club.

During the summer months the waters of the Cumberland are as clear as those of a spring branch, the current is almost imperceptible, and the scenery through which it flows is equal to that of a diminutive Switzerland. I cannot imagine a stream better suited to canoe excursions than it is. It abounds in game fish, and all along its wooded banks, deer, rabbits, hares and doves can still be found in abundance. I sincerely hope the club will prove a success, and know of no better source for its members to gain aquatic lore than by studying the yachting and canoeing columns of the FOREST AND STREAM. J. D. H.

NASHVILLE, Tenn.



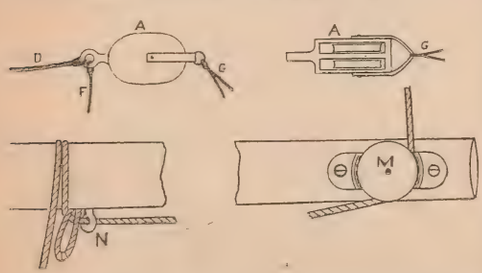
AN IMPROVED LATEEN SAIL.

Editor Forest and Stream:

I have been reading your articles on amateur canoe building in FOREST AND STREAM with considerable interest and a great deal of pleasure. I have been patiently waiting for the article on sails, to see what would be offered. For the past three years I have been experimenting with the different styles of sails, endeavoring to find which sail was best adapted to amateur canoe sailing, and find the lateen by far the best, for the reason that it gives the most power with the center of effort nearer the deck, but it was an ugly customer to arrange so as to reef. I send you herewith a diagram of a reefing lateen sail that I used on Lake Chautauqua last summer, and was very much pleased with it; indeed, it was a success. It can be reefed so quickly that in a sailing regatta I reefed while coming in stays.

The mast is about double the height of mast for ordinary lateen, and has sheave fitted at C to work fore and aft. Pennant D is spliced into the swivel eye of block, A, and in setting the sail is rove through mast over sheave at C to block on deck at P (port side, near mast), and thence to cleat, E. There is also spliced to the eye of block, A, the boom lift, F, which is put through the jaw, T, and knotted on underside at such length as you desire to have the boom from the deck. A metal strap is also fitted to block, A, as shown, into which topping lifts, G, are spliced. When the block, A, is drawn snug up to the mast at C the sail is resting in the lifts and the boom is in proper position for sailing.

To hoist and lower sail, halliard L is used, being made fast on gaff



at K, passed up through double block A to single block B, back down through block A and through a block on deck on starboard side of mast opposite block P to cleat on starboard side of deck opposite E, and when thus rove need not be unrove further than the block in the deck, as in taking down the sail, drawing pennant D through its bearings clears the whole business, and all the gear can be rolled up in the sail and put away. In a sudden squall, by letting go pennant D the sail will immediately go overboard.

To set sail, place mast, reeve pennant D through sheave C, block P to cleat E; halliard L through block in deck to cleat; haul pennant D taut and belay; haul halliard L taut and belay and the sail is up. To lower sail, let go halliard L and sail will drop.

For reefing purposes, I splice into the eye at I a bolt rope, X, and sew to sail, as shown to H, where I fasten well, then extend through block at M to screw eye N and O on under side of boom (one block, M, on each side of boom for single and double reef), where a knot is tied.

To Reef.—Slack halliard L, draw taut reef pennant and belay by grasping boom and reef pennant back to screw eye with one hand and holding pennant while a loop is passed between main part and screw eye with the other hand as shown, then set up halliard L till sail is in position.

To Shake Out Reef.—Take hold of end of reef pennant and pull out loop and tauten halliard L. In reefing it is not necessary to tie reef points, S, as the setting up of bolt rope, X, virtually makes a new foot to the sail. The points need only be tied for looks. I think it an excellent cruising sail as well as for beginners.

By carrying reef pennant well forward on boom a reef may be taken when before the wind, but I have not found a time when I wished to reef when before the wind. When it blows so hard as to make a reef necessary sailing before the wind in a canoe, I think the best way is to take in sail.

LONG SHANKS.

CLEVELAND, Ohio, May 16.

THE NEWBURGH MEET.

ALL who visited Newburgh from New York have returned, but are still talking of the good time they had. We copy the following from the New York *Times*. There is no doubt that the local meets will, in the future, be an important feature in the growth of canoeing, as they bring in many who would not visit the annual meet, and excite an interest in the sport over the entire locality where they are held:

"The canoe meet held last week at Newburgh was a very successful affair. It was the first of a series of so-called local meets which are to take place in various parts of the country this summer. There can be no doubt that the American Canoe Association has done and is doing a good work. Including as it does members in every State of the Union and in Canada, it has had much to do in bringing about the 'canoe boom' that has made such marvelous progress during the last year. At the same time it is evident that the members of the association are too widely scattered to make it possible that any large proportion of them can attend the annual meet. Hence it seems very advisable that the canoeists who reside within practicable distance of one another should have their annual local meets. There would be little difficulty, for example, in bringing together a large number of New York and New England men at some central point, and in like manner, the canoeists of the Middle States, of Canada, and of the Northwest might form local subdivisions of the association. It would be a great pity if the American Canoe Association should be disbanded, or if it should cease to hold its annual camp, but the association can be made all the stronger by the help of local branches, each with its own special annual gathering."

ROYAL C. C.

THE second race for first-class sailing canoes was held at Hendon on Saturday, the 17th inst., when, out of five boats entered, the following four started: Violet, Mr. W. Whitney; Gladys, Mr. T. F. Knowles; Imogen, Mr. H. Church; Merlin, Mr. E. G. Wilkinson. A fresh breeze from the southwest enabled the boats to make a fast race of it, in spite of double reefs, for nearly the whole time. Gladys rounded the lower buoy first, closely followed by Violet who, passing her on the run home, continued to increase her lead during the remaining two rounds, eventually taking first prize. The times were taken as under:

	First Round.	Second Round.	Third Round.
Violet	4 05 00	4 40 00	5 16 00
Gladys	4 05 02	4 41 00	5 18 30
Imogen	4 07 00	4 44 00	5 25 00
Merlin	4 11 00	4 52 00	

The third match of the season came off at Hendon on Saturday last, May 24, but only the two following canoes came to the line: Gladys, Mr. T. F. Knowles; Imogen, Mr. H. Church. There was a fresh breeze from east at the start, when Imogen got off with a good lead, which she maintained until reaching the end of the lake. As soon as it came to a turn to windward, however, Gladys overhauled her hand over fist, and soon took the lead from her, eventually winning easily at 4:37. The race for the challenge cup will take place at Hendon today, when some good racing may be expected, Mr. D. Ashton having built a new canoe, and Messrs. W. Baden-Powell and A. H. Tredwen being among the entries.

THE GALLEY FIRE.

RICE, CORNSTARCH AND CEREALS.

FEW things are better or more easily prepared in camp than rice. Put some to soak at night and in the morning it will cook in a short time. Pour off the water in which it has soaked, and add again sufficient water to cook it, so as not to have the second watering. Cook slowly and do not stir. Always cook in cold water. (Hominy and meal are always stirred into boiling water).

Plain rice and milk with sugar, rice with a dressing of butter, sugar and nutmeg, rice with whisky sauce, rice any way is ever agreeable. For whisky sauce, blend together a little corn starch, water, butter and sugar, let come to a boil over the fire. Search the "medicine chest" until the proper label is found, and add a few spoonsful to the taste. Or a good dressing is made thus: One tablespoonful corn starch or flour stirred into half pint of water and let come to boil, sweeten with sugar and flour, with nutmeg or vanilla. A small bottle of vanilla occupies little space, and is found very useful by the cook.

There is nothing better among the unnecessaries of the commissariat than cornstarch; once taken it always assumes its place in the list of supplies. It is good for dressings, custards, omelettes, or simply boiled in milk. Its preparation is most simple, it is wholesome, nutritious, not bulky, and one package will supply any ordinary cruise.

Let one pint milk come to a boil. While heating mix two tablespoonsful cornstarch and one egg, one tablespoonful sugar, pinch salt, and a little cold milk. When milk boils add mixture; let boil a few minutes, stirring the while; be careful not to burn. Flavor with vanilla or lemon. Cornstarch custard is made the same way, only substitute three-quarters for two tablespoonsful cornstarch. If larger quantity is needed use same proportions.

If in a permanent camp, with the expectation of company to dinner, you may surprise them with the regular old-fashioned custard for dessert. Beat up four eggs, three tablespoonsful sugar and pinch of salt. Let one quart milk come to a boil. Stir mixture into boiling milk and set pail containing all into kettle or other pail of boiling water and boil until thickened; or set cups containing mixture into frying pan of boiling water.

A person with a little ingenuity can always have sufficient variety of food; the various vegetables, cereals, berries, melons and fruits. Too much meat is eaten in warm weather for the general good, and no doubt the canoeist is benefited by his departure from the carnivorous precincts of the city.

With the exception of a vial of "Jersey Blue" in the medicine locker and the ardent spirits which naturally belong to every canoeist, I would advocate (like the "Kingfisher" and others) the use of nothing stronger than tea, coffee or spring water; though the lover of the sparkling beverage may contend with the "tar," that "If wine's a poison so is tea, though in another shape. What matter whether one is killed by canister or grape?"

Aurora's coffee is of the right kind, simple, practicable and good. How many receipts we see, about as intricate as the manufacture of French pastry. A greenhorn on the perusal of them would prefer spring water to the undertaking. The only suggestion I would make to Aurora is the use of a small piece of codfish skin for the purpose of clearing. A good cup of tea is made by simply pouring boiling water on tea, two tablespoonsful to a quart of boiling water, replace on fire, let boil and set back to steep. This may not suit the epicure who makes his tea with a thermometer, but a hungry canoeist could never discriminate.

Now why can we not have a cook book of our own, each giving some ideas and receipts until we make quite a volume. And let the brotherhood work hard and tax its ingenuity for a good bed and a good dinner, for what is any cruise without either. Q.

TORONTO C. C. SAILING RACE.—As announced on the 24th ult., the Toronto C. C. were on that day to race for a challenge cup and three prizes. The fire in the *Mail* building, however, prevented the commodore from being present, so the race was postponed until last Saturday, when it came off. The course was from the foot of Lorne street to yacht Alarm, moored near the R.C.Y.C. wharf at the Island and return, to be gone over twice. Entries as follows: Boreas, Commodore Neilson; Isabel, Mr. Tyson; Sadie N., Mr. Nicholson; Whimbrel, Mr. Mason; No Name, Mr. Kerr; Racine, Vice Commodore Stinson. The Isabel, Boreas and Whimbrel carried heavy iron centerboards, the Sadie N. a wooden board, the No Name an Atwood folding board, and the Racine an iron keel. Wind was from the east, a fresh breeze, making a rough sea for such small craft. The start was made at 3:10 P. M., the Sadie N. immediately crossing the line with a good lead, followed in turn by the No Name, Isabel, Racine, Whimbrel and Boreas. The No Name soon took the lead, and little change in position took place until the Alarm was reached, when the Boreas—which had been sailed a better course than the others—made a good turn, and taking the lead was never headed, winning by about a hundred yards from the Isabel and two hundred from the Sadie N., the Whimbrel making a good fourth; the No Name and the Racine having given up the contest. The No Name—a new craft by Glendinning—would probably have captured the cup if her rudder lines had not given way. She showed great speed and weatherly qualities. The Atwood centerboard, with which she is fitted, did its work well, and is no doubt a great help to any small craft in going to windward. They are being put into a great many skiffs, and now that they are manufactured in Canada by the Wildermuth Spring Bed Co., of Gananoque, the cost will be much less than when imported. The Commodore, in addition to winning the cup, also won a board of the above description, value $6, presented by the above company. Mr. Tyson won a spirit stove presented by W. A. Sparrow & Co., and Mr. Nicholson a camp knife presented by Mr. McDowall, 174 King street east. Next Saturday the club will have a race round the Island for the sailing cup held by Mr. Tyson, and the following Saturday may see another race for the running cup.—*Toronto Mail.*

KNICKERBOCKER C. C.—The annual regatta of the Knickerbocker C. C. will take place on Saturday next, June 14, at 3 P. M., off the club house, One Hundred and Fifty-second street, North River. The races, which are open to club members only, will be sailed under A. C. A. rules, they are: Paddling classes 2 and 4, 1 mile; sailing classes, A and B, 3 miles; paddling and sailing, all classes, 1 mile; tandem race, open to all, 1 mile. First and second prizes will be given in all except the tandem, in which but one prize will be given. Mr. C. G. Y. King is clerk of the course.

NEW YORK C. C.—The regular spring regatta will be held June 21, off the club house at New Brighton. Races called on arrival of 2 P. M. boat. There will be a sailing race for classes A and B, distance 3 miles; paddling races for classes 2 and 3, distance 1 mile; a tandem paddling race same distance, an upset race and canoe gymnastics. The regatta is open to all amateurs and suitable prizes will be offered. Written entries must be sent to Regatta Committee, care of J. F. Newman, secretary, 19 John street.

CANVAS BOATS.—Grand Rapids, Mich.—Will you please allow me to make a suggestion to your correspondent "Young Tenderfoot" of Philadelphia. It is simply this: If you buy a folding canvas boat, do not get one that has a seam through the center. I have tried two fifty-dollar ones. The first one gave out after using three times, the other leaked badly the second time it was used and had to be sewed all over. Should you decide to get a canvas boat, have it made from one piece of cloth.—ARTHUR WOOD.

THE A. C. A. MEET.—Dr. Neidé writes that by an arrangement with the publishers he is able to supply maps of the Thousand Islands to members of the American Canoe Association at cost, forty cents each. The map is on a scale of one and a half inches to the mile, and includes the river from above Gananoque to Grenadier's Island. It is neatly bound in pocket book form. Copies can only be obtained at this price by A. C. A. members and from Dr. Neidé.

CANOE PHOTOS.—We have received two photos of the Newburgh meet from Mr. Joslin of Newburgh, one 12×14in., a fine view of Plum Point from the south, with canoes on the river, the other, an 8×10, showing both sides of the river toward Cornwall and the canoes turning the lower stakeboat in Class A sailing race. Canoeists can obtain copies of these and the other three views from Mr. Joslin, No. 73 Water street, Newburgh, N. Y.

MERRIMAC RIVER MEET.—A large attendance of canoeists is promised at the meet on the Merrimac River below Lowell, on June 14, 15 and 16. John Boyle O'Reilly and other Boston canoeists will be present, and the canoe fever is rapidly spreading among local canoeists.

BARK CANOES.—A correspondent inquires whether any other bark but birch is suitable for canoes. Can any of our readers inform us?

Yachting.

FIXTURES.

Secretaries of yacht clubs will please send early notice of proposed matches and meetings.

June 12.—New York Y. C., Annual Matches.
June 14.—Seawanhaka Corinthian Y. C., Annual Match.
June 16.—Newark Y. C., Opening Match.
June 16.—New York Y. C., Race around Long Island.
June 17.—Quaker City Y. C., Review and Harbor Cruise.
June 19.—New Jersey Y. C., Annual Match.
June 21.—Hull Y. C., Pennant Match.
June 23.—Newark Y. C., Open Matches.
June 24.—New Haven Y. C., Spring Match.
June 26.—Salem Bay Y. C., First Championship Match.
June 27.—Eastern Y. C., Annual Matches.
June 28.—Boston Y. C., Ladies' Day.
June 30.—Manhattan Y. C., Annual Cruise.
June 30.—Quincy Y. C., Second Match.
July 4.—Larchmont Y. C., Annual Open Matches.
July 4, 5, 6.—Quaker City Y. C., Corinthian Cruise.
July 5.—Hull Y. C., Review and Annual Cruise, five days.
July 9.—Beverly Y. C., Marblehead, First Championship.
July 12.—Boston Y. C., Second Club Match.
July 12.—Hull Y. C., First Club Match.
July 19.—Hull Y. C., Ladies' Day.
July 24.—Eastern Y. C., Annual Cruise.
July 26.—Beverly Y. C., Nahant, Second Championship Match.
July 30.—Quincy Y. C., Third Match.
Aug. 4.—Quaker City Y. C., Review and Harbor Cruise.
Aug. 9.—Boston Y. C., Annual Matches.
Aug. 11-25.—Quaker City Y. C., Annual Cruise in Chesapeake and Delaware Bays.
Aug. 16.—Salem Bay Y. C., Open Matches.
Aug. 16.—Hull Y. C., Open Matches.
Aug. 28.—Quincy Y. C., Fourth Match.
Aug. 30.—Hull Y. C., Second Championship Match.
Sept. 3.—Hull Y. C., Third Championship Match.
Sept. 4.—Salem Bay Y. C., Second Championship Match.
Sept. 13.—Boston Y. C., Fall Matches.
Sept. 14.—Quaker City Y. C., Review and Cup Race.
Sept. 28.—Quaker City Y. C., Review and Harbor Cruise.
Oct. 5.—Quaker City Y. C., Closing Review and Cruise.

STEEL FOR SHIPBUILDING.

ALTHOUGH the use of steel for shipbuilding is a novelty in this country, the subject is one of the greatest interest to American yachtsmen and shipowners. Although steel vessels were built in England over twenty years ago, in 1865, six steamers, 5,312 tons in all being launched, its use was discontinued on account of the expense, but within the past five years its decreased cost, together with its many advantages over iron, have brought it into much more general use abroad, the cost now being about the same as iron, while its strength is much greater.

The steel used in the new government cruisers now building is made at the works in Chester, Pa., the plant for which was designed and erected by Mr. C. M. Rider, in 1881, and is capable of turning out coatings up to 40 tons weight. The arrangements are most complete in

all details, the ingots cast being sufficiently perfect to admit of rolling at once, without any cleaning or chipping.

At the outset of the undertaking much doubt was expressed by experts as to the quality of the metal to be made, it being estimated that at least 25 per cent. would be rejected, the specifications requiring a tensile strength of 60,000 pounds per square inch, and not less than 23 per cent. elongation in 8in. Out of 38 consecutive heats made, however, one only failed to meet the above specifications.

An entirely new method of manufacturing steel plates has lately been brought forward by the inventor, Mr. Joseph Whitely, of Leeds, England, who is now experimenting with the process.

A hollow iron cylinder lined with fire brick is mounted on a horizontal axis on which it revolves. A pipe perforated with holes conducts the molten steel to the inside of the cylinder, on which it falls, and is distributed in an even thickness by centrifugal force. When sufficiently thick this inner cylinder is drawn out, slit on a circular saw, flattened and rolled to the required thickness.

If a plate is required for shipbuilding, a mold would be used, for instance, 5ft. diameter and 5ft. long, in which a cylinder 1in. thick is cast, making, when cut and flattened, a plate 5ft.x15x1in. thick, which by successive rollings is reduced to ¼in. thick, growing to 30ft. lengths, the breadth being about the same. A mold has been used 9ft. long and 5ft. diameter, containing a plate of 30cwt. It is claimed for these plates that there is no risk of overheating or burning, the metal is homogeneous and of much greater strength. The process is also applicable to the manufacture of boiler tubes.

LARCHMONT Y. C.

ALTHOUGH all the boats enrolled in the club are considered as being entered for the pennant matches of each spring and fall, but thirteen appeared at the starting line on Saturday, June 7, for the first match of the season. Besides the attractions of the races, the occasion was, in a way, a housewarming in honor of the club's new and enlarged quarters, and a number of visitors, besides the club members were present.

In addition to the pennants, special prizes were offered by Commodore Monroe, of $50 to the winning yacht in any class having four or more starters, but this inducement failed to secure full entries, as but one class, the smaller open boats, mustered over three starters, while but one other class had more than two, as given below:

SECOND-CLASS CABIN SLOOPS.

Name.	Owner.	Length.
Athlon	Dr. J. C. Barron	54.8½
Eclipse	E. H. Wales	51.0

THIRD-CLASS CABIN SLOOPS.

Dream	Gibbs & Babcock	41.6
Schemer	Com. Monroe	37.3

FOURTH-CLASS CABIN YACHTS.

Aneto	H. W. Eaton	22.0
Gannet	Oliver Adams	21.2
Varuna	E. S. Turton	— —

OPEN BOATS 24 TO 27 FEET.

Cheemaun	W. I. Van Wort	24.10

OPEN BOATS 20 TO 24 FEET.

Willis	C. E. Jenkins	22.10
Zoe	H. Sanderson	22.9
Fairy	F. E. Towle	21.9
Cruiser	A. B. Alley	20.10
Nymph	F. W. Flint	21.11

The Vivien was also entered in the fourth class, but did not start.

The weather, which was all that the visitors and spectators could desire, did not promise as well for the yachtsmen, though at 11 o'clock, when the judges, Messrs. W. H. Jenkins, R. B. Rathbone and W. C. Stewart, started out in a little steam launch, there was a light breeze from the southwest, the tide being half flood.

The course for the first three classes was from Pagoda Point around the buoy west of Execution Light, thence around Matinicock Buoy and home past Captain's Island, where a markboat was moored, past Execution Light, and finishing at the starting point, a distance of 22 miles; while the two classes of open boats, after leaving Matinicock Buoy, returned by the way of the black buoy off Constable's Point, and Execution Light, making 17 miles.

At 11:14 the first gun was fired, the signal to start following at 11:19 and the final gun at 11:24, at which time all but Dream and Schemer were away, these being handicapped to the extent of 2m. 20s. each. The order and times of starting were:

Fairy	11 22 33	Cheemaun	11 25 20
Aneto	11 22 34	Eclipse	11 25 31
Gannet	11 22 48	Willis	11 25 33
Cruiser	11 22 54	Athlon	11 25 58
Zoe	11 23 55	Dream	11 26 20
Nymph	11 24 00	Schemer	11 26 20
Varuna	11 25 05		

On the beat out to Execution Light, Fairy held the lead for some distance, with Cruiser, Zoe, Eclipse and Athlon in the order named, until when near the buoy, Cruiser went to windward of her, holding her place, however, but for a few minutes, as big Eclipse soon passed her, rounding first at 12:17:00, the others following with Cruiser at 12:17:40, Zoe 12:18:18, Athlon 12:18:40, Fairy 12:19.02, Cheemaun 12:19:40.

By this time the wind had fallen so that the other boats dropped out except the Varuna, but after a time it breezed up again, and all were off for Matinicock buoy, Athlon being first to set her spinnaker, followed by Eclipse, while the little fellows had to content themselves with jibs boomed out. Eclipse was first around at 1:24:20, Athlon 20 seconds later, and Cheemaun, sailing alone, as there was no competitor in her class, followed at 1:28:20. Cruiser still led the small ones at 1:30:32, with Zoe at 1:31:00 and Fairy in the rear at 1:31:40.

Here they parted company with the big ones, making for Constable's Point buoy, and rounding as follows: Cheemaun 2:25:20, Zoe 2:29:00, Fairy 2:29:40, Cruiser 2:31:30.

Meanwhile Athlon was doing her best down the wind with Eclipse, and after the most exciting part of the day's sport, succeeded in rounding the snake boat off Captain's Island, half a minute ahead of Eclipse, at 1:56:19. The beat to Execution was a very pretty sight, the advantage to windward apparently being with Athlon, but finally she broke tacks and stood well into Glen Cove, under the land, the Eclipse passing Execution Light 1m. 40s. ahead.

The little fellows meanwhile had made a good fight of it, Cheemaun rounding the buoy at Execution Light at 3:13:45, Fairy 3:18:56, and Zoe 3:19:50. The run home was made with jibs to port on the open boats and spinakers on the same side on the two sloops, Cheemaun being first over the line, the times of the boats being:

SECOND CLASS—CABIN YACHTS.

	Start.	Finish.	Elapsed.	Corrected.
Athlon	11 25 58	3 57 33	4 31 35	4 31 35
Eclipse	11 25 31	3 57 20	4 31 49	4 29 04

FOURTH CLASS—CABIN YACHTS.

Varuna	11 25 05	4 09 53	4 44 48	4 42 44

OPEN SLOOPS—24 TO 27 FEET.

Cheemaun	11 25 20	3 36 44	4 18 24	4 11 24

OPEN SLOOPS—20 TO 24 FEET.

Fairy	11 22 33	3 52 53	4 30 20	4 28 24
Cruiser	11 22 54	3 57 08	4 34 14	4 30 23
Zoe	11 23 55	3 53 20	4 29 25	4 29 10½

The next races of the club will be the annual matches on July 4, while another pennant match will take place in September.

EASTERN Y. C. ANNUAL MATCHES.

THE Eastern Y. C. will sail their annual matches off Marblehead Rock on Friday, June 27, at 11:30 A. M., or if stormy on the following day.

All yachts must be entered by 2 P. M. on Thursday, June 26, at the office of Edward Burgess, Secretary of the Club, No. 7 Exchange place, Boston.

The following prizes are offered: First class schooners, $250 and $200; second class schooners, $150 and $75; third class schooners, $50; first class sloops, cutters and yawls, $150 and $75; second class sloops, cutters and yawls, $75 and $35. The awarding of prizes will be under Rule 8 of sailing regulations.

The first and second class schooners, and first class sloops, cutters and yawls will make the first race and will sail one course, but they will start respectively as below stated. The third class schooners and second class sloops, cutters and yawls will make the second race and will sail one course. All starts will be flying. The first race will be open, under this circular, to all yachts of any regularly organized yacht club.

STARTING SIGNALS.

At 11 o'clock, or thirty minutes before starting, flags, bearing the numbers of the courses to be sailed, will be hoisted on the regatta committee steamer; the course for the first race above that for the second race. If only one flag is shown all will sail the same course.

At 11:25.—Warning signal five minutes before the start by lowering numbered flags, hoisting blue flag and blowing a whistle.

At 11:30.—Start of first class schooners by lowering blue flag and blowing a long whistle. Five minutes' limit for this class to start. This signal will be the warning for the second class schooners.

At 11:35.—Start of second class schooners and limit for first class schooners by lowering blue flag (which has been hoisted one minute previously) and blowing whistle. Five minutes' limit for this class to start.

At 11:40.—A short whistle marks the limit for second class schooners.

At 11:45.—Start of first class sloops, cutters and yawls, which start signal, and no limit allowed. Their time will be taken from the whistle and the lowering of the blue flag (which has been hoisted one minute previously).

At 11:50.—Start of third class schooners and second class sloops, cutters and yawls, which start at signal, and no limit allowed. Their time will be taken from the whistle and the lowering of blue flag (which has been hoisted one minute previously).

In case of delay in the first signal the same intervals of time will be observed. Every yacht sailing the race must carry her private signal at the mainpeak. Only sails allowed by Rule 11, of sailing regulations, may be carried. Any yacht having cause for complaint must signify it in accordance with protest rule of sailing regulations. The starting line will be from Marblehead Rock to a stake boat.

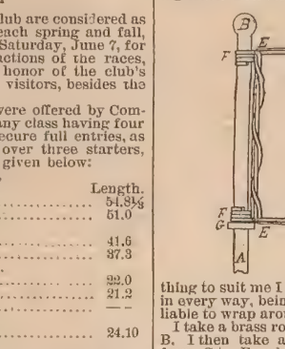
A steamer will be provided for members and their families, leaving Rowe's wharf, Boston, at 9:45 A. M., and calling at Phillips's wharf, Salem, leaving there at 11 A. M. sharp, landing at the same points in the evening.

The annual cruise of the E. Y. C. will begin on July 24, starting from the rendezvous at Marblehead and going around Cape Cod to the westward.

A TELL-TALE.

Editor Forest and Stream:

In reading your paper I often see suggestions and inventions which are given in your paper for the edification of those who are interested in the particular lines to which such things refer. You will remember some time ago I sent you an inquiry for "tell-tales," as we call them here, or a flag to indicate the direction of the wind, to be used on sailing craft. You very kindly answered this inquiry, but not finding any-



thing to suit me I have devised the following which I consider good in every way, being ornamental and sensitive to the wind, and not liable to wrap around the rod.

I take a brass rod, A, and put on it a washer, G, and a movable cap, B. I then take a piece of brass wire and bend it from C to D then from C to E and D to E and twist the two together from E to E; I then wind each end around the rod A, so as to form bearings. It is now ready for the bunting which is put over the frame C E D E, so that the frame is entirely inclosed by the bunting, which is sewed in a small seam at S S, also sewed together at the top and bottom. This makes the best tell-tale I know of, for it is a vane and flag combined—for the same height of rod can be longer flag, as the frame prevents its hanging down low. J. P. O.

NEWARK BAY Y. C.

THE complete times of the races of this club on Decoration Day are as follows, all being sailed over the club course in Newark Bay, a distance of twelve miles. There were twelve entries in four classes, cabin sloops, jib and mainsail, cats over 19ft. and cats under 19ft., for challenge pennants for each class, to be won three times before becoming the property of the winner. The wind was puffy and very uncertain, and the races were won more by luck than good sailing.

CLASS A.

	Start.	Finish.	Actual.	Corrected.
Gray Eagle	12 02 00	1 53 55	1 51 55	1 51 55
Vixen	12 07 50	2 03 55	1 56 05	1 53 10
Emmy C	12 06 53	1 06 00	1 59 07	1 57 49

CLASS B.

Leo	11 59 52	2 20 00	2 20 08	2 20 08
Rambler	12 00 32	1 59 00	1 58 28	1 56 28
Linda	12 00 21			

CLASS C.

Cloud	11 57 33	2 01 00	2 32 07	2 03 02
Shadow	11 57 00	1 54 00	1 57 00	1 55 15
Triton	11 56 30	1 53 44	1 57 14	1 54 09
Ripple	11 58 09			

CLASS D.

Marion	11 57 15	2 33 28	2 36 18	2 36 18
Eddy	11 55 30	2 25 11	2 29 41	2 29 34

The club is bending every effort to make the open match of June 16 a success. There have been received to date about forty entries, including the most of the crack small boats of this vicinity, with the promise of many more. It is especially desired that cabin sloops from 25 to 35ft. long be well represented, and all owners of boats of this class may rest assured of having good treatment and of meeting foemen worthy of their steel. There will be six classes, with a cash prize of $20 for each class; $3 entry fee. This club was organized in September, 1882, with nineteen members, and now has eighty members and twenty yachts.

ATLANTIC Y. C.

THE first of the three principal matches that each spring excite the yachtsmen of New York, that of the Atlantic Y. C., sailed on Tuesday last, derived its interest mainly from the fact that some new boats were to be tried as well as several of the old ones which have been rebuilt or materially altered during the winter. The question of type, or of cutter vs. sloop hardly entered into races, the yachts, with one exception, being centerboard boats. The race may really be considered as the debut of Dr. Barron's new sloop Athlon, as the previous occasions on which she has appeared have hardly been fair tests of her merit, but after Tuesday he need not be ashamed of the Wave's successor. Another boat in the same class, whose performance was watched with some interest, was the Thistle, an old boat, but lately rebuilt and new in New York waters, and that has promised on the few occasions that they have met, to be a worthy antagonist of the Athlon. Grayling also has been changed considerably since her disastrous first season, her spars and ironwork having been greatly reduced. The boats in the smaller classes are already pretty well known, the new one being Mr. Wintringham's Nomad.

The weather early in the morning promised a repetition of last year's disappointment, with wind from the northeast and cloudy sky at 10 A. M., when the tug Luckenback, with the judges on board, left Brooklyn for Bay Ridge, the steamer Columbia, with the members and their friends, following shortly after. Off the Atlantic Basin the yachts, mostly under mainsail, jib and topsail only, were flying about waiting for the signal, while several steam yachts were taking guests on board to witness the race.

The classes were as follows: Class A, schooners, 72ft. and over; Class B, schooners, under 72ft.; Class C, cabin sloops, 55ft. and over; Class D, cabin sloops, 43ft. and under 55ft.; Class E, cabin sloops, 35ft. and under 43ft.; Class F, cabin sloops, 30ft. and under 35ft.; Class G, cabin sloops, 26ft. and under 30ft.; Class H, cabin sloops under 26ft.; Class I, open sloops; Class K, catboats.

At 10:36:10 in answer to a signal from the Luckenback, the first gun was fired from the bluff, the understanding being that the second gun was to go off three minutes later. Nearly all were well placed above the starting line, toward which an ebb tide was carrying them while the wind had shifted to S. W. with no increase of force. Three minutes passed, all bore down on the line, Clytie ahead, but no gun was fired. Clytie was obliged to cross, tack, and work back above the line, losing all the advantage she had. Finally three loud blasts from the tug awoke the artillerist on shore, and at 10:53:50 the second gun was fired, the Thistle crossing first at 10:55:35, Crusader second, Mischief third, running up jibtopsail as she did so, the times being:

Thistle	10 55 35	Enterprise	11 05 56
Crusader	10 58 00	Haze	11 06 20
Mischief	10 59 05	Daisy	11 06 50
Athlon	10 59 10	Amazon	11 07 12
Fanny	11 00 05	Fanita	11 07 18
Triton	11 00 40	Roamer	11 07 18
Grayling	11 01 50	Romeyn	11 07 25
Gracie	11 02 25	Venture	11 07 40
Agnes	11 02 35	Viking	11 09 20
Clytie	11 03 12	Linda	11 10 19
Leona	11 03 12	Nomad	11 12 10
Ilderan	11 03 16	Una	11 12 40
Crocodile	11 04 28	Stella	11 12 55
Phantom	11 04 40		

Just before the start an old gentleman pulled alongside the judge's boat in a light gig and asked for a list of entries, after scanning which he quietly pulled off toward the Narrows.

The course for A, B, C and D was from the anchorage off the club house, foot of Fifty-fifth street, South Brooklyn, down through the Narrows, to and around a stakeboat near buoy No. 8, off Sandy Hook, passing to the west of the same; thence to and around the Scotland lightship, keeping the same on the port hand; thence to and around Sandy Hook lightship, keeping it on the port hand, and thence home, going to the southward and westward of the beacon on Romer shoal.

For class E the same course, to and around stakeboat near buoy No. 8; thence to and around Scotland lightship, keeping it on the port hand, and thence home.

For classes F and G the same course, to and around stakeboat near buoy No. 8, keeping the same on the port hand, and thence home.

Classes H, I and K had no starters.

The following prizes were offered: A first prize to the winning yacht in each class, in which at least two yachts shall enter and start; a second prize in each class, in which at least four yachts shall enter and start; and a third prize in each class, in which at least seven yachts shall enter and start.

The "Livingston Memorial" prize to be awarded to the first sloop of Class D in at home stakeboat, without time allowance, to be held on the conditions of its presentation.

A noticeable feature of the arrangements was the size of the figures on the mainsails of the competing yachts, which were really large enough to be seen at a considerable distance, enabling the spectators to place the boats throughout the race.

The entries and allowances were as follows:

		M. S.
CLASS A—SCHOONERS.		
Grayling	L. A. Fish	Allows
Crusader	J. B. Maxwell	0 02
Clytie	A. P. Stokes	4 06
CLASS B—SCHOONERS.		
Haze	C. W. & J. Hogan	Allows
Triton	Harry E. Dodge	1 53
Agnes	H. H. Hogins	8 51
Leona	E. C. Sterling	19 41
CLASS C—CABIN SLOOPS.		
Gracie	Joseph P. Earle	Allows
Mischief	Joseph R. Busk	9 21
Fanny	H. Cruger Oakley	5 33
Athlon	J. C. Barron, M.D	17 16
Thistle	William Ziegler	17 16
CLASS D—CABIN SLOOPS.		
Roamer	J. W. Cooper	Allows
Enterprise	G. B. Moffat	4 10
Fanita	George J. Gould	4 13
Stella	J. L. Marcellus	7 29
Linda	H. C. Roome	8 21
CLASS E—CABIN SLOOPS.		
Crocodile	J. G. Prague	Allows
Una	Miles Wood	6 32
Phantom		
CLASS F—CABIN SLOOPS.		
Daisy	C. F. Ulrich	Allows
Viking	F. C. Swan	0 31
Nomad	H. C. Wintringham	0 56
Romeyn	W. R. Vermilye	1 02
Ilderan	Walter Southwick	5 09
CLASS G—CABIN SLOOPS.		
Venture	H. G. Peabody	Allows
Amazon	Franklin Beames	3 18

The Amelia was entered in Class E, but withdrew, Una taking her place.

Most of the yachts crossed on port tack, the remainder going about when well over, soon working short tacks through the Narrows with a light S. W. wind. At 11:40 Mischief was off Fort Tompkins, Fanny astern inshore and Gracie by the Seawanhaka Basin, where she had run in, losing wind and tide by so doing, the schooners working down the Long Island shore, and once outside Crocodile ran ahead to Coney Island Point. The order was Crocodile, Athlon, Fanita, Romeyn, Mischief and Thistle, with Gracie at the tail of the procession, the remaining boats being scattered between her and Thistle. Off Norton's Point, Fanita took the lead of Crocodile, who now gave second place to Mischief.

Here Fanita stood to the eastward, losing ground by so doing, while Mischief, followed by the others, stood for Buoy No. 8, on port tack, under a breeze that sent the water through her scuppers, and, for the short time it lasted, made the prettiest sport of the day. Down they came, showing half their sides to the watchers on the judges' boat. Mischief first around, and off on starboard tack, Fanny hurrying after, taking in jibtopsail as she came up, Fanita third, content with gafftopsail only, and Crocodile laying down under mainsail and jib, having found her topsail too much for her. Thistle and Athlon, the latter heeling well down, followed next, then the catamaran Jessie, not in the race, but traveling as though she was, while close together came Grayling and Triton, followed by Romeyn, the times being:

Mischief	1 15 30	Triton	1 26 08
Fanny	1 18 08	Romeyn	1 27 30
Fanita	1 19 18	Agnes	1 32 30
Crocodile	1 20 58	Enterprise	1 32 45
Thistle	1 21 28	Gracie	1 33 00
Athlon	1 22 05	Crusader	1 34 55
Grayling	1 25 50		

Short tacks followed, and then longer legs down the beach to Scotland Lightship, the tug running ahead, the Columbia in company with her.

While laying to awaiting the Mischief, a small boat pulled alongside the tug and the oarsman asked for a drink of water, and on receiving it lay on his oars a short time to see the first boats, then pulled off steadily toward the Sandy Hook lightship. He was at once recognized as the gentleman who had asked for the programme of the races at the starting point three hours before. His name is Whiting, an ex-commodore of the Brooklyn Y. C., who still finds pleasure on the water in rowing about. His boat was a light cedar, half outrigged gig about 16ft. long, everything about her in perfect order, painters flemished down, a watch compass and lamp fastened to a thwart within easy view. Late in the afternoon, when the tug was well in toward the Hook, with a fog astern and some sea, the little Ida was passed, making bravely for the Hook.

Approaching the lightship came Mischief on port tack, Fanita and Crocodile, the latter getting out spinnaker boom for a run home from this point, taking some time, however to get her spinnaker set. Jessie was also on hand in time to see Athlon lead Thistle around.

Mischief	2 09 17	Thistle	2 20 00
Fanita	2 11 10	Triton	2 23 10
Crocodile	2 14 20	Gracie	2 26 15
Athlon	2 17 40	Crusader	2 28 07
Grayling	2 19 42	Enterprise	2 34 0 0
Fanny	2 19 50	Roamer	2 34 50

No others were timed, the tug hurrying after the leading boats, now well to windward. Mischief and Fanita were now having a bout, the latter having set jibtopsail in the light wind. Mischief was first around the lightship at 3:04:04, coming up under the lee of the lightship, having lowered jibtopsail. As she passed, her spinnaker boom was swung into place from forward, but on the port side, so that it had to be shifted to starboard.

Fanita, at this time well below the lightship, now stood up, also dropping spinnaker boom to port, breaking out spinnaker at 3:08:30, and in order to avoid shifting it, keeping her main boom to starboard, to do which she had to keep down toward the beach, leaving Mischief on a straight course up toward the bay. Grayling now came up to show that there were schooners as well as sloops in the race, passing third, while Fanny took fourth place, with Athlon close on her weather beam and Thistle following, after which there was a long wait for the stragglers, led by Gracie, the Haze and Agnes, with several others having wandered off to the southward, and not coming up in time to be noted.

Mischief	3 04 04	Thistle	3 27 35
Fanita	3 06 55	Gracie	3 36 00
Grayling	3 07 40	Crusader	3 37 50
Fanny	3 18 00	Roamer	3 46 30
Athlon	3 18 10	Triton	3 47 20

The procession home was hidden in a haze that came up, but there was a fresh wind astern that hurried all up the bay. Among the rear guard were Triton and Roamer, the latter with spinnaker like a balloon pulling her along, and keeping very close to her larger rival.

In the Narrows at 4:30 the sun broke through the clouds, showing Mischief well ahead with Fanny, while astern were Athlon and Fanita, the latter doing all possible to hold a place with the big sloops. While both were at their best, Athlon carried away the tack of her jibtopsail, the sail running up the stay, but a hand climbed up the stay securing the sail and hauling it down, soon after which Athlon walked through Fanita's lee.

Gracie, meanwhile, was doing her best work of the day coming up and passing Athlon. Of the schooners the Grayling had outrun the fleet, being the first in, her performance throughout the entire day having proved the value of the improvements made in her. The times of finish and corrected times were:

	Start.	Finish.	Elapsed.	Corrected.
CLASS A—SCHOONERS.				
Grayling	10 57 50	5 13 54	6 16 04	6 16 0
Crusader	10 57 50	5 25 48	6 27 58	6 27 56
Clytie	10 57 50	5 56 03	6 58 13	6 54 07
CLASS B—SCHOONERS.				
Haze	10 57 50	Not timed.		
Triton	10 57 50	5 40 10	6 42 20	6 40 7
Agnes	10 57 50	6 09 40	7 11 50	7
Leona	10 57 50	Not timed.		

CLASS C—CABIN SLOOPS.				
Gracie	10 57 50	5 30 03	6 32 13	6 32 13
Fanny	10 57 50	5 19 24	6 21 34	6 16 11
Mischief	10 57 50	5 18 21	6 20 31	6 11 10
Athlon	10 57 50	5 32 13	6 34 23	6 17 07
Thistle	10 55 05	5 41 08	6 45 33	6 28 17
CLASS D—CABIN SLOOPS.				
Roamer	11 03 20	5 45 13	6 41 53	6 41 53
Enterprise	11 03 20	6 11 10	7 07 50	7 03 40
Fanita	11 03 20	5 33 35	6 30 35	6 26 22
Stella	11 03 20	Not timed.		
Linda	11 03 20	Did not go course.		
CLASS E—CABIN SLOOPS.				
Crocodile	11 03 20	4 59 08	5 55 48	5 55 48
Una	11 03 20	5 39 38	6 36 18	6 29 46
Phantom	11 03 20	5 32 01	6 28 41	Not timed
CLASS F—CABIN SLOOPS.				
Daisy	11 03 20	3 52 51	4 49 31	4 49 31
Viking	11 03 20	4 31 12	5 27 52	5 27 21
Nomad	11 03 20	3 58 30	4 55 10	4 54 14
Romeyn	11 03 20	3 39 33	4 36 13	4 25 11
Ilderan	11 03 16	4 00 07	4 56 51	4 51 42
CLASS G—CABIN SLOOPS.				
Venture	11 03 20	4 27 22	5 24 02	5 24 02
Amazon	11 03 20	4 22 05	5 18 45	5 15 27

The only mishap was to the Una, who lost her topmast. The winning yachts were: Class A, Grayling; Class B, Triton; Class C, Mischief; Class D, Fanita; Class E, Crocodile; Class F, Romeyn; Class G, Amazon. Crocodile also takes the Livingston Memorial Prize, and Roamer second club prize in her class.

QUAKER CITY Y. C.

THE start at 10:50 A. M., on Monday, June 2, was one of the very best, notwithstanding the light and variable airs. As predicted by the writer the wind swung around from the N. E. to S. W. and the yachts, with their light sails set, speeded away. At Gloucester the Sunbeam having got her club topsail set had passed all the cabin boats, and much to the surprise of all was rapidly going through the fleet of open boats. Minerva No 2, or more familiarly speaking, the "Old Reliable," was following close in her wake. It was supposed by the quick move of the Rosita that she would soon go to the front in her class and capture the Minerva, as it was the Rosita's wind, but she had her match in the Consort, and that settled it.

After the regatta steamer came abreast of the fleet at Red Bank, it was discovered that the Pratt had gone down to show the rest of the fleet the way, the little J. Galligher keeping her company, with the Elwell a good third, Sunbeam fifth, Minerva, of Trenton, sixth. Esther seventh. Off Hog Island the Au Revoir went to the front, Pratt a good second, Elwell third, Richmond fourth, Pierson fifth, Sunbeam sixth, Minerva No. 2 seventh. Soon after Flick got his work in, and by a masterly manipulation of airs the Pratt took the lead, keeping it throughout the race.

FIRST CLASS CABIN BOATS.		Chester Buoy.	Home.
Sunbeam	2 10½		6 11¾
Minerva	2 20		6 21
SECOND CLASS CABIN BOATS.			
Minerva No. 2	2 13½		6 20¾
Consort	2 26½		6 25½
Rosita	2 24		6 27½
Florigar	2 26		6 30
THIRD CLASS CABIN BOATS.			
Thomas	2 28½		6 25¼
Nohma	2 46		6 33
Tillyer	2 23½		6 35
Ariel	2 38		6 36
FOURTH CLASS OPEN BOATS.			
Pratt	2 02		5 40¼
Pierson	2 11		5 46
Elwell	2 07		5 47
Esther	2 16		5 59¾
Minerva (Trenton)	2 13¾		6 18¼
Clee Bro's	2 20		6 28¼
FIFTH CLASS OPEN BOATS.			
Richmond	2 12		5 57¾
Au Revoir	2 08		6 01¾
Skelton	2 41½		6 30
J. Galligher	2 34		6 33½

Turning the lower buoy the flagship Florigar's topmast slipped away from the heel fid and turned down. The run home was void of excitement on account of the light wind. The Pratt stood over for Linicum Island, all hands following like sheep, until the Sunbeam rounded the buoy and went for the slack water under Jersey shore, Cap. Wyble caught eels years ago in the grasses along the Spanish main and knew just what he was about, of course he had many followers.

The Pierson, one of Jim Collins's last and best, having done phenomenal sailing in last year's regatta, was expected to take care of the Pratt, as she did last year. But the Elwell had something to say about that, and fought the Pierson every inch, making it quite exciting, especially at the Horseshoe; but shape, like blood, will tell, and she came in a good second. The Thomas got a puff or a luff, or something else hitherto unknown, and came in with her tail up, as will be seen by the record. Commodore Hanigan felt good when the Richmond showed up so far ahead of her class and fourth boat in the fleet.

The most remarkable feature of the whole race was the splendid performance of the Sunbeam in the light airs. Had it blown hard enough to have canted her a single degree, the judges would not have been able to take her time at the home flag boat. The grand old Minerva No. 2 again sweeps the deck, adding another to her many victories. R. G. W.

IREX.—The notice of the new steel cutter Irex is taken from *Land and Water:* "The new 85-ton racing cutter, built by Mr. Fay, at Northam, Southampton, for Mr. John Jameson, owner of the famous racer Samœna, is from the designs of Mr. Richardson, who also designed the Samœna, Silver Star, Marguerite, etc., and is of the steel-composite type—steel frames, with plankings of teak and pitch pine, the hull being of immense strength. It was originally hoped that she would be ready in time for the early matches, but strikes among the workmen on the Clyde at the beginning of the year created a delay in the supply of the steel, and for several weeks the work stopped at the casting of the lead keel, a ponderous monstrosity weighing close on 72 tons, this being the heaviest keel of the kind ever cast. It is in three or four sections, dove-tailed together, and secured by gun-metal bolts of enormous caliber; from this the Irex has been gradually built up, very much in the fashion that a house is raised on its foundations, and the rapidity with which she has been completed up to the period of launching has been really marvellous, hardly three months having elapsed since the receipt at the yard of the first of the steel castings. She has been turned out in a manner which does Mr. Fay and whole staff the greatest credit, under the vigilant eye of Capt. O'Neill, of Myosotis, Annasona and Samœna fame, who has literally surveyed every inch of stuff put into the ship, entering at the same time into a hearty spirit of co-operation with the builder that has done much to facilitate the progress of the work. We have already given the principal dimensions of the yacht, but may repeat that she is 85ft. long on the water-line, and 99ft. over all—her counter thus being of great length, with a sternpost of tremendous rake—her outside beam is 15ft. and depth 18ft. The keel is 4½ft. across the top, and about as deep in the deepest part, tapering fore and aft and vertically, and displaces over six tons of water. It is hoped she will be ready for sea in about a fortnight, and will proceed to the westward when in commission, sailing her maiden race at Liverpool on June 19."

SINGULAR ACCIDENT TO A STEAM YACHT.—The Stella is a steam yacht of 26ft. length, and 6½ft. beam belonging to a club of seven members, all of whom reside in Philadelphia, and who for the past ten years have taken weekly excursions during the season on the Delaware River and the neighboring streams. At half past 10 on Saturday night, she left her dock at Kensington waterworks with her owners on board beside two guests, being in charge of Alfred C. Neil, a licensed engineer, and Jame Cargill, a licensed pilot. Running up the Delaware, they turned into Rancocas Creek about 12 P. M., and shortly after, as claimed, blew three signals of four whistles each for the drawbridge. As they neared the bridge, a man was seen coming from the bridge tender's house to the draw, but when near by they found the latter was still closed. An attempt was immediately made to turn the boat, but the flood tide ran so strongly that she was carried broadside against the bridge, the cabin roof striking the timbers of the bridge, keeling her over so that she filled and sank. Alfred Anderson, who was asleep in the cabin, was carried down and drowned. On the afterdeck were Robert R. Coster, Jr., and John Cuthbert, an old man with a crippled hand, both of whom held to the bridge. A party arrived to help them, just as Coster after telling them to save the other, released his hold and was drowned. The remaining members of the party were picked up or swam ashore. It is claimed by the owners of the yacht that the bridge tender was asleep, while he makes a counter charge that they did not give the proper signals. The body of Mr. Coster was not found, and the yacht had not been raised at last reports.

A CANDID ADMISSION.—"As the imported cutter Madge is again to make her appearance this season with a fighting crew on board," said a yachting expert yesterday, "it may be well to reflect a moment on what has occurred in the American yachting world since her victories in New York and Eastern waters in 1881. Up to that time few men were so bold as to say that a deep boat could sail with the world renowned skimming dishes, but the manner in which the stranger disposed of her antagonists, though the measurement for time allowance was very favorable to her, caused experts to conclude that, after all, Americans, perhaps, did not know everything about the principles of speed. Since that memorable yachting year a great many changes in type and ballast have taken place among us in the designing and construction of pleasure vessels. Nowadays very few yachtsmen will have a shallow boat, except that local causes compel the selection of the type. On the contrary the majority make it imperative that they shall have good draft of water, and once pronounced advocates of light draft and light weight have made a complete aquatic somersault by building deep boats with heavy weights so that the fastest vessels of the present day in smooth water are those carrying a great weight of ballast. The feeling of the yachting public in this matter became so strong a number of cutters were built until now 'the real Simon Pure' housing bowsprit 'and a' that' is frequently seen in American waters. And, really, you must allow me to say that the cutter rig is the more beautiful to the eye, while it is the best fitted to fight old Neptune yet devised. Almost all our sloops have taken to the two-masted rig, so that long topmasts, backstays, runners, etc., are so common, critics make no remarks, except at the absence of them. All these things show that Americans have taken advantage of an example set them, and not allowed prejudice to blind them. They have adopted what seemed to be good for our waters, and, as experiments are yet being made, time alone will show what will be the final result. Boston yachtsmen have taken to a type evolved from the wide sloop, and the result is a heavy draft sloop—in fact, more draft than that of a cutter of the same length and almost the beam of the sloop. The type carries as much, if not more, weight than the cutter, is as costly to build, and requires an enormous sail area to obtain speed. Length measurement, however, combined with canvas, restricts this type to very small boats, and though great internal room is obtained, the principle is carried far enough to develop fatal errors. That is to say, large boats cannot be made to carry such sails, and even if they could, the first time they were caught outside with a big sea and no wind spars would be thrashed out of them or gear so worn or strained that owners would hesitate long before repeating the experiment. For these reasons Boston practice cannot be taken as a guide, except for very small boats. In New York the results of the trials with the Madge and other cutters have been to induce builders to timidly add more depth and slightly reduce the beam, and, while the centerboard is retained, the forestay has been put out on the bowsprit in order to obtain a better shaped forestaysail. The measurement system adopted by the prominent sloop clubs has no doubt had much to do with this, though the inability of many yachtsmen for want of time to make extended cruises and the shallowness of the water in numerous harbors are also causes which have their effect. Depend upon it, we are on the eve of a great change. The tendency is to restrict the beam and increase the depth. Once well started in this path, there is no telling where the stopping point will be, as it will soon be found that the ballast on the keel is worth more than the beam. The season of yachting now at hand may dispel much of the doubt surrounding the all important subject, and to this end the results of the many races arranged will be anxiously looked forward to by all thoughtful yachtsmen."—*N. Y. Herald.*

[A look at the fleet of yachts that will assemble three times this week on New York Bay will give convincing evidence of the victory of FOREST AND STREAM in the long fight for honest boats. The presence of a fine fleet of thoroughbred cutters, while important in itself, is no more so than the changes to be noted in the sloops of today compared with the same vessels of a few years ago, but besides such indisputable evidence, we quote the above as an index of the feeling among a large majority of yachtsmen, who have burst the shell of habit, prejudice, ancient dogmas, and so-called patriotism that has so long retarded our yachting, and are willing to examine fairly and intelligently all that is placed before them and to accept or reject on merit only.

The self-satisfaction, over confidence and unwillingness to examine or adopt anything new or unknown has virtually disappeared among the great body of American yachtsmen, while at the same time the sport has advanced proportionately. Such truths as were proven so conclusively by Madge, and were then only accepted unwillingly because they were beyond dispute, are now received readily, weighed carefully and impartially, and adopted or condemned only after a fair hearing.

The work of the last four years has made possible a fair and thorough test of the questions in dispute, many of them have already been decided conclusively, and the contests of this week open a season that promises to end the controversy finally.]

SALEM, MASS.—While yachting is not as forward as usual at Salem (perhaps owing to the backward season), there are yet signs of life. The Fortuna lays at the wharf, Beverly, having just received her summer spars and rig. Alongside was the Latona fitting up, and the sloop Ariadne, now owned by E. B. Rogers, Beverly, will come out looking finely in a white dress with hard wood upperwork. The Halcyon is yet between the bridges, so are the Nita, Clochette and one or two others. The cutter Medusa, Rice's Whitecap and Benson's Viva, with Upton's Crest, are in commission. The Salem Bay Y. C., with its new commodore, Mr. Winslow, and his new schooner, the Cleopatra, will open the season lively.

MAGGIE.—This cutter will soon be ready for the season's races, having undergone several important alterations during the spring. Some 5,000lbs. have been taken from her inside and added to her keel, part in the shape of a shoe 4in. thick and 3in. wider than the old keel, thus projecting 1½in. on either side, forming a shelf. The rest of the lead was cast in two plates, fitting each side of the keel and resting on the projecting shoe, all being held by copper bands passing under the keel and through-bolted to the hull. In consequence of this change she has been fitted with longer spars and a new and larger suit of sails.

ATLANTIC Y. C.—The times of that portion of the fleet that anchored in Gravesend Bay after the sail on Decoration Day were as follows: Daisy 3h. 1m., Tourist 3h. 6m., Viking 3h. 6m. 30s., Crocodile 3h. 6m. 45s., Romeyn 3h. 7m., Gleam 3h. 11m., Venture 3h. 11m. 15s., Genevieve 3h. 11m. 30s., Ilderan 3h. 11m. 45s., Nomad 3h. 21m., Triton 4h. 10m. 30s., Gracie 4h. 15m., Agnes 4h. 20m. In class C the Athlon won on Monday and not the Thistle, as at first reported, the prize being awarded to the former.

SOME NEW BOOKS.

EUSTES.—A novel. By Robert Apthorp Boit. Boston: Jas. R. Osgood & Co.

AN AVERAGE MAN.—By Robert Grant. Boston: Jas. R. Osgood & Co. A study of one phase of New York social life.

BUT A PHILISTINE.—By Virginia F. Townsend. Boston: Lee & Shepard. This is a new novel by a writer who is a great favorite among school girls.

IN THE SADDLE.—A collection of poems on horse-back riding. Boston: Houghton, Mifflin & Co. A comprehensive, well selected, elegantly printed little book, with all the famous rides in the poetry of adventure, love and war.

STAGE-STRUCK; or, She Would be an Opera Singer.—By Blanche Roosevelt. New York: Fords, Howard & Hulbert. Written "to persuade American girls, who come over to Europe to study music, that they might be wiser to study at home."

WHIRLWINDS, CYCLONES AND TORNADOES.—By William Morris Davis. Boston: Lee & Shepard. An essay on the theory of storms, reprinted from *Science.* The illustrations and the text together afford an admirable exposition of the subject.

EVERYBODY'S PAINT BOOK.—A complete guide to the art of outdoor and indoor painting. By F. B. Gardner. New York: M. T. Richardson. The special design of the book is to give full instructions to those who wish to do their own house painting.

PROFITABLE POULTRY KEEPING.—By Stephen Beale. Edited with additions by Mason C. Weld. New York: George Routledge & Sons. Price, $1.50. A compendium of practical information about the various breeds of poultry, with directions for their management.

THERE WAS ONCE A MAN.—A story. By R. H. Newell (Orpheus C. Kerr). New York: Fords, Howard & Hulbert. A reprint of one of *The Continent* serials. Story opens in New York sixty years ago, thence scene is transferred to Borneo in the time of the famous English Rajah Brook.

SUPERIOR FISHING; or, the Striped Bass, Trout, Black Bass and Bluefish of the Northern States.—Embracing full directions for dressing artificial flies with the feathers of American birds; an account of a sporting visit to Lake Superior, etc. By Robert Barnwell Roosevelt. New York: Orange Judd Company. A new edition of a work published in 1865. Contains a great deal of solid information, for the author is a thorough sportsman both with rod and gun. Mr. Roosevelt is a strong writer, and we have often pointed out both his beauty of style and his faults. The former are apparent on every page and the latter occasionally crop out. He has become careless in revising what was really a wonderful stock of fishing lore twenty years ago, and on issuing a new edition contents himself with adding new chapters and letting the old ones stand.

FLY-FISHING IN THE MAINE LAKES, or camp life in the wilderness.—By Charles W. Stevens. Boston: Cupples, Upham & Co. This book was favorably noticed in our columns some months ago when first published. The present is a third edition. Several pages have been added, and there are numerous very crude illustrations contributed by the author's friends. Barring these, the volume is a handsome specimen of the bookmaker's art.

WILD WOODS LIFE, or a trip to Parmachenee.—By Capt. Chas. A. J. Farrar. Boston: Lee & Shepard. This is a book about boys and for boys. The title page describes it as "A realistic story of life in the woods." It is not very realistic. The boys go through scenes which are never to be found outside of book covers, yet, we presume, youthful readers will find it none the less entertaining on that account, and we hope that Mr. Farrar may find a large audience for his yarns.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

A. L. L., New York.—The specimen appears to be the warbling vireo (*Vireosylvia gilva*).

POINTER.—Bay snipe shooting in Shinnecock Bay begins in July, is best in September, and lasts into November.

QUESTION.—Are any bullets of .32-caliber made hollow or express, or would cartridge makers make them to order? Ans. Yes.

J. T. G., Keyport, N. J.—We cannot tell of any cement that is entirely reliable for your purpose. Marine glue would probably answer; but it cannot be procured here.

C. P. B., Ottumwa, Ia.—Canoes carry two flags, a club signal and a private signal, the latter at the peak of the mainsail, the former a peak of mizzen when two sails are carried.

F. P., New Bedford.—When is the law off for black bass in Rhode Island? Ans. The law of 1876, and we know of none later, forbids their capture between March 1 and July 15.

FISHCULTURIST.—How can I get the reports of the American Fish-cultural Association? Ans. Only by joining. It costs $3 per year for membership, and the reports are confined to members only.

H. C. P., Orisco, Ia.—The best book for you is "Hallock's Sportsmen's Gazetteer," which contains descriptions of all the game birds, animals and fishes, and tells how to capture them. We can supply it. Price, $3.

Z. B. W., Gloversville, N. Y.—The only change made in woodcock law of New York was printed in our issue of May 22. The season for Delaware and Oneida counties was made Sept. 1—Jan. 1; elsewhere, Aug. 1—Jan. 1.

TROUT.—1. Where can I get a book on trout raising? 2. Has a man a right, legally, to net brook trout for stocking a private pond? Ans. 1. Get "Domesticated Trout," by L. Stone. We can supply it. 2. Not in public waters, nor in private ones, without the owner's consent, and in this case the waters must be strictly private.

NOVICE, New Orleans.—1. Is a lancewood rod a good durable rod for trout fishing, and what kind and size are the trout flies used? 2. About what would a first-class canoe cost, with paddles and sail? 3. What is the name of the best reel in use and what is the price? Ans. 1. Lancewood is good. Flies of all kinds and sizes are used, according to the size of the trout and the kind of waters. 2. A first-class canoe, with paddles, sails and fittings, will cost from $100 to $150, according to size and finish. 3. We do not know whether you want a large or a small reel; they range in price from $1.50 to $18. Write to any of our advertising tackle dealers, they are all reliable.

PERCYVAL.—I am going to fish a lake in Berkshire this summer which has had 70,000 landlocked salmon placed in it in three lots, first lot in 1879. The lake is fed by springs; deep in some places, shallow in others; in some of the shallow bays are pads. The bottom is partly weedy in shallow places, and partly sandy in others. The deep spots have stony bottom, no mud. The outlet is a good sized stream and there are pads, etc., around it. The lessees of the lake allow fishing from July 1 to Nov. 1. The angling works tell very little of value about this fish and so far as I know none have been caught since the lake was stocked. I intend to try and see if any have escaped the bass and pickerel and would like to ask these questions. 1. What weight should the first lot approximate? 2. Can the fish be caught during the time mentioned? 3. In what part of the lake would I be most likely to find them? 4. What kind and size of flies or bait, if they take it, should I use? Ans. 1 Four to six pounds. 2. Yes. 3. In midsummer they will be in deep water. In the fall they may be near the outlet for spawning. 4. Use ordinary salmon flies if the shallow waters are cool. Use minnows in deep water, fishing as for lake trout.

INFORMATION WANTED.

C. H. S., Philadelphia, wants to know who invented the first American breechloading shotgun, when and where; also whether Roper revolving shotgun is older than Colt's revolving shotgun.

INVALID SPORTSMAN, Binghamton, N. Y..—Wants to know where he can locate in the South or Southwest, where winters are very mild and short, where chills and fever are unknown, where small game is plenty, where air, climate and water are healthy. In a not large village where the inhabitants are good.

LONG ISLAND TROUT PRESERVES.

A Long Island brook trout is as pretty as toothsome, while the artificial creature taken from a private preserve is no match for the wild specimen which, unfortunately for persons who are not million ires rapidly disappeared during the decade past, and such a fish is now regarded as an extraordinary prize. The time was when every stream on Long Island abounded in this game fish, but various causes have led up to a point where an angler must own a preserve, or put himself under lasting obligations to a friend who does, in order to find opportunity to throw a fly at all. While not a single stream has dried, business enterprises established along the banks have poisoned the waters so thoroughly that not even a sunfish could live in it. Other streams have been utilized by professional breeders to raise market trout and furnish young fry for stocking preserves, but the latter feature of the business, once profitable, cannot be considered so any longer, as the State Fish Commission is now supplying nearly all the young hatch that is demanded. Then, again, gentleman who have purchased and improved land extending over territory miles long in any direction have had a sharp eye to the value of swift running streams as an adornment and enrichment to country seats, and it is such who have pratically monopolized the brooks where everybody was wont to fish on chance luck. This is especially true of the south side of Long Island, so that now there is no common fishing ground, and not one person goes trout hunting where 100 used to go. There are ponds to which persons may go and fish on the distinct understanding with the proprietor that for every pound of fish hooked he shall receive the prevailing market price, so that after all the only difference between getting one's supply from the pick of the market and the pond is the satisfaction of knowing and saying that he caught the fish and thus prove his ability as a fly thrower, though it is by no means difficult to catch fish when the thousands in the pond have been starved for days to make them eager to bite. Some breeders are on such good terms with the tenants of the water that a peculiar whistle brings them swarming to the bank, and a fly thrown in from another quarter is made for with a rush, the deluded fish thinking it the regular feeding hour and the fly the first installment of the customary meal. William Furman, of Maspeth, was a fish charmer. He has removed to Smithtown. The ordinary growth of a trout, he says, is three to four inches the first year, and the maximum growth is attained in four years. There are exceptions, however. Some of the young fish grow so rapidly that they eat the smaller ones, and the careful breeder makes a specialty of keeping them properly separated. Occasion-

ally a peculiar disease attacks the fish, killing thousands in a brief time, and it is then that the greatest ingenuity is required to preserve any part of the stock. Eels, perch and pickerel are deadly enemies of the trout.

Perhaps the greatest private trout preserve in this country is on Long Island. It is owned by the South Side Sportsmen's Club, and is located at Oakdale. The club is composed of wealthy New York gentlemen, and the property is valued at $250,000. When the late Recorder Hackett was president of the club he was the champion fly-thrower, and it was his boast that he never ate a fish (at the club) which he did not hook, and he could stow away five pounds of trout at a meal and not feel distressed. The pond in which the full-grown fish are kept covers several hundred acres, and the breeding houses are maintained on a large and scientific scale. George Lorillard has a great estate and and an excellent and well stocked trout stream adjoining the club, and southward near the Great South Bay is the magnificent estate of Mr. William K. Vanderbilt, whose trout excel in flavor by reason of the stream being rendered brackish by the overflow of salt water from the bay. Mr. Lorillard is very ill in Florida, and his property, which has cost him $250,000, is for sale at the modest sum of $200,000. Mr. Vanderbilt's place has cost him $800,000. He owns twenty thousand acres of land.

Babylon is famous for its great ponds. The notable ones are owned by Mr. August Belmont, Mr Austin Corbin, Mr. Phelps and Mr. Sutton. Mr. Belmont has been unfortunate. The poachers have troubled him a great deal, and stolen thousands of his fish. Sometimes if a pond is small, they drag a net through it. Into a large pond they throw lime, which causes the fish to show the white of their stomach and lay motionless. They are tenderly but quickly picked up and the fresh water, carried in barrels for the purpose, soon revives them. A moment's delay sometimes kills them, as they are the most delicate of water game. On one occasion it became necessary to clean Mr. Belmont's pond. The men carelessly uncovered the fish and hundreds of them were killed by the heat of the July sun. Trout can endure cold, but not the heat. The fishing in this pond is now unsurpassed. Mr. Corbin, too, has had his share of trouble with poachers. He went in for prosecuting them at large expense of money and time, but got no satisfaction, as the jury acquitted the prisoners on the ground, as was thought, that no man had any right to monopolize the products of the water. That was during the time when the common streams were rapidly falling under private control, and public sentiment was strongly opposed to it. There are some great trout in Massapequa Pond at South Oyster Bay and in the streams northward which feed it. In one stream running under the Montauk Railroad people familiar with the fact never lose an opportunity to catch a passing glance of the frightened fish that abound there and shoot out in small schools as the trains pass over. The brook is half a mile long and the fish find natural food in it upon which they thrive better than those artificially bred. Thompson's Pond at Noyac was once a famous stream, but at present is somewhat inferior through damages by freshets and the unneighborly conduct of some of the residents. It is a picturesque place where the city folk go to enjoy a trout dinner instead of to fish. New Canaan, a wild region north of Patchogue, is the home of many professional breeders who, in very small space, raise such an incredible quantity of fish as to place them in the category of poachers.—*Brooklyn Eagle.*

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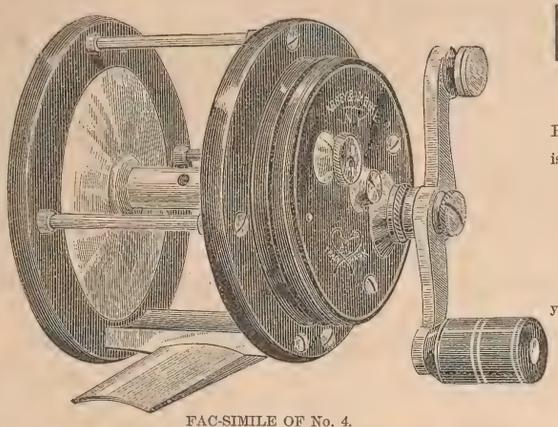
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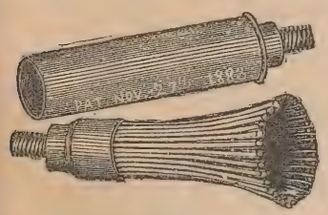
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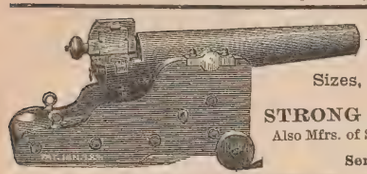
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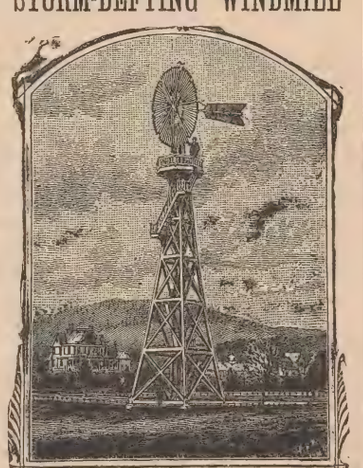
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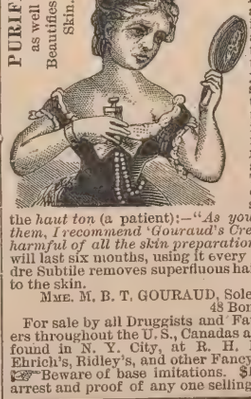
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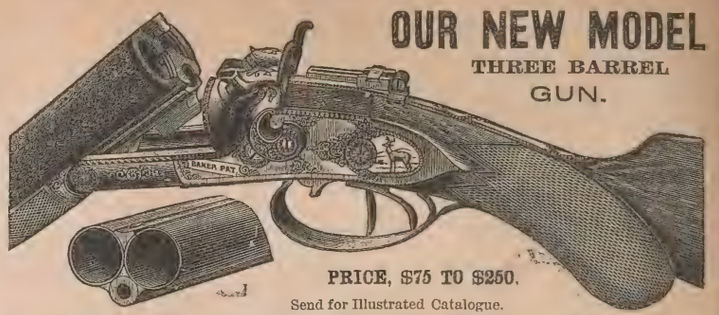
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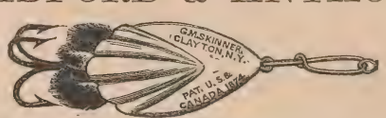
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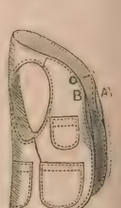


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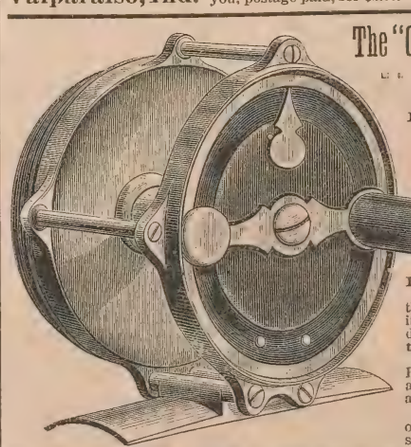
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NEW YORK, JUNE 19, 1884.

VOL. XXII.—No. 21. NOS. 39 & 40 PARK ROW, NEW YORK.

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JUNE WOODCOCK.

EVERY year, as regularly as the seasons roll around, come the complaints of those various individuals who go out for game-bird fledglings. Our correspondents are quite inclined to find fault with the exploits of these gentlemen, and usually heap abuse upon them. This spirit is hardly commendable. Undoubtedly the aggravation is great, and writers lose their temper only under great provocation. They see the game birds destroyed out of season; and then they fly into a passion and write to us to denounce the men who cause their woe. This is, we need not say, entirely wrong. Instead of getting mad and writing to a distant newspaper about it, they might better keep their temper and secure the punishment of the bird destroyer.

There are two classes of these destroyers of the early bird. Each is made up of individuals whose mental and moral development has been stunted. There is the man who has some dogs to break, and thinks that he must go into the game covers in the spring, rout the mother bird from her nest and let his canine pupil poke its nose into the eggs. Later in the season, if his pups can manage to catch some of the fledglings, so much the better. He lacks the sense requisite to comprehend that a bird chewed up by a puppy is just as dead as if riddled by a large charge of shot. The proper way to give him a hint on the subject is to enlarge his brain capacity by sequestration in a cell, or tapping his pocketbook to the extent of the fine in such cases made and provided. This is apt to accomplish even more than can be secured by writing to FOREST AND STREAM, which we are quite willing to acknowledge is often an effective means.

The idiot who takes his young dogs into the nesting grounds is an altogether different specimen from the sneak who goes in for getting the immature birds for the alleged reason that if he don't some one else will. The former lacks common sense, the latter wants common decency. His plea is that of a common felon. "If I don't some one else will" has been the cowardly excuse for almost every crime known to the calendar. The man who slides off into the woods in June, and makes this a defense for his misdemeanors, has a spirit so contemptible that honest men will fail to understand it. How any one who professes to practice field sports for the pleasure there is in them, can find any enjoyment in lugging home at night a bag of birds, and with it the load of his consciuasness that he has done a mean and unlawful deed, is something quite beyond our comprehension. Can any one explain it?

THE POINTER DISCUSSION.

A PORTION of the great mass of correspondence on this subject will be found in our Kennel columns; another portion we decline to publish. We have before called attention to the fact that, if pointer breeders are to be benefitted by this discussion, it must be conducted temperately and must be confined to the question at issue. If this is not done, what should be an argument between gentlemen degenerates into an unseemly wrangle from which no one can emerge with any credit. Some of the letters which we print this week we regret to say wander lamentably from the subject, and cover a vast deal of ground which is wholly foreign to it. Is it quite impossible for those who write about dogs to stick to the point? The question at issue is about certain dogs. Can correspondents not confine themselves to those dogs and say where they are good and where bad? For ourselves we have no desire to mingle in the fray. Our decisions are matters of record to which any one can refer.

It is somewhat amusing, however, to observe how those on each side in the debate seem to imagine that, because we do not at once espouse their cause, we are therefore secretly abetting their opponents. Within a day or two of each other, and just after our editorial two weeks ago on "The Pointers at New York," we received among the numerous letters on the subject two from gentlemen on opposite sides of the question especially interested in the matter, from which we quote below:

One said:

If you have any personal reason for not wanting anything to appear in the paper against ——— or ——— I shall have nothing more to say, and will respect your private affairs accordingly.

The other said:

The fact that they know a good dog and are friendly to me should not be sufficient reason for putting their letters in the waste-paper basket.

Now, of course, if these gentlemen had given themselves the trouble to think about the matter at all, they would not have taken the further trouble to write such silly stuff as the above, but they did not stop to think. It is rather late in the day for us to say that we are not pecuniarily interested in dogs, and have no private reasons for excluding communications from our columns. But we certainly shall not publish matter that, in our judgment, will fail to interest our readers. Communications must keep more closely to the subject in hand, and should contain something that will instruct. We hope that this hint will suffice.

NEW YORK MOVES TO INCREASE THE OYSTER.

GOVERNOR CLEVELAND has just signed the bill which was introduced into the last Legislature of New York, by Gen. S. W. Johnson, of Mamaroneck, Westchester county, which constitutes Mr. E. G. Blackford, of the New York Fish Commission, also a commissioner for the protection and propagation of oysters. This bill, which was suggested to Gen. Johnson by his constituents, reads as follows:

"For the Commissioner of Fisheries, appointed under Chapter 309, Laws of 1879, $5,000, to be expended as said Commissioner may deem proper upon vouchers to be approved by the comptroller, for the purpose of investigating into the causes of the decrease of oysters in the waters of the State of New York, and into the extent of the injuries made by the starfish and other animals that attack the oyster, and for the purpose of ascertaining how the oyster industry may be protected and the supply increased."

This is a good beginning, and will, no doubt, be followed with good results. We have on several occasions pointed out that New York should follow the lead of Connecticut, which has a perfect system of leasing oyster grounds, which, after three years' trial, gives satisfaction to the oystermen. Mr. Blackford will avail himself of the experience of Lieut. Francis S. Winslow, of the United States Navy, who has given much thought to the oyster question, and is familiar with the oyster grounds of the State, if he can be detailed for this purpose. Prof. H. J. Rice, whose labors in the study of the embryology of the oyster are familiar to our readers, will also be engaged on the work, and the hatching station of the New York Fish Commission at Cold Spring Harbor will, in all probability, be selected as the site for operations in oyster culture, as it is most favorably situated for the work.

THE ADIRONDACK FORESTS.

IT is understood that Governor Cleveland has withheld his signature from the Adirondack forestry bill, and consequently there will be no commission this year. There was, however, in the appropriation bill a clause devoting $5,000 to the employment of three experts to prepare a report on the Adirondack forests, to be presented at the meeting of the next Legislature. This clause, according to the published reports, has received the Governor's sanction, and so we may hope for progress in the movement to protect the Adirondack woodlands.

We understand that before his recent departure for Europe Mr Morris K. Jesup made arrangements to have a party go into the Adirondacks at his expense, in case the State made no appropriation. This party was to be under the direction of Professor Sargent of Harvard. It is to be hoped that Comptroller Chapin will as soon as possible select the investigating committee, as he is empowered to do by the clause referred to, and that the board so appointed will at once enter upon their important work.

PRESIDENT ARTHUR'S RECORD.—Last Monday President Arthur and Secretary of War Lincoln went down to Long Island on an angling excursion. They fished for trout in the Massapequa Lake, which is a preserve owned by Mr. William Floyd-Jones. Now, the ordinary angler can go fishing and come home at night without saying boo to anybody. But when the President of the United States wets a line the great metropolitan journals send their representatives to intercept the tired fisherman and learn his luck. So when the two returned to the Fifth Avenue Hotel the other evening, they found their passage blocked by a horde of reporters, who wanted to know all about it. President Arthur made a plea of having other fish to fry, and escaped. Secretary Lincoln consented to say something, but not much. He refused to tell how many fish were caught. To a *Times* reporter who asked how the fishing was he replied, "Well, as good as could be expected. It's pretty late in the season;" while to a *Sun* reporter he explained: "We had a very enjoyable time, although it is a little early for good fishing." What is to be inferred when a President and a Secretary of War go fishing, and in place of showing a handsome "mess of trout," allege to one that it was too late for fishing, and to another that it was too early? We confess that it appears as if the catch that day must have been an exceedingly meagre one; but we shall not hastily, nor strenuously, insist upon such an interpretation of Secretary Lincoln's prevarication.

MARKED TROUT.—It is the custom of some of our fish commissioners to attach metal tags to liberated salmon, that when captured again, the growth of the fish may be noted. We once knew an angler who was in the habit of putting his mark on trout; but he did not use a metal tag. It was a rule with him to retain no trout that weighed less than one-half pound. When he landed one of less weight, he would carefully take it from the hook, mark it by biting off the upper portion of its tail fin, and throw it back into the water to grow. Sometimes he would catch these fish again after they had attained the proper size to find a place in his basket; and it was often a source of pleasure to him to receive a letter of thanks from some fellow angler who had chanced to take one of the marked big fellows. One day this biter of trouts' tails was driving along some eighteen miles from home, when he came to a bridge over a stream, and in passing saw a big trout rise. The next day, with his tackle, he drove back over these eighteen miles and tried for a rise. He found not a sign of trout. The next day he made the journey again, with a like result. The third day, nothing daunted, he drove out again. This time he pulled out a three-pound trout. The upper half of its tail fin was gone; and our friend has always believed that it was one of his marked trout.

THE REFRACTORY PIGEONS.—The New York State Association for the Protection of Fish and Game, are trying to find out where the wild pigeons are nesting, so that they may hire the professional nest robbers to collect a few thousands of birds to be protected by the Association at the Buffalo tournament. This scarcity of wild pigeons is seriously interfering with the progress of game and fish protection in this State, and the protectors may well ask each other what is to be done about it. An unsubstantiated rumor is abroad that clay-pigeons may be substituted for the live birds, but as every practical man knows, there is nothing so potent for true game and fish protection as four or five thousand wild pigeons, captured on nesting grounds and shot at the trap,

The Sportsman Tourist.

UNCLE LISHA'S SHOP.

III.

THOUGH in mid-day there was yet a hazy after-taste of the sweetness of Indian summer, the season was beginning to have a smack of winter in its night air. On such an evening, as the first star began to shine above the rounded peak of Tater Hill, Lisha rubbed the mist off a pane of his long, low shop window, and stooping his eye to it peered out upon the darkening road. Out of the gloaming presently grew some dark shapes into men, the sound of whose footsteps and voices came a little before them. When they and others had entered and been welcomed by Lisha, he having lighted his pipe and taken some work in hand, declared "the meetin' open," and that they "was all ready to transack business." Little was said till some one remarked, "Pwheeew!" And then all became aware that an odor more pungent and powerful than those of leather and shoemaker's wax was pervading the atmosphere of the shop.

"Good airth an' seas!" cried Lisha, "I secont the motion! Le's all whew! Some on ye stepped on suthin' t'night, or somebody got skunk's ile to sell."

Each took a sniff of his neighbor till the source of the fragrance was traced to Pelatiah's corner, when he shamefacedly confessed that he "hed ben a trappin' a leetle," but said in extenuation, "I sot fer mink. I hed one trap sot in a holler log over to Hillses' brook with a ruster's head fer bait, an' when I went tew it yist'day the trap was hauled' int' the log. I pulled on the chain c'nsid'able stout, but it didn't le' go a bit, an' then I god daown on all fours an' pecked in to see what the matter was ailded it, an'—O, gosh all Connet'cutt! My eyes haint god done smartin' yit! I rolled an' I tumbled till I got to water, 'n' then I washed an' rubbed an' scrubbed till I c'ld see suthin' 'sides stars and fire, an' then I went hum an' berried all them close, an' washed me in three waters an' smudged me with hemlock browse, an', gosh darn it all, I didn't 'spose I wa'n't all sweetened aout! 'F my comp'ny haint 'greeable I'll dig fer hum."

"Sho!" Lisha shouted with hearty politeness, "Guess we c'n stan' it 'f you can! 'S fer me, I ruther like a leetle good fresh skunk parfum'ry. The's some 'at eats 'em"—rolling his eye toward a known mephitipophagist—"an' I sh'd think them 'at likes the taste would the smell. Furdermore, I'm beholden to skunks fer c'nsid'able myself. Keep yerself comf'table, Peltier."

No one objected to Pelatiah's presence, and several asked Lisha how he was indebted to skunks for anything.

"Wal," said he, slowly scraping the sole of a boot with a bit of broken glass, while his thoughts went backward over the rough path of his life, "in the fust place, when I was a leetle chap they cured me o' croup with skunk's ile, which they gi'n it ter me spoo'ful arter spoo'ful, an' greesed my stomerk with it outside tew. An' then arter I'd got growed up, skunk essence cured me of azmy. An' then—I don't scasely b'lieve I'd ha' ever got Jerushy 'f 't hed n't a ben fer a skunk!"

After the "wal I swan's," and "goshes" and "yeou don't says," which this declaration called forth, there was a general demand for an explanation, and Lisha laid down his boot and glass, and devoted himself wholly to the telling of his story, with his elbows on his knees and locking and unlocking his waxy fingers as he talked, as if so he wove the woof of his tale.

"I never sot no gret on ole folks tellin' of what they'd did, or ben, or hed when 't they was younger, but when Jerushy was Jerushy Chase she was 'baout 's pooty a gal as c'ld be dug up in tew three taowns, an' as smart and cap'ble, an' nat'lly she was sought arter, an' none the less cause her father was tol'able well off. When I begin a sparkin' on her, I hed n't nothin' much but my tew hands, was a workin' aout by the month for this one an' that one for six or eight months, an' I'd larnt to shoemake a leetle so 's 't I 'whipped the cat' winters, so ye see I was arnin' suthin all the time, an' I wa'n't sech a humbly ole critter 's I be naow, so 's 't stood jes 's good a chance as any o' the fellers, till bimeby the' com a chap to teach aour deestrick school, a college feller f'm Middlebury. He was a clever creeter, an' smart, an' good natered an' hahnsome, c'ld rastle like a bear, 'n' sing like a boblink, 'n' wore hahnsome close evey day, so all the gals 'most wus a ravin' an' a ravin' arter him. Jerushy wa'n't, though, an' that made him the faster and fircer arter her. An' so arter a while his pooty talk an' hahnsome close an' all them college things begin to work on her, 'n' she get so 't she'd mos' lives I would n't come Sunday nights as not.

"So it run along till tow-wards the middle o' sugarin', she a favorin' him a leetle mor'n me of the tew, an' the' was goin' to be a gret sugarin' off to Hillses, 'n' most everybody hed a *in*vite. I went 'n' ast Jerushy to go 'long with me, 'n' she said she 'didn't know; guessed she'd go 'long with the one 'at come arter her fust.' Thinks sez I, Mr. Schoolmarster, 'f you get to Uncle Chase's 'fore I dew, you'll hafter pull foot for it lively. So 'long in the middle o' the art'noon I got my chores all done up, an' dressed me an' off. I put 'crost lots, 'n' I hedn't got fur when darned if I didn't see that 'tarnal schoolmarster jest agoin' int' the aidge o' Meeker's Woods, pintin' for Uncle Chase's, 'n' nearer tew it 'n' I was. I doubled my jumps an' got there, an' tole Jerushy I'd got there fust 'n' she'd got to go 'long with me. She kinder hung off, lookin' outen the winder every onct an' awhile, but nary a schoolmarster! An' so bimeby she got rigged up an' off we went an' had a gret carummux to the sugarin'. She kep' a-sythin' an' a-peekin' fer a spell, but nary a schoolmarster, an' then she got desput jolly 'n' made more fun 'n the hull toot on 'em. Goin' hum in the moonshine, I ast her to jine me in a sugarin' for life, an' 'fore we got to the chips in the do'yard she 'greed she would, an' here we be! Me on this 'ere shoebench, an' she," lifting his voice and pointing a waxy forefinger at the door that opened into the kitchen, "an' she a-peekin' through the crack o' that 'ere door!" The door squeaked suddenly to, and the wooden latch clicked rather spitefully.

"Wal," said one disappointed auditor, breaking the short ensuing silence, "Wha'd all that hev ter dew with a skunk?"

"O, nuthin' much," said 'Lisha, "only, ye see that feller was a shovin' 'long the best he knowed, through the woods in a wood road, an' fust thing he run spat ont' a skunk aout takin' a walk. The skunk wouldn't run, an' he wouldn't, an' it turned aout con'try to scriptur. The battle *was* to the strong, an' the race *was* to the swift. The schoolmarster smelt loud 'nough to fill a forty acre lot, an' so the' wa'n't no schoolmarster ta Chases' nor t' the sugarin-off, nor t' the school in that deestrick that spring, nor nothin' left on him in the deestrick but his parfume So ye see, a skunk hed suthin' ta dew with his scaseness, which I c'nsider myself c'nsidable beholden to skunks."

"Bah gosh!" said Antoine, "ah don' fred for skonk, me! Ah tek hol' of it hees tails an' lif' 'im aup, he can' do sometings! No sar!"

"'Twouldn't make no diff'ence tew ye if he did," said Lisha, "a skunk's nat'ral weepon haint nothin' but double d'stilled biled daown essence of inyuns, 'n ye couldn't hurt a Canuck wi' that."

"Bah gosh, guess you fin' aout 'f he hurt you, you git him on you heyesight, whedder you Canuck or somebody. Ant it, Peltiet, hein?"

Said Solon Briggs, "Might I a-rise to ask you, Antwine, Anthony, or Anto ni-o, all of which I suppose you ter be, haow dew you pervent the aout-squirtin' of the viles o' wrath whilst you air a-proachin' of the mestiforious quadruple head?"

"Wal, M'sieu Brigg, dat someting you got t' larn bah—ah—what you call it, pracsit?"

"Prehaps Peltier 'd lend ye one o' his'n to practyse on, Solon," Lisha suggested, but Solon expressed no desire to acquire the art of capturing skunks by that method.

"The y ra'ly can't scent when you hol' 'em up by the tail, 'n' that's a fact," said Joseph Hill. "I remember onct when I was a boy ten 'r dozen year ole—I d'know, mebby I was fourteen—lemme see, 'twas the year 't father hed the brindle caow die 't hed twin calves; got choked with an apple—no 't wa'n't, ' was a tater—they was fo' ye'r oles when he sole 'em, the fall 't I was seventeen—no, I wan't but thirteen—the' was a skunk got int' the suller, 'n' of course we didn't want to kill him there, so my oldest brother, Lije, he took a holt on him by the tail an' kerried him aout the hatchway with a pair o' tongs, an' then he gin him to me an' I hel' him up while he shot him. He put the ole gun clus to his head an' blowed him clean aouten the tongs as fur 's crost this shop, 'n' by gol, he never scent one mite till then, no more 'n a snowball."

"Did he die?" asked the ever alert seeker after useful knowledge.

"Why, yes," Joseph replied, "he jes stunk hisself to death then."

"Jozeff," said Lisha, "that 'ere puts me in mind of the Paddy. 'Divil a nade o' shootin' him,' says he; 'lave him alone an' sure he'll shtink himself to death.' What a 'tarnal time the creeturs dew hev wi' skunks 'fore they git 'quainted with 'em. 'Member the ole story one on 'em tole? What was't Sam?"

Sam repeated the time-honored tale. "The furs toime iver I wint hoontin' in Ameriky was wan day whin I was gown to me worruk, an' I kilt a boird call't a skoonk. I threed hur undher a hayshtack an' shot hur wid me sphade, an' the furs toime I hit hur I misht hur, an' the nixt toime I hit hur where I misht hur afore. An' whin I wint to plook the feathers off hur, I was foorced to shkin hur, an' in doun that I shtruck hur ile bag or hur heart I dunno, an' the shmell nearly suffocaytit me, an' I was near shtarvin' afther, for divil a dhrink cud I take, but the shmell of hur was in me noshtrils to kape me awake all night.' I like to died," Sam continued, "to hear Joel Bartlett's Irishmun tell 'baout the fust skunk 't he ever met. 'Twas when he was in Masschusitts, 'Maxacushin' he called it. He ben a workin' on a railroad, an' lived in a shanty as yit though he was workin' fer a farmer. Sez he, 'I wor a shpadin' round threes in a yoong archard, an' Tom Egan, the divil, was in id wid me, an' I seen caperin' troo the grass a foine shlip av a young cat, an' says I to Tom, says I, begob, I'll capshure it to kill the mice in the curse o' God shanty that's near dhrivin' me dishthracktit. 'Do,' says he to me, an' the divil knowin' in his own moind what it was. An' away I wint in purshuit, an' whin I was about to lay me two hands on id, I was shtruck in me face an' the two eyes av me wid a shtream av the divil's own wather an' I was blindit an' shtrangled, entirely. But I joomped on the baste wid me boots an' kilt it, I was that choked wid rage, an' a grea' d'l beside, an' thin I wint away back to Tom, but divil a near him wud he let me come, the bl'guart, an' I call't out, 'Tom!' says I, 'am I kilt entirely an' is it me, or is it the divil's father of a baste that be's makin' the notorious shtink altogether?' says I. 'Be gob!' says he, 'its the both ov yees, an' ye'll shmell that bad an' may be worse for a year,' says he. 'Ah thin,' I cried, 'millia murthers, I'm ruinaytit!' an' so skoolked away home to the curse o' God shanty, an' whin I wint in Biddy an' the childher wint out, an' I had the shanty an' the shmell all to meself. Well, I berrit me close, an' I sailed back an' forth troo the pond o' wather till night, but divil a much bettber did I shmell for a week. Oh! bad luck to the counthry that nurtures such cats!"

"Dat Arish," Antoine remarked, "a'nt spik so good Angleesh lak ah do, don't it?"

The slim candle in the sconce had burned so low that when Lisha attempted to snuff it with his fingers he pulled it out and it dropped upon the floor, and sputtering out left the shop in darkness except for the thin streaks of firelight that shone through the cracks of the stove, and the dim rays of stars slanting in at the little window. The mishap was accepted as a unanimous vote of adjournment, and stumbling and groping their way to the door, Lisha's guests again departed.

A SUMMER CAMP GROUND.

WAGON Wheel Gap with its hot springs, fine scenery, altitude of 8,305 feet, invigorating air, abundance of all kinds of game and large trout, may not suit the tastes of all our Eastern tourists and sportsmen, so I will continue to give a few more of the many interesting points on this great mountain railroad, called by all who have ever traveled it "the great scenic route."

The writer during last fall traveled over the Denver & Rio Grande Railroad from Denver to Salt Lake and stopped off, camped, fished and hunted at six different points on the line, and all he can say is that no sportsman can go amiss for game of all sorts and speckled trout in abundance, at any point he may select after the train leaves Pueblo, Colo.

The first point of great interest to the tourist or sportsman is the Royal Gorge or Grand Cañon of the Arkansas. Here deer and mountain lions are plenty. The former are frequently seen from the windows of the passing train.

The Grand Cañon has been lauded in many of the daily papers throughout the land. It must be seen to be appreciated. The English language cannot describe it. From the entrance, for eight miles, there is an ever-changing scene of Nature's greatest work. Above you the peaks rise to the giddy height of 3,000 feet. Below the river rushes and falls over the craggy rocks. As you penetrate deeper into the cañon the walls appear to close on you, until a mere fissure of thirty feet is left for train and river to pass, while the smooth granite soars to the very clouds above. Here is an iron bridge, built lengthwise, and suspended on steel trusses mortised into the rock at either side. At this point the grandeur of Royal Gorge culminates. The next point of great importance is Marshall Pass, where you cross the Sangre de Cristo range, at an altitude of 10,508 feet, in a palace car. Here the sportsman enters the great game country of the world.

Continue to Sapinero, and if you desire elk, bear, mountain sheep, mountain lion, blacktailed deer, grouse and mountain trout as large as your arm, go to the Roaring Forks of the Grand River, about thirty miles from the railroad. If you want all but the elk, go to the eating station called Cimarron. Here are fine camping grounds and the very best fishing and game grounds. Here you can camp within a mile of the station and can start a deer any time within one hour's travel. Grouse here are very plenty and easily got at. There is a large pool here formed by the confluence of the Cimarron Creek and the Gunnison River, which will suit all lazy fishermen. One can sit on a large rock and drop his fly and take off from his hook fine trout just as fast as he can handle them. Last August the old Irish bridge tender was watching me play a taking fly at this point, when this pool seemed literally alive with large fish. I and my fifteen-year-old son had caught out of this one place thirty-seven pounds in less than one-half a day. Our Irish friend says: "By jabers, I hive bin troying to clane this houl out of thim for the past four months, and jist luck at thim. How miny do you think there is lef yit?" I answered him I thought by appearances that it must yet contain about twenty barrels of trout.

One of the remarkable features of this great game world is that since the Indians have been removed game of all kinds is rapidly increasing. Many of the old Mormon settlers, who have lived in Utah for the past thirty years, say that deer are more plenty to-day than when they first came to Salt Lake.

If our Eastern men wish only deer shooting and trout fishing, let them go on to Pleasant Valley Junction and remain until late in October or November, when the deer cross in this vicinity from the Wasatch range of mountains to the south seeking a country having less snow than the northern range. Very little hunting is done in Utah, and deer and grouse are perhaps more abundant than anywhere in the world. The following seems almost incredible, but it is nevertheless based on facts:

The writer was one of a party of three at Pleasant Valley Junction on a deer hunt late last November, when the snows were heavy in the upper Wasatch range, and the deer were traveling south in great numbers. We killed eleven in one day, and had all we wanted. While getting them to a wagon road to take them to the railroad, the writer counted, in a barren space of their trail south, forty-seven deer passing in two hours' time. Here much of the keen sport of hunting for this game is lost to the true sportsman. On visiting this spot, through which no doubt thousands of deer pass during a comparatively short time in the late fall, the snow was beaten down the same as though a large herd of sheep had been driven over it.

These are all black-tailed or mule-eared deer. Colorado has many white-tailed or red deer, but Utah has none. This conclusion was formed last fall after hunting over a great portion of the Territory, and watching the market in Salt Lake City for the whole of last season and not seeing one red deer. To an old deer hunter of the Eastern States shooting the black-tailed deer of the West would be tame sport indeed, because they have none of that foxy cunning which is always found in the red deer. The black-tail will often stand while a good marksman will kill five or six. I have known a market hunter to kill a band of seventeen within a radius of less than 200 yards, and this was done without a magazine gun, by a Mr. Woodard on Powder River in Dakota. In that same vicinity I caught a large doe with a greyhound, dressed it and started toward camp; and inside of one hour we came across the same band, and our dog caught and killed the second doe. The reader will naturally ask how I know this was the same band. Because the first band had one buck and nine does, and when we came up to them the second time there were but eight does and one buck, a coincidence not to be accounted for in any other way. In my next I will describe how we caught a buffalo calf with three greyhounds. Q. VAN HUMMELL, M.D.

IDAHO SPRINGS, Colorado.

Natural History.

A BIT OF A SERMON.

BY permission of the writer we are enabled to print some extracts from a private letter which furnish an eloquent sermon against summer shooting. The facts speak for themselves so forcibly that no comment on them is required. The observations here related will be no less interesting to the naturalist than the sportsman, and by whomever read, the story is an interesting one:

While strolling on the banks of French Creek, near Clayton, on Sunday last, June 8, in company with my wife and a friend, we started a woodcock, which feigned being wounded, and gave utterance to the most plaintive squeaks, from which we inferred the nest must be near. A short search discovered it among some small bushes on the ground in a comparatively exposed position. The nest contained three eggs, which we, of course, did not disturb. Leaving the nest for over an hour, I cautiously returned, and getting on my hands and knees crept within ten feet of it without disturbing the old bird. After watching her for about ten minutes I saw her stand up in the nest and with her bill and one foot change the position of two of the eggs, after which she settled back on the nest.

She then evidently saw me, for she gave a sudden twist sideways with her head and then slowly and cautiously stretched herself out as flat as possible, her bill resting flat on the ground. She remained thus for fully five minutes. Presently I arose from my position and stepped forward, when the bird quietly sneaked away from the nest, seeming to crouch as near the ground as possible, until about twenty feet away when she arose with the usual cry, but immediately fell to the ground, fluttered up and down and finally turned over on her back fluttering her wings as if in the last agony, but as I approached she scrambled away, dragging one wing on the ground until she had led me fully two hundred yards from the nest, when suddenly she bade me *au revoir*, and darted away like a rocket. Secreting myself some distance from the nest, in fourteen minutes I was surprised to see her sitting on it as quietly as before being disturbed, but how she reached there I am unable to say, as I did not see her ap

proach, and half a minute before her reappearance on the nest nothing was to be seen or heard. As the woods were open I had an excellent opportunity of watching her interesting manœuvers and had hoped to be able to note the manner in which the return would be made.

I wish that some of the advocates of July woodcock shooting could have seen the devotion of the mother bird, and their views might be modified; and should these eggs be hatched now what pleasure would there be in shooting on Aug. 1 a mere chick, six weeks old?

I wish our State law for woodcock read for every county alike—Sept. 15 the first day of the woodcock season.

As I wrote you some time since, I once found mere fledglings in July, but this was the first opportunity I ever had of watching the old bird on her nest. I had always supposed the nest was hidden in the depths of some swamp, but this was on high ground, in a maple grove interspersed with hickory and oak, and there was no apparent attempt at concealment, for it was visible anywhere within a radius of fifteen or twenty feet, and was built entirely of grass and small leaves. ONONDAGA.

NORTH AMERICAN BIRDS.

TEN years have elapsed since the publication of the first three volumes of "North American Birds," by Messrs. Baird, Brewer & Ridgway, and now we have the fourth volume. The first three covered the land birds, and the last two are to complete what will be the greatest work on American ornithology since the time of Audubon.

The delay in the completion of the work has been due to its great cost, no publisher having been found who was willing to assume the risk of carrying it out to its end. That we have now the first of the two concluding volumes of the series is due to the liberality of Prof. J. D. Whitney, late State Geologist of California, and of the Director of the Museum of Comparative Zoology of Cambridge, Mass. The present volume is issued as the twelfth of the Memoirs of the Museum, and like those which have preceded it, reflects credit upon the institution which sends it forth. Although "issued in continuation of the publications of the geological survey of California," in its appearance, manner of illustration, and general make up, the present volume resembles the first three of the "History of North American Birds," and the authors being the same, it is, as a matter of fact, the continuation of that work. It is true that the lamented Brewer did not live to see the printing of the first volume of the water birds begun, and that portion of the work assigned to him has suffered in consequence of his death. Prof. J. A. Allen has, however, completed some of the unfinished articles, and like all his work, it is well done.

This work, therefore, coming fresh from the hands of our most eminent ornithologists, being the most recent work of the kind, and being gotten up without regard to cost, cannot fail to appeal very strongly to every ornithologist. Certainly it is high time that we had these volumes, for, with the exception of the material in "Birds of the Northwest" and "New England Bird Life," nothing systematic has been published on the water birds of America for very many years.

The present volume carries us, beginning with the herons, through the so-called wading birds, and well into the *Anatinæ*, the cinnamon teal (*Querquedula cyanoptera*) being the last species mentioned. The concluding volume, which is promised in September, will carry us through the water birds, and the greatest modern work on American ornithology will be completed. The descriptive portion of the work is indeed quite beyond criticism, and it is made more valuable by the numerous excellent figures of the heads, and outline sketches of bills of different species which are scattered everywhere through the text. At the same time we cannot help regretting that the part devoted to the biographies of the water birds should be, as is apparently now the case, somewhat behind the times. Some years have elapsed since the manuscript was prepared for publication, and while the technical and descriptive portion of the work has been revised so as to bring it down to date, a considerable portion of Dr. Brewer's work gives no evidence of having been treated in the same way.

Thus, the biographical sketches of the different species are much the least satisfactory portion of the work. They consist almost altogether of citations from different authors, giving very fully the distribution of the different species, but not telling us as much about their habits—their real inner life—as we should like to know, and even as regards distribution we find that the work is by no means brought down to date, and that many interesting observations in the West and elsewhere by some of our best observers—men like Ridgway, Henshaw and Merriam, for example—are not mentioned.

The volume appears to be singularly free from errors, though occasionally a loose statement has crept in. Such, for example, is the statement that the habitat of the upland plover (*Bartramia longicauda*) is "Eastern North America, migrating to Brazil and Peru and extending north to Alaska and Nova Scotia." As a matter of fact, the range of this species extends in the Northern United States west nearly if not quite to the one hundred and twelfth meridian, while further south, near the fortieth parallel, we have ourselves seen it near the bend of the Platte in Western Wyoming, Ridgway took it on Kamas prairie in Utah; Abert is reported to have sent one from New Mexico, and Henshaw took one in Southeastern Arizona. With all these references it seems scarcely proper to call it an "Eastern bird," as is sometimes done.

The nomenclature employed in this volume is, in the main, that announced by Mr. Ridgway in his important paper on the nomenclature of North American birds, published in 1881, but here and there we note changes from that list. Thus, we find the so-called English snipe no longer called *Gallinago media wilsoni*, but see that it has been restored to specific rank, and that what we formerly thought of as *Gallinago media* has, as was predicted would be the case in Dr. Leonhard Stejneger's paper on the subject (Proceedings U. S. Nat. Mus., Vol. V., 1882), taken Frenzel's name, *Gallinago cœlestis*.

In this volume we have set before us, for the first time in an American work on ornithology, full and systematic descriptions of a number of extralimital species, of which one or two individuals have recently been taken within our borders, a fact for which those ornithologists who have not access to large libraries will be profoundly grateful.

The present volume and the one which is to follow it will be gladly received by sportsmen generally as well as by naturalists. The former will find in it so many of the species which they pursue, that the work is certainly one which should be in the hands of all our readers, who cannot fail to find in it pleasure as well as profit.

Taken as a whole the work is monumental; its value and its importance can scarcely be overestimated. Praise is not needed for it, since the names of its authors are a sufficient guarantee of the quality of the work, and to say that it is by Baird, Brewer & Ridgway, assisted by Allen, is only another way of stating that the very best minds among the ornithologists of this country have combined to produce a work which shall do them credit.

* The | Water Birds | of North America, | by S. T. Baird, T. M. Brewer | and | R. Ridgway. | Issued in continuation of the | Publications of the Geological Survey of California. | J. D. Whitney, State Geologist. | Volume I. | Boston: | Little, Brown and Company. | 1884. | Price (uncolored) $12 per volume. Hand colored $30 per volume.

SEASONS AND BIRDS OF THE PRAIRIE.

BY H. S. WILLIAMS, M.D.

WHEN old Boreas bursts through the sun-bound confines of his summer home and comes rushing southward, driving the more tender birds to warmer climes, there are a few species which, more hardy than their followers, fear not the threats of the bluff old gentleman, but remain to buffet with him. Latest among the little wanderers that come rushing from the north with the first blasts of winter, are the longspurs (*Centrophanes lapponicus*) and snow buntings (*Plectrophanes nivalis*). Hardier birds than these there are none; the more boisterous the weather the better pleased they seem. Winter kings the country folks call them, and truly they deserve the name. They are almost the only birds that come regularly about the prairie barnyards in the winter. The two species associate together to a considerable extent, but the longspurs seem more adundant and familiar. Seen at his best, the longspur is by no means a plain bird, but at no time will he bear a companion with the snowflake. The latter is indeed a jaunty fellow. How finely contrasted are the black and white of his wings, and what a warm brown hood he wears. Seen hurrying over the prairies, he is, with the exception of the snowy owl, the most noticeable bird of winter. But I fear his fine feathers make him vain, for he is something of an aristocrat, holding himself rather aloof from the society of man during fine weather, or so long as he can obtain food elsewhere. But during severe storms he sometimes comes familiarly about the stables in quest of food. This has led to the belief, common in some districts, that the appearance of the "white snowbird" predicts a storm, while the coming of the "black snowbird" indicates the approach of fair weather. This last is not necessarily the true *hyemalis*, which rarely remains in Northern Iowa during the winter, but any of our darker winter birds. Many persons go on a step further and gravely assert that the same individuals actually change color from day to day, becoming white before a storm!

Another strictly terrestrial bird, only less hardy than the last, is the shore lark (*Eremophila alpestris*). He is a resident here, yet somewhat erratic in habits as in flight. I am not surprised if I see him in the depth of the coldest winter, but then he appears only occasionally; and quite as frequently he is not seen at all during two or three of the coldest months. Some fine February morning, however, as I walk across a meadow or ploughed field in the open country, he starts up before me, and then, as he flies away, he sings. His notes are sweet, but so fine and feeble that you must listen intently or the breeze will bear them from you and they will be lost. The bird may have remained here all winter, but more probably he has just returned from a pleasure trip somewhat further south. At all events he has not sung before, and I herald the note as truly a spring sound. True, spring will not open for a month to come; we shall not see the bluebird, borne in the same breeze that brings the first whiff of that orange-blossom aroma which all await so impatiently, for several weeks; but the lark's song reminds us that nature is awakening. It gives us a foretaste of what may not come in reality for a long time. No matter what the weather may be after this, I see the lark daily. If it storms, he utters only a shrill *cheep*; but if it shine he is full of music. Seated on the ground or upon a fence post, he sings almost constantly. First comes an interrupted prelude, more faint even than the song itself, which is a peculiarly undulating sucession of lisping sounds, sweet, and at times penetrating. But this is by no means his best performance, though his song is always the same. Later, while his mate broods her eggs on the ground below, he pours forth his music from the skies, as becomes a lark. His ascent is songless; obliquely, by successive stages he rises, alternately beating a few strokes with those strong wings and gliding with pinions motionless. But having reached the height to which he aspires, his song begins. As he sings, he floats motionless, slowly sinking. The strain ended, a few wing-beats brings him again to the desired height, and again his feeble liquid notes are heard. He is so high that he seems a mere speck against the sky, yet, feeble as are his notes, we hear them distinctly. We must not take our eyes from him or he may be lost, and we shall miss the best part of the performance. Having repeated the strain a score or more times, he pauses for a moment in air, gives a swoop downward, and then, closing his wings, falls like a thing inanimate, rushing earthward with almost meteoric rapidity. Surely he will be dashed in pieces; he goes to his own destruction and no power can save him. But no; when almost to the earth, see him spread those broad wings, swing outward and upward in a graceful curve, and go skimming off across the meadow. What a grand finale! one exclaims involuntarily, and ever afterward we regard the lark with a new interest and class him among the true avian poets.

I have said that the lark is erratic in habit, but he is by no means as much so as a certain hardy little northerner who is not so exclusively confined to the prairie, yet is never with us found far from the open country. I refer to the redpoll linnet (*Ægiothus linaria*). This little fellow is sometimes abundant throughout the winter, sometimes seen only in fall and spring, again is not observed at all during the season. The winter of 1878–9, remarkable for the large number of northern birds it brought to us, gave us among the others numerous redpolls. In the fall I found them in the open prairie, and later they came about the yards in town, associating with the goldfinches, which they resemble in size, in flight, and in one of their call notes. I know a sandy plot by the river, covered with weeds, where these birds could almost always be found, and there, too, perched on the topmost bough of a neighboring tree, might be seen the marauding shrike (*Lanius borealis*), which ever and anon darted with murderous onslaught into the ranks of the finches and, selecting a victim, followed it in hot pursuit through the air. Now up, now down, to this side and to that, darts the affrighted bird, and close behind, following each deviation with the unerring accuracy of a sleuth hound, comes the blood-thirsty pursuer. Who would not, as he sees the exertions of the little finch become less and less powerful, put an end to the flight of the ruthless shrike? Gladly would we cut him down and tell ourselves that we but gave him his deserts. Yet he only pursues the dictates of his nature; he kills that he may live; and we who condemn him would pursue as eagerly a rare finch or warbler and shoot it, almost without a throb of compunction, merely that we might dissect and classify, or, giving it a wire skeleton, perch it in life-like attitude, mocking its once happy actions. But we think not of this as we see the frightened finch almost within the clutches of the shrike. We only wish that we might destroy the pursuer. But it is too late; they have passed in zig-zag flight, the shrike every moment closing in upon his prey. At last he makes an extra exertion, and the victim is his. Seized in his bill he bears it sloping to the earth, there to perform the closing scene of the little tragedy.

In glancing at the character of the shrike, I find much to admire. Though small in size, his superior strength and activity more than make up for this deficiency, and few, if any, are the birds to which he yields in open combat. In point of sportsmanship, what one of our hawks is his equal, though he be armed only half as well as they? The little falcons are almost unerring marksmen, but they are pot-hunters. Failing to secure their victim at one sudden sweep, they leave it and go in search of another standing mark. Not so the shrike. True, he sometimes "pots" a bird; I am not certain that he would not always do so of a preference; but, failing in this, he gives chase, like a true sportsmen, and the victory is given to the swifter pair of wings.

The northern shrike, to which reference is here made, visits us only during the winter. His congener, the loggerhead (*Lanius ludovicianus*), is a regular and rather common summer resident, found only in the open country, and nesting in hedges or groves of cottonwood. I have not known him to exercise his sportsmanship upon anything larger than a grasshopper, and think he confines himself largely, if not exclusively, to insectorial prey.

One can scarcely speak of prairie birds and say nothing of the king of them all—the pinnated grouse—though he has been so often and so well described that every one is familiar with at least the outlines of his history. With us, as elsewhere, he is termed a resident, yet I doubt whether many individuals spend the entire year in one latitude. Each fall large flights of grouse pass over the towns, always headed toward the southeast, and in the spring a corresponding number all northwest bound. These flights occur mainly at dusk and in the early morning. The birds fly in scattered companies, as low as barely to miss the tops of the trees and houses; the shrill whizzing of their wings tells of their proximity before they are seen, and a view of them gives one a conception of momentum which, it seems to me, could be made more vivid by nothing less than a cannon ball. At no other season are the grouse seen to make extended flights, and in spring and fall, as already mentioned, all move in one direction, northwest and southeast, respectively. This would seem to be sufficient proof that, with us at any rate, individuals of this species are migratory, though collectively they are certainly resident, being as abundant during the most severe winter as at any other season, and, of course, far more conspicuous, there being nothing to afford a hiding place. They begin to "pack" early in the winter, and sometimes associate in immense flocks, numbering in some rare cases many thousands. This happens only when there are very large fields of unhusked corn in a particular section, affording peculiarly favorable conditions for the existence of a large number together. Under such circumstances I once saw a flock of grouse which, when on the wing, extended continuously for a distance of fully half a mile, the stream—for such it seemed—being perhaps fifty yards wide and three or four tiers deep; this entire space, be it understood, as closely packed as ample wing-room would permit. Such flocks as this are very unusual, but two or three hundred individuals are frequently associated together. Outlined against the snowy sheet that covers the prairie, they are very conspicuous and afford a great temptation to the sportsman; but they are so wary that it is almost useless to stalk them on foot, except during a storm. In a sled one can often approach within fair range; but he who would at down right and left now must be no novice, for the grouse is no longer the weakling that we knew in August. At best, only small bags are possible, and no one here thinks of doing much grouse shooting after the fall "packing" begins.

To the Eastern man, traveling over our beautiful summer prairies, it is a matter for constant wonder that no grouse are seen, even though he is assured that he is in the midst of their haunts. From May till October one may ride constantly through a country where grouse abound without catching more than an occasional glimpse of an anxious hen skulking with her brood by the roadside. Even if actual search be made, it is a mere chance if it be successful; and we might as well hunt a fox without hounds as to hope to make a bag of grouse in the early fall without the assistance of a dog. It is much to be regretted that the grouse are yearly becoming less abundant in Iowa; but as we have a pretty generally observed game law, it will be many years before anything like complete extermination is threatened them, even in the eastern part of the State. The gradual and steady decrease in their numbers is, of course, attributed to the sportsman; but there is a cause over which man has no control that operates more efficiently than any other in deciding the relative abundance of grouse in any particular season, viz., the June freshet. If the backwardness of the season has prevented the grouse from mating early, and in addition the succession of June storms that we almost always experience begins early, large numbers of the chicks are drowned; and it may safely be predicted that small "coveys" will be the rule in the fall. Occasionally an entire brood is destroyed, in which case the mother bird again undertakes the maternal duties; and when the "season" opens in the fall, her chicks will be no larger than half-grown quails and barely able to make a feeble flight of a hundred yards.

But I have given more space than I intended to the grouse, and will only mention a few other common winter residents that help to add interest to the dreary aspect of the prairie landscape during the season. The most conspicuous of these is the snowy owl, which is a regular, though not a very common resident. The short-cared owl (*Asio accipitrinus*) is more common, and is, furthermore, a resident, nesting in May or June on the ground among the grass in the open, unbroken prairie. The same remark will apply to the marsh hawk (*Circus hudsonius*), but these latter are more abundant during the summer, and are, no doubt, partially migratory. The marsh hawk is apparently a feebly organized bird, well fitted to prey upon small birds, frogs, etc., but he is capable, when pressed by hunger, of much greater feats. I once witnessed a most exciting chase, in which one of these birds was the pursuer, and the pursued no less a bird than a full-grown

pinnated grouse. The latter flew with all the swiftness of which fear rendered it capable, yet the hawk, with apparent ease, flapping those broad wings steadily but in a leisurely manner, followed close behind, gradually shortening the distance that separated him from his victim. For more than a mile the race continued, and at last, the grouse, overcome by either fatigue or fear, came to the ground, and the hawk followed immediately. They were by this time so distant that I could not see the final result, but I had little doubt that the quarry proved an easy victim and served for many a fine repast. I had not previously credited the hawk with so much courage, and I think his prowess is not generally appreciated.

With the first approach of spring, not the "ethereal mildness" of the past, but the stormy, disagreeable early spring of practical life, the prairie takes a still more uninviting appearance. There was something grand, almost sublime, in the vast, unbroken, dazzling whiteness of the typical winter landscape, but this now gives place to a dirty, dismal, muddy expanse, which calls forth neither the sadly-pleasant reveries of autumn nor the joyful vivacity of the late spring time. The snow melts and stands in pools in the level prairie, and swells the "sloughs" and little ponds of the more rolling country into vast shallow sluggish rivers, and cold, dark, silent lakes. Even the birds seem to have left for more pleasant scenes, and for a few days a fertile soil has the dreary visage of a desert.

But in a day all is changed. What seemed the fit abode of death now teems with life. Ducks of a dozen species throng the ponds, and geese, brant, and cranes stalk about on the higher grounds. Pintails and mallards, in flocks of hundreds or even thousands, visit the last year's corn and oat fields, literally blackening the ground as they feed and the air as they rise. An occasional blue heron (*Ardea herodias*) flies silently over the water courses, the brown bittern skulks among the slough grass and dwarfed willows, the Wilson snipe springs in erratic flight on every side, and the shrill whistle of the curlew breaks anon upon the almost audible silence that yesterday pervaded the very atmosphere.

All this is but a transition scene, in a few weeks these welcome visitors have retired to their summer haunts, but in their places there are others who are not visitors merely, but residents come to spend the entire summer. And how different is the face with which nature greets them from that which of late she wore. All now is smiles and gladness. The ponds and sloughs have returned to their wonted limits, the upland is dry and its coat of dusky brown has given place to one of loveliest green, sprinkled here and there with golden buttercups and subdued by the exquisite purple of the pasque flowers and violets. Now, indeed, does the face of nature smile as one who wakes gladly from a peaceful sleep. Her creatures of the prairie, though less varied in kind than those of the woodland, are sufficiently abundant to lend animation to the enchanting scene. Spermophiles, our most typical prairie mammals, whisk gayly here and there, or viewing us suspiciously from their door-sill, prepare to dive into the bowels of the earth at our nearer approach. Little sparrows, most conspicuous among which is the yellow-winged, make the air vibrate with their ditty, while the ubiquitous black-throat buntings chant their clinking strain on every side.

And there, stalking so gracefully, with that slender neck responding to each motion of the body, or floating along with broad wings tremulously vibrating in a manner that marks him unmistakably, is our most characteristic upland bird of summer, the Bartramian tattler. A little shy and reserved he was at first, but now the very embodiment of confiding trust, and at all times a model of gentle gracefulness and meekness. Knowing the characteristics of the family to which he belongs, and watching him individually, one would not suspect him of having any other notes than the melodious, undulating chuckle which he usually utters as he takes wing. But he has others, nevertheless, and his song—for such it really deserves to be called—is the wildest, shrillest sound to be heard on the prairies. It is not like a bird note, and, in fact, I think of nothing in nature which it resembles save the shrieking of a gale; and a poet, not seeing the bird, would doubtless attribute the sound to the prairie wind sporting among the clouds, for the tattler gives birth to his thrilling strain only while suspended high in air. A corruption of the sound may be brought to the mind of one who has never heard it by whistling shrilly an imitation of the sounds "*wheep-cheer wyl,*" the first two syllables being very much prolonged. Beginning low in the scale, a gradual ascent is made till a very high tone is reached, which is caught up by the second syllable and the scale descended to the point of commencement. These notes, like the boomings of the grouse, are heard as distinctly, and seem as loud, at a great distance as when near at hand; but such is not the case with a low, chuckling prelude which invariably precedes them but is often lost in the air. The tattler's return to earth, when he has tired of repeating his wild strain, reminds one of that of the shore lark, already described; but it is a little less bold and not absolutely perpendicular, the wings being partly unfolded.

We would gladly bid time pause at this season that we might longer revel in the luxuriance of its pleasures; but it cannot be. Spring shades gradually but all too quickly into early summer, and the vivacity of Nature gives place to a dreamy somnolence. Even the birds are listless and forget to sing, save the ever present black-throat bunting, whose chant, breaking in upon the drowsy stillness, becomes monotonous from frequent repetition. The vegetation is assuming something of a parched and withered hue, in keeping with the golden sheen of the harvest fields. The sun's rays fall with constantly increasing force. There is no shelter, and often for a whole day not a hand's breadth of cloud dots the clear azure above. What wonder that the birds are silent? And yet, but for the heat, what surroundings could be more in harmony with poetic inspirations? An expanse of grass sprinkled with golden rods and asters, bounded only by the over-arching sky; absolute silence, broken only by the hum of insects, an all-pervading sense of vastness, of silent grandeur, of sublime peacefulness—surely no spot, unless it be the deep, primeval forest, could better engender a feeling of contentment and rest, an appreciation of the force of a dreamy, idealistic philosophy.

But the summer days are also sped, and sadly, yet not without pleasure of a somber kind, we note that the year is dying. Our prairie now of itself has few charms; but the stir and bustle among it inhabitants afford new scenes each day for the observant eye. The more tender birds move off to the south, and each day some new migrant appears from the north to tarry for a few days or weeks before again taking up its journey. The warm showers have been succeeded by chilling rains; the gentle breezes by cold, cutting winds; frosts nip the vegetation and crust the ponds at night, though the sun still gives at midday resuscitating warmth. The wildfowl appear again and animate the prairie as in the spring time. A season of calm succeeds—the Indian summer—that smoky, quiet season when all is serene and peaceful, yet all suggestive of death, dreary, a change. And the change is at hand. A sharper frost kills the last hardy stems, and puts upon the water a coat that the wildfowl cannot break; the chilly blast whistles unchecked across the prairie, bringing the first scurrying snowflakes; the last goose honks his farewell for the season, and the stillness of the night of winter settles over the scene.

CHARLES CITY, Iowa.

THE COUESIAN PERIOD.

Editor Forest and Stream:

The letter in your issue of the 12th inst., addressed to the Chairman Section of Avian Anatomy, A. O. U., and signed by "*Amicus Socrates, amicus Plato, magis amica veritas,*" has just been read by me. I beg leave to say to your correspondent that notwithstanding the fact that he informs me that he is a member of the Union, this is no reason, nor can he expect it, that I am called upon to answer an anonymous letter. It is something I have never been guilty of, and I do not intend to depart from my views upon such matters in the present instance. I am prompted in writing this letter simply by the fact that I do not wish your correspondent to think me so discourteous as not to take any cognizance of his communication whatever, or much less that he has written something that is unanswerable. So soon as he does me this honor, and is manly enough to attach his proper name to his views, it will give me pleasure to respond to him and answer his questions to the best of my ability. I am too old an ornithologist, to say nothing of my experience in kindred matters, to be caught "gunning in the dark."

R. W. SHUFELDT.

WASHINGTON, June 13, 1884.

RODENTS AS CARNIVORES.

MY acquaintance with the muskrat has been intimate for some time. In the winter of 1822-3 I saw a dead horse thrown down the river bank against some trees. The muskrats had a beaten path in the snow from a hole in the bank, some twenty feet distant, to the carcass, on which they fed half the winter. The inference is, then, a fair one, that they would gladly have added variety to their diet by fishing, if circumstances favored, and this is certainly strengthened by the fact that, in March of the present year, a man, fishing through the ice for pickerel, after a hard tussel with "a big one," drew out a muskrat on his hook. The skill of this animal in opening bivalves is proverbial, and yet he is often driven to straits for food in winter, as he does not hibernate. I once caught one burrowing under the snow, like a mouse or mole, gnawing grass roots from the frozen ground.

But this is not the only rodent that has outraged "classification," and eaten forbidden fruit. During my sojourn among the mountains the past summer, a young woodchuck fell into our hands, and was in many respects a petted favorite. My brother had already paid $5 bounty on dead ones, to save his clover fields from damage, but here was an innocent prisoner, and of course he was not killed but fed.

All through July, August and September, he was at meal times "a regular boarder," pulling at my clothing until supplied. Bread, milk and cooked potatoes constituted his favorite diet, and he manifested a decided preference for cake. For this food he abandoned clover entirely.

In October he dug a hole and foraged promiscuously upon any light cotton or muslin fabric for a nest. I found him dragging a large pillow into his hole, and stopped the business by placing armsful of rowen hay at the entrance. This soon disappeared, and his visits to the table were less frequent. Early in November he closed the blinds, pulled down the curtains, and we saw him no more.

Late in March of the present year, he came out in fair condition, resuming at once his place in the household and demanding the rations of the former year. One day we passed him sitting bolt upright holding half a sucker in his hands, just caught. He was biting off large pieces and eating with all the seeming relish of an otter. Soon the season of family arrangements came on, and he left for a mate, perhaps to return, but most likely to meet his death at a stranger hand.

Nor is the squirrel family, preëminently "nut crackers," exempt from the same charge. I once set one at liberty in my laboratory to play hide and seek among boxes and specimens, but his partiality for bird meat, and ignorance of the physical effects of arsenic soon cost him his life.

B. HORSFORD.

SPRINGFIELD, Mass.

FISH AND SNAKES.

THE writer, who has fished more or less each season for many years, has long been aware of this habit of snakes taking fish, and after careful observation I am firmly convinced that fish furnish a great source of diet to a large portion of the snake family.

On Saturday last, the writer with a companion was fishing for pickerel in the outlet of a pond near this city, and while thus engaged we were treated to a very remarkable exhibition of this habit among snakes. As our boat was slowly paddled along the shore among the lily pads, the writer, who wielded the rod, noticed a large striped perch alarmed at our approach, dart into a small cove, and the next instant there followed a great commotion in the water. As our boat was moved slightly so as to obtain a better view, we saw a large snake holding the struggling perch in its mouth above the water and making its way slowly to the shore. Scarcely had it reached the bank with its victim when there rushed from some hidden retreat among the bushes another snake at least a foot longer than the other, and instantly a terrible struggle took place between them for the fish. Over each other they rolled and writhed upon the ground. One instant both would be tugging at the fish, then the fish would lie upon the ground, and over his struggling form the snakes would roll in battle in a desperate struggle for the mastery. At last by a mighty effort the larger beat off the smaller, seized the fish in its mouth and glided into the water, whereupon the smaller became the attacking party and another terrible struggle took place in the water. At last, as though becoming tired of the unequal combat, the smaller one disengaged itself from the fray, and with a slow, tired motion, swam slowly ashore among the bushes. The other, holding his ill-gotten prey aloft, at least a foot above the water, went quickly ashore.

It was now time for us to show our hand, and picking up a stone each (for we had previously landed so as to better view the fight) we cast them at his snakeship, and he was soon dead.

The perch was a fine specimen, eight inches in length, was in good condition, gills bright red, and had the luster in appearance that denoted a healthy condition; it was quite exhausted by the rough treatment and from being out of the water so long, but after we returned it to the stream, after a few erratic movements it slowly swam out into deeper water.

The snakes were both bluish black in color on back and sides, belly was a deep bloody orange color, and the one we killed was four feet and ten inches in length. HEMLOCK.

LOWELL, Mass.

[These snakes were no doubt the common black water-snake (*Tropidonatus sipidon*).]

BOUND TO RAISE A FAMILY.—Early in May a pair of robins built their nest in a cedar tree close to my bedroom window and soon three eggs were laid. Men working at a fence close by disturbed the birds and they shifted their home into the branches of an elderberry bush twenty yards away. A week after their removal I observed an English sparrow in the old nest, throwing out an egg, and in a few days more they had all disappeared. When their second batch of eggs was partly incubated the proverbial bad boy "poked" the nest down, to the utter dismay of the mother robin. Nothing daunted, however, the couple seem bent on raising a family, and have again taken possession of their first quarters. This morning I noticed two eggs in their nest. A pair of robins have brought out two broods each year in this same cedar tree, the last two seasons, and I am inclined to think that this couple are my former visitors.—POST (Yonkers, N. Y., June 14).

LATE GOOSE.—Saw a wild goose fly in a northwesterly direction toward evening on the 8th inst. This is the latest straggler I have ever observed.—POST (Yonkers, N. Y., June 12).

Game Bag and Gun.

THE WHITE DEER.

AN INDIAN LEGEND.

A PHANTOM there is in the far Northwest
A shade of a deer that flees forever:
It never stops and 'tis never at rest,
But onward it speeds over mountain and river:

From the blue Coast Range to Sierras' heights,
Through the forests deep and by intricate ways;
On the stormiest days, in the darkest nights,
'Neath the sultriest suns of the summer's blaze:

From Shasta's base to his dome of snow,
Around Lassen's zone and a hundred lakes—
Where thundering torrents incessantly flow,
And nothing may follow the course it takes.

The dogs start up from the hunter's fire,
And madly spring to a midnight chase:
They baffled return after venting their ire,
In baying the phantom that vanished in space.

The hunter halts, where he steals along—
And his rifle flames at a bounding deer—
At a mighty stag with many a prong,
He fires again—and he shakes with fear;

For the deer bounds on with never a wound,
Though the mark was fair and the aim was true,
And its heavy weight fairly shook the ground,
As with miraculous leaps it evanished from view.

The phantom will be when the men are gone,
For 'twill never be slain by a mortal's might,
And onward 'twill speed, forever on,
The deer is a spirit and snowy white. ESAU.

SHASTA, Cal.

A SUNDAY DEER.

BY D. D. BANTA.

SEVEN years ago last summer I made my first visit to the Twin Lakes in Montmorency county, Michigan. With my two boys, then mere lads, and a young preacher fresh from Princeton, I had been on the Au Sable a couple of weeks or so, having all the sport with the grayling of which I was at the time capable. How often in memory do I recur to those red-letter days! The Au Sable was populous with a fish that has afforded me more real pleasure in the taking than any other fish I ever met with. And besides that, the navigation of the Au Sable in the summer weather, was replete with every fluviatile enjoyment. The crooked, winding, spring cold waters, now dashing impetuously down the Huron slope beneath arboreal arches and between forest-fringed banks, and anon widening out into a broad, deep, sluggish stream, with low banks, whose timber was burned and blackened by former fires, presented a succession of pictures that never failed to charm even those least loving the wilderness. I have made eight voyages down that river in as many years, and as I sit by my coal fire and look out of the window at the fleecy flakes of this March snowstorm, I hear in fancy the rippling of the Au Sable's stream, and I know that a brown hackle dropped lightly upon the surface of yonder dark pool, beneath the overhanging cedars, will be followed by a splash that will tingle every nerve of my body, and I want to make the journey once more.

Ball had quite recently built a cabin on the river about seven miles below the north branch—the only occupied cabin for forty miles up and down the river—and he was loud in his praise of the Twin Lake region as a profitable place to go for hunting and fishing. Of both we could have a surfeit by sticking to the river, but "Man never is, but always to, be blest," and so we listened with sharpened ears to the glowing stories told of the Twin Lake country. Ball had never been there himself, nor had Pancake Jack, a trapper staying at his cabin, but both had talked with land-lookers and trappers who had, and it was made manifest to us that the sportsman's paradise lay at the Twin Lakes.

The map showed that it was twelve miles to the lakes in a straight line; how far in a crooked one it remained for us to find out. A hay road had been cut out half the distance, and both Ball and Pancake thought we would strike the plains shortly after passing the end of the road, and so have unobstructed traveling most of the way.

Bob Greaves, a Canadian, who had drifted out to Roscommon and was able to own a wagon and team, happening in,

we engaged him to tote us out, and so, on a drizzly, uncomfortable August morning, with Pancake as guide, we set out for the Twin Lakes.

I need not stop to tell what a rough time we had of it after we had gone as far as the road was cut out. I have been in my share of tight places by "flood and by field" rambling in the wilderness, but for twelve hours I am quite sure I never exerted myself so continuously as I did on this trip, chopping and bridging in order to get through a swamp that intercepted our progress. As the sun was going down on the second day, we emerged from the swamp to the plain, and were so exhausted with toil that we built a fire and slept, with the starry sky as our tent. By noon of the third day we reached our destination.

The Twin Lake region is famous for the number of its lakes and the beauty of some. It is so named because of the two largest, which lie very close to each other, and are called the Twins. "There are a hundred lakes," said Ball, "in one township up there," which is perhaps an exaggeration, but there are a great many lakes, mostly land-locked, lying on the plateau between the headwaters of the Thunder Bay River, which flows eastward into Thunder Bay on Lake Huron, and Black River, flowing northward into the lake, and Big Creek, flowing westward into the north branch of the Au Sable. The Twins and Wolf Lakes and Te Lake are of sufficient importance to give good sport. There may be others, but if so I never found them. The ponds and smaller lakes are too numerous to mention.

The first lake we came to was Te Lake, so called because some early trapper or land-looker fancied he saw in its shape a resemblance to the Roman capital of that name, and could not let the opportunity pass to show his learning. The lake does bear a rough resemblance to a T, but it would make a better boot than T. It is true that the heel would be a little long for a normal Caucasian foot; but, if we call it a boot, when I tell you that the leg lies north and south, with the top to the north, and the foot east and west, with the long heel pointing west toward the upper or eastern Twin Lake, which is surrounded by a heavy forest and which is about three-fourths of a mile distant, and the toe pointed eastward toward a cluster of small landlocked lakes lying in the open, brush-covered plain, some of which are crescent-shaped and others circular, and others still irregular in outline, and that our camp was established in a grove of beautiful Norways that fringed the sole from toe to heel, and that we were a third of the distance from toe to heel, I think you can find our old camping ground, should you ever visit the lake, much more readily than if I were to describe it by the letter it is supposed to resemble. South of our camp spread the open plain, dry and free from mosquitoes and no-see-ems, and north of us, across the foot, was a brushy plain, also of dry land. We were free from insects. Our teamster returned to the settlement at once, and Pancake Jack, after a vain effort to kill a deer, soon followed after.

By some mischance we failed to take with us an adequate supply of flour—a mischance that oftener happens to a camp than any other, according to my experience. We did not make the discovery, however, until both teamster and trapper were gone, and as the teamster would reurn to Roscommon, thirty or forty miles distant, and remain there until his appointed time to come after us, we saw that there was but one thing to do and that was, eke out our flour so as to give us some bread at every meal till his return. If he came at the time appointed, we found by actual measurement that we had a little less than three pints of flour per day for four mouths, and whatever may be the fact at home, that ratio will not begin to do in the woods. We had, however, a good supply of tea, coffee and sugar, a little meal, some rice and a few potatoes, and the woods were full of huckleberries, while the lake abounded in bass. Fortunately we had with us a boat, and Te Lake produced bass running from one and a half to three pounds. Near the instep of our boot-shaped lake were two islands. One of these, containing about an acre, rose eight feet or more above the surface of the lake and was covered by a forest of white pines and other soft woods, which was the only pine forest I ever saw in the Lower Peninsula, not showing any marks of fire. Not a charred stick, stump, trunk or log was to be seen on that island. Around its shore was the best bass fishing I think I ever saw. Two seasons, that one and the following, I fished off the north and east shores of this island with amazing success. And while I am at it I may just as well say that while I never fished in either of the Twin lakes, nor in Wolf Lake, which lies a half mile or more north of the east end of the easternmost Twin Lake, yet both Ball and Jack told me the following year and after they had fished them that all these gave capital sport. These lakes are accessible from Gaylord and Otsego on the Saginaw and Mackinaw Railroad, and the sportsman who will take his boat with him and set up his tent on the east shore of the easternmost or Upper Twin Lake will be in one of the most delightful tenting grounds I ever saw. He will lack but one thing, and that is a spring of good water. But the lake water is sweet and clear, and if he understands himself the water question will never vex him. The spring is at the west end, not far from the outlet.

Notwithstanding Pancake Jack, who never scaled but skinned his bass, could fry one better than any woods-cook I ever saw, and for that matter house-cook either, and imparted to us something of his skill before he left us, yet we soon began to "lust after the flesh pots of Egypt." My experience deer hunting was quite limited, and contrary to what I had expected, all the deer I came across were too smart for me, and I came across a good many. To save me I could not kill a venison.

We had nearly stayed our two weeks. The weather had been delightful. Nearly every day the sun had sifted its yellow rays down through the waving Norway foliage upon our camp grounds. The Chaplain, as we termed the young preacher, had fished some, hunted a little, read his Greek Testament more and slept most. The boys had picked huckleberries, kept camp and rioted in all the joy of spirits that our vagabond life in the woods gave. As for me, I explored woods and plains for lakes and ponds, and at the same time thought I was hunting. Well, so I was, and I found some deer, too, but not until they had first found me, and then all they would show me was a flag of truce. It was peace between us in spite of all I could do. At first I think my companions had confided in my skill as a hunter. They had seen me shoot one or two deer on the river. But as the descending suns had continued to bring me back to camp without the coveted venison, they ceased to talk about it as a thing within the range of our possibilities, or even to ask me the stereotyped "What luck?" The last Saturday had come and gone, and I had cleaned my rifle and laid it aside. Monday was the appointed day for Bob to return for us, and as our flour was nearly gone we resolved to eat fish for Sunday's breakfast, dinner and supper, and bake the last bread Monday morning, for go out to Ball's we would on that day, Bob or no Bob.

Sunday came bright and breezy. This was our day of rest, and as for me I was wearied enough with my much tramping during the week just closed to thoroughly enjoy it. Amid much merriment, with not a few jibes at my skill as a hunter, we had eaten our dinner with its small supply of bread, after which the Chaplain took his Greek Testament and retired to a shady spot to read, meditate and, perhaps, sleep. The boys having rigged a blanket for a sail to the boat had gone sailing on the lake. I was at our improvised table writing in my camp journal. I think it must have been about 3 o'clock when it occurred to me that I had not heard any noise from the boys for some time. At once I walked to the lake's margin and looking westward saw the boat sailing homeward with but one sailor aboard. At once it flashed across across my mind that George, the "unlucky boy," had fallen overboard, and with that I desperately called for tidings, as if I could have made myself heard the distance Charley was away. But ere I had time to catch the answer I hoped for, I saw through the open Norways the "unlucky boy" running toward me as if in a race, and at the same time motioning for silence. Very soon he came up puffing, and in an awful stage whisper he exclaimed, "Deer in the lake!" and at the same time pointed to the east. Quicker than I can write it I had "old Smiley" out of the tent—and a large-bored, hard-shooting rifle she was—and with powder and ball rammed home set out for my game, that was from a quarter to a half mile away.

Well up toward the toe of the boot on the south shore was a bit of rather low land—an acre perhaps—and it was covered by a thick growth of tall, slender Norway saplings. Into this clump of small trees I crept, and at about seventy-five yards from the lake's margin I stopped to reconnoiter. All George had said was, "deer in the lake." Where was it? I could see the shore at the very end of the lake and clear around on the further side, but no deer was there. Had it scented me from afar and fled as all the others of weeks before? Or, is that red fringe I see through the brush at the edge of the water just in front of me it? No. I came very near shooting at just such a fringe Saturday morning, and it turned out to be a bunch of red blossoms. Hold! It moves, I believe. Ah! To be sure it moves—that's the deer. Heart, be still! It is feeding on the lily pads, and I must wait till it puts its nose to the pads again. There! I creep to a sapling, for somehow I find I am not over steady of nerve just now, and I must have a rest. It is a bushy place to shoot through, but I fancy I can hit that red line. Drawing as fine a sight as I can, I pull trigger, and as the report dies away, I hear a splash or two and then all is still. Did I kill it? Without the knowledge experience brings, I did not understand the significance of the splashing. Hastily re-loading, I ran around to the end of the lake and there I fancied I found blood, but a second look told me it was a bit of red moss. Examining the shore with some care, I could not find the place where I could feel certain it had left the lake. So many tracks were there, I became confused and despondent. After all, had I missed the thing clear? Dear me! The gun must surely shoot wild. I parted the fringe of brush and weeds at the margin and look over into the water. Strange I had not thought of doing so before, for there is the track of muddy water leading right to the very place I am standing. Here then, the deer must have come out after all, and I step back to look once more for the track, but failing to find it, I return to the margin once more, and parting the fringe of bushes and weeds, I examine carefully to see, if possible, the animal's track. And as I do so, the clearing water discloses my deer lying four feet beneath the surface, dead of course, and at once I leap in and haul it ashore.

"Whoo-ee!" It is a shout of victory. Three answering shouts come back to me, and quicker than I had thought, I hear the cracking of brush and the scraping over logs, and above all, the heavy slump, slump, of the Chaplain's terrible boots. The good man had dropped his Greek Testament and was bound to be in at the death. No sooner did he get sight of me than he asked:

"Did you kill it?"

"Yes!"

"Good for you!"

And next George's bare head popped up over the crest of a little hill.

"Have you got it?"

"Yes!"

"Bully!"

Our quarry proved to be a young and barren doe in fine condition, and was at once taken to camp, where all hands turned to and it was soon flayed. Then we began to talk for the first time of our hunger. Till then each had eaten his share to the last crumb and said nothing. But now we began to complain. The Chaplain said he was "awful hungry—hungry enough to eat a piece of dead deer," and I told them that we would cut the big bones out and crack them and boil them as the primitive man was supposed to have done. And we did. And besides the cracked bones we put in the pot all the nice tid-bits, and then covered all with water and clapped on the lid and set the mess to simmering and stewing over a slow fire. After an hour had passed, the Chaplain's irony became as sharp as his appetite, and he proposed that we go home and leave the pot till next year; and so to appease him our last potatoes were sliced and put in, and when these were cooked till done and some seasoning had been put in, we stirred water into a fourth of a pint of our precious flour till it was the consistency of thin cream. That we poured into the pot, which was boiled briskly as long as we could abide it, when the dish was pronounced done, and a more palatable, savory, satisfactory dish, not one of us ever tasted, I am sure.

The next day Bob Greaves came after us and in due time we were back upon the swiftly flowing Au Sable catching grayling.

MARCH, 1884.

THE TRAPPERS.—Hornellsville, N. Y.—I hardly think that you will hear much from the trappers. They are not likely to write much about their art, for those who excel in it do not care to tell what they know. Their secrets are jealously guarded. But on other points you might occasionally draw them out, on the improvement in traps, for instance. I should like to know where foxes are plenty, so that I can trap them.—S. D. [Foxes are plenty in Accomack county, Virginia.]

GAME IN MARKET.—The New York *Graphic* of June 13, says: "If our correspondent will take the trouble to go through the markets he will not find it a very difficult matter to obtain a brace of wild ducks or some choice cuts of venison, even if it is the close season. Of course, the game laws are evaded. Everybody knows that."

SNIPE.—The jacksnipe is a migratory bird, and, having attained on the southern marshes that succulent obesity which is so highly prized by the epicure, he takes his way north to relieve the aristocratic canvasback and the conservative redhead of their involuntary martyrdom in the Chesapeake Bay. The snipe is known as the grayback, English or jacksnipe. He goes to marshy or boggy ground. His food is obtained from the mud, into which his long bill is thrust. He is a real game bird, with an erratic flight and an accommodating tameness. He does not become alarmed and fly up at fifty yards' range, but he prods around in the soft ground with perfect unconcern until the sportsman or his dog is quite near him; then he darts up with sudden alarm, flipping his wings with a queer motion that carries him in a zig-zag course, right and left, giving utterance at the same time to an oft-repeated note like "Scaipe!" "scaipe!" It takes a good, steady shot to kill snipe. A man who gets flustered and bangs away too quickly nearly always misses. The higher the snipe gets from the ground the more steady does his flight become, and it is only necessary to keep a steady footing and wait until his snipeship gets thirty yards off, then crack away in his direction with an ounce of No. 8 shot, which at this distance scatters a yard square. With a good aim he is apt to come to terms. Jacksnipe live in Florida, Texas and Louisiana in the winter, where the great flat prairie marshes afford them satisfactory accommodation. At this season of the year they go North with the ducks and swans, and raise a family in some swampy region. The Southern snipe is the best, because they are killed in the early spring. During the fall their family cares make them thin, and they are no such choice subjects for a generous palate nor such gamy birds to kill in the field. In hunting them a dog is not usually essential. They can be more readily kicked up than the partridge or the woodcock. Snipe should be cooked like the woodcock, with all of his intestines left except the gall and crop. His head should be picked clean and his bill thrust into his breast. If a little high in flavor he is more appreciated.—*Baltimore Sun.*

JUNE WOODCOCK.—Philadelphia, June 14.—Again I have to report this year the illegal shooting of woodcock, or I should say the intention on the part of those who should know better, to go out before the law allows the birds to be shot. Only to-day, while at a prominent gun store in Philadelphia, I asked the question of a gentleman whom I thought posted on the subject, if woodcock had bred in any numbers in a locality he frequently visited. In reply I received the answer that many had been seen and that next week he intended getting into his boat with his fishing tackle as a "blind", and slip up a creek running into the Delaware River, and kill a few birds. "If I do not do this," he added, "I will get none in July, as they will all be cleaned out." This is one confession of intentions of two that have been made to me. I would add that the ground proposed to be visited is in New Jersey, where of all places around us the law is supposed to be the most strictly enforced.—HOMO.

WANTS A MOOSE.—Philadelphia, June 6.—I wish this coming September to make a trip after moose. Can you tell me where to go with any chance of success, or put me in communication with any one who can give me the required information. This will greatly oblige one of your earliest subscribers.—W. D. W. [Write to Ned Norton, Colebrook, New Hampshire. Col. Cecil Clay, who wrote "Among the Moose" in our last volume, could put you on the right track, if he would.]

GAME IN SULLIVAN COUNTY.—Monticello, N. Y., June 7.—"W. C. M." or other parties wanting good bass fishing and partridge and woodcock shooting in August and September, will find it at this place. Trains leaving New York city in the morning via Erie Railway, arrive 2 P. M. same day. To parties inclosing stamps I will give any desired information.—FRANK KENT.

GAME RESORTS.—We shall be pleased to receive for publication information about desirable game resorts. Sportsmen are invited to send us notes of their experience.

'COONS AND 'COON-HUNTING.

[Read before the New Hampshire Fish and Game League, by Mr. John Foster.]

THE naturalist has given the 'coon but little attention. Usually he has been accorded a classification, a half page of imperfect description and oblivion as to his real merits. The hunter has not generally adopted the 'coon as his favorite game, and he is less hunted than most of our game animals. His habits all have a tendency to conceal him from the sight and knowledge of men, and it is not an unusual thing to find in a good 'coon country those who, though living among them for years, have never seen one, and whose ideas of their habits are vague and indistinct; nevertheless, those who do choose to hunt them become the most enthusiastic of sportsmen, and place the pleasures of the 'coon hunt foremost of all. To all who are interested in animal life, either as scientists, sportsmen, or lovers of nature, we extend the assurance that a visit to the haunts of the 'coon, an interview with him in his own forest domain, an examination of his habits, his food, and the ways and means of his capture, will prove a very pleasant adventure. An animal of marked and peculiar habits, a good liver, choosing a wholesome diet, possessed of the cunning of the fox, most affectionate to her little family, defending them at times with great bravery and a shrewdness which amounts to strategy, such is the 'coon in its native condition.

The raccoon, *Procyon* of the scientist, but in familiar phrase the 'coon, is positively an American. His family is represented on both the American continents, and in no other lands. Our own North American 'coon is found from Canada to the Florida Keys, and westward to the Pacific coast. In different sections he undoubtedly has different habits; in the cold Northern States he reaches a greater development, and is a far more gamy animal than in the South. His average weight in our State when his full growth is attained is a little less than twenty pounds. The females do not often weigh over seventeen or eighteen pounds, and the males seldom over twenty-two or twenty-three. We rarely catch one as heavy as twenty-five pounds. The largest one we ever caught tipped thirty pounds. We have heard of 'coons being captured weighing as high as forty pounds, and we consider the parties who have given us this information in most cases reliable. We seldom catch the heaviest 'coons, for the reason that when they have reached their greatest weight they range but very little, and therefore the chances of the dog striking their track are greatly lessened. Their flesh is by some prized very highly it is wholesome, and if properly cooked is certainly very nice food. One decided peculiarity of the 'coon is the coldness of his scent, as hunters term it; that is the small amount of animal scent which he leaves in his track, thus rendering it extremely difficult for dogs to follow him. The characteristic is stronger at some times than others. Through the summer months, when the young are under the mother's care, and are

unable to defend themselves, this lack of scent is most apparent, and through the month of September and the early weeks of October it is a good dog that can successfully follow their blind and puzzling track. Later, the scent becomes stronger, and in the months of November and December it is comparatively an easy matter for the dog to follow them, though then the track is cold compared with that of other animals.

We think the 'coon prefers to live in the vicinity of civilization rather than in a wholly wild country. In sparsely settled districts, in the large tracts of forests which we still have left, the 'coon makes his home. His domicile may be a secure and cosy cave in some ledge on the hillside, but perhaps it is more likely to be in a hollow tree; and here, when the storms of winter come, the whole family go, to sleep the long sleep of winter; to sleep free from the cares and dangers of their little world, to sleep forgetful of invading foes, the battle with the dog or the stern race for life. The warm thaws of February awaken them, and in obedience to their mating instincts, they travel long distances on the snow, and it is claimed by some that they then perish in great numbers if the weather becomes suddenly and severely cold. This may be the most probable theory of accounting for their great scarcity in some years.

In general, the 'coon has many means of self-defense and self-protection; he is sly in his travels, even in the night; never emits a noise of any kind that may disclose his whereabouts; his extremely puzzling track protects him at all times from random, untrained dogs; seldom visible in the daytime, he is safe from all day hunters; and though formed more for strength than speed, by adopting many a cunning ruse he can run far before the fastest hound; he will jump from a tree into the very midst of hunters and dogs, and lead them all a long and wearisome chase, and sometimes escape them entirely. The dog can undoubtedly run much faster than the 'coon in a fair race, but he is greatly retarded by being obliged to unravel as he goes the cold, almost scentless track, and thereby the latter has a great advantage.

The young 'coons appear about the middle of April, from four to six in a family, and long afterward they are under the control and faithful guardianship of the mother. In the hunting season she is with them, and under her guidance they are oftentimes saved when the hounds are on their track. She carefully guards them in their tender, helpless age, developing in them the instincts by which they are to live and protect themselves. Unless disturbed and broken up by an enemy, the little family continues together for a long time; through the summer, autumn and winter they occupy the same home, and by some it is claimed that they breed but once in two years, and that the flock is not separated until the young are fully grown, which is at about two years of age. If this is so, and there are reasons for thinking it may be, then the 'coon is without doubt the most faithful parent animal we have, for we know of no other which cares for and retains the society of its young so long. Unlike the female, the male 'coon is an unsociable, unfatherly, ascetic old fellow; solitude and silence best suit him; he ranges far and alone. To tree two old males together, or one with a female or young ones is a thing of the most rare occurrence.

Their food in the spring and summer consists of frogs, fish and nearly all kinds of animal life that exists in and around our streams; and in meadows, bogs and marshes their tracks are often seen; here they will dig for grubs, lizards, frogs and snails. They are fond of berries in their season, and in September their track is often started in a blueberry or blackberry patch. Black cherries they are exceedingly fond of, and they will go far to get a meal of this favorite food. The cornfield they sometimes visit early in the season when the young corn is sweet and tender; this they are fond of, and when once the field has been discovered it is sure to receive repeated visits, until the farmer discovers "signs of 'coons in the corn," and then there is great preparation among the boys for a 'coon hunt; the neighbors are invited to the soiree; the family dog, whose recommendation is that "he's great on woodchucks," is drafted into service, and under the brilliant harvest moon the hunt begins with the cornfield as an objective point. If the dog succeeds in surprising the flock he may secure a trophy, but most probably the result will be a general stampede for the woods with the pursuers in the rear; the hunters urging on the dog, who is, through no fault of his own, as incompetent to follow the track as his master. And so the hunt winds up with a shadow of disappointment; but still it has afforded an hour's recreation for the overworked farm boys. And gentlemen, as true sportsmen, we should ever extend our sympathy and encouragement toward the sports of the boys of the farm; their hunting days are few, their business hours are from sun to sun, they are toilers, and are to be the bone and sinew, perchance the brain, of the future, to them is given little chance to train the eye and nerve to the glass ball or the flushed bird, their old-styled guns cannot compete with your improved breechloaders, their dog must be watch dog, farm dog, and hunter all in one. You invade their hunting grounds, and as they toil they hear the crack of your gun, and know that the fine coney which they have watched and doted on for weeks is being exterminated by skilled hunters and unerring dogs, and if, as the only way to compete with you, they gather their game a little early in the season, or here and there set a few snares in the woods on their own land, in rendering judgment or criticism, let us remember that it is but human for them to enjoy their own sport in their own way, that we shoot twenty birds where they snare one, that we have never been favored with a revelation disclosing which is the proper method of slaughter, and therefore in construing the law we should be liberal, and in applying it we should be charitable.

The food of the 'coon during the best part of the hunting season is the mast of our various nut bearing trees, chestnuts, beechnuts, acorns of the different kinds of oak. Sweet apples are eaten when they can be found. They have the fondness of the bear for everything sweet, and when captured young are easily tamed by feeding them on sweetmeats. They eat insects of various kinds; have been known to eat grasshoppers, but whether from necessity or choice we cannot say. But the food relied on for the purpose of preparing for winter is certainly beechnuts, chestnuts and acorns, the two former kinds being preferred. In years when nuts are scarce the 'coons are never found to be as fat, and in the winter following such a season they are often found, even on the coldest days, searching through the snow for food, sometimes going even so far as to enter the barns and outbuildings of the farmer. They are then piteous looking animals indeed, and one would hardly have the heart to destroy them. They are very fond of water, and on starting out in the evening they immediately go first for drink; in a dry season they often travel far to find it. One learned writer says that they always dip their food in water before eating it; but, though knowing them to be strong teetotalers, we do not believe they go to that extreme.

If we are to hunt the 'coon in early September, we shall expect to find him in the lowlands, along brooks, and about ponds, meadows and marshes; black cherry trees in bearing are sure to attract him, even if he makes a long journey to find them. Later, after the early frosts, we should traverse the highland forest, where nut trees are in bearing, preferring a growth with beech or chestnut or both intermingled, but still remembering that among the oak growth they are often started. And it is well in going from one point to another to follow in the line of brooks and water courses as much as possible, for these are the chosen highways of the 'coon.

In our judgment cornfield shooting is the poorest kind of 'coon hunting; they seldom pay much attention to the cornfield except very early, and then many are too young, and all are too poor in fur and flesh to kill.

The hunter, when he starts with his friends for a night's sport, should know where the game lives, where the streams are, what food is in season and where it is to be found; he should move first in reference to the home of the 'coon, next in reference to the nearest stream or watering place, and then he should thoroughly hunt over the ground on which he is most apt to feed. Of course, a strict adherence to any rule in hunting is not to be expected, but our object is to suggest the conclusion that success is in a great measure due to the hunter and his methods of procedure.

The subject of dogs is an exhaustive one. A volume might be written on 'coon dogs alone. Every hunter at some time or other has his ideal dog; perhaps at the present only a tradition, but once an actual being, the pride of his master and the terror of the 'coon. The hunter never wearies of recounting incidents of the past; and as the old soldier of the "Deserted Village" "Shouldered his crutch and showed how fields were won," so have we been entertained on many a tramp by some old veteran of the woods with graphic descriptions of the exploits of the "old dog." How many times have we heard when on a hunt and our own dogs were working well, the expression, "Oh, if I only had the old dog!" How the love of the master for the "old dog" lingers! There is true affection between the hunter and his dumb companion. He may be poor, destitute, almost hungry, but you cannot buy his dog. Through the few years of the faithful creature's life they live and hunt together, and then the new dog comes, but he is not the "old one;" there can never be another "old dog." His memory is ever kept green; stories of his prowess are ever at hand ready to eclipse the achievements of any living dog that comes up for praise. And as each hunting season returns and again we gather for the chase, while waiting for a bark, stories are in order; the veteran hunter leads and in imagination the "old dog" hunts again. Though his kennel stands empty, "Yet back from the hill the voice of the hound in the morn echoes still." When old Polonius in the play asks Hamlet what he reads, Hamlet answers, "Words, words, words."

And when we answer the question, what insures success in hunting 'coons, we should in the same spirit answer emphatically, dogs; not this breed or that in particular, but dogs; those which can do the work, for pedigree is no essential part of a 'coon dog. He may be, as *Edgar* in "King Lear says,

> "Mastiff, greyhound, mongrel grim,
> Hound or spaniel, brach or lym,"

but if he is the successful dog his value is assured. Of all dumb animals we place the dog first, perhaps not the most useful, though. Baron Cuvier, one of the world's greatest naturalists, says of him, "It is the most singular, the most complete, and the most useful conquest that man has made."

By his intelligence, his adoption of reasoning methods, his great courage, his wonderful gift of the power of scent, and his affectionate devotions to his master, has the dog deserved that praise which the song and story of every age and tongue have bestowed upon him.

The good 'coon dog must have nearly all of the best qualities of the dog family; he must have intelligence, courage, patience, endurance, and above all, the strongest powers of scenting four-footed game, rarely are all these elements developed in the same dog, hence good 'coon dogs are rare, but when these characteristics do appear, then with proper training one can have a first-class dog.

Although a good 'coon dog may be found in nearly every breed and grade of the canine race, still in certain breeds there are conditions which lead us to have a preference, and for ourselves we certainly look first among the best blooded hounds, and if we find one fulfilling the essential conditions, he is surely the dog we want, for if not already trained, he can, with proper care, be taught to forsake all other game, and his strong hunting instincts be trained to bear upon no other living animal. He becomes most devoted to his master, is cool, patient and enduring, and when in the hunt he has no other purpose but to press on to the end of the track. Usually a great ranger, he saves you much travel by finding his own tracks. He is kind and affectionate with his friends, but when aroused by an enemy is brave and tenacious; but over and above all these, he is the very personification of scent, and is therefore, other things being equal, the best track dog in the world. A common type of 'coon dog is a cross of the hound with other breeds. We have known the spaniel, shepherd, mastiff, bull and mongrel, each crossed with hound, to produce good 'coon dogs. The cross hound and spaniel is a dog of good scent, but is very nervous and not a hardy dog. The hound and shepherd is well spoken of by those who have used them. They have intelligence, good scent, are good rangers and are very hardy. The hound and bull is a combination of scent and courage which often makes a very successful dog; he is generally, as it is termed, a good sticker.

The hound and mastiff produce a dog that is quite sure to be a 'coon dog if trained; he will not have the best of scent unless it is taken strongly from the hound. He will be a still-runner, and an intelligent, brave and faithful hunter. The cross with the mongrel or the mongrel himself is of course an experiment; as a rule it does not pay to train one, but still there are decided exceptions, and a common, homely, friendless cur, picked up in the streets, has been known to make a most successful and valuable 'coon dog.

A number of years ago we hunted a few nights with a common black and tan terrier, a little larger than the ordinary size; he had received little or no training, and had taken naturally to 'coons. His scenting powers were remarkable, and we remember him as one of the best still-running dogs we ever saw.

Hence we reach the same conclusion which we premised in beginning our remarks on dogs: the 'coon dog comes from the canine race at large and is confined to no particular breed. Some 'coon dogs run still, that is, do not bark on the track, barking only when the game or the tree is reached. There are advantages in this class; the 'coon, having no notice that he is pursued, has not the chance to lead off to avoid the danger or to choose ledges, bad trees or water, as is often the case before a barking dog. But our own theory has been that the still-running dogs are, as a rule, the weaker scented class, and hence not to be compared in value to the stronger-scented, track-barking dog.

To this rule, if it be one, there are some strong exceptions, for we have known the best blooded and best scented hounds, naturally track-barking dogs, to have adopted, seemingly as the result of a reasoning process, the habit of still-running. No matter how hot or how cold the trail when he finds it, not a bark escapes his throat, but with nose to the ground, the still-running dog glides like a shadow through the dark forest; as he draws on to his game his muscles grow tense, and he steals like a cat on his prey, then with a rush and a roar he is upon it; the great caution of animal succumbs to fear, the mother 'coon and her family are stampeded in an instant and forced to seek the nearest tree, be it large or small. In this way a whole flock is sometimes secured; but, notwithstanding, we prefer the music of the barking dog; he is a more entertaining animal, generally has better scent, and, as a rule, is more successful in the end.

The retreat of an old 'coon before a barking dog is sometimes a finely executed affair; it is planned deliberately and well; it is conducted so as to puzzle and throw off the dog if possible, over ledges, along stone walls and rail fences; now a tree is climbed and from the extremity of a long limb he jumps to the ground again; he wades the brooks, takes to the swamps, then back to the hills and runs round and round some dry knoll, repeating his tactics over and over again: and it is on such a track as this that the best test of the dog is made; here is where the cross-breeds give up in despair, while the grand old hound perseveres and secures the prize.

When we start on a 'coon hunt we should equip ourselves with an axe, a pair of climbers, a .38-caliber revolver, a cord of 100 feet in length, a compass and a pair of pincers to pull hedgehog quills with, for the best trained dogs will sometimes get quilled, and they must be at once extracted or the dog is ruined.

It would be well if every person in the party took a lantern, as in a dark night you cannot have too much light. If you have a good climber in the party a gun is not actually needed, as your climber can climb the tree and with the revolver shoot out the game; if while in the tree he wishes for a lantern or to reload his revolver, he communicates with those below by means of the long cord. Never permit the dog to fight the 'coon till he kills him, for nothing wears a dog out more than this, but be ready with crotched sticks (good strong ones) with which to hold the 'coon down as soon as possible after he strikes the ground; then let the dog have a grip or two, and taking him off, finish the 'coon as quickly as possible. Another thing, never leave a 'coon in a tree after your dog has succeeded in getting him up, if it is possible to get him. Stay at the tree till morning, exhaust every device before you give him up, for nothing encourages a dog more than to know that you are willing to work as hard as he does to get the game; be true to him; get his game for him and he will be all the more true to you; he will work harder on the track, and stay at the tree all night if you do not come before.

Gentlemen, I have exhausted my time and your patience, though not my subject, and in conclusion permit me to say, though hunters, like other men, grow old, and in time a new generation appears in the field, long may it be ere the mantle of the prince of 'coon-hunters shall fall from your president; long may the afternoon sun shine bright as the sun of the morning.

A PEN AND INK SKETCH.

THE heat of summer came with that day, when the first gathering of the faithful met in this present June.

In the preceding week sharp frosts, bold and adventurous, and far from their "base lines," had dashed through the later days of May, and wrought havoc and carried chill and disaster along the entire track. With noiseless speed, and without visible smoke or tell-tale smell of burning, this squadron of frost left in its path the shrivelled leaf and drooping vine and blighted blossom, like a sharp and unsightly scar of a sabre cut across the soft and fair cheek of youthful promise.

But this day was warm, nay, was hot; and fright and discouragement gave place to good cheer and confidence again, in the presence of this friendly force for good.

It was to be a "regular monthly meeting," and "business of importance" called on "every member to be present." Not every one who is called, however, comes, and many are the excuses which stamp their makers with "found wanting."

One distinguished member, whose absence is always advertised by the greater quiet which the loss of his voice establishes, doubtless will plead the enforced attendance at court, and the impossibility of leaving his clientage to compromise and settle their cases, simply and satisfactorily, during his absence, to his great and uncompensated loss.

Another—whose large and growing practice claims from him twenty-four hours of the two dozen which each day affords—will argue as excuse, the suicidal course which attendance at the grounds would prove, in that possibly during those few grateful hours of relief and freedom, some patients might secure sufficient strength to shake off his shackles (and him, too) in a return once more to health and vigor.

A third—whose time is heavy with opportunity and leisure, and who really is old enough to know the value of first impressions—will claim that, instead of coming to the house and magnificently carrying off honors as figure-head (which he inwardly knows to be right and his duty), he must remain near the sound of the calliopic screech-seeking inspiration for a newly to-be-devised "smoke stack," lest some "consolidated" competitor should secure a further "bulge" on him.

And so the list might be extended. Doubtless some would have pleaded that insanest of all excuses, "that they had married a wife" (in our club, it is not to be denied, we have many degrees of intellectual capacity), for many were absent.

One bright, cheerful face and ready, steady hand, we think of in particular. A man who passes his time with *understanding*, and who *shoe-d* know what was *fitting*, *sole-d* himself and stand away, after promising his fellows faithfully that he would make a *corn-er* for these days.

But the faithful were there. The day was hot, the sun oppressive. With windows of shooting house thrown wide open and doors flat back, however, a kindly and refreshing breeze drew through the retreat, already shaded and cooled by the protecting arms of friendly trees. And here came in, in careless and happy irregularity, one after another, the faithful few whose names are inscribed in letters of gold in that book which records the list of good men, who shoot all they can, and wish they could shoot more.

With chairs tipped back, with the curl of fragrant blue smoke rising like the incense from an acolyte's swinging urn, in happy, lazy waiting, the "meeting" did not come to order, but chatted and talked, or were silent and listened, as the mood swayed.

We wondered if the absent had been "taken" in the raid of Jack Frost, referred to at the beginning. We wondered who would "take the cake" in the afternoon's shooting, and after such wondering, now and then two or three would step out to the "firing point," and the sharp crack of a full charge of black, or the flinty snap of wood, powder, showed that the answer was uncertain, and that perhaps a little preliminary practice would not be harmful for any. Never mind who really made the highest score; they were all high and always are. We shoot very well and we know it, and we do not care to say any more about this; but a sketch, a pen and ink suggestion, of the faithful perhaps might serve as helpful models to those of your younger readers who are attracted by, and "know a good thing when they see it."

A thrush filled the air with his sweet song in the edge of the woods across the field, while near by, little finches hopped to and fro, in happy security, and in the nests hidden in the grasses here and there, little open mouths waited a providing parent's return. A pair of nighthawks, the first we had noted, made their way far off across the sky, while nearer the earth and nearer to us the cry of a Wilson's peewee joined the restful harmony. Bees droned, and a fitful fly or two buzzed with monotonous hum—and it was hot.

Of the faithful, who more faithful in every sense than he who is invested with the key and strong-box of the club? It has often been claimed that much practice has made him so proficient in arresting the flight of these swiftly-moving targets of ours, but I think it is not altogether that. Teaching young ideas how to shoot for many years, and being called upon to stop the flight of soaring imagination in others, he has unconsciously acquired this power himself, and he stands among us to-day with his trusty full-choke ready for trap or field—*facile princeps*. Or, if the failing score of some hitherto successful shooter seems to indicate a loss of "grip" or power, what helpful aid to a sturdy and vigorous effort to retrieve lost power, does he give us, when drawing from his store of classic knowledge he assures us that even in Virgil's time it was noted and said: "*Facilis est descensus Averni; sed revocare gradum, hic labor, hoc opus est!*" And familiar with the note of every winged songster of the forest, he will, if you will, describe and recount concerning them, until it stands as a bar between yourself and any cruel shot, which a less familiar knowledge might have permitted.

Another and a younger faithful one, in quest of a fullness of robust health, which nothing in his bronzed and healthy look indicates any lack of, sensibly takes the "outing" which an afternoon at the range affords, and thus fits himself for closer application to duty during the week. And as he tells of his winter in and along the coast of Florida, there seems to come in through the open window the smell of the orange blossom and geranium, and we almost look for the ugly snout of some wandering alligator to turn the corner of the open door.

A third faithful is he who modestly disclaims his title of military distinction, but who gives evidence of his prowess whenever he faces the trap, and who illustrates the slaughter which would follow his opportunity, by the relentless way in which he smashes glass and clay. Devoted to the successful development of teeming field, and showing in well-filled barns and increasing herds, the intelligent management of a well-ordered mind, he yet seeks the rejuvenating and healthful influence of a day's sport, and actually grows young while years accumulate.

In another we see the evidence of the good influences of such a companionship and season of sensible recreation. As the day comes round to the "weekly field day," so is this one found, generally without fail. Office desk is closed, the hum of machinery with its busy wheels and industrious cogs is left behind. Tired head and weary body are refreshed, and each breath drawn in the free outer air furnishes its stimulant and invigoration, as an increased bank account to check against during the week.

And yet others—this time a young man! Finding in this weekly afternoon a sort of De Soto's fountain, he drinks deeply of it and seems to be finding the secret of perpetual youth therein. And in this flush of youthful strength he illustrates its power, in capturing the "championship" when he attempts it (and also the good nature of confident ability in letting it go when some cantankerous competitor seems to require it to make him happy).

And the man who handles diamonds as we others do pebbles—whos

touch is as familiar to gold as is the touch of many to dirt—he is faithful, and will be to death. His "sweeps" turn to gold and his "pots" to silver, and we believe his "carats" are finer by reason of these days with the chosen few.

There is another, who means well, but who is not quite so faithful; 'tis he of the ready hand. He delights in the sport for sport's sake, but also for what it brings in its train. For is not powder required, and do not shot and shell play their part, and are not guns needful to the play? And he will give you (for your money) what you need, and perhaps a little more, for the influence of these days is healthful and elevating. (*May-it* continue to be so!)

Good-fellowship, common interest, cheerful spirit and proper emulation mark these shooting days in "red letter." And we pity the tired professional man, merchant, manufacturer, capitalist or employee who does not belong to a "shooting club," and who cannot enjoy all that such a membership makes possible. B.

Camp Fire Flickerings.

"That reminds me."

116.

THE following is related by Col. Elder, a courteous and entertaining officer of the regular army, stationed at Fortress Monroe:

Dr. S. prided himself upon his skill as a woodsman and rifle shot; but his merit in this regard was not recognized by an uncharitable world. One day he and Captain B. went out deer hunting. They separated, and soon the Captain heard his companion shoot. A moment later a terror-stricken calf rushed frantically by, and had scarcely disappeared in the bushes before the Doctor ran up and inquired if the Captain had seen the deer, which he was sure was mortally wounded, pass that way. "Why, Doctor," exclaimed the Captain, "is it possible that you took that calf for a deer?"

The Doctor's countenance lengthened; and then "a light on his visage spread," and he replied: "I was not certain whether it was a calf or a deer, and I therefore aimed so that I would hit if a deer, or miss it if turned out to be a calf." N. S.

117.

Away down in Dorchester, New Brunswick, lives Deacon Willard Lawrence, who, outside of his piety, is as fond of his gun as the most inveterate sportsman. Yesterday (Sunday, March 30) on his way home from prayers, a small boy rushed excitedly up to him and pointed out a flock of about twenty wild geese that had settled on the marsh near the shore of the Memramcook River. They were the first of the season, and the deacon's blood bounded; but with a mental "Get thee behind me, Satan," he resolutely went into the house and took up the family Bible.

Failing to get interested, he took down his gun and looked at the loads. Three A in one barrel, No. 1 in the other. He would just go down and see if he would have had any chance to get at the geese had it been a week day. In his absent-mindedness he takes his gun aloug and goes to his side-wheel punt on the river bank, and sits looking fondly at the huge birds which are walking slowly toward him. The tide, which has a rise there of thirty feet, soon lifts his boat, and he lets her slowly drift up the stream.

Suddenly three black ducks swim out of a cove and come toward him in a line. Habit is stronger than faith, and he blazes away instinctively, and in a trice the three birds are in the boat at his feet. But the noise of the gun startled the geese on the marsh and they lazily raised and swung over into the river about forty rods away. Alas for the orthodox deacon; the hunter's spirit is mighty within him, and seizing the cranks of his paddle wheels he slowly but steadily turns toward the game, each revolution of the paddle wheels bringing him nearer his quarry. Three birds in range; bang—and it is done, and with the six birds the good man returned to his home.

In relating at the next class meeting his temptation and fall from grace, among his experiences, notwithstanding his self-abasement and repentance, it was thought there was just a slight ring of satisfaction in his voice as he described the way in which those three geese tumbled over at one shot. ARBHEE.

118.

It used to be common in the good old by-gone times for the rustic farmer boys on the banks of Holsten, a beautiful stream in Southwest Virginia, to fish of spring nights, under pine torches, armed with cedar bows and small "gigs" on their arrows, which, by the way, they shot with the accuracy almost of an Indian.

Pete Totten, a conglomerate mixture of Dutch and Irish, a little dried up fire-and-tow fellow, tallow-faced, with little patches of thin beard, yellow, stringy hair, towlinnen breeches and one yarn "gallis," lived near a large family of boys, whom he called "Grimeses," a set forever torturing Pete, yet this had a charm for him.

Pete and the Grimeses were one night at their favorite sport of torch fishing, and as they approached a long sandy bar Pete says: "Er, er boys, look out for eels." Pete, who was barefooted, had his bow at a present and arrow fast on the string ready to shoot, and instead of a noisy stride he kept his left foot stuck out in front, quietly sliding it along in the sand. Presently Pete squared himself and said, "Er, er stop; gad, boys, here's the biggest eel in the Holsten!" Pete took a long, steady pull on his bowstring and "chuck" went the cruel arrow. "O, lardy, lardy! heavens and yeth!" cried poor Pete, as he involuntarily cast his bow over his head and fell backward in the water, his foot lifted above, with the barbed arrow through his bleeding big toe. The Grimeses carried him to the bank, where they forcibly extracted the arrow with the aid of a barlow knife. Pete now and then saying, "Er, er, darn you Grimeses, you'd laugh to see me die." GRAEME.

119.

Some ten years ago, in a village not fifty miles from Brooklyn Bridge, there was considerable rivalry as to who brought in the finest strings of trout. Among the lot who were striving for supremacy was my friend Dan C. He could generally tell of bigger strings and bigger trout than the others.

Dan went off trout fishing one day, and just outside of the village he espied a small Dutch boy, with a bean pole and a cord for a line, swishing a very large fish about in the creek. Dan saw that it was a trout of over three pounds weight. The boy told how he had got it stuck fast between two stepping stones in the creek and had struck it on the head with his pole, and then tied it to his line to have some fun with it. It did not take Dan many minutes to catch that trout from the boy with a ten cent bait, and both went off happy. In a few hours Dan returned, went into the grocery as cool as his excitement would allow, and tried to make it appear an-every-time-I-go-a-fishing occurrence to catch a trout. The palm was at once awarded to him, and the fish spread a gleam of truth to his sitting-on-a-barrel stories.

After the boys had all seen it, he presented it to the most popular gentleman in the village. That night the boys were in full force in the back part of the grocery, and Dan was reciting to them how he hooked the fish, the rushes for liberty it made, how he worked it up and down stream, the narrow escapes he had of losing it around a big boulder, how it got under a bank and sulked, then of how he had to get into the creek up to his middle in water to keep clear of the brush, and finally how he led the prize to a little sandbank, got behind it, and threw it out on the bank. He had just finished his glowing description when a big Dutch woman and a little boy came into the back part of the store. The boy walked up to Dan, pointed his finger, and said "Him." The woman held out the ten cent bait, and addressed Dan: "Mishter C——s, the pig vish my poy catch vas ash pig ash vorth two tollar," and she demanded the fish back or two dollars, or she would make trouble for him for cheating her little boy. Dan forked out the two dollars. A. MAC.

Sea and River Fishing.

CAMPS OF THE KINGFISHERS.

Black Lake, Michigan.—VI.

A MILE or two from where we saw the deer, a small cleared spot in the woods at the water's edge, and the tinkle of a little stream running into the lake, invited us ashore to slake our thirst with the first *"clear, cool, spring water" we had found since leaving camp. On getting out, we found this cleared patch of a few rods in area to be the site of the Hughes party's camp of the previous year, recognizing it by his description of the little stream.

The source of this stream, as near as we could see, was a snarl of cedar roots a short distance back in the swamp, from under which it gurgled into a clear, shallow basin, of perhaps fifteen or twenty yards in circumference, and found its way through a tangle of bushes into the lake four or five rods away.

In this basin Brother Hughes had told us he saw three or four small trout the year before, but a cautious and careful scrutiny of the little pool failed to show us even a sign of any kind of fish, and we concluded that the aforementioned trout must have been small barred perch that had escaped from their minnow box, the remains of which we had seen at the mouth of the brook.

Reasoning from this tale of the small trout some months before, we had hoped to find somewhere around the lake a stream or two in which might be found trout of larger growth, but after a careful look into every one flowing into it, within the next four days, we were convinced there was not one in which a respectable trout could procure an honest living, and we were forced to appease the craving of our "trout tooth" with fish of grosser fibre.

Leaving the basin we strolled around the clearing, finding plenty of "sign" of a not very old camp. Here stood a couple of upright poles with a ridge-pole still in place; over there against a tree was an old settee in the rough, which showed considerable skill in workmanship, and near by were the marks where the tents had stood. If all other signs had been lacking of some one having been there before us, there, lying in the sand was the tell-tale old oyster can and fruit can, battered and weather-stained, its mission performed and cast aside to be trampled under foot or be kicked out of the way by the next comer. Broken bottles scattered around in some profusion, several with the labels still adhering to them, proclaimed that the last campers belonged not to the "prohibition party," as the legends on the bottles were mostly in the French and Kentucky languages, with Kentucky slightly in the majority. As we walked back to the boat, Dick remarked in his dulcet mezzo soprano, "Must a' had a revival 'round here from the looks o' the bottles; don't wonder at 'em seein' trout in that little pond."

Back out to the edge of the bar again we went to fishing in earnest, but we must have done something that day to set the fish against us, for not a fin could we stir, nor could we see a fish of any kind anywhere on the broad expanse of the shallows inshore as far as our eyes could reach; however, we were enjoying ourselves this quiet lovely day like a colored brother in a "water million patch," and we persuaded ourselves that we didn't care much whether we took any fish or not, we were merely exploring and studying the waters.

Dick lit a fresh pipe, and hitching himself a trifle to starboard in obedience to a nod to trim boat, summed up the measure of his content by saying, "Now, some fellers want to catch a fish every five minutes, but I don't. Of course, I like to catch one once in a while to keep my hand in, but I'm enjoyin' this boat ride [I was at the oars] an' the scenery so well that it's perfectly imperial to me whether I catch a fish to-day or not."

Dick is clearly a philosopher.

A mile or two further up the aspect of the shore changed, a low wooded hill pushing down to the water in place of the flat strip of bottom land and swamp we had been coasting along ever since leaving the place we had first landed.

The bank along here for some distance, and out into the water for several yards, was lined with a layer of boulders, large and small, so evenly distributed that in places it looked like a wall built by the hand of a master mason. Here, and at the ledge at the head, are the only rocky formations to be found around the whole shore line of the lake.

We had reeled up and left the outer bar and as we rowed along close in shore a little stream trickling down through the rocks said plainly to us. "Come in out of the hot sun, ye luckless fishermen, and cool your parched gullets with a cup of my crystal waters." In response to this invitation we pulled the boat up on the rocks and pushing our way through a fringe of bushes at the top of the bank found ourselves unexpectedly in a small hay field, surrounded on three sides by woods. The hay had recently been mown and cocked but nowhere could we discover a sign of a habitation except a small dog tent a few rods back in the field in which we found the household furniture of the party who had, no doubt, harvested the hay. This was in the shape of an old blanket, a small box containing a knife, fork, tin cup and a piece of bread hard enough to break up into flints, and just in front were an old frying-pan and a little black coffee pot near the remains of a small fire, all of which had the appearance of not having been used for a week or more.

But as we were not particularly interested in this solitary camper, we left the meager outfit undisturbed; Dick remarking reflectively that "from the general look o' things, that feller must have been playin' hoss, as he could see nothing to eat around there but hay." Down in a corner of the field, near the top of the bank, we found a cool little spring, walled up with rocks and nearly hidden by overhanging bushes, which proved to be the fountainhead of the rivulet running into the lake near where we had left the boat.

After drinking our fill at the spring, we combined a stroke of business with the pleasure of our ramble by adding a half dozen frogs to the bucket, which we caught along the marshy strip on either side of the spring branch; not that we had found any special use for frogs that day, but it is always well to provide against being caught short in the matter of bait should the fish form a combination against you and call for more than you can put up. Dick must have had something like this on his mind, his look ahead for sport to come taking shape and voice as he made a sudden dive into the marsh, exclaiming, as he came to a perpendicular with a handful of mud, grass and frog, "Let no speckled frog escape!"

Back in the boat again, we pulled out to the break of the bar and began fishing, but with all our arts and wiles we could not induce a fish to accept any of our most seductive lures and promises of gentle handling. All our knowledge of the gentle art availed us nothing; our "science" was wasted on the desert air, and we made up our minds that the whims of fish are governed by no conditions of wind or weather when they take a notion that they won't bite; that their ways are peculiar and slippery—fish ways, so to speak, and past the understanding of man. Here were Dick and I, two old veterans of the rod, with venerable streaks of silver running through our (self) respected locks, fishing from early morn till high noon over miles of as good looking water as ever a cast was made over, on a perfect day, with the wind just right according to all traditions and teachings, and not a single, solitary sign or symptom of a nibble. We had thought we knew a thing or two about the habits of bass and where to look for them, but to-day the results of a patient study of years, all the well-thumbed and fine-spun theories beloved of the craft were knocked higher'n a kite, and our smartness as bass fishers received a shock from which it took many days to recover, and it is a matter of serious doubt if we ever do get entirely over it; at least, it will be a long time before we hear the last of that day's fishing from the boys.

Hereafter, let no brother, overburdened with "bass smartness"—as we were—have the hardihood to say to Dick and the writer that he can pick out a day and go out and catch as many bass as he may have a mind to; we'll none of it.

We were now well up to the head of the lake and in plain sight of the bridge over Rainy River, and as the sun had tilted over the noon mark some distance, we decided to beach our boat somewhere near the mouth of the river and eat our lunch. The water seemed to get blacker as we neared the upper end of the lake, and all along here, as far out as the deep water, we found streaks of "musrat grass" and patches of scattering bulrushes growing up from the bottom—but no fish.

A solitary Mossback in a boat, coming from the direction of the Rocks, was hailed as he passed by us, and asked if he could point out any particular locality where a few bass might be found by diligent search. Pausing a minute, he replied, "You're right on the best bass water in the part o' the lake—ketched any?" "Nary a one," was answered. "Well, if you don't ketch 'em round here, you won't ketch none nowhere. I've ketched many a whopper round here in this grass" (bet that's a whopper, whispered Dick), and the oars fell, and he was off in the direction of the hay field we had just left—the same "feller," Dick guessed, "that had been playin' hoss." As no whoppers or any other kind seemed to be hankering after frog, fly or spoon, we reeled up and went ashore near the mouth of the Rainy to rest, eat a cold dinner, and figure up how many fish we should have taken since leaving camp.

The water of this river is very dark colored, but from where we stood on the bridge we could see the bottom plainly for twenty or thirty yards above. The stream here is not wide, sixty or seventy feet perhaps, with a depth of six or eight feet of water and a sluggish current that is hardly perceptible. Swimming aimlessly along the bottom here and there we saw several great lazy "red horse" and suckers, but we looked in vain for sign of minnow or other small fry that we might turn to account for bait.

A few days after this we made the acquaintance of a lumberman who had a logging camp and a gang of men a season or two before on Rainy Lake, and who had explored all the region around the headwaters of the Rainy and Little Black rivers. Rainy Lake, he said, was five or six miles long and in places a mile wide, and was simply a widening out of the river twenty-five or thirty miles from the mouth. The stream reaches back forty or fifty miles into a very wild region, where none but the red man, a few hardy lumbermen, or an adventurous hunter have ever kindled a campfire or broken the silence of the woods with crack of rifle.

To reach the lake by boat or canoe would, he said, be a work of great labor, as a series of sharp and turbulent rapids some miles further up would have to be surmounted, yet it might be done with much muscle, skill and perseverance, but the better way would be to haul a boat from Black Lake over a sort of blind road they had made going in and coming out as supplies were needed for their camp. He said the region around and above Rainy Lake was a paradise for a fisherman or hunter, deer and bear being abundant, and the lake swarming with black bass that "bit" so eagerly that it was only the matter of a few hours' labor to jerk out enough three, four and five pounders to last them several days, and furnish a party like ours rare sport for a week.

All this, and more of the same kind was told us one day under his little open shanty near the mouth of the Little Black (he was waiting for a run of logs coming down the river), where four or five of us had sought shelter during a two-hours hard rain storm, and as he was a man of intelligence, a good talker and seemed to be thoroughly posted about the region he spoke of, his tales of the woods and adventures on the Upper Rainy and Little Black rivers were keenly relished by every one of his listeners, and I believe we were all sorry when the rain storm was over and we went back to plain pickerel fishing.

Neighbor Merrill told us, too, that he had been on several hunts in the wilds above Rainy Lake, and the stories he told about the big game of the region drained by the Rainy and Little Black so worked up the old nimrod in two or three of us that it came near resulting in our discarding the rod for the rifle and striking a bee line for Rainy Lake to spend a week or ten days in the heart of these solitudes in serene con-

* This is solely a matter of information for brother "P. D.," not unknown to fame as a whilom contributor to the pages of FOREST AND STREAM.—K.

tent, where the smoke of the camp-fire is rare and the "resorter" goeth not.

"Why," said Merrill, "deer and bear are as plenty up there as partridges are around here in huckleberry time an' wolves too," and to me he said in serious earnest, "an' mebbe you won't believe it, but there's some elk left in them woods yet; yes, sir, elk, an' if my old Winchester could talk she'd tell you so. Jest shoulder your rifle an' blanket and come with me a week an' I'll prove it to you. We'll take Turk an' the black dog, an' if I don't show you some great sport then you can call old Merrill a liar." Old Ben and I were sorely tempted to take him at his word and go, but it was the close season and game laws are not made to be broken and set at naught by honest sportsmen, so the trip was abandoned.

We are not going to take any great credit to ourselves, however, for not going, for the truth is, Ben and I stand convicted of a violation of the game law of Michigan, in intent, if not by overt act, but if the fates don't take sides against us we may, at some time in the future, visit this wild region when the season is open, and I am convinced that with Turk and his master we could have some rare sport with the rifle, and not be ashamed to look the district prosecutor in the face should we chance on him on our return from the woods.

But this digression has no doubt lost Dick and I a chance of taking a bass or two on our trip around the lake, so to quote Old Ben again, we'll "jest hie along."

KINGFISHER.

[TO BE CONTINUED.]

RANGELEY WATERS.

Editor Forest and Stream:

The ice went out on the 11th of May. On the 13th the first visitor at the Mountain View (Mr. Littlefield, of Boston,) captured a five-pounder from the wharf. For a few days following the strikes were few and far between, but the week commencing May 25 was remarkable for the number and size of those brought to the landing net.

Of the guests at the Mountain View four hearts were made happy by bringing home a trout each, weighing respectively 7¼, 8, 8¼ and 8 pounds 10 ounces, the latter being the largest taken to date, and captured by the gentleman above named, while the number of fish weighing from two pounds up to five taken by the party was quite sufficient to satisfy the most ambitious disciple of Izaak Walton.

The Big Lake was almost as productive. Every fisherman and guide went for a "masher" of course, but the wary old fish came not to all. Brandy Point and Bugle Cove were the objective points, and long and faithfully were the shores skirted. Rangeley streams yielded a rich harvest to the seductive red ibis. Fish were taken there weighing as heavy as five pounds. It is a fact that the early spring fishing in Rangeley waters has been most excellent, and the fishermen have rarely had better sport.

An unusual number of ladies have gone in this year with their husbands and brothers, and the refining influence of their presence and their keen enjoyment of the to them new revelation of woods camp life and lake wilderness have added a zest to the trip which always brings color to the cheek, elasticity to the step, and joy to the hearts of all who have the good fortune to visit this charming section. W. M. S.

STAMFORD, June 12.

SALMON CASTING IN ENGLAND.

A FLY-CASTING tournament will be held in England, July 26, under the auspices of the *Fishing Gazette*. We take from that paper the following particulars and call attention to the rules, especially to the conditions governing the third prize, where the line must not be recovered. We understand that this so-called "switch cast" is the same one used by Mr. Harry Prichard in the contests here, and called "water cast," "hoop snake," etc. The *Gazette* says:

"The forthcoming tournament promises to be of a more generally interesting character than ever. Mr. George M. Kelson has kindly undertaken the management and supervision of the salmon anglers' competition, for which two or three pretty little prizes are offered. Hitherto, the salmon casts were demonstrated from a platform. Upon the last occasion, owing to an adverse wind, its position was not a favorable one, but, indeed, so unfavorable, that the record, though really good in the estimation of those present, will probably be exceeded this year. It is a good cast in dead water to propel 37 or 38 yards of line overhand with an 18-foot salmon rod in this country. Anglers know that our English lines are made heavy to throw from the butt of the rod, and that the American produce, in comparison, may almost be called 'blow lines,' as they are very light, and are manufactured to suit their rods, which play only in the upper joints. The consequence is that in a gale of wind the Americans 'walk in,' and we hear it reported, and see it in print, that some one or the other of them has thrown considerably over 40 yards. We can only conclude that this was with the wind. Mr. Kelson will decide upon the day whether this platform is to be shifted to more favorable quarters, or whether the casts are to be made from the bank. The prizes for this section are: Prize I.—Gold egg-cup, with suitable inscription, for the longest overhand salmon cast, to be made with any kind of rod, not exceeding 18 feet in length from the button. Prize II.—A silver egg-cup (also inscribed), for the longes cast with a rod not exceeding 16 feet in length from he button. Prize III.—A folding salmon landing net, for the longest switch cast, when 6 feet only will be allowed behind the competitor, who will be disqualified if any part of the rod or line should, while making the cast, extend beyond that limit.

"Five minutes will be allowed for each competitor to make his cast. Each competitor must have a treble and single gut trace attached to his line, the former not to be less than one yard in length, the latter not less than fourteen inches. Each competitor to use one of the flies which will be provided.

"The Americans declare they can cast as far with a 16-foot rod as with one 18 feet in length. Mr. Kelson has amply provided for this rather remote contingency. Any competitor entering for prize No. 2 who shall make a longer cast than any one of those competing for prize No. 1 shall be entitled to his choice of any one of these prizes in exchange. There are also many gentlemen in this country unaccustomed to an 18-foot rod, who fish and command the catches in their own districts with a small rod—they, too, will be favored by this rule; but we doubt whether any 16-foot rod can possibly win the 'golden honors' Long casting has been a subject for much comment from time to time, and as we know it is absolutely necessary for a salmon fisherman to be able to manage a long line occasionally, so we are pleased to have an opportunity of encouraging it. Mr. Kelson holds that if a fish is properly 'hit,' as he described in the *Fishing Gazette* of 8th March last, it is immaterial whether the strike is made at twenty or thirty yards—the result is the same, or, rather, it should be. There can be no shadow of doubt the nearer one gets to his fish the better it is under control; but often salmon anglers are engaged in a good 'up and-down mill' sixty, seventy, or even a hundred yards off, and when their fish has been struck in the way advocated in Mr. Kelson's articles, how rarely it is that the 'hold,' even after an hour's fight, has been torn or enlarged. Why did Mr. Kelson suggest the late improvement in the patent lever winches? Why did Mr. Ridley devote years to his lines? Because salmon originally out of reach might be hooked and, when hooked, could be mastered. We suggest that competitors should loop their single to the treble gut. There will be a few spare 14-inch lengths of single ready with a fly attached to each, in case of accident; but, whatever accident may happen to either rods or lines, Rule No. 2 must be strictly adhered to. Mr. George M. Kelson's address is No. 13 Colville Mansions, W."

ROD-JOINTS AND REEL-SEATS.

BY DR. JAMES A. HENSHALL.

IN leaving the tentative and uncertain subject of the proper color of leaders for the more tenable one of rod-joints, we step at once upon solid ground. But after the able exposition and defense of the non-dowel joint by Messrs. Wells, Alden, "Esprit Fort" and others, there remains but little to be said by me, except in the way of corroboration.

If there were wanting any proof of the practical superiority of the flush, cylindrical, non-dowell joint over the tapered, dowel and mortise joint, we would find it in the fact that so many anglers, having the mechanical skill to construct their own rods, have discarded the latter for the former style of joints, as evinced by their articles in FOREST AND STREAM during the past few months. And, moreover, they all seem to have arrived at this determination and conclusion independent of each other. Many of the most valuable improvements and inventions have been made in like manner, each one supposing himself to be the sole inventor.

It is now twenty-five years since I made my first rod with flush joints, having at that time never seen or heard of a joint without dowels, and ever since I have been a firm believer in that style of joint. One of the specifications of the Henshall black bass rod is for flush, non-dowel joints, with short, cylindrical ferrules, and as so many of these rods have been sold during the past eight or nine years it has had a great tendency to introduce and popularize this form of joint, which is now also applied to many fly-rods to their great advantage.

I have often thrown apart the doweled joints of the old style rods in casting with both fly and bait rods, and have had them break near the lower end of the female ferrule in consequence of too deep a mortise at that point, but with the cylindrical non-dowel joint I have never had either accident to occur.

There is one point which I believe has not been touched upon by any of your correspondents; the principal cause of the throwing apart of the dowel-mortise joint. The ferrule, dowel and mortise being made tapering, the male ferrule and its dowel acts as a wedge, and the continual springing of the rod in casting tends to loosen this wedge and to eventually separate the joint, in the same way that we extract a nail by working it from side to side. This fact can be easily demonstrated by separating the tapered dowel joint by working it back and forth in this manner, with the hands close to the ferrules; but it cannot be done with the flush, cylindrical ferrule joint; to separate the latter it is necessary to pull or twist it apart, for no amount of springing it back and forth will loosen it. This fact renders nugatory and superfluous all locking devices, screws, cleats and strings which have been proposed to secure the joint and prevent its separation in casting.

Mr. C. F. Orvis, who was the first manufacturer to make the Henshall rod, was also the first professional rod maker I found who agreed with me in regard to the faults of the dowel-mortise joint, and the superiority of the other. He discarded the tapered dowel joint thirty years ago, his greatest objection to it being its tendency to throw apart, owing to the wedge-like action mentioned, and for that length of time he has used the simpler and better non-dowel joint.

Ferrules should be short and cylindrical. It is not necessary for the female butt ferrule to exceed two and a half inches in length, nor two inches for the second joint. The male ferrules should be of a corresponding length, say one inch, which will give all the "hold" necessary, and allow for a small space between the ends of the rod pieces when put together. The ferrule should be perfectly fitted to each other, in some such manner as that so ably described by Mr. Wells. The lower end of the male ferrule, and the button of the female ferrule should be protected by metal caps or disks soldered on, to exclude moisture, in split bamboo rods. Ferrules for wooden rods may be fixed in the same way, or the exposed ends of the rod pieces may be simply varnished. The ferrules should be fitted without cutting the wood, and a wrapping of silk put on at the ends for a finish. A good plan is to wrap on a guide or ring immediately below the female ferrules, so that the upper wrapping of the guide extends to the ferrule, which thus serves a double purpose.

Swell ferrules are unnecessary, and are neither so good nor strong as cylindrical and uniform ones. The ends of the ferrules may, however, be swaged into a hexagon form in split bamboo rods, to give a more perfect fit, without any disadvantage in other ways. Ferrules may be banded if the metal is very thin, which is apt to be the case with those drawn from German silver, which cannot be drawn so thick as brass. Ferrules should be affixed with shellac or cement instead of using the metal pin, which has a tendency to weaken the rod, and renders the removal of the ferrule more difficult to the angler for the purpose of repair.

The advantages of the non-dowel joint may be formulated as follows: 1. The ferrules being shorter, are considerably lighter. 2. The ferrules being shorter, stiffen the rod less at the joint and allow a more uniform bending of the rod. 3. The ferrules being shorter, are more easily put together and taken apart. 4. The ferrule being cylindrical, will not throw apart in casting. 5. The ferrules being cylindrical and fitting more perfectly, will not become loose and shaky by use. 6. There are no dowels to stick and bind after getting wet. 7. They are more easily repaired. 8. There is no mortise to weaken the rod. 9. It obviates the use of all locking devices. 10. The cost is less.

The best reel-seat is the old shallow groove cut in the wood, with reel-bands. It is lighter than any other reel fastening, and subserves its purpose better than any of the modern inventions. Any reel can be made to fit it in a few moments. If it is too shallow for the cross-bar of a reel, it is only necessary to deepen it with a gouge chisel or a penknife. If the reel fits too loosely, a piece of paper or card board placed under the cross-bar, tightens it. With solid metal reel-seats there is no remedy but by altering the cross-bar of the reel, which sometimes entails a good deal of labor and no little skill; and it may have to be altered a second or a third time to fit the metal reel-seats of other rods.

The solid metal reel-seat subserves no good purpose, and adds from two to four ounces to the weight of the rod. It is idle to say that the additional weight gives the rod a better balance—it should balance without it; or that the wood may swell (without it) and cause the reel to stick—if the groove is well varnished and the rod properly used it will not swell. The fact is the metal reel-seat is put on to make the rod "sell." It gives a rod a nobby, flashy appearance which pleases some, but old anglers are not to be caught with such chaff. If rod and reel-makers would conform to the standard sizes reel-seats and cross-bars, as adopted by the National Rod and Reel Association, it would save anglers a vast amount of trouble and vexation. Will they do it?

CYNTHIANA, Ky., June 10, 1884.

[In my article on "The Color of Leaders," in last week's paper, page 387, middle column, sixth line from the bottom, for "with leader or snell" read "without leader or snell."]

THE PUGNACITY OF QUAIL.—Toledo, Ohio.—In am inclined to the belief that we have still a great deal to learn and to unlearn about this beautiful bird. My friend Willis, of New Jersey, insists that quail in confinement will not show the slightest disposition to breed, owing to their jealous and pugnacious disposition, unless the number in the inclosure is limited to a single pair. It is not unusual, he says, in a state of nature for a male bird to pair with two females, but this condition of thing would cause serious trouble with caged birds. The knowledge that Willis does not possess about quail is hardly worth having, and I believe that in the main he is correct; but I have quite recently discovered a case where two male and one female quail have been living together most amicably for over a year—a clear and unmistakable instance of polyandry. Not only do these male birds never fight, but singular to relate both males during all the spring have been paying the most marked attention to the female, and both have received her favors impartially. The three birds were kept in a large wire cage about seven feet square and proportionately high, and as they are in a room through which there is constant travel, pay no especial attention to persons passing and repassing. The hen has thus far shown no disposition to lay. Will this hen now mate with a third cock, an entire stranger, if removed to a different cage and placed with him alone under more secluded surroundings? I cannot answer to-day, but perhaps I can later in the season. Her new mate, a very fine specimen of *Ortyx virginianus*, has been in confinement a year and a half, and is tamer than the average domestic fowl.—H. H.

A STATE SENATOR NABBED.—Manchester, N. H., June 12.—Inclosed find an item clipped from Manchester *Union*, which will show to some extent which way the wind blows regarding the game and fish restrictions in this State. I have heard it said many times that those "in the ring" always had what they wanted of either, early or late, in or out of season. Black bass have been caught and offered for sale at the markets here, and the open season is not here yet. The item runs: "A gentleman in this city has just received the following information from Wolfeborough. Fish Commissioner Hayes, while crossing Lake Winnipisecogee from Wolfeborough to the Weirs last Thursday morning on his way to Plymouth, to get trout fry to be distributed in the waters of the southern part of the State, discovered something that looked to him suspicious, and so took a boat, went back to the object and captured a trawl 723 feet long and equipped with 125 hooks, and three men, one of whom is a State Senator and a member of the Fish and Game League of Nashua, who was old enough, big enough and ought to know better than to have been engaged in such illicit sport. The violation will be punished to the fullest extent of the law. Much complaint has been made of illegal fishing on Winnipisecogee Lake. The spawning beds of the lake trout have been robbed, very much to the detriment of fishing in those waters. Hayes has fired the first gun and others will follow."—A. B. D.

SARATOGA LAKE.—Saratoga, N. Y., June 11.—I think very few people know what a good fishing ground this little sheet of water is. Although it has been fished for more than three-quarters of a century, both by legitimate angling and netting, the fishing is still good. The famous Saratoga Lake black bass, the necessary part of a dinner at "the lake," are still plentiful, and are as game as any fish that swims. I admit the sport of trout fishing, and am as devoted to it as any one; but I maintain that a two or three-pound bass fights harder and longer than any trout. Up to a year or two ago it was the practice of parties living in the large towns south of here to come up at evening with a large seine and at night drag the sand flats where the bass spawn, taking in some instances several wagonloads of these fish. This has been partly stopped, but seining is still continued, and large quantities are caught in fyke nets. If this lake could only be preserved as Greenwood Lake is, I am sure that in a few years the fishing would be very fine, as it still holds its own, and is as good as it was twenty years ago, according to all accounts. Can you inform me in what way the careful preservation of Greenwood Lake was attained?—SARATOGA. [Greenwood's protection has been by clubs of anglers, who have made it their business to see that the law is enforced.]

PASSAIC RIVER has been cursed with net fishers. The Passaic County Fish and Game Protective Association, of Paterson, sent a warden, June 9, and arrested one Joseph Durget, Jr., who runs a saloon on the island off Lincoln bridge. Durget was convicted of having drawn a net and was fined $24.48. His friends paid it for him.

CONEY ISLAND CREEK.—The Coney Island Rod and Gun Club, of Brooklyn, announces that there is good fishing now in Coney Island Creek and Gravesend Bay. Prizes are to be awarded to the members catching the largest striped bass in these waters during the months of June, July, August, September and October; also for the largest weakfish.

"WAWAYANDA" AND "TRUTHFUL JAMES" will try their luck in Canada this summer. They have an elysium of perennial bass somewhere in the woods up there, and will camp out.

RAINBOW TROUT.—Caledonia, N. Y., June 10.—Last Tuesday evening a gentleman from our village caught with the fly in the Oatka or Allen's Creek, a rainbow trout weighing four pounds ten ounces; it was a perfect fish in marking and colors and gave him great sport. He says that it was a full hour before he could land it. The fish was taken below a dam about two miles below the mouth of Caledonia Creek, the stream into which the rainbows were first placed on the Atlantic coast.—JAMES ANNIN, JR. Wellsville, N. Y., June 9.—In the summer of 1880 California trout were first placed in the Genesee River in this vicinity. Last Friday a California trout was caught at Shongo, eight miles up the river from this place, which weighed three pounds seven ounces. The fact is demonstrated that our foreign friends will attain a good size in these waters.—CLARENCE A. FARNUM.

WIND FISH.—New York.—Perhaps I can help "N." out as to the wind fish of the Hackensack. Two summers ago, while spending a few days at Rockland county, trying to take some pickerel, I heard a good deal about this fish, but could not get one. Not long after my return home two were sent me. I thought I knew them, for I had taken them in streams in Michigan while fishing for trout, and at my old home in Canada. I took the specimens to a friend in the FOREST AND STREAM office, who said I was right in calling one of them a dace and the other a chub. These two were not over three or four ounces in weight, but I have seen them as large as a half pound. I understand that the reason they were called "wind fish" was not because they "bit" best when the wind blew, but because of their large air bladder, or as the boys called it, "wind bag."—NIAGARA.

BASS AT ST. CLAIR FLATS.—Detroit, Mich., June 14.—I am glad to note that our Canadian friends at St. Clair Flats have stopped, or at least have endeavored to stop, the catching of black bass off the spawning beds, in or near Johnson's channel. For years, many Detroiters and others on this side of the creek, have regularly in May and early June taken enormous numbers of black bass from Johnson's channel. As the spawning season in those waters lasts until June 15 or even later, anglers should have had more thought. Within ten days several Canadian sportsmen have taken the matter in hand, and have politely informed parties fishing there that their laws prohibit the catching of black bass between May 1 and June 15, and their notifications have been the means of saving myriads of eggs and small fry. Good for the Canadians.—DELTA.

NEW JERSEY SALT-WATER FISHING.—June 14.—Weakfish have begun to run into the bays on the New Jersey coast. At Barnegat, fair fishing is reported. Sea bass are biting, and a number have been taken inside the inlet near the "old wreck." Have heard of but few sheepshead boated as yet. It is beginning to be the time for them to appear. No bluefish yet.—HOMO.

ANOTHER MOSQUITO REPELLENT.—The "Angler's comfort," manufactured by N. S. Harlow, Bangor, Me., is highly spoken of by those who have used it in their campaigns against the insects of Maine, the Adirondacks and Canada.

CYNTHIANA, Ky., June 10.—Black bass fishing has not been so good as usual in this section this spring, owing to high and cool water.—J. A. HENSHALL.

Fisheulture.

SALT AS AN AGENT FOR THE DESTRUCTION OF THE FISH FUNGUS.

BY PROF. H. J. RICE.

[Read before the American Fisheultural Association.]

THERE are very few persons who have ever had anything to do with the artificial rearing of fish; especially if the rearing is carried on in comparatively quiet and warm water; or who have ever had very much to do with fish in aquaria, but have been more or less exercised over the decorations and ravages of that very insidious and annoying vegetable parasite, commonly known as fish fungus, although it occurs, indeed, on many other objects than eggs and fishes. Many means have been employed for its destruction and innumerable efforts made to dislodge it from the tanks where it had obtained a firm foothold. Asphalt, tar, salycilic acid, salt and various other simple or compound agents of destruction have been employed, and while each and all of them have been pronounced beneficial, yet most of them are difficult to apply, and after being applied much care is necessary in order that the agents shall not be the means of doing that which they were employed to prevent; that is, cause the death of the eggs or fish experimented with. Of all the agents thus far employed for the purpose of destroying this fungus, or *saprolegnia*, common salt is, taking everything into consideration, probably the most useful, since it can always be easily obtained and quickly manipulated. But it is always well to bear in mind that with whatever agent the work is carried on, the agent will perform its part only when associated with vigilance, persistence and zeal on the part of the operator.

Having had occasion during the past season to make certain experiments in the direction of dislodging and exterminating this undesirable form of vegetation, which had secured too firm a hold in certain tanks and upon certain animals and fishes in the laboratory at Fulton Market, N. Y., I determined to try the effect of the continual use of a strong solution of salt, and to note carefully the results. The work was thus merely supplemental to what has already been done in this direction, and, so far as it goes, corroborative of such previous efforts. The animals upon which I experimented personally were goldfish of the Japanese variety, black bass and specimens of *Necturus lateralis*, or the mud puppy. I also induced Mr. Geo. Ricardo, fish warden of Bergen county, N. J., to undertake some experiments as to the efficiency of salt in destroying the fungus which collects so plentifully upon the trays and bunches of eggs in the smelt hatching operations. The experiments with the goldfish were begun during the month of January, and continued several months. The specimens operated upon were from a lot brought over from Japan and China in December by Capt. Jones, of the steamer Oxfordshire, and placed immediately upon their arrival in tanks of running water at the stand of Commissioner E. G. Blackford in Fulton Market. The fish had been very severely handled during their ocean voyage, many of them having large numbers of the scales knocked from their sides, evidently from being thrown against the sides of their vessel as the steamer struggled in the rolling waves.

From this cause, and undoubtedly also from the fact that the water into which they were placed was too cold for their warmth-loving constitution, they commenced to die, one by one, within a day or two of their landing on our shores. Those that died first were hardly more than still before the velvet-like plush of the *saprolegnia* spotted their bodies or fins, or, in some cases, literally enveloped them in a robe of white. Soon not only the dead but the living were similarly decorated and it became evident very quickly that if something was not done the *saprolegnia* would, before long, claim them all its victims, although it is hardly more than justice, perhaps, to state that the fungus in all probability was in these cases, whatever it may be in other cases, a secondary rather than a primal cause of death. While death was thus making sad havoc in the ranks of those of these beautiful fishes which were kept in the running Croton water down-stairs, those which I had taken, very soon after their arrival, up-stairs into the laboratory and placed in a small aquarium of moderately warm water, were getting along very nicely and were not troubled at all with the fungus. I then requested that four or five of those specimens affected with the fungus should be taken from the tank and sent up to me to be treated with a salt bath. I prepared the bath by placing three or four handsful of coarse salt in a small quantity of water and then heated it over the fire until the salt was all dissolved.

Cold water was then added until the whole was a temperature of about 60 degrees, when the fish were taken very gently out and placed in their new location. At first the change was not apparently agreeable, as they darted about in a furious manner, but some became quiet and were taken out after an immersion of about one minute and returned to fresh water, but not to the same from whence they had been taken. In the course of half an hour or an hour the fungus began to loosen from the body in quite large patches, showing that the connection of the hyphæ, or rootete, with the skin had been destroyed, and the next morning I picked out quite a large number of these discarded fungus flakes which the fish had thrown off into the waters during the night. In order to make sure that the hyphæ should be entirely destroyed, and not leave relics from whence new crops might be generated, I gave each fish two additional baths of the strong salt water, and until they were moved from their aquarium and injured at a later period I found no traces of fungus on any of them. It is true that in some of the cases experimented upon the salt water did not cure the fish, but the salt water certainly killed the fungus, and undoubtedly if the fishes had not been very much debilitated before the bath was given them, their lives might have been prolonged as in the case of some of the others. The black bass which was experimented with was literally loaded with a fluffy plating of fungus when it was first placed in the bath. It acted much in the same manner as did the goldfish, except that from its size and strength it produced a much greater commotion in the water. It was left in the bath about ten minutes and then replaced in the tank from whence it had been taken. The next morning the entire surface of the body looked as if a strong card had passed over it and had raked the fungus out into long filaments and strings and streams, ready to be pulled off with scarcely an effort. Two days after a second bath was administered, but while still more of the fungus was loosened, the parasite had evidently been too long at work, the hyphæ had penetrated too deeply and drawn for too long a time upon the tissues of the fish for it to recover, and in two days more it ceased to move.

The next animals to be experimented with were nine specimens of the mud puppy or *Necturus lateralis*. These had all been more or less injured about the mouth with the hook in their capture, and two or three had their tails badly mutilated. Some of them were very much matted with the fungus when they arrived, while others were only slightly attacked. They were all placed in the bath and the fungus was loosened or killed upon all of them, but the salt water had the effect, in the cases of those severely injured, of aggravating the injury, and by increasing the rawness of the wounds, prepared the field for a new crop of the fungus, since the water was full of the *saprolegnia* spores, ready, and indeed anxious to continue the old condition of affairs whenever opportunity offered. In such cases the new crop of fungus sprang up with a rankness and a velocity which was truly surprising, and if I had not known that the salt water would kill the fungus, I should have been inclined to think that in these cases salt water acted as a fertilizer for the hyphæ. I am inclined, however, to think that the true condition of affairs was that the salt water killed a part of the hyphæ, and at the same time rendered the wounded surfaces much more suitable localities than ever they were before for the growth of the fungus, and then when the animals were replaced in the fresh water, the spores, which were there in countless numbers, finding suitable territory in which to develop, took root, and together with the remnants of the old hyphæ, grew with wonderful rapidity. At any rate I succeeded in destroying the fungus only on those animals which were not badly wounded. The rest died.

In the spring of 1877, while engaged in studying the embryology of the smelt at New Brunswick, N. J., under the auspices of the Maryland Fish Commission, I found that one of the most serious drawbacks in the manipulation of the jars in which the eggs were placed was the collection and growth of the *saprolegnia* upon the trays and upon the eggs, especially whenever the eggs were much massed together, as they often were in clusters of the size of a large walnut or larger. With the arrangements which we then had we could not try the effect of salt upon this growth of fungus, but in my report to the Commission I expressed my opinion in favor of testing the salt-water bath, as soon as arrangements for its use could be made.

An opportunity to test this method with the smelt eggs did not occur until this spring when in talking with Mr. Ricardo, who was engaged in manipulating smelt spawn upon the Hackensack, I suggested that he should try the effect of immersing the small eggs in strong salt water, particularly such of them as had any fungus attached to them. The method employed by Mr. Ricardo in attaching the smelt spawn, which is similar to that employed by Mr. C. G. Atkins in Maine, some years ago, that is by taking blades of sedge or water grass and dipping them into the pans of milted spawn prevents to a great extent, if not entirely, the massing together of the eggs, since the rough surface of the blades allow only a single layer at most to adhere to the surface; the result is pretty even distribution of the eggs over the blades and not much chance for the attachment of the fungus except on the dead eggs and the dead portions of the grass. Still there always is a greater or less amount of fungus present, and very much in proportion to the greater or less flow of water over the eggs.

Acting upon my suggestion, Mr. Ricardo prepared some salt water, strong enough, as he said, "to bear up a potato," and placed some of the egg-bearing grass blades in it. He took those blades which had considerable fungus upon them, and after leaving the blades in the water for fifteen or twenty minutes, he took them out and found that the fungus had been killed so completely that it could be stripped from off the eggs like a slough, leaving the eggs nearly, if not quite as clean as when first taken. From that time on until the eggs hatched out, which was, I believe, a period of about two weeks, he gave them a bath every day or every other day, and no more fungus appeared, and only about five per cent. of the whole number failed to hatch. Every experiment which he tried seemed to show the advantage of the salt bath in the destruction of the fungus, and that little or no harm resulted to the embryo fish. In order to test the effect of continued immersion upon the embryo, he placed some ova in the salt water and kept them there for forty-eight hours. At this time they were all in good condition, and it was not until they had been kept constantly immersed for from sixty to seventy hours that the embryos were unfavorably affected.

Short immersions seem to have very little effect upon either the embryo or the adult fish, and, while there is a point beyond which we cannot safely go in our experiments with either the one or the other, yet of the two the embryo seems to be able to stand a longer immersion than the adult, especially than these species which are not anadromous. Short and moderately frequent immersions, then, will in all probability accomplish what is desired, so far as the destruction of the fungus is concerned. This, at least, seems to have been the case in my experiments, but it is much better, in every case where it is practicable to do so, to give this salt bath as soon as any fungus is discovered and before the hyphæ have penetrated very deeply into the tissues, for it seems to be beyond question that the *saprolegnia* is one of these parasites that causes tissue destruction, as I have seen in numerous instances the gradual extension of the velvety carpeting of hyphæ branches, from some minute wound on one side of the body of an animal, until the entire body was girdled. By taking the animal in hand early, and, in case there is no serious wound to be aggravated by the salt, by using a strong solution and using it for a short time and often, it seems to me that salt may be a valuable agent in the hands of those who wish to rid their aquaria or their hatcheries of what is often an intolerable pest. And above all must it be borne in mind, that when water is used that comes from rivers and lakes, like the Croton water of New York city, no matter how clear of fungus they may get their tanks or aquaria, the spores are in the water, and any wounds in the fishes or decaying or dead matter which may at any time afterward get into the water offer fertile fields for renewed growths, which can only be disposed of by a new resort to the salt wash.

THE OHIO COMMISSION.—We have the eighth annual report of the Fish Commission of Ohio. It opens with an account of the first breeding of fish in America by Dr. Garlick and Prof. Ackley. Sixty million whitefish eggs were in the hatcheries at Toledo and Sandusky at the time when the report was written. It is thought that the eggs of the black bass can be taken and hatched and better results obtained than when the fish are left to do their own spawning. The game question is touched upon and it is recommended that all duck shooting in the spring of the year should be stopped and also that no amendment to the game laws be acted upon until the same has been considered by, and reported to, the Fish Commission by the Fish and Game Committe. An excellent showing of work is made in the tables which give the numbers and places of the distribution of fry, in which, by the way, the pike-perch is miscalled "jack salmon." Extracts from Henshall's "Book of the Black Bass" are given to show that there are two species, but sad work is made of names and technical terms in the nomenclature, due to careless proof reading. Prof. Charles Dury contributes an article on the late Fisheries Exhibition at London; and Mr. C. W. Smiley one on the carp.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

G. A. C., Canton, Mo.—Your gun is of English make.

C. G., Elmira, New York.—The recipe was given in our issue of Feb. 28, 1884.

W. A. R., Portland, Me.—We think that there was such an article, but are unable to find it.

J. H. S.—Will you please inform me how to raise young crows? Ans. Feed them as you would chickens.

W. A., Bay View, Wis.—1. Some people eat red-winged blackbirds. 2. The use of the grease in gun wads is as a lubricant.

G. L. O., Boston, Mass.—1. The measure of shotgun bores is an arbitrary one. 2. For rifles see our advertising columns.

READER, New York.—We advise you to take your gun (for polishing the stock) to a gunsmith. Have written you at address given.

YANKEE.—The name Manitoba is pronounced with the accent on the last syllable, Manito-ba, the final a having the sound of a in father.

E. F. F., New York.—Where can the most profitable hennery be seen near this city? Ans. Ask some of the Washington Market poultry dealers.

J. H. R., Pottsville.—Where is a good place for camping out in Pennsylvania? Ans. Go to the headwaters of the Sinnemahoning in Tioga county, Pa.

I. S. W., Providence.—Is the book "Wing-Shooting (advertised in your book list, by "Chipmunk") the same as published by T. G. Davey, Ontario, which formerly sold at $1.00? Ans. Yes.

R. F. B., Troy, N. Y.—We can supply you with a copy of Babcock's compilation of the New York game laws, price, 25 cents. The law permits killing of song birds to be used as natural history specimens.

E. H. K., Elmira, N. Y.—The charge of 3 drams powder, 1 ounce shot is better adapted to the 12-gauge gun than to the 10-gauge. To determine which gun will give the better pattern and penetration with that load, try them.

C. W. S., Hudson, N. Y.—1. The open season for wildfowl in this State is from Sept. 1 to May 1. 2. Song birds may be shot for natural history purposes. Game birds may not be captured, save in the open seasons prescribed by law.

MAC, Harrisville, Mich.—Which English weekly paper gives the best English rifle news, scores and general rifle matters? Ans. *Volunteer Service Gazette*, 121 Fleet street, London. Subscription price about $5 we presume.

J. M. E.—Your correspondent "J. M. E.," May 15, 1884, would probably find the "Manual of the Vertebrates of the Northern United States," etc., by D. S. Jordan, Jansen, McClurg & Co., publishers, price $2.25, of considerable utility.—W. H. S.

H. L. C., Cleveland, O.—The "Adirondack cottages for the cure of all pulmonary diseases" are at Saranac Lake. Write to Dr. E. L. Trudeau, at that place. We understand that the institution is endowed and the expenses of patients are light.

W. C. M., New York.—I wish to use the star wads to save the trouble of crimping my shells, but it has been suggested to me that they would be likely to scratch the gun barrels. I use a choke-bore. Will you kindly give me your opinion on the subject? Ans. They will not scratch the gun barrels.

D. F. E., Boston, Mass.—We cannot tell you where you will find "good partridge and duck shooting with deer and good fishing, within 200 miles of New York." There are few favored spots where one can kill all sorts of game at a single shot. For ruffed grouse try the interior of Connecticut. For deer, go to Maine or the Adirondacks. For ducks, try the south side of Long Island.

G. C., Worcester, Mass.—Where can I get a pocket map of Hancock and Washington counties? Ans. There is a Hancock county in each of these States: Ga., Ill., Ind., Iowa, Ky., Me., Miss., Ohio, Tenn. and W. Va.; and a Washington county in Ala., Ark., D. C., Fla., Ga., Idaho, Ill., Ind., Iowa, Kan., Ky., La., Me., Md., Minn., Miss, Mo., Neb., N. Y., N. C., Ohio, Or., Pa., R. I., Tenn., Texas, Utah, Vt., Va. and Wis. Which State or Territory do you refer to?

W. G.—If my question is not prompted by stupidity will you kindly answer whence are the terms No. 10 gauge, No. 12 gauge, etc., as applied to the caliber of shotguns. Ans. The numbers were originally used to denote the size of the bore by stating the size of the ball adapted to it, and the ball was designated by the number required to make a pound. Thus, a 10-bore was a gun which would receive a leaden ball 10 of which would weigh one pound, or, as it was said, would run 10 to the pound.

B. B., Boston.—1. Where could I buy a first-class male donkey (for mule raising) and what would be about the cost? 2. Where are the principal mule farms in this country? Do you know of any in the neighborhood? 3. Would you consider the South Carolina coast a good place for mule raising? Ans. 1. Probably no jack suitable for your purpose in this neighborhood. A good one would probably cost you anywhere from $500 to $1,000. Write to Graham & Grannis, Poplar Plains, Ky. 2. Principal mule farms in Kentucky and Missouri. We know of none in this vicinity. 3. It would be an experiment.

AMATEUR.—Wortendyke, N. J.—Yesterday, while taking a walk, I found two birds under a pear tree on their backs. One was dead, and the other, although its toes were turned up, seemed all right. There are no marks of shot on either, and I cannot account for their prostration unless it was the result of a fight. I can find no one about here remembers having ever seen a bird like it. I have the live bird and I mail you the other. Please inform me what it is. Can you offer any explanation of their position as I found them? Ans. The bird is the cedar bird or cherry bird (*Ampelis cedrorum*), a widely distributed and abundant species, which breeds with us in summer and also often spends the winter here. We cannot account for the position of the birds.

The Kennel.

FIXTURES.

BENCH SHOWS.

Sept. —.Bench Show of the Philadelphia Kennel Club. Mr. P. C. De Saque, Secretary.

Oct. 8, 9, 10 and 11.—Third Annual Bench Show of the Danbury Agricultural Society, Danbury, Conn. E. S. Davis, Superintendent, Danbury, Conn.

Oct. 14.—Non-sporting Bench Show of the Westminster Kennel Club, Madison Square Garden, New York. Mr. Charles Lincoln, Superintendent.

AMERICAN KENNEL REGISTER.

OUR little monthly contemporary, the *American Kennel Register*, continues to meet with great favor on all hands. The best evidence that it was needed is seen in the anxiety of breeders and owners to register their stock. The June number runs up the entries to between 1300 and 1400, and the pressure for entries is so great that this month's *Register* is again enlarged to twenty pages. The *Register* started fifteen months ago, as a twelve page paper, but for several months now it has been regularly printing sixteen and twenty pages, which is certainly a good deal for the merely nominal subscription price—one dollar. It is a complete record of all events interesting to dog-owners and breeders.

POINTERS AT NEW YORK.

Editor Forest and Stream:

Mr. Cornell's reply to my criticism of the pointers at the New York show afforded me much pleasure and considerable merriment. I have for months wished to have a little talk about pointers with the Westminster Kennel Club's genial secretary, whose knowledge of the subject, though limited, may at least be said to be varied. Unfortunately, Mr. Cornell does not appear to have read my letter carefully. If he did, he must intentionally have misconstrued its meaning and my motives for writing it. I do not remember suggesting to pointer exhibitors the advisability of lashing themselves into a rage and forthwith proceeding, in a rambling style, to attack either me or my dogs. What I said was that I would be glad if any one could point to errors of judgment on my part, and I added that "impartial" criticism of our pets is conducive to improvement. My report was a careful criticism of dogs, not their owners. Mr. Cornell's reply is an untrustworthy advertisement. One part of his letter reminds me of an amusing little incident which occurred at the dog show recently held under the auspices of his club. As I was bringing my first prize setter puppy out of the judging ring, somebody asked, "Who has won?" The reply was as follows: "Mason again, but we couldn't stop him." No, could not prevent it, and cannot now make me lay my pen aside until justice, or some sense of fair play, is discernible at the combinations very appropriately termed "bench" shows.

Mr. Cornell first states that in his opinion Meteor was far and away the best dog in the large champion class. Mr. Cornell had him out, and Mr. Cornell handled him. Good judge, Mr. Cornell—understands a pointer—once advocated the claims of lemon and white pointers, after that favored the liver and whites, now breeds them black and white. Once wrote would not own a pointer by Faust so long as Sensation was in the stud—sound judgment. A great believer in variety; owns the blood of almost every pointer in the world, good and bad, and fancies that a conglomeration of the bad is the necessary quantity out of which to compose that which is good. Well, after Mr. Cornell had had the dog out, he discovered that he had a bad head with no stop "below" the eyes, and little depth of skull. The snipy muzzle, the high set on ears, the badly-carried tail, the short back and the long legs Mr. Cornell failed to see. He simply concluded "his one important fault is that his head is not handsome." Still he is the "type of dog" Mr. Cornell wants to see noticed at a "bench show," as he is fit for bench and field. I should like to see "pointers" win prizes at "dog shows;" therein lies the difference. Now, if Meteor has little depth of skull, he has clearly no brain capacity and consequently no brains. How then, in the name of common sense, can he be fit either for field or show purposes? Perhaps Mr. Cornell or some other luminary of the law connected with his club, will explain this. Does Mr. Cornell still advocate the breeding of insipid, senseless-looking, wishy washy animals? I thought he had changed his views when I noticed that he and his club were carrying out the advice I gave them twelve months ago, and were breeding to dogs outside their kennel.

There is another question I wish to ask of Mr. Cornell. The Westminster Kennel Club has for years advertised in the public stud a dog named Sensation, whose value is estimated at the reasonable sum of $12,000. I found Sensation to be Don, a dog which when in his prime was offered for sale by a breeder and a judge for £15 15s. (about $75). I refused to take him at the price, as did every other man who has had experience with the breed. Finally he came to this country, and with marvellous rapidity his value increased in proportion to the puffing administered, until it reached the modest sum I have just quoted. He was never a show dog, and on one occasion I remember his winning second prize at a little Saturday afternoon show held in Oswestry. The first prize, I believe, was worth ten shillings ($2.50), the second, five shillings ($1.25), and the third, half a crown (60 cents). Can Mr. Cornell deny that for years this dog was advertised and lauded to the skies as no other dog ever was? And what is the result of this to-day? Look round one of our dog shows and see! I am not digressing, neither will I be driven by personalities or abuse from the question at issue. Is it not possible to misrepresent two dogs equally as well as one? I think so. Is this not being done with Bang Bang? Time will tell.

If Sensation is a good-looking pointer how can Meteor claim to be a pointer at all? If Meteor is the correct type honest men can hold but one opinion. Nobody can deny that Sensation is a very long cast dog, short on the legs with a round barrel, whereas Meteor is leggy and short in the back with a head different from anything I have ever seen on a pointer, and altogether different from Sensation's. I think pointer breeders should know why Sensation was ever allowed to be placed in the stud as a pointer if Meteor is fit for bench and field. I ask the question in their behalf. Mr. Cornell will, perhaps, kindly clear away the veil from before our eyes. My argument is that neither Sensation nor Meteor is a show dog. How could I consider them such when Wagg, Beaufort, Bang, Faust, Bow, Don II., Sancho, Graphic, Bang II., Rap, Belle, Luna; Prude II., Bow Bells, etc., are or were pointers, and have been proved to be such, not by men who never bred a good one in their lives, but by authority. If influence is allowed to alter the type of dogs to suit various owners I say the sooner dog shows cease to be held the better.

Mr. Cornell appears to have taken offense because I said that Bravo was the gentleman of the small-sized classes, and should accordingly have won the sweepstakes. I did not allude to Bang Bang, for I thought it pleased Mr. Cornell to win a prize under the judges appointed by himself, viz., Mr. Sterling, of pointer "fame," Mr. Higgins, a breeder of setters, and Mr. Tracy, the W. K. C.'s artist. I certainly did not attach much value to a prize won under such conditions, and perhaps I did not sufficiently appreciate the club's honest endeavors to have the prizes awarded to the best dogs. I am now told that Major Taylor was not asked to judge the pointers on account of his having expressed the opinion that Bravo is, as I say he is, a much better dog than Bang Bang. In defense of my criticism I will now endeavor to show Mr. Cornell why I consider Bravo superior to Bang Bang. It is quite as easy for me to support my opinions by sensible argument as it is for Mr. Cornell to refute my statements by no argument at all. Mr. Cornell tells us that Bang Bang beats Bravo everywhere excepting in hocks, whereas I most emphatically dissent from such a statement, calculated as it is to do much harm. Mr. Cornell possibly intended to say that Bravo beats Bang Bang everywhere excepting in muzzle. If he did, he was right or very near to it. Bravo, as I have already written, is decidedly weak from eye to nose, and is a trifle round in barrel. His legs and feet are exceptionally good, he has a nice clean neck, good quarters, and a well-placed and well-carried tail. I freely admit he is not quite the type of dog I like, but he was the best shown and should have won easily.

When Mr. Cornell tells us that Bang Bang is the most strikingly handsome pointer in America, we either refer back to Sensation, look into the glass to see if we are out of our swaddling clothes, or imagine ourselves to be spending the summer months at Babylon, Long Island. Bang Bang is very heavy in head, he has the shortest neck I have ever seen on a pointer, and is very throaty. Most large pointers when they get to be four or five years old grow throaty, but no excuse can be made for a small-size three-year-old dog. He has fairly good shoulders, and though some people object to his back, I like it. He has good forelegs, with plenty of bone for a little dog, and then you have finished with him. Besides the faults enumerated above, his feet are too large, he is faulty in the stifles and hocks, has no second thighs, and possesses a very coarse tail, which he carries *à la* foxhound. His nose and eyes are black (serious fault). "The Book of the Dog" says, "The nose must be large and moist, not black. A black nose is an especial blemish in a lemon and white dog." In regard to the eyes, the same authority says, "The color depends on the color of the dog, and are, therefore, either dark or light as the case may be." Besides these faults, the existence of which nobody who has seen the dog can deny, there is something far more importance to breeders. A little something, which, in my opinion, Mr. Cornell ought to have made public long ago. Especially so when he and his club assume to have the welfare of the breed at heart. Bang Bang gets black and white puppies from almost every bitch bred to him, and I am told that the Westminster Kennel Club has advised the lucky owners of such stock to put it into a pail of water, ank keep only the lemon and white and liver and white puppies. I will not at present bring into discussion the correctness of Bang Bang's pedigree, for I have a good deal of regard for the gentleman who bred him. But there is a screw loose somewhere, without doubt. My opinion is indorsed by a well-known English breeder of pointers, who writes me as follows: "Bang Bang did win first prize, but the class was a wretchedly bad one. The opinion here is that the American who paid £50 for him got his fingers well bitten. The dog has another fault besides those named by me." Is it an honest endeavor to improve our pointers to recommend in the public stud such a dog, simply because he is a fairly good field dog and is owned by the Westminster Kennel Club? I think not.

When I formed my criticism of the pointers at the New York show I passed over my own dog, as I did not think it in good taste to express my opinion of him. I therefore simply referred your readers to my notes on the dog in these columns before I purchased him. I do not now propose to advertise Beaufort. Those who have seen him know what he is; those who have not seen him are not very likely to be led away by beginners or individuals known to be prejudiced against his owner. My opinion expressed in this paper twelve months ago that "America can boast of having bred Beaufort, who is in my opinion the best pointer living," has been indorsed by every judge of pointers who has seen the dog, without one single exception. Mr. Cornell now considers Beaufort's legs crooked fore and aft. Yes, Mr. Cornell, his hindlegs are crooked, and pity my ignorance if you like when I place upon record a confession that I like to see a sporting dog with crooked hindlegs. Grand judge of pointers Mr. Cornell, teaches one so much in a short space of time and at such little expense. Does Mr. R. C. Cornell expect any sensible person to believe that I—who am a stanch advocate for good legs and feet, I, who time after time have urged breeders of sporting dogs in this country to give more attention to legs, feet and bone than they were doing, I, who never in my life have conferred honors upon cripples—I paid the longest price ever paid by an Englishman for a pointer, and the dog I purchased is crooked fore and aft? It is scarcely worth my while to refute such reckless statements, for those who have seen Beaufort are aware that he stands on about the grandest forelegs and feet ever seen. What shall we hear next, I wonder? I am well aware that it causes Mr. Cornell a good deal of uneasiness to know that a member of the Westminster Kennel Club, and the best judge in the club, is breeding to Beaufort, and considers him the best-looking dog he has ever seen. It must be equally galling to Mr. Cornell to think that the club's breaker, Mr. Luke White, is breeding to Beaufort, and that he has told me he has never seen a large pointer that could equal him. In the face of these "facts," and seeing that the name of Beaufort's owner is written with blood on the pages of the great account book at Babylon, is Mr. Cornell's attack not ill-timed—a failure?

If Mr. Cornell writes what he believes to be true of Beaufort, he acknowledges his ignorance and utter inability to understand the first and most important attributes of the breed. He does more than this, he holds himself and his club up to ridicule. I have before me here on my desk a letter from a gentleman in which he states, and will swear to it, that Mr. Cornell and a friend desired to purchase Beaufort for $500 at the Washington show, fifteen months ago. What is more, they engaged a gentleman whose name is familiar to all breeders of pointers to assist them in getting the dog. Mr. Nixon refused to sell at the price and acted wisely, for such a dog would be a gift at the money, not only for show purposes alone, but for stud purposes. He is getting better stock than any pointer living to-day, and is the best sire I have ever seen with the exception of old Bang. I am importing some bitches to cross with him and I hope to be able to show Mr. Cornell that I can breed good-looking dogs and raise them if the W. K. C. can not. It is a pity Mr. Cornell and his club did not succeed in purchasing Beaufort, for they would have been able to say that they owned a good-looking dog, the first they ever did own. As it is they must plod along, honestly endeavoring to show us the importance of establishing a new type of "black and white dogs." This may be successfully accomplished when they have the new dog association well in hand, and can over-ride kennel clubs and dog shows throughout the country.

Mr. Donner must excuse me from entering into a discussion about dogs with him. Though his letter was such as one expects to see from this gentleman, and stood out in broad contrast from that of Mr. Cornell, I really cannot argue with those who when in the capacity of judge have awarded the highest honors to cripples. I am perfectly sure that after what I saw on that memorable occasion when Mr. Donner judged the setters at New York, our ideas about the legs and feet of dogs are altogether at variance. Why Mr. Donner now wishes us to understand that the legs and feet of horses are similar in formation to those of dogs, I cannot tell. What a charming picture a horse would present with a set of legs and feet under him such as are to be seen on Mr. Donner's beau ideal of an English setter.

Mr. Donner is a member of the W. K. C. He wrote to strengthen Mr. Cornell's letter and indorse Mr. Sterling's decisions. He failed to do either one or the other, but he did indorse public opinion that Mr. Sterling is either a very partial man or knows nothing whatever about dogs. Let us be charitable and incline to the latter opinion. In his attempt to show my criticism of his bitch to be incorrect, Mr. Donner writes: "She (Fan Fan, winner of second prize) has intolerably bad feet; in fact I think a rooster has better feet, at least for the purpose of sitting on the fence." What do breeders and exhibitors of sporting dogs think of a "judge" who awards prizes to animals with worse feet than a rooster? And what do they think of the club that indorses him?

CHARLES H. MASON.

TOMPKINSVILLE, S. I., June 14, 1884.

Editor Forest and Stream:

Just a few words on "A Breeder of Sporting Dogs'" criticism on color. There is a saying that "a good dog is never of a bad color." Just so with Bang Bang. Mr. Cornell finds him the most strikingly handsome dog he ever saw. Your correspondent thinks he should be disqualified because his nose is black, and refers to Stonehenge and Vero Shaw. But Stonehenge doesn't support him unless in some volume I have not at hand. In his "Dogs of the British Islands," he says: "In color (value 5) there is little choice in point of fashion between the liver and lemon and white, after them come the black and whites," etc. Nothing about black noses. Vero Shaw gives it as his personal opinion that a black nose should amount to a "disqualification," yet he frankly admits that "authorities of position" differ from him. He allows nothing for color in his scale of points. Yet despite Vero Shaw's views, fortified as they now are by your correspondent and Mr. J. H. Phelan, Bang Bang won first at the Crystal Palace (England), the only time ever shown abroad. He has been once shown here for general competition, and then in very bad condition, and though defeated for first place, the judge did not "disqualify" him. Only once besides has he been judged, and that in the contest for the sweepstakes when under Messrs. Sterling, Higgins and Tracy, he again won. Isn't it just possible that your correspondent may exaggerate the importance of that black nose?

Let me add that lemon and white bitches bred to him throw lemon and white or orange and white pups, and liver and white bitches, black and white and liver and white. I have twice bred a liver and white bitch to him and shall do so again, and until I get advice of greater importance than that of your above-named correspondents, I don't think I shall drown the black and white ones.

ELLIOT SMITH.

NEW YORK.

Editor Forest and Stream:

Under the heading of "Pointers at New York," in your last issue, there appear such extraordinary comments, not to say criticisms, that I venture to say a word to the "Breeder of Sporting Dogs," who seems too modest (?) to sign his name, on the part of the apparently unfortunate and misguided Westminster Kennel Club.

He expresses surprise at "Mr. Cornell's remarks wherein he states that Beaufort's legs are extremely bad, being crooked both fore and aft." My natural inference is that he has never seen the dog, and his surprise is that the dog should have been so freely (I use the word advisedly) advertised in the stud. As to the remark, "All large dogs are throaty," would not this axiom (?) be better in heavy type at the head of your kennel page?

I would like, while not wishing to go into any controversy, to say, in referring to Beaufort that, while not ignoring his very many good points, from which I do not in the least wish to detract—and I do not know Mr. Mason personally—the dog's fore feet are badly put on at the pasterns, making him pigeon-toed. His hindquarters and legs curve like the wishbone of a Rhode Island turkey. His stern is, in "show condition," brought to the finest possible shape, but the bend in it cannot be eradicated once he is away from the handler. His body and head are particularly good, but to bear the criticism of judges at any show let us try and produce something that can go alone.

When Mr. Cornell says he is "stilty" I think he is wrong, because stilts must at least be straight, and even the clown in the circus has never ventured on curved ones.

As to Bang Bang, I prefer to let some one else criticise him, as I bought him for the W. K. C., and as his chief fault seems to be an occasional black and white puppy in a litter I must confess that I did not know that that color was so thoroughly unpardonable a fault. His mother, Princess Kate, was black and white, and a rare good one she was. His daughter Lingo succeeded in pulling off the puppy stakes at Shrewsbury this year, and perhaps a black and white one may yet make a mark here, as they have often done on the other side of the water.

G. DE FOREST GRANT.

Editor Forest and Stream:

Allow me a few words in reply to the letters about pointers at the New York show, which appear to me to contain more personal allusions to myself than to the dogs under discussion. As to the challenge made in one of these letters, I have to say, as I have before announced in the sporting press, that the Westminster Kennel Club would take no notice of these windy offers.

We put our dogs in open competition at the bench shows and field trials, and get our records fairly and above board. These gentlemen of the Knickerbocker Kennel Club with a wonderful unanimity hurl at us the dreadful accusation that Bang Bang throws black and white pups. So he does frequently, and remarkably handsome they are too. Two were very highly commended at the last show, and well deserved the cards they got. This does not indicate that the pups trace back to a coach dog, or whatever it was that Mr. Appold showed to be the progenitor of the illustrious stud dog of the Knickerbockers of New Jersey. Bang Bang's dam is black and white, and the dog has a legitimate right to his dark points.

This is what "Wildfowler" says in the *Shooting Times* of May 23 last: "Princess Kate, Bang Bang's mother, we ('Wildfowler') shot over for a season, and a better bitch was very hard to find." This is published with a fine picture of our dog, and a half column devoted to his achievements and pedigrees

One word more and I hope not to bore you or your readers for many a week again. J. H. Phelan says, "Something must be done for bench shows. It is time that dogs, not owners, were judged." I have read those very words once before, and from another source, and I say that this is an outrageous assertion and a vile aspersion of our judges. "Why does not Bang Bang win prizes under some other judges than those appointed by the W. K. C.?" I am asked, and I answer that he does. He won the first prize at the Crystal Palace, the only time shown in England, and you see what Mr. Munson says of him at Cleveland, "As a stud dog Bang Bang is a failure." His daughter, Lingo, has just won in the field trials at Shrewsbury, and his son, Master Bang Bang, has just won first in a class of twenty-seven heavy-weight pointers at Antwerp. Mr. Lort judged the class, and the *Live Stock Journal* declares that "this was an exceedingly fine lot."

In this country the dog has scarcely had a chance to prove his merit as he has not yet been here a year.

ROBT. C. CORNELL.

Editor Forest and Stream:

In your two last numbers I find letters from several gentlemen, all claiming to know as much or a little more about pointers than Mr. Sterling or anybody that does not see fit to agree with them that Beaufort is the best pointer in America. After reading so much from the pen of Mr. Mason and the many admirers of Beaufort, I had made up my mind to see the model pointer, but am sorry to say I was very much disappointed on seeing him at the late New York show for the first time. I was told by a number who had seen him at Washington that he had changed very much, and that they were very much disappointed in him on this occasion, as he was too fat for show or any other purpose After giving him a good examination, I came to the conclusion that he was a good

looking big dog with a fair head and good markings, but not what I want for a pointer dog.

Mr. Dorsey says: "Have we been worshipping an idol so clumsily defective as this? Our ignorance has certainly been pitiable, and kindly Mr. Cornell desires to remove the scales from our eyes." I would advise Mr. Dorsey, now as the scales have been removed, to keep them clear, and if ever he sees Meteor or Bang Bang to look them well over and try if he cannot see the difference between a cart horse and a thoroughbred.

The gentleman who signs himself "A Breeder of Sporting Dogs" has seen fit to belittle Mr. Cornell's judgment of the pointer by referring to Stonehenge and Vero Shaw, and has displayed as much ignorance as any of the would-be judges. He says: "The first thing that struck me as I was examining him [Bang Bang] in his stall was his black eyes and black nose. Is this a charming attribute of a lemon and white pointer?" In order to take the scales from his eyes I will say, in the first place, that Bang Bang is not a lemon and white dog, but is a dark orange and white, and when wet has more black spots than any other on him; besides, he came from black stock on one side, as his dam was black and white, so it is not surprising that he should have black on him or that he should get black and white pups; and, again, if he is not color blind and will go and look at him again, he will find that Bang Bang has about as handsome soft brown eyes as any dog he ever looked at, and if he only saw him as he lay in his stall, as he represents, he had better look him over before going into print, as he had a blanket on about all the time in his stall, and no man can judge a dog under those circumstances. I am afraid that Mr. "Breeder of Sporting Dogs" has so much Beaufort in his eyes that it was all the pointer dog he could see.

Mr. Geo. L. Wilms's bitter remarks to Mr. Cornell I think are all uncalled for when he says, "Mr. Cornell trys to belittle Knickerbocker and Beaufort and supports Mr. Sterling's most erroneous judging." I tried to get a good look at Knickerbocker, but was not allowed to take him out of his stall, and as he had a blanket on most of the time, could not see him only when in the ring, and liked him better than Beaufort, but think Mr. Sterling showed good judgement in giving the prize to Meteor over them, as they are both too clumsy and are not to be compared with Meteor any more than a cart horse to a thoroughbred. As Mr. Mason has explained all the faults of the dogs shown against him, I will not paint any good or bad for any of them, but am inclined to think when Mr. Wilms says that Bang Bang has a short and throaty neck he leaves off judgment, as I defy him to show a cleaner neck and throat on a pointer. He also says "that he must admit that his tail looked nice at the show, but when he saw him before, the abundance of coarse hair and the carriage of that appendage was most marked, besides does he think black nose and eyes the right color for a lemon and white dog?" Now, as to his tail, it was natural and had not been clipped or sandpapered as some of the famous or would-be famous pointers I saw at the show were, and his neck had not been soaked in anything to shrink it up as some I saw there, and when he went into the ring he was a natural dog without any faking. That I can swear to, as I took him there and no man in the club had seen him for three weeks or more until the show opened.

I must agree with Mr. Cornell when he says Bang Bang is the best looking pointer dog in America. I will say to Mr. J. H. Phelan, "Where ignorance is bliss, 'tis folly to be wise," and if he thinks Bang Bang is a failure as a stud dog and produces bad pups, I will show a pup eight weeks old against any he can produce of Beaufort's, the same age, for any reasonable amount or a piece of plate as he prefers, and if the club will allow me I will make the race against Beaufort with Bang Bang for any amount I am able to raise, and as he says, "Mr. Orgill is one of the most successful exhibitors and breeders of this country, he might not want to decide," I will name as a man to judge, one I think as capable as any in this or any other country, John Davidson. As he has never seen Bang Bang or Beaufort he will be as good a man as could be found, and one who will give the best dog the award. I have showed under him a number of times and he never placed one of my dogs, yet I give him credit as being the best judge of a dog I have ever met, and should we be able to come together with the dogs I hope that such a man will be the judge so as to have it settled which is the best pointer.

As Mr. Phelan thinks Mr. Orgill the most successful exhibitor in America, I will say that Mr. Davidson has given as many of his dogs prizes as any one that ever judged them, so I don't see why he will not suit to judge such a race as this. If Mr. Phelan or any of the above think Beaufort is the best pointer in the field, I will be pleased to name a number against him on one, two, or as many days as he or they wish to run, and I think Mr. Munson would be pleased to give them a chance at Meteor at any time. One question I would like to ask Messrs. Mason, Phelan and others, why they do not find fault with the judge who gave Mr. Mason's mastiff first prize, when he ought to have sent him out of the show if they wish to make bench shows improve, and not keep harping on the pointers, as I fail to find but a very few who are dissatisfied with the awards given by Mr. Sterling. To Mr. Ingersoll's question whether Mr. Mason had sent out any more of those protest letters, will say, to my surprise, about one week after the show, I received one, the same word for word, and was not pleased with it. If any of the friends of Beaufort wish to accept any of the above offers they can do so by applying to

T. M. ALDRICH.

MANTON, R. I.

Editor Forest and Stream:

I believe Mr. Cornell is something of a yachtsman, and that may account for the expression he used in his letter when he said Beaufort's legs are "not straight fore and aft." I am not a yachtsman, and what is more to the point, perhaps, I never owned a pointer and am never likely to, but I would like to get hold of Mr. Cornell's meaning. Will he kindly explain?

I can understand a sheet being straight fore and aft, or a boom in the same position, but legs are more like masts, and I don't see wherein the application of the term applies to masts. Possibly it is my ignorance, but all the same I am puzzled and I want to know.

In view of Mr. Cornell's explanation in your last week's paper, will he also kindly supplement that by stating which is the part of the dog's leg he refers to when he says Beaufort's hocks are bent. There seems to be a wide divergence of opinion as to the hock of a dog. Does Mr. Cornell mean the bone from the hock joint to the foot? If so, how is it bent?

PUZZLED.

NEW YORK.

Editor Forest and Stream:

In your last issue appears a letter from Mr. John W. Munson, in which he claims the privilege of saying a word in favor of the pointers in his kennel only, but abuses this privilege by slurring dogs bred by others. His reference to Beaufort I am not called upon to notice. No doubt Mr. Mason will take care of that. In reference to my own, he says: "I don't think a pointer will ever be bred in America except by chance from the Glenmark and Girl and Icicle and Lily and similar mongrel breed that will approach the true pointer type of Meteor and Bang Bang. Of course not. Mr. Munson's vanity would not let him think that others can accomplish (except by chance) what he hopes to accomplish in the "day when it arrives," and he firmly believes "the day will arrive," and he is going to be "so proud." Of what? "Winning prizes with dogs of his own breeding?" He admits the future holds out to him what we have accomplished long ago. For Mr. Munson's benefit I will state that the Glenmark—Girl progeny are field dogs, true to the pointer type and have been winning prizes all these years. This the height of his ambition! As he seems ignorant of these achievements, I will call his attention to this progeny that never yet "chanced" to be any but true to pointer type. Of the first litter Knickerbocker won first at Boston and champion at Ottawa, New Haven, Washington and Toronto, besides specials. Glenwood was he. and the following year won second prize at New York. Snowflake won third prize and repeated it the next year at New York. Glendale was he. at New York and shortly after lost. Flirt, probably the best bitch of this litter, her owner has never shown, as also Jean, but who was represented by her son Craft (vhc. at New York) and daughter Lady Bang (first and special at New Haven). Of her last litter but one was raised, Lennox, who won second at New Haven. So you see, Mr. Munson, that this Glenmark—Girl stock is leading where you hope to follow.

There is another part of Mr. Munson's letter to which I wish to call attention, and that is his allusion to Mr. Sterling's being interested in the dogs he (Mr. Munson) exhibited at the late New York show. If there have been any reflections printed in the sporting papers on this subject it has escaped my observation. As Mr. Munson has introduced this matter we would be pleased to hear further from him about it.

R. T. GREENE.

JERSEY CITY.



MR. GEORGE K. REED'S GORDON SETTER DOG "FLASH."
Winner of Champion Prize, New York, 1884.

A PROTEST.

WE, the undersigned exhibitors and breeders of pointers, request you to place on record in the pages of FOREST AND STREAM our disapproval of the awards of Mr. E. C. Sterling, at the New York dog show, held in Madison Square Garden, May 6, 7, 8 and 9, 1884:

Allerton, David, 160 Broadway, New York city.
Amory, G. W., 196 Beacon street, Boston, Mass.
Baltimore Kennel Club, Baltimore, Md.
Bringham, L. F., Jersey City, N. J.
Clarkson, Wm. H., South Orange, N. J.
Dorsey, T. B., Baltimore, Md.
Dwyer, T. H., New York City.
Greene, R. T., Jersey City, N. J.
Halstead, A. E., Moncton, New Brunswick, Can.
Heath, Charles, Newark, N. J.
Hepsley, William, Jersey City, N. J.
Knickerbocker Kennel Club, Jersey City, N. J.
Lamb, Richard, 59 Carmine street, New York city.
Mason, Chas. H., Tompkinsville, Staten Island, N. Y.
McNiel, Geo. W., Jersey City, N. J.
Moller, Christopher, 149 Madison avenue, New York city.
Moller, Wm. H., Salem Center, N. Y.
Mills, Mortimer, Jersey City, N. J.
McCollom, Dr. A., 52 Bedford street, New York city.
New Haven Kennel Club, New Haven, Conn.
O'Malley, James, 10 Whitehall street, New York city.
Phelan, J. H., 75 Clifton place, Jersey City, N. J.
Piercey, G. H., Jersey City, N. J.
Porter, E S., New Haven, Conn.
Roach, Garrett, 1305 Fifth avenue, New York city.
Rogers, Frank E., 610 Broadway, New York city.
Rowan, Geo. W., Irvington-on-Hudson, N. Y.
Steel, Wm. F., Piermont, N. Y.
Thompson, J. H., Jr., Paterson, N. J.
Towner, H. D., Nyack, N. Y.
Tozier, E. B., 405 Cumberland street, Brooklyn, N. Y.
Trissler, Joseph R., Lancaster, Pa.
Underhill, F S., Newark, N. J.
Vandevort, R. T., Homewood avenue, Pittsburgh, Pa.
Vrendenburgh, A. P., Bergen Point, N. J.
Waite, G. W., Elizabeth, N. J.
Wanstall, John, Washington, D. C.
Wilbrath, Fred, 97 Maiden Lane, New York city.
Williams, W. R., 21 Platt street, New York city.
Wilson, Robert, Brandford, Conn.

Of the fifty exhibitors or breeders applied to, forty indorsed the protest. Among those who declined, three replied that they were in sympathy with the movement but feared the judges would be instructed not to give them prizes at the next show if they indorsed it. Another replied that he had made it a rule to abide by the judge's decisions no matter "what style" of competition he was in. Another could not indorse it because in his opinion the dogs were not judged by the party to whom it applies, but by a kennel club; whereas another considered it useless "seeing that nobody took the slightest notice of the awards."

For Protest Committee,
CHAS. H. MASON.

MINSTREL.

Editor Forest and Stream:

In your issue of March 6 appeared, besides others, a description of my imported English beagle dog Minstrel. As full particulars had not then been received from England, the breeding of Minstrel was not given. Now, for the information of your readers who are interested in the beagle, please publish the following from the London *Shooting Times* of May 16: "Mr. W. H. Ashburner has sold his imported black, white and tan beagle dog Minstrel to Mr. A. C. Krueger, Wrightsville, Pa. This dog was sent by us to Mr. Ashburner, and we had chosen him with great care. He is certainly one of the best beagles we had ever seen, but he will not show himself when on a chain or a leash; hence he was only very highly commended at a late American show.* But judged by points, we doubt if there is a better beagle in America. However, we have been disappointed by the party from whom we secured him. He promised to give us his breeder's name (a Cornish gentleman), so that we could find out Minstrel's pedigree, and then refused to do so on the ground that the gentleman objected to being referred to at all, or even to have his name mentioned in the matter. Under the circumstances we at once wrote to Mr. Ashburner, explaining the matter, and offering to supply him with another beagle if he so desired. As to Minstrel, we repeat it, we doubt very much if there be such a beagle in America. As to judging of the true worth of a dog simply by the position he gets in a prize list, is rubbish. When we say the dog is a good one, he is a good one, let the judges place him as they like, either through their ignorance or through the dog's own fault in not showing himself, but nothing can alter his intrinsic qualities."

In a letter to me, dated May 27, "Wildfowler" says: "Minstrel is a very fine dog. * * * To the best of my belief Minstrel is thoroughbred. He looks a beagle every inch of him."

The above should remove all doubts concerning Minstrel. "Wildfowler" knows a good dog.

There is no apparent necessity for any further pedigree beyond importation if the dog was selected by an able judge, and is really a good specimen of the breed. The well-known Rowett stock of beagles nearly all run back to imported Sam and Dolly and imported Warrior, and at that point all pedigrees cease.

A. C. KRUEGER.

WRIGHTSVILLE, Pa., June 12, 1884.

* This is an error, as Minstrel only got commended at the show in question.

THE CHICAGO DOG SHOW.

THE second grand international bench show of dogs held at D Battery Armory, Chicago, Ill., was a marked success. The quality of the dogs in many classes was a decided improvement on that of last year. Setters and pointers were well represented. The show of deerhounds was remarkably good the Landseer and Clovernook Kennels made a grand display of these magnificent dogs. Irish water-spaniels were a strong class, these dogs having worked themselves into great favor with the Western sportsmen. The arrangements, under the careful superintendency of Mr. Charles Lincoln, were all that could be desired, and the benching and feeding left nothing with which to find fault. Major Taylor judged setters and pointers, and Mr. James Mortimer all other classes. We must here call attention of owners to the fact that a dog to be well shown should be at least clean. Many of the dogs, and especially the setters, were in a filthy condition, and in more than one instance a deserving dog lost his commended card through the neglect of his owner.

In champion mastiffs, Hero II., the only entry, was conspicuous by his absence. In the open class for dogs and bitches, Nelson, a grand brindle, carried off the highest honors. He is a wonderfully good dog in front, with grand, massive skull, but is weak on back and hindquarters. Queen Bess was given second prize. She is a brindle of great size and bone, stands on the best of legs and feet, but is a little snipy in muzzle, a fault she inherits from her dam, Speiro, given c. Juno, vhc., has good skull and muzzle, but is undersized and stands badly on her forelegs. Speiro II., vhc., is of good size and shape, lacks bone, and is long in face.

Champion Rough-coated St. Bernards.—Mr. E. R. Hearn's magnificent dog Duke of Leeds was the only entry. He has much improved on his New York form, has put on considerable flesh, and was in grand coat. In the open class for dogs or bitches, first prize was withheld and second awarded to Samson, a fair young dog, with nice head, but badly shown, being out of coat. Barrie, c, was a very ordinary specimen.

Champion Smooth-coated St. Bernards.—Leila was the only entry. She is certainly the finest bitch ever seen in this country, of great size and substance, grand head and correctly marked. In the open class there were no entries.

Newfoundlands were not a good class, with the exception of the first prize winner, he is of good size, fair head and good coat.

In champion greyhounds, Major beat the Toronto winner; in neck, shoulder and stifles. He is a speedy looking dog, but was not in his best form In the open class, Twilight was given first. She is a very truly made bitch, with beautiful head, and shows great quality, but shown soft, and lacked muscular development. Snowflight, given second, is an immense dog, with a coarse, badly shaped head, but has wonderfully developed haunches, splendid chest, back and loins, and the best of legs and feet. You Know, vhc., was out-classed in the above company, as was Prince, hc., and Prince Albert, c.

In champion deerhounds Roy beat Oscar. Roy is a very typical dog, but is somewhat weak in loin. Oscar is a very large dog, woolly in coat, short in neck, and straight in shoulders and stifles. The open class for dogs or bitches was a very strong one. Mr. Van Hummell, of the Landseer Kennel, showed six excellent dogs, all of which were good ones. The Clovernook Kennel's Mac, however, could not be denied. He is a recent importation, is of great size, truly made, and being a youngster will improve; he was given first prize. Douglass, given second, is one of the best made dogs we have seen, and

has the proper coat; he is only fourteen months old, and will make a clinker. Lady Dare, vhc., and Sheila, c., are litter sisters of Douglass, and are both fine, roomy bitches, the latter a little short of coat. Heather, vhc., is a well-made dog, of correct type, but rather small. Lord Ryno, hc., is a fair dog badly shown. Olga, hc., is a good sort of bitch, with capital head and coat. Cluthan, a four-months-old bitch puppy, although unnoticed, promises to grow into a first-rate one.

Champion English Setter Dogs.—Paul Gladstone had no difficulty in disposing of Dime, the Toronto winner, who, although a good dog, carried too much lumber to please the judge's eye. In extra champion bitches. Dido II., shown in splendid condition, had a walk over, her only competitor, Peep o' Day, being withdrawn. In the open class for dogs, Stanton was placed first, Dictator second, Glen Rock hc. The winner is a well-made dog with nice head, good shoulders and chest, legs and feet, but is a bit on the small side. Dictator has a heavy skull, short neck, and a badly-carried tail. Count Blythe, unnoticed, might have got a place but for his dirty condition. In the corresponding class for bitches Blue Spark was given first, closely pressed by Lucy Dean, a very good little bitch but too curly in coat. Daisy Pembroke was vhc Jeanette and Neenah, hc., were badly shown, but are both good ones, particularly Jeanette. Blue Queen, Flirt and Countess Adele, were each given a commended card. In the puppy class, Countess Lill was placed first, and Forrester second. There was not much to choose between these, the winner being a little the best in back and loin, but they are both good ones; King Noble, vhc., is a well grown puppy with a very plain head; West, hc., and Judge Lincoln and Lady Pembroke II. were fairly good ones.

Gordon Setters.—Gruse was placed first and Dan second. In the puppy class three unnamed ones were placed first, second, and vhc.

Champion Irish Setters, Dogs.—Brush was the only entry; he shows a good deal of quality and is of good coat and color, is rather light in bone and carries a proud tail. In the open class for dogs, Almont, given first, we do not like; he is coarse almost to clumsiness, and has a bad head and badly placed ears. In the corresponding class for bitches. Queen, shown too fat, was placed first, Romaine second and Nell vhc.; we thought Nell showed more quality than Romaine, had better head and coat, but was suckling a litter of puppies and consequently not in her best form. In Irish setter puppies Megora, a worthy descendant of champion Elcho and Rose, was placed first and an unnamed one second.

In champion pointer dogs, any weight, Fritz, very much improved since the New York show, rightly won over Joe, who is bad in head and straight in his stifles. Fritz is a very smart dog, with good head and neck, shoulders well placed, ribs, back and loin good, first-rate legs and feet, is a trifle straight in his hocks. In extra champion pointers, under 55lbs., Bravo, too well known to need description, was the only competitor. He afterward won the special prize for best pointer in the show, Fritz making a very close fight with him for the honors. Pointers, dogs, any weight, were not a good class, with the exception of Pilot, given first. He is a trifle heavy on the shoulder, and not quite so good in loin as he might be, but easily beat Donald II., given second, who is rather a weedy dog, stilty and straight in shoulder, and has a nasty light eye. The others do not need any descript on. In the corresponding class for bitches first prize was withheld and second given to Venus (which was as much as she was entitled to. In the class for puppies, Fly, a three-months-old daughter of Bang and Spinaway, was on exhibition only. She is a very nice puppy and gives promise of maturing into a first-rate one. The prizes were withheld in this class.

Extra Champion Irish Water Spaniels.—Old Barney, with the exception of being a little too fat, was in great form. He has all the old vim in him, was in wonderfully good coat, and looks good for nine more years. He was given the prize over Mike, who was out of coat and does not wear his age so well as his kennel companion. In champion Irish water spaniels, Count Bendigo, after a close fight, won over Storm, who was shown too fat, and is rather too short in the leg and swayed a little in the back. In the open class for dogs, Sinbad II., though in poor coat, won over Dandy, given second. The winner is best in head and ears, also in bone. Dick, vhc., is a fairly good dog, as is Mack, hc., though the latter is very faded and rusty in coat. In the class for bitches, Queen, given first, quite outclassed her competitors. Irish Queen, placed second, is a typical bitch, but rather light in bone. Fly, vhc., has a poor head, and her ears are small and badly placed. Juda and Lady Amphitrite were absent.

Field Spaniels.—Hornell Growler had virtually a walk over, the other entries being poor specimens, and second prize was withheld. In champion cocker spaniels Hornell Silk was the only entry, and was rightly entitled to the prize. In open dog class for cocker spaniels the prizes were withheld. In the corresponding bitch class, Venus, a nice little cocker with good head and coat, but a little high on leg and light in bone, was given first and Cute hc.

Beagles.—There was little to choose between first and second, Scioto, given first, beat Myrtle, second, in chest, loin and coat; Hummer, hc., is a nice puppy; Howler, c., will grow too large.

Dachshunds were a strong class. Juliette, by Unser Fritz (ex Waldine) was given first; she is rather too large, but is very good in head, ear and crook, and is very lengthy and close to the ground. Goethe, second, is another good one, not quite so typical as the winner, while Pluesher and Diana, vhc., and Faust, hc., were each good ones and fully deserved their cards.

Champion Fox-Terriers, Dogs.—Vakeel, the first prize winner at Cleveland, wrongly entered in the open class, had a walk over. In the champion bitch class, the beautiful Village Belle had no trouble in disposing of Gypsey, who is not so good in coat and has a very full eye. In the open class for dogs, Scarsdale was far ahead of his competitors. Dash II., placed second, and Jumbo, vhc., were fair dogs of no particular merit. In the class for bitches, Judy, given first, beat Clover Belle, second, who was out of coat, and has not improved since we last saw her. In the puppy class, Trojan, a new importation, was given first. He is a smart puppy, but a little on the small side, Clover Belle was vhc., and Spy, hc. The latter is a nice-headed puppy, but light of bone and weedy looking.

Robin Adair and Effie were the only entries in the respective collie champion classes. In the open class for dogs Rob Roy, a very nice sable, with splendid coat and of good size, was placed first, over Sharp, second. Sharp has a heavy skull and badly carried tail, but has a profuse coat and is a nicely marked black and tan. The bitch class was poor; first prize was withheld and second given to Prep, a well-made bitch, but quite out of coat.

The bulldog class had only one entry, of the mongrel type, and the prize was withheld.

In champion bull-terriers President was the only entry. In the open class for dogs and bitches, Joker, given first, is a very good one, as is Nell, given second. There were twenty-one entries in this class, but with the exception of the winners they were all of the usual fighting-dog description, with no pretensions to good looks.

Black and tan terriers had only one entry, our old friend Bessy from Toronto; she was in splendid condition. In the class for Bedlington terriers, Blucher carried off the honors. Tynesider II. was absent. Elswick Jock, a promising puppy, was given second and Atlantic hc. Hard-haired Scotch terriers brought out Heather and Tam Glen, placed first and second. These are two good ones, hard to beat. Nellie, c., shows age. In Yorkshire terriers, there was only one fit to be shown, a nicely-coated dog, rather faded in color.

In champion pug dogs, Mrs. Hill's Joe was the only entry. In champion bitches, Mr. J. Englehart won with Bo Peep, a very nice little bitch, beating Judy. In the open class for dogs, Pudgie, given first, is a trifle large, has good skull and wrinkle, proper mask and good coat. Colonel, given second, is a good specimen, but coarse in coat, three unnamed puppies were respectively vhc., hc. and c. Bogie was absent. In the bitch class, Darkey was given first. She has a good skull, large eyes, good mask, has a loose tail and is rather large. Flirt II., second, is smutty, but well-shaped. Flossy, vhc., a five month's old puppy, is nicely marked and looks like growing into a good one.

Toy terriers were good, the first and second prize winners being diminutive black and tans.

Italian greyhounds introduced three very good ones, Rigoletto, given first, is a beautifully-shaped one, rather large; Gip, second, just beat Pedro, vhc., in condition.

The prize was withheld in the toy spaniel class.

The miscellaneous class brought out a collection of all breeds, from the gigantic Ulmer to the toy tan terrier. Three equal prizes were awarded to Pluto, an Ulmer hound, Wasp, a Dandie Dinmont terrier, and Hornet II., a white English terrier; Tot was awarded an extra prize and Tom Brown, a Dalmatian, was given vhc. Outside of these there was a very nice collection of Blenheim and King Charles spaniels and Yorkshire terriers, all very good ones, which were unfortunately entered too late for competition.

Following is a full list of the

AWARDS.

Champion Mastiffs.—Absent.

Mastiffs.—1st, B. B. Bullwinkle's Nelson, brindle, 4yrs., and 2d, Queen Bess, brindle, 1yr., Nelson—Speiro. Very high com., E. Sheffield Porter's Juno, fawn, black points, 2yrs., Turco—Queen; B. B. Bullwinkle's Speiro II., 1yr., Nelson—Speiro. Com., B. B. Bullwinkle's Speiro, fawn, 5yrs.

Champion Rough-Coated St. Bernards.—E. R. Hearn's Duke of Leeds, imported, rich orange, brindle, 2yrs., Mount Zion II.—Novice.

Rough-Coated St. Bernards.—1st withheld; 2d, Clovernook Kennel's Samson, tawny and white, 16mos., Monk II.—Sheila. Com., W. N. Cornholm's Barrie, imported, dark orange, tawny, 21mos., Bruno—Minka.

Champion Smooth-Coated St. Bernards.—E. R. Hearn's Leila (E.K. C.S.B. 12,012), imported, tawny brindle, 2½yrs., Roland—Nellie.

Newfoundlands.—1st, S. R. Ireland's Pete, black, 2¼yrs., Barney—Vic; 2d, Fritz Moritz's Melac, black, 17mos.

Champion Greyhounds.—Geo. S. Parvin's Major, mouse, 2yrs., Prince—Gipsey.

Greyhounds.—1st and 2d, The Landseer Kennel's Twilight, brindle and white, 4yrs., imported Quicksilver—Stratagem; Snowflight, white, 3yrs., Son of Misterton—Bonnie Lassie. Very high com., Carl Young's You Know, fawn, 3yrs., sire and dam imported. High com., H. Schanze's Prince, fawn, 20mos. Com., Mrs. Fred. W. Madera's Prince Albert, fawn and Maltese, 17mos., Clyde of Scotland—Queen of the Plains.

Champion Deerhounds.—Clovernook Kennel's Roy, brindle fawn, 2yrs., Paddy—Lassie.

Deerhounds.—1st, Clovernook Kennel's Mac, brindle fawn, 2yrs., Paddy—Lassie; 2d, The Landseer Kennel's Douglass, fawny brindle, 14mos., imported Oscar—Olga. Very high com., The Landseer Kennel's Lady Dare, grizzly gray, 14mos., imported Oscar—Olga; Clovernook Kennel's Heather, blue, 16mos., Clansman—Countess. High com., The Landseer Kennel's Olga, tawny brindle. 4yrs., Bruce—Whitman's imported bitch, and Lord Ryno, grizzly gray, 15mos., imported Luke—Lorna II. Com., L. M. Hamline's Archie, light brindle, 11mos., Rowell—Lufra; The Landseer Kennel's Sheila, tawny brindle, 14mos., imported Oscar—Olga.

Champion English Setters, Dogs.—W. B. Gates's Paul Gladstone, black, white and tan, 2yrs., champion Gladstone—Lavalette.

Extra Champion English Setters, Bitches.—W. B. Shattuc's champion Dido II., black, white and tan, 3½yrs., Druid—Star.

English Setters, Dogs.—1st, H. Bryson's Stanton, white, black and tan, 2½yrs., champion Gladstone—Frost; 2d, J. I. Case, Jr.'s, Dictator, black, white and tan, 2½yrs., Rake—Phyllis. High com., Dr. E. L. Mayo's Glen Rock, blue belton, 2yrs., Druid—Princess Draco.

English Setters, Bitches.—1st, T. Donnoghue's Blue Spark, blue belton, 17mos., Hornet—Daisy; 2d, International Kennel Club's Lucy Dean, blue belton, 2½yrs., champion Pasha—Coomassie. Very high com., N. B. Cook's Daisy Pembroke, black, white and tan, 2yrs., Pembroke—Royal Gift. High com., Lake Shore Kennel's Neenah, white, black and tan, 18mos., Harrison's London—Dawn, and Jeannette, lemon and white, 18mos., Dick Laverack—Twilight. Com., J. H. Whitman's Flirt, lemon and white, 5yrs., Druid—Milley; T. Donnoghue's, Blue Queen, black, white and tan, 4yrs. Druid—Leda; Lake Shore Kennel's Countess Adelle, white, black and tan, 3yrs., Count Noble—Princess Belle.

English Setter Puppies.—1st, Jno. L. Barker's Countess Lill, blue belton, 11mos., Gladstone—Donna J.; 2d, Joseph R. Dyer's Forrester, black and white ticked, 11mos., Gladstone—Countess Druid. Very high com., Jno. L. Barker's King Noble, blue belton, 9mos. Count Noble—Rosalind. High com., A. M. Weinhardt's West, black and white, 10mos., Jack, Jr.—Lady Rattler. Com., Mrs. F. S. Hunt's Judge Lincoln, black, white and tan, 4mos., Judge—Lady Pembroke. Com., S. S. Brewer's Lady Pembroke II., blue belton, 4mos., Judge—Lady Pembroke.

Gordon Setters.—1st, J. H. Umberhine's Grouse, black and tan, 3yrs, Dart—Fly; 2d, E. Thomas, Jr.'s Dan, black and tan, 2yrs., Shot—Gordon Setter Puppies.—1st. E. Thomas Jr.'s —— black and tan, 3mos., Shot—Fannie; 2d, E. Thomas Jr.'s —— black and tan, 3mos., Shot—Fannie. Very high com., E. Thomas, Jr.'s —— black and tan, 3mos., Shot—Fannie.

Extra Champion Irish Setters, Dogs.—Absent.

Champion Irish Setters—Dogs.—1st, J. A. J. Sprague's Brush, red, 5yrs., champion Elcho—Champion Rose.

Irish Setters, Dogs.—1st, E. Thomas. Jr.'s Almont, red, 2yrs., champion Elcho—Lina.

Irish Setters, Bitches.—1st, T. Donnoghue's Queen, red, 4yrs., Tolleston—Bridget; 2d, Ashmont Kennel's Romaine, red, 2½yrs., champion Elcho—Rose. Very high com., Frank H. Tuttle's Nell, red, 2½yrs., Branch—Star.

Irish Setter Puppies.—1st, J. A. J. Sprague's Megora, red, 10mos., champion Elcho—champion Rose; 2d, Frank H. Tuttle's ——, red, 6mos, Mike—Nell.

Champion Pointers, Any Weight, Dogs.—C. W. Littlejohn's Fritz, lemon and white ticked, 3yrs., Beaufort—Spot.

Extra Champion Pointers Under 55 lbs., Dogs.—Norbury Kennel's Bravo, lemon and white, 4yrs, Bragg—Kate.

Pointers, Dogs, Any Weight.—C. W. Littlejohn's Pilot, lemon and white, 3½yrs., Scout—Dame; 2d, C. M. Mumhall's Donald II., liver, white and ticked, 30mos., champion Donald—Devonshire Lass.

Pointers, Bitches, Any Weight.—1st, withheld; 2d, W. A. Thompson's Venus, lemon and white, 2yrs. 2mos., champion King Bow—Chess.

Pointer Puppies.—Prizes withheld.

Extra Champion Irish Water Spaniels—Excelsior Irish Water Spaniel Kennel's Barney, dark liver, 9yrs., Shamrock—Shannon.

Champion Irish Water Spaniels.—T. Donnoghue's Count Bendigo, liver, 4½yrs., Bob—Bridget.

Irish Water Spaniels, Dogs.—1st, J. H. Whitman's Sinbad II. (late Bob) liver, 6yrs., Sinbad—Queen; 2d, Charles A. Boxer's Dandy, liver, 3½yrs., Dandy—Judy. Very high com., Richard W. Stafford's Dick, liver, 1yr., Dan—Irish Queen. High com., Excelsior Irish Water Spaniel Kennel's Mack, dark liver, 17mos., Barney—Lady.

Irish Water Spaniels, Bitches.—1st., T. Donnoghue's Queen, liver, 3½yrs., Shady—Lottie; 2d, Richard W. Stafford's Irish Queen, liver, 2½yrs., Champion Barney—Cricket. Very high com., Excelsior Irish Water Spaniel Kennel's Fly, dark liver, 1yr., Mike—Lady.

Field Spaniels.—Hornell Spaniel Club's Hornell Growler, black, 3yrs., Brag—Nell; 2d, withheld.

Champion Cocker Spaniels, Dogs or Bitches.—Hornell Spaniel Club's Hornell Silk, black, 22mos, Champion Obo—Chloe II.

Cocker Spaniels, Dogs.—Prizes withheld.

Cocker Spaniels, Bitches.—1st, J. H. Whitman's Venus, liver and white. 3½yrs, Carly—Nellie; 2d, withheld. High com., J. H. Whitman, Cute, liver and white, 5yrs., Deck—Nelly Bly.

Beagles.—1st, T. Lane's Scioto, white, black and tan, Max—Fanny; 2d, Charles Schwein's Myrtle, white, black and tan, 3yrs., Rattler—Lula. High com., F. T. Lane's Hummer, white, black and tan, 5½mos., Sam II.—Scioto. Com., F. T. Lane's Howler, white, black and tan. 5½mos., Sam II.—Scioto.

Dachshunde.—1st and 2d, Geo. Poppert's Juliette, red, 3yrs., Unser Fritz—Waldine; Goethe, red, 22mos., Pluesher—Juliette. Very high com., Wm. Loeffler's Diana, black and tan, 6mos., Waldmann II.—Babette; Geo. Poppert's Pluesher, red and white, 2yrs, Waldmann—Gretchen. High com., Geo. Poppert's Faust, red, 22mos., Pluesher—Juliette.

Champion Fox-Terriers, Dogs.—F. B. Lysons's Vakeel, black, white and tan, 2½yrs., champion Volo—champion Spiteful.

Champion Fox-Terriers, Bitches.—Frank C. Wheeler's Village Belle (E.K.C.S.B. 12,427), white, black and tan, 2¾yrs., champion Volo—champion Beauty.

Fox-Terriers, Dogs.—1st, Clovernook Kennel's Scarsdale, white, black and tan, 3yrs., Joker—Ella; 2d, S. C. Bruner's Dash II., white, black and tan, 16mos., imported Dash—imported Beauty. Very high com., Thos. Chandler's Jumbo, black, white and tan, 2yrs., imported Zero—imported Bell.

Fox-terriers, Bitches.—1st, Martin Kelley's Judy, white, black and tan, 10mos., Bob—Redden's bitch; 2d, Clovernook Kennel's Clover Belle, white, black and tan, 10mos., Joker—Warren Wakeful. High com., F. E. Willard's Vicker, imported, white, black and tan, 18mos., Viper—Nell. Com., John F. Ryan's (V. S.) Beauty, white, imported Jim—imported Gip.

Fox-terriers, Puppies.—1st, Clovernook Kennel's Trojan, white, black and tan, imported. Very high com., Clovernook Kennel's Clover Belle, white, black and tan, 10mos., Joker—Warren Wakeful. High com., F. B. Lysons's Spy, white and tan, 11mos., champion Rattler—Lily. Com., Martin Kelley's white, black and tan, 2½mos., Trimmer—Vicker.

Extra Champion Collies.—Thomas H. Terry's Robin Adair (A.K.R. 892).

Champion Collies.—Thomas H Terry's Effie (A.K.R. 1231).

Collies, Dogs.—1st, J. A. Long's Rob Roy, golden sable, 12mos., champion Champagne—Maude; 2d, F. B. Lysons's Sharp, black and tan, 3yrs., imported.

Collies, Bitches.—1st withheld; 2d, John Kidston's Prep, black and tan, 1yr.

Bulldogs, Bitches.—Prizes withheld.

Champion Bull-Terriers.—1st, E. Sheffield Porter's President, white, 6yrs., Randall—Minnie.

Bull-Terriers.—1st, Charles E. Feller's Joker, white, 2yrs., Joker—Russ; 2d, Charles E. Feller's Nell, white, 2yrs., Victor Nell.

Black and Tan Terriers over 7 lbs.—1st, John F. Scholes's Bessy, 2yrs., imported Nep—imported Top.

Bedlington Terriers.—1st, John F. Scholes's Blucher, liver, 2½yrs., Winon's Teachon—J. A. Batty's Jess; 2d, W. S. Jackson's Elswick Jock, dark blue, 9mos., Elswick Lad—Tyneside II. High com., John Massey's Atlantic, blue black, 3mos., Elswick's Lad—Tyneside II.

Hard-Haired Scotch Terriers.—1st, John H. Naylor's Heather, brindle, 26mos.; 2d, John H. Naylor's Tam Glen, dark brindle, 21mos. Com., Mrs. Dr. W. H. D. Lewis's Nellie, blue grey, 6yrs., Flick—Flock.

Yorkshire Terriers, Blue and Tan.—1st, Lake Shore Kennel's Silver II.; imported; 2d, withheld. Com., Charles Schwein's Lillie, 2yrs., Sandy—bitch by champion Dreadnought.

Champion Pugs, Dog.—Mrs. Geo. H. Hill's Joe, fawn, 4yrs., champion Comedy—Clytie.

Champion Pugs, Bitch.—J. Englehart's Bo-Peep, fawn, 2yrs. and 9mos., Fritz—Minnie May.

Pugs, Dogs.—1st, Joe R. Richards's Pudgie, fawn, 15mos., imported Joe; 2d, Mrs. O. S. Cummings's Colonel, light fawn, 2yrs. Very high com., Mrs. C. S. Cummings's Puppy, 9mos., Colonel—Darkey. High com., Mrs. C. S. Cummings's Jumbo, light fawn, 5mos., Colonel—Darkey. Com., Mrs. C. S. Cummings's Puppy, 9mos., Colonel—Darkey.

Pugs, Bitches.—1st, Mrs. C. S. Cummings's Darkey, fawn, 2 yrs.; 2d, Mrs. F. P. Fisk's Flirt II., fawn. 8mos., Bogie—Flirt I. Very high com., Mrs. C. S. Cummings's Flossy, light fawn, 5mos., Colonel—Darkey.

Toy Terriers, Dogs or Bitches, other than Yorkshire, under 7lbs.—1st, Miss Mamie Lucas's Fifini, black and tan, 17mos., Cricket—Fidele; 2d, Minnie St. Clair's Gypsey, black and tan terrier, 4yrs., Jack—Fanny. Very high com., Mrs. H. S. Sheplar's, Topsey, black terrier, 3yrs. High com., J. F. Dagley's Blue Bell, blue and tan, 7½mos., Paddy—Nancy.

Italian Greyhounds.—1st, Mrs. C. H. McCulloch's Rigoletto, fawn, 5yrs., imported; 2d, J. Engelhart's Gip, fawn and white, 20mos. Very high com., J. Engelhart's Pedro, fawn and white, 3yrs.

Toy Spaniels.—Prizes withheld.

Miscellaneous, or Foreign Class.—Equal 1st, The Rambler's Pluto, imported Ulmer, brindle striped, 3½yrs., full pedigree; R. P. Palmer's Wasp, Dandie Dinmont terrier, pepper and salt, 2½yrs., imported Darkie—imported Nell; John F. Scholes's Hornett II., English terrier, white, 2½yrs., Hornett—Diamond. Extra 1st, Mrs. P. J. Conlisk's Tot, English tan terrier, 2yrs., Turner's John—Rodger's Ripple. Very high com., Tony Denier's Tom Brown, Dalmatian, 3½yrs., Tom Hughes—Rugby.

SPECIAL PRIZES.

Class A. Best English setter—Gen. W. S. Shattuc's Dido II.

Class B. Best collection of sporting dogs—T. Donoghue.

Class C. Best brace of English setters—T. Donoghue's Blue Queen and Blue Spark.

Class D. Best hard-haired Scotch terrier—John H. Naylor's Heather.

Class E. Best pug in open class owned by a lady—Mrs. C. S. Cummings's Colonel.

Class F. Best English setter over 12 and under 20mos.—T. Donoghue's Blue Spark.

Class G. Best Bedlington terrier—John F. Scholes's Blucher.

Class H. Best Italian greyhound—Mrs. C. H. McCulloch's Rigoletto.

Class I. Best Irish water spaniel in open class—J. H. Whitman's Sinbad II.

Class J. Best Irish water spaniel—Excelsior Irish Water Spaniel Kennel's Barney.

Class K. Best pointer dog—The Norbury Kennel's Bravo.

Class L. Best pointer bitch—W. A. Thompson's Venus.

Class M. Best St. Bernard—E. R. Hearn's Duke of Leeds.

Class N. Best hard-haired Scotch terrier—John H. Naylor's Heather.

Class O. Best pointer under 18mos—J. Donoghue's Croxteth's Rival Queen.

Class P. Best five English setters—Lake Shore Kennel's Countess Adelle, Neenah, Jeannette, Lady Lucy and Lady Juno.

Class Q. Best bull-terrier—E. S. Porter's President.

Class R. Best fox-terrier puppy—Clovernook Kennel's Trojan.

Class S. Best black and tan toy terrier owned by a lady—Miss Mamie Lucas's Fifini.

Class T. Best pug owned by a lady—Mrs. George H. Hill's Joe.

Class U. Best brace of setters the get of Pembroke—Lake Shore Kennel's Lady Lucy and Lady Juno.

Class V. Best five Irish water spaniels—Excelsior Irish Water Spaniel Kennel's Barney, Mike, Storm, Mack and Fly.

Class W. Best five cocker spaniels—J. H. Whitman's Jimmy Crow, Chung, Venus, Cute and Chloe.

Class X. Best five fox-terriers—The Clovernook Kennel's Scarsdale, Clover Belle, Trojan, Pricilla and Spite.

Class Y. Best kennel deerhounds—Dr. Van Hummell's Oscar, Douglas, Lady Dare, Olga, Lord Ryno, Sheila and Cluthan.

Class Z. Best collection of pugs—Mrs. C. S. Cummings.

Class AA. Best kennel English setters—Lake Shore Kennel.

THE BENCH SHOW ASSOCIATION.

Editor Forest and Stream:

We have become convinced that the invitation to kennel clubs to meet the Westminster Kennel Club on June 21 and discuss the advisability of forming a general association, has not given those interested in the subject sufficient time for consideration. We feel, too, that the question of whether the association should be one of individuals or clubs should be fully discussed. On the whole, it seems best to postpone the meeting, and we have so advised the various clubs to whom our invitation was addressed.

Notice of the meeting will be sent you when the date has been fixed. ROBERT C. CORNELL, Secretary.

THE PHILADELPHIA DOG SHOW.

ALREADY the Pennsylvania State Agricultural Society has begun the erection of the several buildings in which will be exhibited the live stock entered for competition at the State Fair, which hereafter will take place yearly in our city. The department to be devoted to dogs will be commodious and well ventilated, and within the grounds—thirty acres in extent—excellent opportunity will be given for exercising all animals displayed. Both the Pennsylvania Railroad and the Reading Railroad companies are laying their tracks directly into the inclosure, which will be the greatest convenience to both visitors to the bench show and owners wishing to ship their animals.

The question of the appointing of judges for the dog show has been brought before a meeting of the Kennel Club and it is the intention of the organization to be careful in their selection. At this early date quite a long list of special prizes has been promised, and it is confidently expected that many more will be secured. The regular prize list equals that of any of the bench shows yet held, but the puppy classes have been in every instance dropped, a wise decision, it is said, for it has been often remarked of late that every youngster sent to a dog show should be accompanied with crape on his collar, especially if the animal has not passed through a distemper attack: moreover a fair judgment can never be made between dogs of five to seven months old, and those not quite a year, when they are competing in the lists. At the coming

show of the Philadelphia Kennel Club very good opportunities will present themselves to exhibitors wishing to dispose of field dogs, as the time will be so short before the shooting season opens, when setters and pointers will be in demand, and well-bred non-sporting dogs, especially collies, will be inquired for by the farmer visitor to the State Fair. HOMO.

ENGLISH KENNEL NOTES.

"NO DOGS," murmured discontentedly the multitudes on Epsom Downs last week, assembled to witness the classic race. The regularity of his appearance has led holiday-makers to expect him. As soon as the course has been cleared by the police for the great race, and the green streak that divides the vast crowd is visible, then we expect "his coming and look brighter when he comes," and this year we regarded it as bad omen that "the Derby is falling off," and that no frightened mongrel tore madly along, wildly seeking a spot to hide himself from the exultant cheers of recognition that noisely hail his appearance. Of course, we all lost our money in consequence, and Lillibulero hadn't even the decency to start. Perhaps the "Derby dog" knew something—perhaps he anticipated the cold reception of the invalid that won. As I sat after the race dangling my legs over the side of the coach, vainly hammering my disappointment on a lobster-claw that would not break, and heard the remarks, "Sir John is a hot 'un;" "So is the Captain;" "How does Plunger Walton like it?" I thought the dog displayed his intelligence in not coming on "in that scene." But the dear old dog was there for the Oaks and urged his wild career and brought back the backers' luck.

News reaches me the York show turned out better than expected; the entries, I believe, numbered about seven hundred. The judging took place on Saturday. Among the judges is Mr. Hugh Dalziel, who is, I believe, within the recollection of New Yorkers from the time he judged in their city. I think Dr. Gordon Stables was his colleague on that occasion. I don't know how true it is, but I have heard that the latter gentleman offered to officiate on that occasion in "Highland costume," if the promoters of the show thought it would improve the "gate". I doubt not Sir Hugh was highly indignant at the suggestion, as he also hails from the "land of cakes."

Hugh Dalziel (pronounced Dl. simply the first and last letters of the name, in Scotland) is the giant of our doggy press. He towers above all our scribblers in knowledge of the subject and ability to treat it. His specialist knowledge of medicine makes his advice on doggy ailments the best obtainable and gets subscribers for the *Bazaar* who apply to him through the correspondence column for gratis advice.

His writings are clear and concise, every idea is plainly expressed and each argument as he writes it is hammered in with rugged Carlylese English. He has a broad, hard-hitting style devoid of flowery decoration. He "shoots folly as it flies" with cannon balls. He is essentially the free lance of journalism and it is owing to his blunt candor that he is not now sitting on the soft cushion of the *Field* editorial chair.

It is his misfortune that in his frequent tirades against abuses, prejudice and ignorance, that friends often receive some of the indiscriminate blows that he freely rains about him. In his last fight, the "Lochinvar" case in the *Field*, he has maintained his reputation, and though the editor of that paper threw his fighting weight in the scale of his opponents, yet the impartial reader has seen that Mr. Dalziel has made out a very unpleasant case against the Hertford committee's fairness, Mr. Murchison's idea of duty toward one neighbor and Kennel Club justice.

Years back Mr. Dalziel wrote for the defunct *Country*, but he is permanently attached to no paper at present, though notes and letters signed "Corsincon" frequently appear in the *Stock Keeper*, *Kennel Review*, *Scottish Fancier*, *Live Stock*, etc. He was one of the founders of the Dandie Dinmont Club and his heart has ever been true to that breed. He is an excellent judge of all breeds of terriers. I should sum up his character as "an aggressively honest hard-hitter."

The English exhibitors at the Antwerp show did remarkably well. Mr. Lort judged the English classes, but as he was absent on the second day the reporters of the *Live Stock Journal* (Mr. Gresham) and *Shooting Times* (Mr. Langdale) were called in to conclude his duties. The first named, I hear, exhilarated by the prominence, forgot that *suaviter in modo* should not be left at home when traveling. The English kennels present were chiefly represented by their "second strings," though perhaps that expression is not fair to Mr Edwin Nicholl's exhibits, among which was his grand bloodhound. Triumph, who appropriately enough won the St. Hubert prize of the St. Hubert Club. It must have been with a pang of regret that the Dutchmen saw him return to England. Mr. Alfred George brought away several prizes.

The Paris show is now on and I hear the numerous packs make a fine sight in the Gardens of the Tuileries. They are attended by the huntsmen, who wake up the neighborhood each morning with the music of their curly brass horns. These gentlemen are wonderfully got up and their gaudy liveries put even the fierce *Chasseurs d'Afrique* out of countenance. I don't think many Englishmen have considered it "good enough" to go over, for the show is dreadfully organized. It ought to be otherwise. There are sportsmen in France who could do it better if they got the chance. There is Ernest Bellecroix, for instance, editor of the *Chasse Illustrée*, and lately elected a member of the Kennel Club, surely he might induce the Kennel Club to assist him with advice. Why do they not invite Mr. Lewis Clement, proprietor of the *Shooting Times*, to help them? His French is so good that he speaks English with a Gallic accent, his varied experience in dogs and dog shows, acquired during his engagements as kennel reporter on the *Field* and *Bell's Life*, would be of invaluable assistance. "Barkis is willin'," I am sure, and no one would be more in his element in the gay metropolis than the volatile "Wildfowler." At present the Paris show is exclusively patronized by masters of hounds and dog dealers, but give us a good schedule and reliable judges and we shall not neglect the opportunity to show them the best. The time is favorable enough, Auteuil races on Sunday, dog show all the week, and the Grand Prix to conclude with; there's a programme to stir the blood, though one's sire do sit "cut in alabaster." Even these gay Londoners would leave their "Empire" and "Healtheries" for the "Eden" and "Bignon's."

Mr. Lewis Clement is not a man to lean against a tree and watch the sundial; there is a lot of enterprise in his little paper, the *Shooting Times*, and it contains an announcement this week that has knocked the breath out of the quiet old bodies in the Strand, Fleet street and Hampstead Road.

In future subscribers can advertise dogs for sale gratis. At first sight it looks two to one on the subscriber, but it would not do to imagine that "Wildfowler" had not a bit up his sleeve; besides, the plan is an old one on the Continent, and if it pays there it may have a like chance here. I shall open next week's number with amused expectation.

I get the *Shooting Times* regularly, and having met the owner at one or two shows, I am able to appreciate his large personal share in its columns. I believe the paper has passed through the troubled waters which everybody who starts a newspaper must expect to meet. Mr. Clement first became familiar to sporting readers for his punting articles under the *nom de plume* of "Wildfowler" in the columns of *Bell's Life*. He left them to go on the *Field*. He did their dog-show reports, and quite the best of the kind I have always considered them. He wrote the report on the bloodhound Napier, which brought a libel case down on the *Field*. "Wildfowler" has more than the courage of his opinions, he has the impudence of them; sometimes, of course, he is wrong, and the Napier case was one of them, I think.

While engaged on the *Field* staff he did a very large business in dogs, and this it was that brought him into conflict with the autocrat of the paper, Dr. Walsh, who put the alter native plainly, "Give up the *Field* or the dogs." He gave up the *Field*, went to the dogs and started the *Shooting Times*, and Vero Shaw reigned in his stead. The staff of the paper is a small one, it consists of the editor, himself; a racing editor, Mr. Bromhead, of the *Sporting Mirror*, who writes as Diomed; a gentleman who combines leader writer, dramatic critic and poet, Mr. W. Pocklington, and a reporter, Mr. Langdale, who was once among the exhibitors as a spaniel man.

We are all much interested in the Paris savant's discoveries, and if Mons. Pasteur's commission of inquiry really decide that he has found out a cure for that terrible malady, hydrophobia, no honor in the French Government's power will be too great to offer such a benefactor of humanity. I am promised a complete copy of Mons. Pasteur's report, and if I get it will forward it to the editor

Some notes from York show have just reached me. None of the cracks turned up in the bloodhound class. Crown Princess was champion in the mastiffs, in open dogs Prince, Surajah and Commodore won, and Cleopatria, Ilford Claudia and Ilford Charity in bitches.

In St. Bernards the prize winners were Glacier, Courage II., and Storm-King; bitches, Cloister, Crevasse II. and Khiva. Mr. Goodwin's new purchase, Silver King, by Hermit, won in puppies. The winner of the field trial pointer class was Mr. Norrish's champion Graphic, and for the setter prize there was a tie between Mr. H. F. Grant's Junior Carlton and Mr. Bower's Bessie IV. The Duke of Portland did some winning with his spaniels, and Mr. Easten's team also won in their own classes. Collies were a good show, Mr. John Pirie getting first and third in open dogs and pups with two litter brothers by Eclipse, a half sister to Eclipse, Mistress Beatrix, won in bitches. In the basset classes all the winners came from one kennel and the cup went there too. Mrs. Merrick Hoare's large entry won several prizes in dachshunde.

LILLIBULERO.

JUNE 3, 1884.

RETRIEVER CHALLENGE.—*Editor Forest and Stream:* I hereby challenge Mr. Luke W. White to compete with his Grace against my Fritz in retrieving anywhere in New England the coming fall, the same to be judged by any one not prejudiced against a trick dog. Mr. White says Mr. J. R. Pierson told him that "Grace could not be beat." I would be pleased to have Mr. Pierson judge them. Intelligence, obedience, style, delicacy, to be considered. The following to be used: Tissue balloons, pins, eggs, men, live or dead birds (game or other birds), on land, water, or under water. I claim Fritz will retrieve any bird named that is thrown out, if there are twenty kinds, and will do it blindfolded. Also retrieve two small birds at once. If Mr. White does not accept this challenge, it is open to any one, and barring no breed of dogs. —A. C. COLLINS (Hartford, Conn., June 10).

DOGS ATTRACT LIGHTNING.—Richard Lowe and his men hurried into his barn at Neshanic, N. J., when the shower came up last Friday afternoon, and an old shepherd dog ran in after them. "Dogs attract lightning," said Mr. Lowe, anxiously, "and we had better leave." The words had hardly escaped his lips when a thunderbolt killed the dog. None of the men was injured.—*Sun.*

YORK ROYAL.—We have received from one of our regular English correspondents a report of the York Royal Dog Show. It will be printed next week.

HOW WOULD YOU LIKE IT to have your wife and children in want of the necessaries of life? Many families have suffered this from the death of a protector who expected it as little as you. Moral: Insure in the Travelers, of Hartford, Conn.—*Adv.*

Rifle and Trap Shooting.

RANGE AND GALLERY.

BOSTON, June 14.—There was a very small attendance at Walnut Hill to day, and most of the shooting was in the Creedmoor practice match. There was also a team match by telegraph with the Manchester (N. H.) Rifle Club, which was won by the M. R. A., though in their team there were some men who had never shot in a team match before. Tuesday next the range will be open for the regular rifle matches, and the directors' medal will be shot for. Wednesday the shotgun men will occupy the grounds. Following are the best scores:

Creedmoor Practice Match.

O M Jewell	4	5	5	5	5	4	5	5	4	5	5	4	5	5	4	5—47
H Cushing	5	4	2	5	5	4	4	5	5	4	5	5	4	5	5	4—46
J Merrill	5	4	4	5	5	5	5	4	5	4	5	4	5	4	5	4—46
W Charles (mil)	4	4	5	5	5	4	4	5	5	4	4	5	4	5	5	4—45
C E Berry	4	4	5	5	4	5	5	4	4	5	5	4	5	4	5	5—45
C B Edwards	4	5	5	5	4	4	4	5	5	4	4	5	5	4	4	5—45
A C Adams (mil)	4	5	4	4	4	5	5	4	4	5	5	4	4	5	4	4—44
F W Fowle (mil)	4	5	4	4	4	4	4	5	5	4	4	4	4	5	5	4—44
J E Darmody (mil)	5	5	4	5	5	4	4	4	4	3	4	3	4	3	4	3—43

Decimal Match.

O M Jewell	10	6	10	9	10	8	5	8	6	7	—82
J Francis	8	6	7	9	9	5	9	5	7	7	—72
W H Oler	4	6	8	8	10	10	8	5	7	5	—71
A J Look	5	9	8	8	8	4	4	7	8	8	—69
B A Lappen	6	4	9	7	6	6	9	8	6	7	—68

Rest Match.

S Wilder	9	8	10	9	10	10	9	10	10	—93
P Sylvester	10	10	8	10	9	10	8	7	9	10—91
J Francis	8	6	9	10	9	10	10	10	9	8—89

Team Match.

Massachusetts Rifle Association.		Massachusetts Rifle Club.	
O M Jewell	46	C D Palmer	45
E B Souther	45	H Gray	44
C E Berry	45	F J Drake	44
R Reed	44	G A Leighton	42
R Ravis	43	F B Porter	42
H Cushing	41—264	A B Dodge	42—259

GANANOQUE, Ont., June 10.—A rifle match was held at the Gananoque Association ranges here this afternoon between five men of the Kingston Rifle Association and five men of Gananoque, which resulted in a victory for the Kingstonians by 30 points. The wind was puffy and heavy across the range from the right, and the light was bad, making it impossible to get on a good score. The following is the score made with five shots each man at each range:

Kingston.	200	400	500		Gananoque.	200	400	500	
Capt Curry	18	15	15—48		Lieut Sheilds	14	17	11—42	
Capt Cartwright	12	18	17—47		Corp Wright	18	14	18- 50	
Private Hora	16	23	19—58		A Petrie	19	20	18—57	
Lieut Cartwright	20	19	18—57		Maj Mackenzie	14	7	6 - 27	
Sergt Hora	13	18	24—55		J S Matthews	19	18	21—58	
			265						235

NEWARK, N. J., June 12.—The shooting festival of the Newark Shooting Society was very successfully conducted at the Shooting Park. The spectators and participants in the sport were in excess of previous years, and many representatives were present from Washington, Pittston, Pittsburgh, Boston, Davenport, Ia., and other places. The shooting began on Monday and continued until this evening, when the prizes were awarded. The scores of the winners of the chief prizes were as follows: Man Target—F. W. Schmider 60, S. Ellsworth 59, T. P. Delahanty, E. Holzman and E. Berg 58. Ring Target—H. Dehl, G. Quitmeyer and E. G. Zeller 71, L. Vogel, Wm. Hayes and J. Schmidt 70. Target of Honor—Wm. Hayes 68, Wm. Frommer and E. Klein 67, M. L. Riggs 66.

PHILADELPHIA, June 12.—The monthly contest for the champion's gold medal of the Passyunk Rifle Company, of Philadelphia, took place at the Stockton Range, Camden, on June 11. A strong wind, almost a gale, was blowing across the range, making shooting extremely uncertain and difficult. Quartermaster Wallace M. Hoffner, with a score of 33, will wear the medal for June. Distance 200yds., 10 shots, open sights.

FORT KEOGH, M. T.—W. M. Farrow has reached this point on his westward trip and is the guest of Lieut. J. M. T. Partello. The two crack shots enjoyed a little shooting at 500yds., off-hand, at the regular Creedmoor target, the score standing for Mr. Farrow: 4 5 5 5 5—24.

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

BOSTON GUN CLUB.

BAD weather did not prevent a large and influential attendance at the Wellington shoot June 11. Shooters from a large number of the outside clubs coming to do justice to the different matches which had been duly programmed for some time past. The wind was shifty, straining the ability of the trap shooters present to the utmost. The next shoot of this club, on June 25, will complete the series for the elegant gold medal presented to the best three-men team. A large number have signified their intention to do honors by their presence on the occasion when the final struggle takes place. The Massachusetts Rifle Association at present have the best scores, but the last shoot may afford the chance of changing.

Match 1.—5 single birds, 18yds., rise:

B F Johnson	11110—4	G F Cutting	10011—3
S H Wurms	10111—4	W H Allen	01011—3
C DeRochmont	01110—3	J Bartlett	11111—5
F L Papanti	11100—3	D Kirkwood	10101—3

Bartlett first, Johnson and Wurms second, DeRochmont and Allen third.

Match 2.—Conditions as above:

DeRochmont	11111—5	H Mason	10110—3
Wurms	11111—5	Bartlett	11101—4
Johnson	01110—3	Cutting	10011—3
Allen	10101—3	Chambers	11011—4

Wurms and DeRochmont first, Chambers and Bartlett second, Cutting and Johnson third.

Match 3.—3 pair doubles, 15yds. rise:

H H Francis	11 01 11—5	Johnson	10 10 00—2
Kirkwood	01 00 11 3	C Wilbur	11 01 10—4
DeRochmont	10 10 10—3	W L Miner	11 00 01—3
Allen	11 11 10—5	T Howard	10 10 11—4
Papanti	00 01 11—3	Bartlett	10 11 01—4
Wurms	11 01 11—5		

Francis and Allen first, Howard second, Papanti third, Johnson fourth.

Match 4.—7 birds, 18yds. rise:

DeRochmont	1011101—5	Howard	1100111—5
Kirkwood	1111111—7	Bartlett	0101110 4
Wilbur	1101111 - 6	Cutting	1001110—4
Francis	1101001—4	Johnson	1011100 4
Allen	1101111—6	Crandall	1011010—4
Wurms	1101111 - 6	E W Tinker	0111110—5
Miner	0101101—4	J B Valentine	1 11010—5

Kirkwood first, Wurms second, Tinker third, Francis fourth.

Match 9.—5 pair doubles, 15yds. rise.

Kirkwood	11 00 11 11 11—7	Francis	11 01 10 11 11—8
Howard	10 10 11 10 11—7	Johnson	11 11 01 11 11—9
Wilbur	10 10 00 01 01—4	Tinker	11 11 11 10 11- 9
Wurms	11 10 01 11 11—8	S Perry	11 00 11 11 10—7
Law	00 11 00 01 01—4	Valentine	11 10 11 11 11—9

Tinker first, Wurms and Francis second, Kirkwood and Howard third, Law and Wilbur fourth.

Match 10.—7 single birds, 18yds.

Miner	1010111—5	Francis	1101111—6
E Smith	1100011—4	Crandall	1111111—7
T G Stanton	1011111—6	Law	1111111—7
H Souther	1001101—4	Snow	1011101—5
Perry	0110011—4	Wurms	1111111—7
Wilbur	1010111—5	Graham	1011001—4
Bartlett	1100111—5	Tinker	1111110—6
Howard	1011011—5		

Law, Crandall and Wurms first, Tinker and Francis second, Howard and Wilbur third, Smith fourth.

Match 11.—5 single birds.

Tinker	11111—5	Smith	11001—3
Kirkwood	10110—3	Souther	10101—3
Wilbur	01110—3	Stanton	10111—4
Papanti	11100—3	Law	11111—5
Wurms	11110—4	Crandall	01011—3
Johnson	01010—2	Valentine	01001—2
Bartlett	01001—2	Perry	00101—2
Snow	10110—3	Cut ing	10111—4

Law and Tinker first, Stanton, Cutting and Wurms second, Smith and Wilbur third, Perry fourth.

Match 12.—7 single birds:

Wurms	1110111—6	Miner	1100101—4
Kirkwood	1111010—5	Law	0101101—4
Francis	0101011—4	Papanti	0001011—3
Stanton	1010100—3	Wilbur	1010111—5
Johnson	0010101—3	Snow	0110001—3
Souther	1000110—3		

Wurms first, Kirkwood and Wilbur second, Miner third, Stanton fourth.

Match 13.—5 single birds:

Johnson	10111—4	Snow	11100—3
Wurms	10111—4	Kirkwood	10101—3
Cutting	10111—4	Graham	10001—2
Law	11100—3	Wilbur	01111—4
Stanton	11110—4	Francis	00111—3
Souther	01010—2	Miner	11111—5

Miner first, Stanton and Wurms second, Francis and Kirkwood third, Souther fourth.

Match 14.—3 pair doubles:

Francis	10 11 10—4	Wilbur	11 11 10—5
Kirkwood	10 10 11—4	Wurms	01 11 11—5
Stanton	10 11 01—4	Johnson	10 10 01—3
Snow	10 11 11—5	Graham	10 10 01—3
Law	10 11 11—5		

Law and Wurms first, Francis second, Graham third.

Match 5.—3 pairs double birds. 15yds. rise.

Kirkwood	101010—3	Howard	1110111—5
Wilbur	101010—3	Valentine	1101011—4
Wurms	111111—6	Johnson	1010111—4
Papanti	101111—5	Allen	1110104
Tinker	101100—3	Francis	1110104
Crandall	110111—5		

Wurms first, Howard, Crandall and Papanti second, Allen an Francis third, Tinker fourth.

Match 6.—7 single birds, 18yds. rise.

Kirkwood	0001111—4	Valentine	0111011—5
De Rochmont	0111010—4	Bartlett	1011011—5
Allen	1101110—5	Cutting	1101101—5
Howard	1111011—6	Wurms	1111111—7
Crandall	1111110—6	Miner	1100101—4

Wurms first, Crandall and Howard second, Valentine, Bartlett and Cutting third, Kirkwood fourth.

Match 7.—3 pairs doubles, 15yds. rise.

Kirkwood	111010—4	Wilbur	111010—4
Allen	101010—3	Howard	101111—5
De Rochmont	101001 - 3	Valentine	011100 3
Johnson	101011—4	Snow	001011 3
Wurms	111111—6	Francis	101110—4
Crandall	111110—5	D H Graham	111001—4
E W Law	110111—5		

Wurms first, Crandall, Howard and Law second, Wilbur third, Valentine fourth,

Match 8.—New England three-men team gold badge match. Teams of three men, 5 single birds from five traps, 3 pair double birds and 10 single birds from one trap.

Massachusetts Rifle Association.

Wurms	11111	10 11 11	1111111110—19
Law	01110	11 01 11	1100110010—13
DeRochmont	11110	00 11 00	0001101000— 9—41

Narragansett Gun Club.

Tinker	11110	10 10 11	1110101110—15
Crandall	11110	01 10 10	1111100100—13
Valentine	01101	11 11 00	1011110000—12—40

Port Roseway Shooting Club.

Francis	01111	11 11 10	1111001101—16
Howard	00110	11 01 11	1111000011—13
Wilbur	00011	10 11 10	1110010100—11—40

Boston Gun Club.

Sawyer	01011	01 01 11	1110111111—16
Kirkwood	00111	11 01 01	1100100010—10
Johnson	11011	00 00 00	0110001100— 8—34

Shoot off for second money, 3 single and 1 pair double s.

Port Roseway		Narragansett.	
Francis	111 11—5	Tinker	111 10—4
Wilbur	111 01—4	Crandall	111 10—4
Howard	111 —3—12	Valentine	100 11— 3—11

Winners: Massachusetts Rifle Association first, Port Roseway Shooting Club second, Boston Gun Club third.

BUFFALO, June 6.—At the meeting of the Audubons this evening, nothing was done about the State shoot. The arrangements are at a stand for the present by reason of the scarcity of pigeons. The club will wait until the latter part of next month and watch for the nesting ground of the flock of young birds. If, by that time, the club finds there is no prospect of getting enough birds for the tournament they will discuss the feasibility of using clay-pigeons.

CONNECTICUT STATE SHOOT.

THE State shoot for the Ligowsky clay-pigeon medal was held on the new grounds of the Parker Gun Club, Meriden, June 1, and was won a second time by the Parkers. Twelve teams of four men each contested, and though it threatened to rain, as usual, and the day was cloudy, the attendance was larger than at any shoot this season:

Parker Gun Club.

Baker	1110010100111011100111101—16
Birdsey	1110100111101111110001111—18
Strong	1101111011100111101111111—20
Ives	1100101011111111111111111—21—75

Bridgeport.

Adams	0111101011111011110011—18
Longdon	1110110100101010111011111—18
Tousey	0110010101101101111111001—16
Nichols	1111010010011111110111111—19—71

Winsted, No. 1.

Blakeslee	0111111011111011011100—19
Dean	1111111000111011111111010—19
Ferguson	1111100100001011100011000—12
Peck	0001111100111011111111101—19—69

Winsted, No. 2.

Camp	1110010100100001110110111—13
Roberts, A	1001101101111001100110111—16
Roberts, H L	0110110010100111101101011—15
Smith	0000100100100010110011101—10—54

Derby, Conn.

Reed	0111100111001101000101010—13
Wilson	1001101103111100011100010—14
Spencer, Z	0011001100001111101000000—10
Burr	0010100101111010100111111—14—51

Parker Club, Meriden, No. 2.

Brown	0010101010011010011100011—12
Taylor	0110000101001011010010000— 9
Fowler	1000011010100111011010100—12
Potter	0000000100111110110110011—12—45

Milford No. 1.

Platt T	1101011101101010111001110—16
Miles	0110111111101001110011000—16
Platt	0001001001001111101010000—10
Plumb	1101100111001111010111111—18—60

Milford No. 2.

Clark	1010100111011111011001101—16
Smith	1110101100100101101010000—12
Cox	0110000000011110100001100— 9
Gillette	1111100001001110010101010—14—51

Meridens No. 3.

Stokes	1010110011011010100003110—13
Clark	1110001111100011111101101—17
Avery	0001101111111111111111010—19
Symington	1000100110011110101011111—16—65

Spencer Gun Club, Windsor, Conn.

Bull, M	1011110101101011111111111—20
Folsom	1111111010111000010111100—16
Minor	1010101010110011000011011—13
Spencer	1111011111011110100101000— 9—65

Wallingford.

Ives, Amos	0111111011111011110101111—20
Goodrich, A	1110111110110110101011100—17
Talcott	1111101101010110101000111—16
Pixley	0111111001111010100001111—16—69

New Haven.

Armstrong	0010001010010011111000010—11
Penn	0010010111100010010110100—11
West	0110101111111111111110101—20
Hanson	0101010010101011101 —12—54

For the individual medal, held by H. Nichols of Bridgeport, there were 30 entries, but only the following finished their scores, 50 pigeons, 18yds. rise: Birdsey 41, Nichols 40, Bull 40, Goodrich 41, Ives 38, Blakeslee 35, Adams 35, Longdon 34, A. Ives 34, Strong 33, Sterry 30, Dean 30, Penn 26. Tie shot at 5 pigeons. 21yds. rise, Birdsey 11010—3; Goodrich 10111—4. Before the match a sweepstake of 20 entries was shot in which Birdsey won first, Baker and Ives divided second, Nichols and Folsom third. Another of 27 entries, Strong and Nichols first, Folsom second, Minor and A. Ives third, Birdsey fourth.

DETROIT, June 14.—The Terra Cotta Club, a recent organization are having bi-monthly shoots for a medal, to become the personal property of any member winning it three consecutive times. The first shoot was won by Wm. H. W. Avery, who broke 19 out of 20 clay-pigeons. Mr. A. E. Brush won second, scoring 16 out of 20. The third shoot takes place next Thursday at Monroe, Mich., whither the club proceed upon the invitation of Hon. Harry A. Conant, Secretary of State, whose guest the club will be. The trip to Monroe will be made on Mr. Brush's elegant steam yacht Lillie. There are several crack shots yet to be heard from on the medal question, notably Mr. Geo. E. Avery, and young Mr. Gaylord. The latter shoots in fine form. He has not participated in the last two meetings, but is now on deck.—DELTA.

SAN FRANCISCO, Cal., June 8.—The much talked of match between Fay and Burbank, for $100 aside, at 50 single birds, 20yds. rise, and 80 fall, was finally settled at the Oakland race track to-day. The day was a most disagreeable one, there being a nasty, soaking rain all day, which not only made it bad for the visitors, but also prevented the birds from flying. The confidence displayed by Fay's friends in his capability of winning the present match was chiefly based upon a fine practice score he had made at San Bruno on Friday last, when he killed 40 out of 43 fast, strong birds. Slade acted as referee, and the veteran Rice pulled the traps. The following was the score:

Burbank	1110111111000111011111111111111111111101111101111—43
Fay	1101110101111111111111111111111111101011111111101—44

PAWTUXET, R. I., June 13.—Regular weekly shoot of the Narragansett Gun Club for silver trophies, at 10 pair of double clay-pigeons, 15yds. rise:

G J Crandall	00 11 11 11 11 11 11 11 11 10—17
E W Tinker	10 11 00 11 11 11 11 11 11 11—17
H D Mathewson	00 11 10 11 11 11 11 11 10 10—15
C M Sheldon	01 11 10 01 01 11 11 11 10 10—14
G F Butts	11 01 11 01 10 10 11 00 00 10—11
Mr Hayward	10 11 10 10 01 10 00 10 10 10—10
Tie—{ G J Crandall	10 11 11 10 11 11—wins first prize.
{ E W Tinker	01 11 11 10 01—wins second prize.

Ligowsky individual championship State badge, at 25 single clay-birds sprung from 5 traps, at 15yds. rise:

H D Mathewson	11111 11111 11111 11111 11111—25
G J Crandall	11111 11111 11111 11111 11111—25
E W Tinker	10111 11101 11111 11111 11111—23
G T Butts	01111 10111 11111 11111 11111—23
C M Sheldon	11101 11111 11111 10111 10011—20
Mr Hayward	11110 10110 11010 00010 11111—16

Mr. H. D. Mathewson wins badge for first time. This badge has been won nine times by our president, Mr. E. W. Tinker, and as the shooting ends July 1, he stands a sure winner.—H. W. S.

TROY, N. Y., June 11.—There was quite a contest between members of the Central Gun Club at Young's Park to-day, each shooting at 25 clay pigeons and 20 glass balls. Mr. N. Lewis, the rifle maker, broke 21 clay pigeons and 19 glass balls, 18 of the latter without a miss. This was thought pretty good for a man 75 years old.

BROOKLYN, June 10.—Acme Rod and Gun Club, of Brooklyn, N. Y., Dexter's Park, Cypress Hills, L. I., June 10; glass balls, screened revolving trap, for gold badge:

Short	1111011111011111101011—16
Keppel	1110111011011010111111—16
Schottler	0011101111011011011011—14
Knebel, Jr	1101011111100110100010—12
Betz	1011011111111000010010—12
Smith	0010011011111101100010—12
Linstedt	0111111001100100011—12
Munck	0110100110000011011111—11
Stark	1000101001100000101 0— 7
Pope	0001000100100010000 1— 5

Ties: Short—11111—6; Keppel—1110—3. The first annual picnic of this club will be held on Tuesday, July 15, at Euler's Broadway Park.—H. K.

MERIDIAN, Miss.—A tournament has been arranged to take place here on June 17, 18 and 19. The various matches are open to the world, and will be shot under the auspices of the Meridian Gun Club, under standard rules. A full attendance will be on hand, principally rural shots from the surrounding country, with delegations from Selma, Montgomery, Mobile, and from New Orleans. On the first day there will be two matches at live pigeons, one at chimney swallows, one at clay-pigeons and one at glass balls. On the second and third days the erratic bat will be substituted, and the majority of the boys will get "left" while trying to draw a killing "bead." No such shooting has ever been done on bats as right here at home by members of the Louisiana Gun Club, who ought to put in an appearance at Meridian and show the boys how to kill bats

NEW ORLEANS.—Mr. Scooler, the jeweler, has donated a handsome silver bat, to be contested for in a series of two matches at the erratic "leather wing." The first to take place on Wednesday evening, June 18, and the second on the 25th, on Marengo street, back from St. Charles, shooting to be under rules of the Louisiana Gun Club, at handicap distances, from 20 to 25 yards, 20 bats (10 doubles) to be shot at in each match, and highest total score in both matches to take the handsome and very appropriate prize. Matches are open to all comers, and no entrance fee will be charged.

DETROIT, June 11.—The Michigan Gun Club held its monthly shoot at the Park House, Hamtramck, to-day, O. A. S. Haven putting up a handsome fishing rod as a prize for the winner. The shooting was at 20 clay-pigeons each and the following scores were made:

Donaldson	1 0 1 0 1 1 0 1 1 1 1 1 1 1 1 0 0 1 1 0—14
Stewart	1 0 1 1 1 0 0 0 0 0 0 1 1 0 0 1 1 1 1—10
Jardine	1 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 0 1 1 0—16
Langlois	1 0 1 1 1 0 0 1 1 1 0 1 0 1 1 0 1 0 1 0—12
Davis	0 0 1 0 1 1 0 1 1 1 1 0 1 1 1 0 0 1 1 0—12
Woods	1 1 0 1 1 0 1 0 1 1 1 0 1 1 1 1 0 1 1 1—15
Barbour	1 1 1 1 1 1 0 1 1 0 0 1 0 1 1 0 1 0 1 0—13
Larkins	1 0 1 1 1 1 0 1 1 1 1 0 1 1 1 0 1 1 1 1—16
Evans	0 1 0 1 0 1 1 1 1 1 1 0 1 0 1 0 0 1 1 0 0—11
Barnes	1 1 0 1 1 1 1 1 1 1 1 0 1 0 0 1 1 0 1 0 1—14
Schweikart	1 1 0 0 1 0 1 1 1 1 1 1 1 1 1 1 0 0 1 0 0—13
Worcester	1 0 1 0 1 1 0 1 1 1 1 0 0 0 1 0 0 0 0 0— 9
Gilman	1 1 1 0 1 1 0 0 1 1 0 1 0 0 0 1 0 0 1 0—10
Havens	1 1 0 1 1 0 1 1 1 1 0 1 1 1 1 0 1 0 1 0—14

Jardine and Larkins shot off the tie, and the former will go a-fishing with that rod.

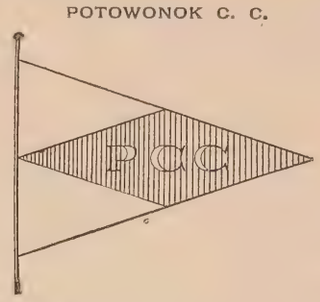
CAPT. BOGARDUS is with the Wild West show at the Polo Grounds, this city.

ENGLISH PIGEON-SHOOTING BILL.—The bill to prohibit pigeon shooting passed the Commons and was defeated in the House of Lords. A new bill has been introduced forbidding the mutilation of birds before being liberated from the trap.

Canoeing.

CANOEISTS are invited to send us notes and full reports of cruises, club meets, information about canoeable waters, and other communications of interest.

POTOWONOK C. C.



P. C. C., Fort Madison, Ia. John Rix, Captain; J. W. Albright, Jr., Mate; C. H. Peters, Purser; W. H. Atlee, Secretary. Organized March, 1882. Signal, red and white.

CONNECTICUT RIVER MEET, MAY 30.

Editor Forest and Stream:

The second annual meet of the Hartford and Springfield canoe clubs, held at Calla Shasta Grove, six miles south of this city, May 30, 31 and June 1, 1884, was in every sense of the word a success. Thursday night three S. C. C. men and a cook went into camp, but in the morning we found an intruder occupying considerable room and, generally speaking, a perfect nuisance, by name Jack Frost.

Friday, at 9 A. M., we saw our guests, the H. C. C., sailing before a stong northwest wind, coming under the south end bridge, making a beautiful picture. Nothing unusual in the trip, except an upset, which was promptly attended to. Breakfast was served and from this time until sundown members of each club were arriving at camp until our shore was lined with thirty-five canoes, a fair showing for two clubs.

The camp photographer was early at work and many fine views obtained, especially the "first breakfast." Dinner having been disposed of the national game of base ball was set in the field, with very damaging results to some.

Owing to the strong northwest wind sailing races were postponed, and at 6:30 P. M. the paddling race was contested, five men from each club entering. At the finish, Messrs. G. L. Pratt and Paul Knappe, of the S. C. C. were declared winners of first and second prizes. It was none the less interesting to see Commodore Jones trying to defeat Vice-Commodore Hubbell, both H. C. C. men, for third place; but it was a cold day for the Commodore.

After supper, a regular old-fashioned camp-fire was held, around which a jolly crew of canoeists told stories, joined in a grand chorus, related their varied experience in canoeing matters, listened to the banjo concert by members of H. C. C., which was first-class, enjoyed every moment until the long hours closed in and good-night was sounded.

Saturday morning early the campers were up and preparing for the day's sport. First the cook favored us with hot beef tea; later a breakfast was served—coffee, oatmeal, potatoes, beefsteak, mutton chops, ham and eggs, etc. Then another game of base ball, at which lawyer Clark, of Hartford, astonished the natives with his scientific pitching, so that one, two, three and out was in perpetual order. Next came trials of speed—running, jumping, hop, skip and jump, throwing the weight, vaulting and general gymnastics. We must confess that Hartford is about one foot ahead. At 10 A. M. twenty canoes set sail for Springfield and enjoyed an hour in the city.

After their return and dinner served, the wind had dropped to southwest, coming up river a perfect gale; light canoes were soon ashore. Then Hartford sent out one of her men, only to be followed by an S. C. C. man to pick him up. Then an S. C. C. man viewed the bottom of his canoe until rescued. On account of the fury of the gale, all sailing races were postponed, and Com. Jones presented with first sailing prize.

At evening we were busy with our large craft bringing in men from the opposite shore, who came from Hartford by train to remain in camp over Sunday. A large company sat at table and enjoyed a hearty meal. Then camp-fire again, and canoeing in all manner of shapes was talked over. Considerable interest was manifested in the annual meet of the A. C. A. at Grindstone Island, and we hope to forward ten men from each club. Then three cheers were given for the second annual meet and for the success that has come from the original local meet in 1883 by the same clubs, which has met with universal favor throughout the United States.

The Hartford men have made rapid progress in the management and equipment of canoes, are thoroughly interested in the sport, make a run every Saturday afternoon and camp until the following Monday morning. For this Com. Jones should receive all praise; his energy and enthusiasm has been adopted by his club. A Hartford man retired after others in the same tent. He was talkative, you know how that is, his bedfellow was sleepy and did not enjoy the story, so he made his wide awake partner a lemonade, adding a few drops of chloroform—really you can't imagine how quiet that tent was in less than five minutes. Good scheme boys, book it.

Among those who arrived this P. M. was the famous Hartford photographer, Mr. Charles F. Stewart, and assistant, Mr. Graham. They brought a canoe camera, the plate-holder of which is 26×32in., and the camera—well, it would make a first-class Clyde tent. He proposes to take in the camp, etc., if it's possible.

We had all kinds and models of canoes. One Racine (which is for sale), a large number of Rushton, Stephens, Everson, Joyners and other makers. There were St. Pauls, Shadows, St. Lawrence, Rob Roy, Clyde, Stella Maris, Gruyling, Springfield, Eliard, Princess, double cruisers, and last, but not least, a Rushton sneakbox, which did not outsail any canoe that we know of.

This afternoon we received a call from two canoeists, one of the N. Y. C. C., the other a K. C. C., who had been to Springfield in their double canoe and were homeward bound. Sunday A. M. opened up fine as silk; warm, pleasant and agreeable to all hands. After breakfast Mr. Stewart erected his double-decked, fore-and-aft, three-story camera, mounted a ladder at the back door, and had hard work getting the focus of Mount Tom, twenty miles away. This having been accomplished, we were "set" in position, and flatter ourselves we formed a pretty fair picture.

Camp was lively all day, until the latter part of dinner, that solemn hour glides silently in every encampment when the time for saying good-bye arrives. It was then the fun was over and we all realized that the best of friends must part. Lawyer Clark, in a lively speech, congratulated the S. C. C. on their entertainment, and promised them a "bang up" time in the fall. The S. C. C. responded through the Commodore of the A. C. A. who can vouch for the hospitality enjoyed at the hands of the H. C. C.

At 3 P. M. the fleet started for Hartford. The almost deserted camp was soon made lively by arrival of friends overland from Springfield, and they were favored with a regulation camp fire. Monday, A. M., the S. C. C. broke camp, returned home only to find the shore side of their canoe house three feet out of water on the river bank.

Several hours' work with jacks and timbers placed her safely in the water. The thorough method of its construction proved itself a valuable investment in this case, for it withstood the terrible strain and is in good condition. Now prepare for the August meet of the A. C. A. at Grindstone Island, Aug. 1 to 15. Everybody on deck.

GERI.

KNICKERBOCKER C. C. REGATTA.

NO day could have been more admirably adapted for this occasion than Saturday last. The sun shone brilliantly, but there was a cool, invigorating vitality in the air that is as rare as it is delightful at this advanced season of the year. The neighborhood of the club house, always attractive, was at its best, and there are few more charming spots on the Hudson. To the north lies the boldly-jutting point crowned by the mouldering ramparts of Fort Washington; exactly opposite, the gray, spectral Palisades keep their eternal watch and ward; lower down are the picturesque bluffs and shaggy woodlands of Fort Lee, while the eastern bank is dotted with villas whose greensward creeps down almost to the water's edge. Through the midst

> "The river nobly foams and flows,
> The charm of this enchanted ground,"

winding its stately way from storm-swept mountain, quiet islet and rippling brook to the great unrestful city that seethes and labors at its mouth.

That river was ruffled by fierce but intermittent blasts from the northeast. Close inshore it was in comparative calm, alternately blackened by passing catspaws and gilded by the sun, but out in the middle the surface was constantly torn and whitened by the gusts, and along the further shore the white caps tipped angry, formidable seas.

Long before the appointed hour the river was dotted by canoes driven sturdily along by the paddle or wheeling in graceful curves beneath their snowy sails and the tiny flags that burnt in vivid tongues of color at their mastheads, each little craft experimenting in the varying and complex problem of wind, tide and current before its anxious captain.

A large number of spectators watched the races from their carriages or from the end of the adjacent pier. Here the resources of the club house were taxed to the utmost to provide camp chairs, whence "ladies' eyes rained influence" on the contestants. A hearty welcome was extended by the K. C. C. to a representation of the Neptune Club, of Newark; to Messrs. Childs and Root, of centerboard fame; Mr. L. W. Seavey, of the Kit Kat Club, and other well-known canoeists.

The first race of one mile paddling was called at at 3:30 by Mr. E. A. Hoffman, who officiated as clerk of the course in the unavoidable absence of Mr. C. G. King. It was hotly contested, Messrs. Greenleaf and Griffin coming in ahead of their respective classes.

When the sailing race for Classes A and B was announced, the wind, with the historic perversity of regatta weather, was hauling round to the south, and seemed to blow in sharp, fitful puffs from every quarter of the known world. The course was laid to windward and return, and seven canoes started, presenting almost every diversity of build and rig, from the Shadow to the Racine and from the balance lug to the leg-of-mutton. The race was a pretty one, the two rival Netties, sailed respectively by W. L. Green and E. Fowler, crossing the home line considerably in advance of their competitors.

In consequence of the lateness of the hour the combined paddling and sailing race was omitted. There were three entries for the tandem race, which was won, after and exciting mile dash, by Messrs. Greenleaf and Green. Subjoined are full particulars, with corrected time:

PADDLING RACE—DISTANCE 1 MILE.

	Class 2.	M.	S.
J. L. Greenleaf	Coquago	10	30
E. Gould	Idler	10	40
H. T. Keyser	Skip	11	14
	Class 4.		
E. C. Griffin	Marguerite	10	44
R. J. Wilkin	Tip	11	10

SAILING RACE—DISTANCE 1½ MILES.

	Class B.		
E. Fowler	Nettie	21	20
W. Dormitzer	Manche	27	30
R. J. Wilkin	Tip	28	36
E. E. Griffin	Marguerite	30	17
	Class A.		
W. L. Green	Nettie	23	07
J. L. Greenleaf	Coquago	27	33
A. A. Gardener	Red Rover	Not taken	

TANDEM RACE—DISTANCE 1 MILE.

J. L. Greenleaf, W. L. Green.	Tip	8	36
R. J. Wilkin, E. Gould.	Saskatchawan	8	39
W. Dormitzer, E. Fowler.	Red Rover	8	42

The Knickerbocker C. C. is rapidly increasing in size. There are thirty-two active members on its rolls and five applicants are now awaiting admission. A most prosperous career seems to be opening before it in its new home.

THE GALLEY FIRE.

CANOE AND CAMP COOKERY.

IV.—MEATS.

Broiled Steaks.—If the steak is tough beat it on both sides, but not enough to tear the meat and allow the juices to escape. Wipe a gridiron clean, heat it well over a bed of coals, and then put in the steak. Turn often, and if the drippings escaping into the fire cause the latter to blaze or smoke, withdraw the gridiron for a moment. Season, after it is done, with pepper and salt, and if a gravy is desired put a half teaspoonful of salt, half as much pepper, and a piece of butter or fat as large as a duck's egg into a hot dish, and add two tablespoonsful of boiling water. Pour it over the steak slowly, so that every part of the latter will be moistened.

Broiling in a Frying-pan.—Broiling can be done as well with a frying-pan as with a gridiron, and all the juices are preserved. Heat the pan very hot first, then put in the meat to be broiled, cover over with a tin plate, and turn the meat often in the pan.

Boiled Meat.—Put the meat into enough boiling water so that the former will be a little more than covered. Cover the pot and boil till cooked, which will take about fifteen minutes for every pound of meat. Skim constantly while boiling, and turn the meat several times. Replenish when necessary with boiling water. One teaspoonful of salt for each five pounds of meat should be put into the pot a short time before the meat is done. If there is a layer of fat on top after the meat is cold, remove it. Beef or venison fat may be used for frying.

Baked Deer's Head.—Build a fire in a hole in the ground. When it has burned to a good bed of coals put in the deer's head, neck downward, with the skin on but the eyes and brains removed. Cover with green grass or leaves, coals and earth, and build a new fire on top of all. In about six hours exhume the head, remove the skin, and the baking is complete. This method of baking applies as well to the head of any animal.

Fried Salt Pork (or Bacon).—Good salt pork is smooth and dry. Damp, clammy pork is unwholesome. Slice thin, put in frying-pan with cold water enough to cover, let it come to a boil and boil two or three minutes; then turn off the water and fry brown on both sides; or, soak one hour in cold water then roll in bread or cracker crumbs and fry with a little butter or lard in the pan.

Broiled Salt Pork.—Slice thin, and broil same as steak on a gridiron or on the end of a green switch held over the coals, using extra care that the smoke and flame from the drippings do not reach the pork.

Boiled Pork.—Soak over night in cold water and put into a pot of cold water over the fire when the boiling begins. Boil same as other meat and save the cake of fat that rises when it is cold for frying purposes. Turnips, cabbage, potatoes and greens are good boiled with pork. (See table for boiling vegetables in a future paper).

Baked Pork and Beans.—A camping friend of mine takes two nights and a day to bake pork and beans, and as his beat any "Boston baked beans" that were ever canned, I give his method. In the evening he picks over, say, two quarts of beans, washes them, and soaks them in cold water until the next morning. Then he parboils three pounds of salt pork and cuts it into thin slices. The soaked beans are drained and put into a pot with enough cold water to cover them and a teaspoonful of soda, the pot is covered, and they are boiled briskly for a quarter of an hour, the scum being removed as it rises. Then the water is poured off, fresh boiling water is put in the pot, and they are boiled with the cover on till tender. This is the time when I get tired and hungry, and eat the beans and pork without baking, but my friend digs a hole and builds a fire in it, as for all camp baking, puts one-half the beans into the bake kettle (or bake

basins, described before), lays over them the sliced pork, over that the rest of the beans, pours a half pint or so of boiling water over them, and (it being by that time sundown) buries them, tightly covered, among the coals, and goes to bed. At daybreak they are done.

Hash.—Four pounds of cold boiled meat (not pork) or corned beef, free from bone or gristle, one large parboiled onion, and two pounds of boiled or baked potatoes are chopped and mixed together, seasoned with pepper and salt, and stirred up with about a pint of hot water. Put enough lard or butter into a frying-pan to well cover the bottom when melted, and when it is what "Nessmuk" would call "screeching hot," put in the hash. Stir it for a few minutes, then let it fry till it is brown on the bottom. Corned beef hash requires little salt for seasoning.

Ham and Eggs.—Fry the ham first the same as pork or bacon, and fry the eggs in the fat left in the pan. Break each egg separately into a cup, and thence transfer it to the pan, by which means the yolks are kept intact and bad eggs are discovered before it is too late.

SENECA.

NEWBURGH RACES.—59 Bank Street, New York, June 10.—*Editor Forest and Stream:* In your edition of the 5th inst. you have the Tip, R. J. Wilkin, K. C. C., as coming in last in the paddling race against the Snake. Aurora and Mosquito. I would beg of you to correct the same, as neither the Mosquito nor Tip were in that race. I entered but one race, and gained second place in that in a boat I had never before been in till the night previous.—TIP.

ROCHESTER C. C.—The summer races of this canoe club will take place on Irondequoit Bay this afternoon. The course laid out is between the club house and the Newport House. The entries will be about twenty in number, and the prizes, given by members of the club, will consist of silver cups, flags, watches, headlights and camping outfits.

NEW YORK C. C.—The spring races of the N. Y. C. C. will take place on Saturday, June 21, at 3 P. M., off the club house, Staten Island. Visitors can take the North Shore Ferry to New Brighton, or the South Shore to Tompkinsville, the canoe house being between the two. Both ferries start from the foot of Whitehall street, New York.

Yachting.

NEW YORK Y. C.

THE New York Y. C., on the occasion of their annual matches on Thursday last, were blessed with even worse weather than that which disappointed the Atlantic Y. C. on the previous Tuesday. The day opened with heavy clouds and light wind from the east, with a thick fog during a part of the time, clearing as the afternoon advanced, but at no time with sufficient wind to make an exciting race.

Twenty-three yachts were entered, all but two (the Lotus and Bedouin) starting, the latter withdrawing on account of a death in her owner's family. The keel schooners and Class 1 centerboards had no entries, those in the other classes being:

SECOND CLASS SCHOONERS.

Name.	Measurement. Ft. In.	Allowances,—Club Prizes. M. S.	Challenge Prizes. M. S.
Montauk	93.8	Allows	Allows
Grayling	85.8	4 17	4 17
Crusader	84 5	5 02	5 02
Estelle	81.8	6 40	6 40
Clytie	80 6	7 25	7 25

THIRD CLASS SCHOONERS.

Clio	68.8	Allows	15 47
Triton	64.8	3 21	19 08

FIRST CLASS SLOOPS.

Gracie	71.6	Allows	Allows
Fanny	69.7	1 28	1 28
Ileen	65 8	4 49	4 30
Mischief	65.2	5 10	5 10
Hildegarde	64.2	6 02	6 02
Wenonah	63.4	6 46	6 46
Whileaway	57.5	12 30	12 30
Athlon	56.4	12 39	12 39

SECOND CLASS SLOOPS.

Isis	54 2	Allows	16 14
Oriva	53.8	0 29	16 43
Eclipse	—	—	—
Fanita	49.5	5 46	22 00
Vixen	48.6	6 58	23 12
Espirito	47 5	8 28	24 42

The course was from a line between the judge's boat and a markboat near buoy 18, off Owl's Head, thence to and around No. 10, passing to west and south of it, thence to buoy No. 8½, passing south of it, north of buoy No. 5, to and around Sandy Hook Lightship, and returning over the same course to a stake boat off buoy 15 on the West Bank.

A prize was offered in each class, provided two or more yachts start, besides a prize for keel schooners, and the Bennett challenge cups for schooners and sloops.

By 10 A. M. besides the judge's boat, Luckenbach, with Messrs. Tams, Stebbins and other members of the club aboard, there was a fleet of steamers off Bay Ridge, the Taurus, with members and guests of the club, Columbia with a crowd of spectators, the Grand Republic with an excursion on board, and of the yachts Stranger, Corsair, Atalanta, Natalie, Gleam, Sentinel, Tillie, Promise, Theresa, Vision, Marina, Angler and several tugs.

At 12 A. M., by which time the yachts were all near the starting line, a thick fog shut in, with hardly any wind, the tide then having turned down. At the first whistle, 11:21, the Wenonah and Grayling were near the line, the rest of the fleet being scattered above it, the sloops with club topsails set over working topsails, the cutters with club topsails only.

The starting whistle blew at 11:31, and three minutes later Ileen passed slowly and gracefully over the line with boom to starboard, running up jibtopsail as she approached. Clytie followed, then Gracie, with Fanita and Oriva across together, the last whistle, at 11:41, finding Mischief and Clio abreast, both handicapped, with Fanny and Montauk astern, and Hildegarde last of all.

Ileen	11 34 00	Wenonah	11 39 09
Clytie	11 34 21	Whileaway	11 39 19
Gracie	11 34 48	Athlon	11 39 58
Fanita	11 35 00	Vixen	11 40 24
Oriva	11 35 00	Triton	11 40 39
Estelle	11 36 07	Clio	11 41 33
Eclipse	11 36 39	Mischief	11 41 43
Crusader	11 37 35	Fanny	11 42 05
Grayling	11 37 59	Hildegarde	11 42 34
Isis	11 38 37	Montauk	11 42 34
Espirito	11 38 53		

Mischief set spinnaker on the line, most of the others following, some of them starting with spinnakers to starboard and having to shift them.

The tide carried them down, there being but little wind and above the forts they loomed up like a procession of ghosts in the fog, the fleet being rather curiously in the shape of a letter L, one line down the Long Island shore, Ileen well ahead with half a dozen strung out behind her, while at the end of the line a part of the fleet, one abreast of the other, made the bottom of the L, extending across the Narrows.

At noon the fog lifted a little, at 12:09 Ileen passed Fort Lafayette, and there came some streaks of wind that broke up the geometrical order of the procession. Athlon first with clubtopsail and balloon jib started ahead of the pack, helped by a puff from the west, taking a foremost position, Ileen still leading to leeward, Gracie, Clytie and Mischief being well up to the front, Wenonah on the latter's lee beam. Fanny and Fanita tried a little bout at luffing, the former proving victorious, when the wind fell, and at 12:40 the order was Fanny and Athlon abreast to windward, with Ileen to leeward and Gracie, Clytie, Wenonah and Mischief between. All now stood over toward Coney Island Point, with a southwest wind. Ileen well in the van, Clytie, Wenonah, Gracie and Athlon in pursuit, Mischief and Fanita close behind with Hildegarde and Oriva well under their lee, Isis astern in company with the big schooners. Athlon here did the best work of all the pursuers, and off the point was in hot chase of Ileen, who was going like a steamer under a fresher breeze that she had felt all day.

At 1 o'clock Ileen went on port tack and stood for the buoy, Clytie being second about and Gracie third, the rest soon following, with a breeze from southwest. Up to this time Ileen had been doing splendid work, and had put a mile between her and the pack; but standing well off to the eastward, a sudden shift of wind lost her all her advantage and tumbled Fanita into first place near the Romer Beacon, with Mischief and Wenonah, who had been making a good fight all day, close to her.

All on the tug had been eagerly watching the varying chances of the yachts to the eastward of them, when suddenly a shout of "Look at Vixen," caused all to turn to the west, where, near the buoy, was a small sloop that had hitherto been unnoticed. A glance showed that she was not Vixen. But who was she? Nobody knew; but she was finally identified as Espirito, a boat new last year and little known. Her skipper, an old pilot, had quietly stood up over the west bank, on a course of his own, and with excellent judgment had struck a strong ebb there which carried her down on the buoy in almost a calm.

At the buoy were a group of steamers, yachts and tugs awaiting the yachts, and by the time the Luckenbach had joined them, Espirito was about to luff, going round on port tack with gafftopsail and balloon jib set, taking in the latter and setting jib to the accompaniment of an infernal chorus from all the whistles within a mile, the melodious bellow of the Luckenbach echoing above all the others. Clytie came round next, Eclipse third, and the rest as below, all soon being scattered again in the beat off the point of the Hook.

Espirito	2 31 19	Hildegarde	2 50 01
Clytie	2 35 13	Vixen	2 50 24
Eclipse	2 40 17	Athlon	2 50 49
Wenonah	2 41 24	Gracie	2 51 38
Crusader	2 42 21	Oriva	2 52 05
Mischief	2 44 51	Whileaway	2 53 42
Fanny	2 45 44	Clio	2 56 38
Montauk	2 46 19	Isis	2 58 56
Grayling	2 47 31	Estelle	3 00 58
Fanita	2 48 49	Triton	3 02 24
Ileen	2 49 23		

At 3:30 Espirito still lead, but Wenonah had second place, half a mile astern, with Clytie half as far behind her, and Gracie fourth. Fanny, Ileen and Mischief were standing down in the order named. Ileen at 3:45 trying to pass through Fanny's weather. The rest were well strung out along the beach, Athlon and Fanita standing in on port tack, the others mostly on starboard, with a fresh southeast wind. At 4:10 a fog came up very suddenly, shutting out everything for a few minutes, but it lifted as quickly, showing the yachts in nearly the same order. Athlon and Fanita in together near the beach were at it, hammer and tongs, neither having much the best of it at any time. Hildegarde did little of note thus far, being sailed very close all day, but Ileen was pointing up in a way worth seeing.

Off the lightship there was no wind to speak of. Wenonah came about on port tack at 4:50, Mischief 4:52:50, rounding the lightship as below:

Mischief	4 55 12	Oriva	5 02 33
Athlon	4 55 57	Crusader	5 03 08
Fanny	4 55 59	Grayling	5 05 08
Fanita	4 57 19	Hildegard	5 07 43
Montauk	4 58 29	Whileaway	5 11 45
Ileen	4 58 29	Eclipse	5 12 19
Wenonah	5 00 03	Clytie	5 13 26
Espirito	5 00 36	Isis	5 13 41
Gracie	5 01 10	Triton	5 16 58
Vixen	5 01 21	Clio	5 18 06

Athlon did a pretty piece of work on the turn, Ileen gave way for Montauk, rounding immediately after her, and Clytie nearly picked up Isis on the end of her jibboom, by which time the rest were well on the way home, the kites all spread to the light southeast wind.

At 5:10 Wenonah lost all her kites in a moment, as it proved, by losing the head of her topmast, and was out of the race. All went merrily up for the Hook with clear sky, bright sunlight and a tearing flood tide; Mischief and Fanny neck and neck, Athlon some distance astern, Montauk fourth, Gracie fifth and Fanita hanging well to her lee quarter, while Crusader, Oriva, Grayling, Ileen and Vixen were in a pack astern.

Fanny now led Mischief to the point of the Hook, where, at 6 P. M., the wind fell, and the question was asked anxiously by all hands, "Will they make the race in the time?" eight hours being the limit for all classes or no race. After drifting in a calm for ten minutes a puff came out of the west, Mischief's crew walked away forward with the sheet, and as they did so she started as though they were pulling her bodily, passing Fanny, who as yet hardly moved.

At Buoy 10 the chances of a race were but small, Mischief coming up ahead, rounding slowly, and starting off a little as her blocks were brought quickly together. Athlon now was after Fanny in a way that promised that she might save her time from the pair, but in the light wind it proved a hopeless task, and it was soon seen that even Mischief could not make the race.

Mischief	6 33 17	Gracie	6 45 39
Fanny	6 33 33	Montauk	6 47 18
Athlon	6 37 03	Grayling	6 49 22
Fanita	6 45 01		

Up the Bay the order was little changed, Fanny's spinnaker set at 7 helping her a little; the tug ran up quietly in the twilight, stopped for a few minutes and at 7:41 a long whistle announced to the leaders, still a mile or so away, that the eight hours had expired. Back went the Luckenbach in the increasing darkness, hailing Mischief first: "No race; ready at 11 to-morrow." "All right, sir," then away to Fanny and Athlon, Montauk and Gracie, and down to the rest coming up slowly. All were anxious for another trial, but when in the rear Wenonah's broken topmast was made out a voice asked eagerly, "Do we try again to-morrow, sir?" "Yes," a cheer went up from all hands forward with a heartiness that showed how keenly they felt their disaster. On steamed the tug through the slowly moving green and red lights toward the numberless white ones beyond; soon the fleet was seen dimly outlined in the Narrows, and the race that was no race was over.

As far as its effect on the main question at issue is concerned, the race so long looked forward to was of little value, no conclusive results being possible when, at three or four times during the day the contestants were distributed about as much according to their size and merit as though they had been emptied from a bag. Light and fluky winds had spoiled a day for the finest fleet of sloops and cutters the New York Y. C. has ever brought together.

FRIDAY, JUNE 13.

The clear weather of the preceding evening was followed by another cloudy day with a drizzle in the morning that gave little indication of what it proved finally to be, a day of the grandest yachting weather that has honored the spring races of New York yachtsmen in a long time. None of Tuesday's light winds or Thursday's disappointments and flukes, but a day to test gear and rigging; when topmasts were best housed and spinnaker booms ashore, a day too to test the metal of the sailor men of sloops and cutters, as well as their respective boats. A rattling breeze over all the course, wet jackets for everybody, a beat to windward that made it no child's play, with a struggle for first place which made it worth having.

Of the 21 starters on Thursday, 5, Crusader, Triton, Whileaway, Isis and Espirito, were missing when the starting whistle blew at exactly noon, the first whistle sounding at 11:50. The rain then had ceased, though the sky in every direction was covered with a dull heavy cloud. The tide had just begun to ebb and the wind was so light from the northwest that light sails were spread everywhere. The pleasure fleet of the previous day was nowhere visible, and the few aboard the tug were the only witnesses of one of the finest struggles known to American yachtsmen. The first across was the schooner Estelle, next Clytie, Ileen, Fanita, Hildegarde, Oriva, Montauk, Clio, as follows:

Estelle	12 01 44	Eclipse	12 08 05
Clytie	12 02 28	Grayling	12 09 07
Ileen	12 04 01	Fanny	12 09 13
Fanita	12 04 12	Vixen	12 10 01
Hildegarde	12 06 44	Gracie	12 10 01
Oriva	12 07 03	Wenonah	12 10 15
Montauk	12 07 42	Mischief	12 10 30
Clio	12 08 01	Athlon	12 11 26

Ileen opened the ball with Fanita as partner in a pretty but very brief luffing match, in which the former showed what she could do when she tried. The big schooners, the rear guard on Tuesday and Thursday, had their turn at last, and started to show the way to No. 10 with a beam wind and a lively bubble in the Narrows, growing worse as they went down, the sloops this time following instead of leading. Club topsails soon came down, spinnakers went below and staid there, and topmasts were struck as well. No loitering to-day, the run that took three hours yesterday was made in one, and at 1:04 Montauk rounded.

Montauk	1 04 00	Gracie	1 11 35
Grayling	1 06 28	Mischief	1 15 20
Clytie	1 06 48	Wenonah	1 15 50
Estelle	1 07 15	Vixen	1 15 50
Clio	1 09 56	Fanita	1 16 55
Fanny	1 10 05	Oriva	1 17 20
Ileen	1 10 05	Athlon	1 18 55
Hildegarde	1 11 00	Eclipse	1 19 50

Montauk had her nose outside the Hook first, with Grayling close behind. Now, if ever, was Ileen's chance—really her maiden race—and well she improved it. On the previous day her own crew of four before the mast were helped out by Muriel's men, all cutter sailors, but to-day her extra men were recruited alongshore, new to the boat, and lacking of course the careful drill needed in a successful racing crew. Once outside, however, she settled down in earnest for the work before her. Hildegarde slipped astern of her somehow in a very short time, while Fanny had to be content with a place on her lee quarter. Fanny finally worked up again, Hildegarde, however, still being last of the trio, Gracie astern of her, and Wenonah in hot chase for a place at the top.

Meanwhile the schooners were hard at it, Montauk well ahead, Grayling second, Estelle to leeward, Clytie astern of her and Clio last of all. Fanny had gained on Ileen a little, but found her jib too much for her; working under staysail Ileen finally passed her at 3:24, having left Gracie under her lee at 2:16, the latter also having taken in her jib.

By this time there was a sea that kept the sloops jumping and tossing about in a way that suggested the propriety of a speedy return to smoother waters. Fanita had had enough some time before, Athlon did not want any more and Mischief was more than satisfied with her port chain plates started off, so all were off for the Hook, Estelle and Clio, the latter with bobstay and bowsprit shroud parted.

Oriva all day had been at her work steadily, having her old adversary, Vixen, against her, and now was doing good work in the beat to windward. Only three boats were timed at the Lightship: Montauk, 2:45:22; Grayling, 2:55:26; Ileen, 3:06:28; the order of the others being Clytie, Fanny, Gracie, Wenonah, Hildegarde, Oriva, Vixen, Eclipse.

To-day the schooners were home far ahead of the others. Montauk started up, with Grayling astern, passing Buoy No. 10 at 3:46:50, finishing off Buoy No. 15 at 4:23:09. Ileen held her own well on the run up as far as Buoy No. 10, but when sheets were flattened both Gracie and Fanny passed her, all finishing as follows:

SECOND CLASS SCHOONERS.

	Start.	Finish.	Elapsed.	Corrected
Montauk	12 07 42	4 23 09	4 15 27	4 15 27
Grayling	12 09 07	4 38 40	4 29 33	4 25 16
Estelle	12 01 44	Withdrew.		
Clytie	12 02 28	5 04 11	5 01 43	4 54 18

THIRD CLASS SCHOONERS.

Clio	12 08 01	Withdrew.		

FIRST CLASS SLOOPS.

Gracie	12 10 00	4 59 08	4 49 08	4 49 08
Fanny	12 09 13	4 58 08	4 48 55	4 47 27
Ileen	12 04 01	5 01 25	4 57 24	4 52 45
Mischief	12 10 00	Withdrew.		
Hildegarde	12 06 44	5 09 16	5 02 32	4 56 30
Wenonah	12 10 00	Disabled.		
Athlon	12 10 00	Withdrew.		

SECOND CLASS SLOOPS.

Oriva	12 07 03	5 24 44	5 17 41	5 17 41
Eclipse	12 08 05	Withdrew.		
Fanita	12 04 12	Withdrew.		
Vixen	12 10 00	5 37 27	5 27 27	5 20 58

Wenonah parted two of her port shrouds and was out of the race on the run home, while Vixen lost a boat which was stove at her davits. Montauk wins the club prize and Bennett cup, Fanny wins the same prizes in her class, and Oriva wins her class prize.

JERSEY CITY Y. C.

THIS club held their twenty-sixth annual matches on June 11, the courses being for classes A and C, starting at stakeboat between Bedloe's and Ellis Islands, around buoy 8½ on Southwest Spit and return. Class D, around buoy 14 in the Lower Bay. Classes G and H, twice around Robbin's Reef. The wind was light from northeast at the start at 11 A. M.

The entries were:

CLASS A—CABIN YACHTS.

Name.	Owner.	Ft.	In.
Linda	H. C. Roome	43	2½
Middy	Dr. J. H. Vondy	37	7

CLASS C—CABIN YACHTS.

Wabasso	G. L. Winn	27	7½

CLASS D—OPEN SLOOPS.

Knight Templar	G. A. Bowker	30	6
Alex. Forsyth	Alex. Forsyth	29	2¾

CLASS G—OPEN SLOOPS.

Fay	F. C. B. Ancher	30	2¼
Hoodoo	Owen Farley	19	11¾

CLASS A—CAT RIGGED.

Annie Forsyth	Alex. Roe	17	7½

All went over with booms to port, as follows:

Annie Forsyth	11 01 00	Knight Templar	11 06 00
Middy	11 04 30	Linda	11 07 07
Wabasso	11 05 00	Hoodoo	11 08 00
Alex. Forsyth	11 05 30	Fay	11 08 30

In the Narrows the wind, by this time southeast, made a lively jump as it drove against the ebb tide. Wabasso gave up and returned, but Middy and Linda were making a close race.

The Class D boats were timed at Buoy No. 4, the Forsyth at 12:33:27, and the Templar at 12:35:20, after which they started home.

At Buoy No. 8½ Middy led round at 12:57:30, with Linda at 1:02:05.

Coming home the wind was at northeast again, all coming up close-hauled, the full time being:

CLASS A—CABIN YACHTS.

	Start.	Finish.	Elapsed.	Corrected.
Linda	11 07 00	3 24 03	4 17 03	4 17 03
Middy	11 04 30	3 14 00	4 09 30	3 52 37

CLASS C—CABIN YACHTS.

Wabasso	11 05 00	Did not go course.		

CLASS D—OPEN SLOOPS.

Knight Templer	11 08 00	3 08 30	4 00 30	4 00 30
Alex. Forsyth	11 05 30	2 48 10	3 42 40	3 40 38½

CLASS G—OPEN SLOOPS.

Fay	11 08 30	3 05 25	3 56 55	3 56 55
Hoodoo	11 08 00	2 47 45	3 39 45	3 38 00

CLASS H—CAT RIGGED.

Annie Forsyth	11 04 00	3 18 05	4 14 05	4 14 05

HUDSON RIVER Y. C.

THE twelfth annual matches of the Hudson River Y. C. on Monday, June 16, brought out nineteen boats, enough entering in each class to make a race. The wind was from northeast, making a beat up the river and a run down, the course being from the club house around a markboat off Yonkers and return for the larger boats, Class E turning a stakeboat off Spuyten Duyvil.

CLASS A—CABIN BOATS.

Name.	Owner.	M.	S.
Howard	E. H. Hatch	Allows	
Emilie	J. Schmidt	40	20
Lottie	John Drew	50	20

CLASS B—OPEN SLOOPS.

Woodpecker	J. Moye	Allows	
Clara S	J. Stiger	1	50

CLASS C—OPEN SLOOPS.

H. H. Holmes	A. L. Kreymeyer	Allows	
Frank Oliver	W. H. Arnis	1	10
Selena C	J. McCarty	1	20
Julia G	M. Flynn	0	10
Sarah B	Jas. Buck	0	05

CLASS D—OPEN SLOOPS.

B. Goodwin	T. Muller, Jr	Allows	
Why Not	O. Chatfield	0	05
Wulie	C. Roth	0	20
Julia B	S. Bridge	2	10
W. Trankle	J. Kaufer	2	10

CLASS E—CAT RIGGED.

Ada	Lewis Wolfe	Allows	
B Flat	J. W. Browning	0	52½
Edith	Fred Geggus	2	30
Owl	Aug. Hermann	3	00

The times of starting were:

Clara S	11 41 55	Julia B	11 45 45
Howard	11 42 20	Willie	11 45 55
Emilie	11 42 40	W. Trankle	11 46 00
Lottie	11 42 50	B Flat	11 47 12
Woodpecker	11 43 00	Owl	11 49 55
Selena C	11 43 25	Edith	11 50 55
Julia G	11 43 50	H H Holmes	11 51 00
Frank Oliver	11 43 53	Why Not	11 51 00
Sarah B	11 44 30	Ada	11 51 00
B Goodwin	11 45 00		

Beating up Clara S, Selena C and Lottie made a close fight, the Clara being first to jibe for home. The Frank Oliver capsized on the way up, but was towed in without any damage, and Edith was disabled and returned. The times at the mark boat were:

Clara S	1 54 30	Willie	1 58 55
Lottie	1 54 50	Holmes	2 03 15
Selena C	1 55 15	Emelie	2 08 35

All came down the wind in a hurry with booms to port, the leaders being well together at the finish, with the pack strung out astern.

CLASS A—CABIN BOATS.

Name.	Start.	Finish.	Elapsed.	Corrected.
Howard	11 42 20	3 46 00	4 03 40	4 03 40
Emilie	11 42 40	3 30 00	3 47 20	3 07 20
Lottie	11 42 50	3 18 05	3 35 15	2 44 55

CLASS B—OPEN SLOOPS.

Clara S	11 41 55	3 18 30	3 36 35	3 34 45
Woodpecker	11 43 00	4 07 50	4 24 50	4 24 50

CLASS C—OPEN SLOOPS.

H H Holmes	11 51 00	3 02 00	3 41 00	3 41 00
Frank Oliver	11 43 53	Capsized.		
Selena C	11 43 25	3 21 00	3 37 35	3 36 15
Julia G	11 43 50	3 59 50	4 16 00	4 16 50
Sarah B	11 44 30	Not timed.		

CLASS D—OPEN SLOOPS.

B Goodwin	11 45 00	3 49 25	4 04 25	4 04 25
Why Not	11 51 00	3 25 35	3 34 35	3 34 30
Wilie	11 45 55	3 27 15	3 41 20	3 41 00
Julia B	11 45 45	3 43 30	3 57 45	3 55 35
W Trankle	11 46 00	3 51 00	4 45 00	4 02 50

CLASS E—CAT RIGGED.

Ada	11 51 00	3 26 25	3 35 25	3 35 25
B Flat	11 47 12	3 13 00	3 25 48	3 24 55½
Edith	11 50 55	Disabled.		
Owl	11 49 55	3 33 50	3 45 55	3 42 55

SEAWANHAKA CORINTHIAN Y. C.

IT was very unfortunate for the Seawanhaka Y. C. that their races followed so close on the two of the N. Y. Y. C., coming in between them and the Long Island race of Monday. Several of those who were out on Friday were disabled, crews were tired out, and on the others time was needed to prepare for Monday, so that of fourteen entries but eight started. The wind and water were but a repetition of Friday, with addition of a clear sky. Fanny, Mischief, Ileen, Grayling, Crusader and Vixen were missing, Isis taking the latter's place.

The course was from Fort Wadsworth around Buoy No. 10 and Buoy No. 8½, thence to and around Sandy Hook Lightship and return over the same course to Buoy No. 15, the fourth class sloops only going around Buoy No. 5 at Sandy Hook. The Luckenbach was on hand as usual with Messrs. Bayard, Suydam and De Luze, the regatta committee, on board; the Sirius carried the members and guests of the club, and Sentinel, Gleam and Marina came out to see the start.

Topmasts were housed on all except Amazon, one, and on some two reefs turned in, and Ray sent both topmasts ashore.

The starters were but eight, as follows:

	Length.	
SCHOONERS.		
Clytie	85.00	New York
Ray	62.00	Seawanhaka
FIRST CLASS SLOOPS.		
Gracie	78.02	New York
Athlon	56 06	Atlantic
SECOND CLASS SLOOPS.		
Oriva	60.83	Seawanhaka
Isis	61.25	Seawanhaka
FOURTH CLASS SLOOPS.		
Petrel	39.54	Seawanhaka
Amazon	28.03	Atlantic

At 11:33 the first whistle sounded, the Luckenbach being then on a line with the middle tower of Fort Wadsworth, and five minutes later the starting signal was given. Athlon was first to cross on port tack under staysail and single reefed jib. "Stand by for Isis," called out the timekeeper, as the new cutter was seen close to the line, but before she could cross, Oriva, with one reef and jib, swooped down between her and the tug, and handled beautifully, ran through her weather and crossed ahead of her. Gracie was late, having stopped to tie in second reef, having also jib and staysail set. Grayling ran down with the others, but soon turned back. The times at the start were:

Athlon	11 40 18	Amazon	11 43 15
Oriva	11 42 00	Petrel	11 47 10
Isis	11 42 05	Gracie	11 50 40
Clytie	11 42 46	Ray	11 52 50

The little fellows, Petrel and Amazon, snugly reefed, were bobbing up and down, the former soon ahead. Amazon parted the shackle of her weather shrouds when below the forts, both shrouds coming down. As it was found impossible to repair the damage, the mainsail was lowered, and she ran under head of jib into Perth Amboy. At 12:07 Gracie's staysail came down, while Oriva, with tack triced up, was well ahead, Athlon next and Isis third. The bay even here was all in a tumble, with a promise of still more outside. Off the Upper Middle buoy Isis passed Athlon and led for a short time. Smoother water was found at buoy No. 10, and Oriva and Athlon, after rounding, stopped for second reefs.

Oriva	12 41 16	Athlon	12 44 25
Clytie	12 46 46	Isis	12 43 52
Gracie	12 43 40		

While lying under the Hook, Petrel appeared alone, Amazon being long out. She ran under the Point, anchored, repaired a tear in her mainsail, her crew dined, and started on again around buoy 5 in time to go home with the big ones.

At 1 o'clock Oriva and Athlon were busy with second reefs, while Gracie kept on, passing both and gaining quite a lead on them. Rounding the Hook Gracie was butting into the seas, throwing spray all over her, while Oriva with a steady swing went through them at a pace that was taking her rapidly to the front, and at 2:15 she had Gracie under her lee, gaining on her steadily from there to the Lightship.

By this time there was fun on the tug as the big seas came in, green and solid, on the bar. Down she went and up again, now and then taking a sea over her stern and soaking all on the after deck, and once, with a roll to port, sending stools, tables and passengers into the leecuppers, but once over the bar the seas were longer and less vicious, more attention was paid to the yachts and less to personal interests. Ray had been in sight of until now, when she was seen astern, heading up and making good weather of it but going slowly over the ground, evidently bound on going over the course, though all alone, Clytie having turned and given up just before with a broken bobstay. Isis soon followed, seeing which Athlon turned tail and made for the Hook also, leaving Oriva and Gracie to fight it out alone. It was clear over head but wind and water were both cold for a June day, and there was no place for any but thorough sailors outside the Hook. On the beat out all Oriva's good qualities were seen and appreciated, as she not only left big Gracie with her 21ft. of extra length astern but did it all in a way that was doubly to her credit. Probably no other yacht in New York waters has been so heartily abused as Oriva, the first large cutter built here, and the name she has gained in the past two seasons, with the added victories of Friday and Saturday, are due no more to her than to the careful handling and thorough seamanship of her owner and skipper, a true Corinthian in every way. At the Lightship her time was 3:06, with Gracie one minute later, the latter jibing at once as she rounded, while Oriva stood in to catch the early flood up the beach, jibing further in shore and shaking a reef out. Running before wind and tide the seas were lighter and more to Gracie's taste, and size of course began to tell. Oriva was now under single reef, but losing ground, rounding Buoy No. 10 at 4:24:09, Gracie having turned at 4:22:04.

When last seen Ray was hanging on bravely, still well to leeward of the Lightship. Coming up the Bay, Bedouin met the leaders, standing up grandly under lower sail, and looking ready in every way for Monday's fight.

Petrel was also sighted, under double reefed mainsail and reefed staysail, going along easily and steadily. Gracie passed the line at 5:08:29, Petrel at 5:04:15, and Oriva at 5:12:43, Ray not being timed.

Jerseys and oilers were changed for shoregoing clothes and the tired sailors were picked up by the Luckenbach off Stapleton, but in spite of frock coats, linen collars and such disguises, it was easy to pick out the sailor men from the crowd on the tug, by the salt-encrusted faces, and hands that showed traces of an intimate acquaintance with wet ropes. The crews of the winning boats were:

Sloop Gracie.—R. Frederic Tams, captain; John E. Roosevelt, O. D. Lovell, Sidney Chubb, William M. Wright, Alfred Roosevelt, W. Emlen Roosevelt, J. N. Winslow, T. A. Bronson, E. Randolph, Jr., C. Randolph, H. Earle and Albert Meredith.

Cutter Oriva.—C. S. Lee, captain: A. B. Alley, R. C. Cornell, A. B. Simonds, W. Simonds, A. P. Montant, C. L. W. Eidlitz, Harold Sanderson, W. S. Alley, L. D Oremieulx and G. Villamoy.

Schooner Ray.—Vice-Commodore W. W. Tompkins, captain; J. M. Breese, mate; C. H. Leland, F. L. Leland, J. Lentilhon and W. H. Colburn.

Petrel.—J. Hyslop, captain; Benj. Tuzo, E. A. Stevens, Thos. E. Brown, A. Stevens.

SPRING MATCHES ON NEW YORK BAY.

BESIDES half a dozen matches of the smaller clubs, New York has had during the past week four races, in which most of the larger sloops and cutters, with some of the best known of the schooners, have entered, and the results, though unsatisfactory in some respects, must be of value to all yachtsmen.

Of course the main interest centered on the sloops and cutters, the latter having a far better representation than ever before. Ileen as yet untried, Bedouin and Wenonah altered during the winter. Oriva in good shape as usual, while the new Isis, which appeared for the first time, has been looked forward to with great interest by yachtsmen of moderate views.

The most important of all the separate points involved in the great controversy that has divided yachtsmen during the past five years has been, of course, displacement, and intimately connected with it, that of depth as a factor of safety. Moderate beam, low ballast, double jib, keels, housing spars, loose mainsail, reasonable rig—valuable as they all are—have been subordinate to this main point, which is now conceded by almost universal practice as definitely settled, the old theories of light displacement and draft being abandoned in New York and still more in Boston.

The change going on steadily season by season, of lead for iron, outside ballast in place of inside, on all classes of yachts, decides that point finally; double head rig is now the rule and not the exception, while less hoist, more gaff, long topmasts, loose mainsails are too general to excite comment. The actual practice of yachtsmen of all opinions has thus finally decided all the main questions at issue in favor of FOREST AND STREAM, and the work of this season is to decide the minor details, keel or board, moderate or small beam, the proportion of draft best suited to our requirements, and various points of less importance.

While a large number of yachtsmen still sail under the flag of the thorough cutter, most of those who once stood up stoutly for the old light displacement boats have abandoned them and shifted their colors to a new type of craft, deep, wide, large displacement, mixed rig, centerboard, low weights; a type represented in Boston by the new Thetis, and in New York by Athlon, who has sailed her first races within the last two weeks, while a large contingent, still further over the fence, have pinned their faith on the cutter Isis, a boat moderately wide and deep.

The presence of so many cutters, and of the two latter boats in addition to most of the older sloops, and the Thistle, new in these waters and just rebuilt, had raised anticipations of fine sport, which have been to a certain extent realized, though marred by those accidents incident in yachting, and of which the cutters have had their full share.

Bedouin, of whom so much was expected, has been out of all the races, owing to the death of a child of her owner; Ileen has changed skippers but recently, and her new master, promoted from a ten-tonner, has not had time yet to learn his boat, while in Friday's race, being a resailing of the previous day's contest, and not on the programme, she had no regular racing crew aboard. Wenonah has been equally unlucky, losing topmast on Thursday and parting her shrouds on Friday, so that the whole burden of the fight has fallen on little Oriva, a task she has accomplished in a way creditable to herself and her owner. Of the sloops, the only mishap of moment was to Mischief, who varied her usual performance by starting her port chainplates in the jump off the Hook on Friday.

The paltry winds of the first two days made any real test impossible, while the postponement of the New York race, with Monday's contest so close, prevented several from entering it, and cut down the S. C. Y. C.'s entries on Saturday. The Atlantic Y. C. race was, of course, of less interest than the others, the boats being centerboards, with one exception, the entries for large schooners small, and there was little wind. Mischief and Fanny did the best work of the day, being about even throughout, Gracie was hardly in the race at any time, and Athlon showed up once or twice, noticeably when near home, and Grayling beat her two competitors, no great task.

The light wind of Thursday, shifting as it did, with numberless flukes and no race at the end, gave no test of merit, but some of the individual performances may be noticed in passing. Ileen at the start showed what she could do in a drift, and promised well until her chances were spoiled by a shift of wind. Athlon followed her for a time, and though making no hug off Fanita in their beat down outside, made a better show in the evening when chasing the leaders in a light breeze. Mischief and Fanny did about as on Tuesday. Wenonah footed well but went out of her course before turning the Lightship and lost her topmast afterward, her sailing when there was a chance justifying her old reputation. Oriva and Vixen were about even all day; Gracie was astern again, and Isis did nothing of note, though of course allowance must be made for a boat in a race that was virtually a trial trip. Of the schooners, Grayling did the best, Montauk not having wind to move her.

Friday's race, with its wind and sea, sifted out the entries with a rude hand. Wenonah, Mischief and Clio disabled, Athlon and Isis turning back in the face of the beat out, and of those who went over, Ileen, showing what she could do to windward, pointing, footing and going easily through all, beating Gracie and Fanny easily to the Lightship, leading them to the Southwest Spit, only losing her place after a splendid struggle on the final run home; while Oriva took good care of Vixen all day, finally beating her home.

Saturday's work under similar conditions was the same, but even more so. Vixen did not start. Athlon and Isis looked around the Hook and came home. Gracie went over the course, led for a greater part of the way by little Oriva, while 28-ft Petrel hammered down to the Hook and home in grand style. Of the schooners, only the little keel Ray went over the course, Clytie, who started with her, turning back disabled, the rest not venturing out. Neither side can thus far claim a decisive victory, but certainly the laurels for the best, if not the only brilliant performance of the whole week, rest with Oriva.

AROUND LONG ISLAND.

AS the ability of American yachts to go further and risk more increases, the desire to do so will grow with it. While it is true that long and dangerous cruises have been made at times in shoal boats it is equally certain that off shore cruising is becoming more common than ever before in our yachting annals, and this year promises to surpass all previous ones in the matter of long races.

The first of the series, that around Long Island, was sailed this week, starting on Monday afternoon, fourteen yachts crossing the line. The prizes are a cup valued at $500 for schooners, presented by W. D. Travers, one of a like amount for first class sloops, presented by ex-Commodore J. D. Smith, and one of $3 0 for second class sloops presented by Mr. Archibald Rogers and Rear Com. S. R. Platt.

The race is a "go as you please," no time allowance and no limit to crews or course after rounding Romer Beacon. The starting line was between the forts in the Narrows, and the finish on a line from Execution Light to Sands Point Lighthouse.

At 4 o'clock on Monday the starters were ready about the line with the steam yachts Theresa and Vision, the catamaran Jessie, several sloops and schooners, and the Luckenbach, with a number of the New York Y. C. members, including Mr. Montant, who had charge of the start, on board. A preparatory whistle was blown at 3:55 P. M., and at 4:05 a second one to start.

The day was clear and warm, wind light from southwest, and water smooth away out, with an ebb tide. The yachts that started and their time of crossing were as follows:

Name.	Owner.	Start.
SCHOONERS.		
Montauk	Rear Commodore Platt	4 09 00
Grayling	L. A. Fish	4 06 50
Fortuna	Henry S. Hovey	4 07 55
Ruth	H. Hathaway	4 10 25
E-telle	J. D. Smith	4 09 20
Fleetwing	R. S. Elliot	3 13 03
FIRST CLASS SLOOPS.		
Fanny	Prince & Whitely	4 07 18
Gracie	Joseph P. Earle	4 11 03
Ileen	Arthur Padelford	4 07 50
Wenonah	James Stillman	4 06 50
Hildegarde	Herman Oelrichs	4 09 25
SECOND CLASS SLOOPS.		
Athlon	J. G. Barron, M. D.	4 11 00
Vixen	F. O. Lawrence, Jr.	4 03 40
Oriva	C. Smith Lee	4 06 15

Most of the sloops and cutters had club topsails set, the schooners under full sail, Ileen ran up balloon jibtopsail before crossing. Fleetwing made a specially fine show with kites set, Oriva crossed first with her old antagonist, Vixen, right on her heels.

At 4:30 Fanny was ahead, Grayling close after her, Vixen, with Oriva fast on her weather quarter, Hildegarde just under Oriva's lee, with Wenonah astern of the two, and Ileen astern but to windward of all four. Behind this group was Fortuna, with Athlon astern of her again, Gracie being among the stragglers.

Soon Oriva and Vixen had a little bout of their own to windward, Oriva twice luffing up, while the two other twins, Ileen and Hildegarde were evidently happy in each other's company. At 4:42 Hildegarde went through Ileen's lee; at 4:45 a spinaker boom came out on Fanny's port, ready for the turn at lower beacon, others following at once.

Fanny passed the Romer at 4:50, the others being timed as follows:

Grayling	4 51 00	Oriva	4 57 00
Hildegarde	4 52 20	Athlon	4 57 30
Fortuna	4 55 00	Ruth	4 57 40
Montauk	4 55 30	Gracie	4 59 00
Wenonah	4 56 00	Fleetwing	4 59 30
Vixen	4 56 10	Estelle	5 00 00
Ileen	4 56 30		

When off Coney Island at 5:23, Oriva parted her spinnaker halliards and down came the big sail in the water, just as she was leaving Vixen. A hand was soon aloft repairing damages, and at 5:35 up went the sail again. As the twilight deepened they stood on in about the same order until lost to sight to those on the tug, and the race was fairly begun.

On Tuesday evening, Commodore Munroe, of the Larchmont Y. C., with the Regatta Committee and a party of the club members, put off in a tug, lying all night on the finishing line at Execution, but nothing was seen of the yachts, the race being almost a dead calm. The schooners Nokomis, Meteor, Tidal Wave and Columbia, with Estelle and Bedouin, were awaiting the finish off Larchmont.

At 9 A. M. the leaders were reported off Mattinecock Light, and later Fanny appeared first, crossing the line at 11:42 with Grayling just astern. Gracie arrived at 12:07 and Montauk at 1 P. M.

WHISPER.—This steam yacht has not had her pressure cut down as reported, being allowed 150 pounds, the boiler having stood a test of 225 pounds. Her owner, Mr. P. S. Ramey, has made a number of valuable experiments with wheels during the past year, both on her and with small models, and she now has a wheel of his own design with two thin steel blades bolted to a cast iron hub.

MADGE.—After two years of idleness Madge turned up in the Bay last week. She must have been astonished at the change two years had made in the fleet, double head sails, plumb stems, longer overhangs, tall topmasts on every hand, a result for which she may take a large part of the credit.

INDIAN RIVER Y. C.—A yacht club was organized June 7, known as the Indian River Y. C., of Rockledge, Fla. The officers elected are: Gardner S. Hurdee, Commodore; Lyman Barnes, Vice-Commodore; H. S. Williams, Captain; B. C. Willard, Treasurer; Barton Smith, Secretary.

THE SNYDER ENGINES AND YACHTS.—The steam yacht has now passed from the first stages of experiment and become an accomplished fact, taking its place no longer as an article of luxury for a few, but a necessity wherever water transit is needed, filling a position between the towing and sailing boats and larger steamboats. To meet the increasing demand, the Snyder Engine Company are now building a line of engines and boilers especially designed for steam yachts, tugs and launches, besides which they also furnish the hull completely fitted up for use. For the smallest boats they build an engine 2¾×4½, 24in. high, and of but 50 pounds weight, with a boiler of 24in. diameter and 42in. high, from which they run up to a 12×12 cylinder with boiler in proportion. The small sizes are of very neat design, fitted with link and reversing lever, the parts being carefully proportioned and all neatly finished. The boilers are of iron or steel, vertical tubular in type, and are specially designed to be easily cleaned and to do the best possible work with poor waters as is often necessary in steam yachts. The company make a specialty of one size of yacht that has been found to meet the popular demand best, the hull being 30ft.×6ft. 6in. with 20in. draft. The engine is a 3¾×5½, with boiler 23×48, vertical tubular, wheel 24in. The hull is of oak, planked with cedar, and finished either with awnings or light roof as desired. Besides the above, the company also manufacture propeller wheels, and a large line of portable and stationary engines, both vertical and horizontal.

ANOTHER STEAM YACHT DISASTER.—Following close on the sinking of the Stella comes the foundering of the Gazelle, a boat once known in New York, but since used in Florida and later in Baltimore. The Gazelle, 56ft. long, 18ft. beam, and 4½ft. depth of hold, started out from Baltimore on Tuesday afternoon, June 10, having besides her captain, J. R. Mills, and a crew of five, a party of seventeen ladies and sixteen gentleman, members of the Tuesday Club, besides a German band, all bound on an afternoon excursion to Annapolis. They spent some time ashore and started at 9 P. M. to run up, but once out of the Severn River a gale was met from southeast, kicking up a sea that soon had the little craft leaking badly and the situation became quite dangerous. Soon many of the party, though ignorant of their danger, became very seasick. Several of the gentlemen, together with the captain, decided on making for a dredge known to be anchored off the Patapsco River, but on reaching it the sea ran so high that it was almost impossible to come alongside. After great difficulty, however, the ladies were safely landed on the dredge, in spite of the musicians, who insisted on landing first, but were knocked down by some of the gentlemen. It was found that the yacht was sinking, so all abandoned her, taking refuge on the scow, and shortly after she disappeared. The ladies were housed in the engine room, while the others had to pass the night on deck in the rain, all being finally taken to the city by a tug the following morning.

THE PENNSYLVANIA Y. C. held its fourth annual regatta on the Delaware, on Monday, June 9. The course was from the Kensington Water Works wharf to a buoy opposite Delanco, N. J., and return to a buoy opposite place of starting. Fifteen boats started. The signal was given at 11 o'clock exactly. On arrival at Delanco the little fleet met with quite a squall, but no accident occurred. Good sailing was made the whole way. The crews were favored with glorious weather and light, breezy winds. Considerable amusement was caused by the efforts of one crew to cut out another's boat. The order of passing the home buoy was: First, No. 7, Bessie; owner, J. Leslie Wood; sailed by George Smith; second, No. 5, Joe and Willie Smith; owner, J. Leslie Wood; sailed by John Smith; third, Leonard Stadler, disqualified; fourth, No. 13, Mediator; owner, Walter Gildert; sailed by John Armroyd. The rest came in straggling. The first prize was $20 and the champion flag; second, $12; third, $6. The winner arrived at the home buoy at 4:15 P. M. exactly.—*Philadelphia Times.*

PROPOSED FLORIDA CRUISE.—Cleveland, O., June 9.—J. W. Rusk, principal of the Rusk School of Elocution, and wife are preparing for a trip to Florida in a small yacht. They will ship the yacht via C. P. R. R. to Wellsville, O., thence down the Ohio to the Mississippi, down to the gulf and around the coast to Florida. They expect to be absent about seven months, leaving Cleveland about Aug. 15. The yacht will be fitted out for comfort and staunchness rather than speed. It is 24ft. by 8ft. beam, cabin 12ft. They will use a Stranahan canvas boat for tender.—PEDAGOG.

A FRENCH YACHT COMING.—Paris, June 6.—*Editor Forest and Stream:* The following bit of news may be of interest to some of your readers: The Nautienne, 700 ton yacht, leaves Havre, June 10, for Quebec, Montreal and New York. She will be the first French yacht that has ever crossed the Atlantic. There will be on board M. E. Blanc, her owner; M. B. Clerc, proprietor of *Le Yacht* newspaper; M. Bonade, the well-known owner of the 40-ton racer Ayosoils, and M. Paul Saunière.—B. C.

CAPE MAY RACE.—But two entries have as yet been made for the race around Cape May Lightship on Monday next, Montauk and Grayling. The condition of the race, which is open to all yachts belonging to any yacht club, are that it is to be sailed in cruising trim, with boats at the davits and anchors on bows. As it is without time allowance, it is not likely that the sloops and cutters will enter.

BOSTON Y. C.—The annual review of the Boston Y. C. was held on Saturday, June 14, in Dorchester Bay, the Adrienne, Commodore Pfaff's flagship, taking her position off Thompson's Island at 3 P. M. and firing a signal gun. The fleet passed in review with a fresh southeast breeze, each firing a gun to leeward in passing, the smaller ones dipping their colors. After a sail down the Bay all spent the evening at the club house.

NEWARK BAY Y. C.—The winners in the various classes in the open matches of Monday were: Vixen, 1:38:34; Our Own, 1:30:20½; Just Woke Up, 1:32:50½; Cygnet, 1:35:31; Shadow, 1:32:28, and Teaser, 1:35:11. We will give a fuller account next week.

EAST RIVER Y. C.—But one boat, the Nettie Thorp, capsized on Monday in the races of the East River Y. C. The course was from the club house to and around the Gangway Buoy and back, the H. H. Holmes winning, with Snoozer second.

DAISY.—This cutter, lately purchased by Mr. Maunsell Van Rensselaer, Jr., of this city, was sailed around from Southampton, England, to Liverpool, and will leave on Saturday next for this country on one of the ocean steamers.

THETIS.—The new one of which so much is expected, was out on Saturday last, on Boston Bay. It is a pity that she was not ready for the Long Island race, but she will make her first appearance at Marblehead soon.

NEW HAVEN Y. C.—Great preparations are being made for the races of the New Haven Y. C. on Monday next. The club now has 33 yachts, 30 being sailing craft, nearly all of which are entered.

SOUTHWARK Y. C.—The winners in Monday's races of this club were: Class 1, Maud; Class 2, Morgan; Class 3, Charles Benton; Class 4, Amanda C.

IOLA.—Mr. Oswald Jackson's sloop came out last week with jib and staysail in place of the single jib she has carried heretofore.

PUBLISHER'S DEPARTMENT.

A FIRE is a good servant but a poor master. A pen is also a good servant, but to be master of it use Esterbrook's.—*Adv.*

A WOMAN'S OPINION WORTH HAVING.—Willimantic, Conn.—*Editor Forest and Stream:* Permit me to express my admiration for the publication of a sportsman's paper so pure that the most sensitive and refined lady can read every line without a blush. Many of us can get our outings only through the stories told by our husbands or brothers, and believe me we appreciate the jokes a great deal better if told in the manly, straightforward way in which your "boys" tell them. It does not require very deep penetration to distinguish the sportsman from the sporting man, the sportman's paper from the sporting papers that occasionally find their way into our homes.—A SINCERE ADMIRER.

THE GREAT DESIDERATUM.—Of late years a new enemy of the health and happiness of the people has appeared in the form of malaria. Not that the thing of itself is new, but the name has a newer definition—so wide that thousands of our people in city and country believe themselves afflicted with it. So physicians tell us, and perhaps they are right. All those bad feelings, depression of spirits, coated tongue, capricious or wanting appetite, pain in the head, back or limbs, we are told, are all due to malaria. And to cure malaria the doctors prescribe quinine, and the people take quinine, in season and out of season, the high and the low, the weak and the sick and the well, until everybody is rolling the bitter morsel under their tongues. Well, does it cure? No. Is it harmless? No, for it does produce neuralgia and deafness and other disorders, sometimes of very grave character. Is there no better way of treating malaria than this abuse of this most powerful and even dangerous medicine? Yes, there is; and it is a fact proved by twenty years' use and experience, and thousands of triumphant cures that Humphrey's Homeopathic Specifics Nos. 10 and 16 do cure, promptly and permanently, all those cases of malaria, and that with simple, tasteless, harmless, sugar-coated pills.—*Exchange.*—*Adv.*

OUR READERS will confer a favor by sending us the names of such of their friends as are not now among the subscribers of the FOREST AND STREAM, *but who would presumably be interested in the paper.*

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A PUBLIC ENEMY.

HE is more commonly known as the dog-catcher, and is found only in the larger towns and cities. Here in New York he travels about with a wagon, in which is a large cage to contain the prey, and an assistant. There was once a dog-catcher who was honest, but he died many years ago and left no descendants. The present race consists, for the most part, of political heelers of the lowest grade—what we call here "toughs" or "short-hairs." They receive their positions through political influence. These men are appointed in accordance with a city ordinance, which requires that all dogs shall be licensed, and shall have attached to their collars a tag bearing their license number. If allowed to run at large, such dogs must wear, in addition to the license number, a muzzle, "constructed so as to prevent the dog from biting." If without a muzzle, the dog must be led "by a cord, rope, or chain, not more than four feet in length." Dogs whose owners do not comply with the provisions of this ordinance are to be captured by the dog-catchers and destroyed.

From what we know of the life of a city dog-catcher before he comes to occupy this exalted position, we should expect that he would prove to be neither more nor less than a licensed dog thief. This is just what he is. Each dog-catcher receives from the city forty cents apiece for the dogs which he captures, and to earn this sum these men stop at nothing. Last year one of them killed a boy in a dispute over the latter's dog, and it is an every-day occurrence for them to catch dogs which have been licensed and muzzled, according to the ordinance, and after having removed the collar and muzzle, to drive away with the victim to the dog pound. Frequently they will snatch from its mistress's arms a valuable pet dog, or will seize it as it runs at the end of a chain, and, cutting the collar, will walk away with the prize. Such an act differs in no respect from snatching the purse, except that the one who steals the property is a licensed official of the city.

The ordinance forbidding dogs to be allowed to run at large is one which has much to recommend it, and it is a desirable thing that the homeless and useless curs, which are only less of a nuisance than the city cats, should be got rid of. But after the owner of the dog has complied with all the requirements of the law, it is an outrage that his property should still be exposed to the attacks of these legalized robbers.

A few days since a gentleman, not a resident of the city, had occasion to bring his dog into town, and to lead him along the street for a few blocks. He had gone but a short distance when he was set upon by one or two dog-catchers, who ordered him to give up the dog. The gentleman in question, having his dog on chain, and feeling sure that for a non-resident no license was required, declined to yield up his property at the fellow's demand, and as there happened to be a policeman among the throng attracted by the dispute, the owner of the dog appealed to that officer for protection. The policeman, however, said that he could do nothing, but as a matter of private advice he recommended the owner to "bat" the dog-catcher. Having therefore found a good-natured and trustworthy bystander to hold the dog, the owner proceeded vigorously to "bat" the dog-catcher, and in a short time administered to him a severe thrashing, after which, amid the plaudits of policeman and street boys, he led away the prize of victory.

The gentleman to whom all this happened was clearly in the right, for the ordinance says "the provisions of this section [*i. e.* as to procuring a license], except those relating to leading and muzzling dogs, shall not apply to dogs owned by non-residents, in remaining temporarily or in passing through this city, or to dogs brought into this city and entered for exhibition at any dog show or annual exhibition of dogs."

The moral of all this is that so long as matters in this city remain as they now are, a man is justified in using force to protect his property, and that when he does stand up for his rights in this way, public opinion and the officers of the law will uphold him in it.

USE FOR THE BARE-FOOT.

THE bare-footed boy is occasionally employed by the angler and gunner to direct them to the choice trout pools and game covers; or to give desired weight to the basket and rotundity to the bag. This is a high and honorable service; and many a sportsman has in his soul a soft spot for the memory of the small boy who saved him from the chagrin of coming home empty-handed.

There is another field of usefulness, to which the talents of our stub-toed young friend might be most profitably directed. Why not induce the small boy to play detective? He is admirably adapted to the work. There are bare-footed boys and bare-footed boys. The one usually encountered in the field is sly, shrewd, circumspect and cunning. He has a sharp eye, knows a thing or two, and can draw his own conclusions. In short, he is just the material to convert into an amateur detective. He delights to catch a fish and sell it for ten cents. He might be taught to take pleasure in catching law-breaking anglers, and receiving pay in proportion.

Some of our game-protecting officials are making complaint that they cannot detect the fellows who infringe the game laws, because the miscreants know the wardens, and elude their efforts. But no one would suspect the small boy. The most wary rascal who pursues the untimely search for fish, and the most artful dodger who sneaks for June woodcock, would entertain no suspicion of the bare-footed, ragged-shirted, one-gallused, brown-faced boy. The probabilities are that he would tell the youth all about it. And the youth could tell the justice.

It may be argued, with some show of reason, that this proposal to use the boy as a detective is foolish, because in every well-regulated instance of the sportsman and the bare-footed boy, it is the latter who catches the fish or snares the bird and sells them to the former. This is not an insuperable objection. Now and then a small boy might be found of so guileless a nature that he would not only sell the man the contraband spoils at the best bargain he could drive, but would add to his emolument by afterward swearing with unblushing front that the man captured the fish himself, and he saw him do it. And the fisherman would not deny it.

It is customary with regiments of troops to adopt a "Child of the Regiment." This might be imitated by game protective clubs, adopting a "Bare-footed Boy of the Club." By taking the youth in hand at an early age and teaching him that to kill a bird out of season is a more heinous offense than to slay a human being at any season, and that to destroy the trout before their time is immeasurably more wicked than arson, his ardor in the good cause might be kindled to such an intensity that, unaided and alone, the youngster would do as much for the cause of game protection, as is accomplished in the same direction by the monthly dinners of the club.

PRAIRIE FIRES AND PRAIRIE CHICKENS.

IN SOME parts of the West, the farmers fire their lands in the spring to insure an abundant crop of hay. They burn the ground as late in the season as possible, in order that the growth may be put back and the crop mature late. In this way they can put off their haying until after the wheat crop has been gathered. Just here comes a clashing of interest between farmer and sportsman. This late burning of the prairies causes the destruction of the pinnated grouse eggs; for the birds are nesting when the late fires are set. The shooters claim that in this way more grouse are destroyed every year than fall to the gun. In some localities this is doubtless true. It is also claimed by the gunners that the farmers can just as well burn their lands earlier in the season, before the birds have nested. And in one or two instances the sportsmen have practically demonstrated their theory by actually firing the farmers' lands. The burning was entirely successful, but in view of the damages awarded to the land-owners, the experiment will probably not be repeated.

So far as our observation of the state of affairs has extended, there is no way in which this conflict of interests can be reconciled. The "chicken crop" should be fostered by every means possible, but it is not so important as the hay crop. Much as the destruction of the birds by fire is to be regretted, the farmer can hardly be expected to sacrifice his hay to save the chickens.

OUTERS AND SHUT-INS.

CLUBS, whose members join together to take their vacations in company, are a familiar feature of our social life. The number of such clubs has wonderfully increased since we began to publish a paper in their interest and in the interest of individuals who take their outings alone. With the ways and doings of the vast throng of out-door pleasure seekers we are all pretty well familiar. Week after week we have read of their explorations, adventures, trials, joys and disappointments. The grand army of outers is doubling its hosts. The veterans of the corps are looking with ever-growing jealousy upon the new recruits crowding into the old camping grounds, and, like the frontiersman, they are seeking new wildernesses, whither they may move on to fish and hunt unmolested.

There is one association which is very different from these bands of outers. Its exploits have never been told very fully in print, but like the shooting and fishing and camping and tramping clubs, its membership is all the time growing. This is "The Shut-in Society." Its membership is made up of invalids who are shut in from the outside world. The clubs of outers are joined together by their taste for out-door life and pleasure; the Shut-ins are united by one sufferer's sympathy for another. The outers join to seek sunshine and balsam odors. The Shut-ins, while of necessity they cannot meet each other, are united to give one to the other consolation which may cheer—as by sunlight—the darkened chambers in which they are immured.

The Shut-in Society was started in 1877, by an invalid lady of New Vernon, N. J., who, having been an invalid for several years, sought to give and receive comfort by correspondence with some one who was, like herself, "shut in." One and another was added, and in time a society was organized. It now numbers nearly two thousand members.

The society publishes a monthly journal called the *Shut-In Visitor*, which is edited by Mrs. Kate Sumner Burr, Walworth, N. Y. The monthly arrival of the *Visitor* is, we may be sure, looked for with more eagerness than that with which the outers await the coming of their journal.

It would be difficult to name societies in more pathetic contrast than those of the outers and the Shut-ins.

WOODCOCK WORK.—The committee to receive money for a Long Island game detective fund acknowledge the receipt of $50, and more is expected. With this encouragement the game protector of that district ought to secure such assistance as will make sure the capture of the shooters who have openly stated their intention of shooting woodcock on Long Island next week. The open season for woodcock will not begin anywhere in New York State before Aug. 1.

The Sportsman Tourist.

UNCLE LISHA'S SHOP.

IV.

THE first snowfall of the season in the little valley was sifting down from a dull sky one November evening not long after that just told of, when Lisha's friends began to gather in his little shop. Each one, as he entered and stamped the snow off his boots, made some remark concerning this latest turn of the weather, as in duty bound by ancient usage: "Snowin'," "Snowin' c'nsid'able kind o' smart," "Gittin' some snow at last," said one and another, and one ventured to "Guess 't we're goin' to git some sleighin' fur Thanksgivin' arter all."

"Wal, I d' know 'baout that," said the oracular Solon Briggs, seating himself in the best place behind the stove, with his elbows on his knees and his hands spread to catch the heat, "I knowed 'at 't was goin' to snow, an' said t' was, an' it does snow, baut I took a notice every sen' I commenced my pilligridge (i wou' say, my pilgigrim) that when the snow comes on ter the graound when it's conjoled, that is, when it's froze, it hain't a goin' t' stay on an' *en*-dure long. Why it is I do' know, but so it is as fur as my observations has went."

Houh!" snorted Lisha, who was rummaging a shelf for a desired last, "Mebby so, but I guess—No. 12, that's it—I guess 't we'll hev sleighin' fur Thanksgivin'. But dum the sleighin', I wish 't I hed a turkey fer Thanksgivin' 's big 's what my boy 't live in the 'Hio tells o' hevin' there, wild ones. tew, 't weighs thirty, forty paound! What ye think o' that?"

"I daoubt it," was Sam Lovel's laconic response, and there was a stir of approval in the audience.

"Daoubt it!" shouted Lisha, "Good airth an' seas! My boy wouldn't lie an aounce on the weight of a elephant. Thirty 'n' forty paound, that's what he writ."

"Wal, I daoubt it," Sam repeated, "jes' think on 't, that's mos' half as much as Cap'n Power's hog weighed, 'n' he was a sollaker, ye know. Turkeys ain't in the habit o' growin' so big."

"Not here, I know they hain't," Lisha admitted.

"No," Solon interrupted," fer it hain't their nart'ral climax. They hain't abregoines here."*

"No," Lisha continued, "'n' then things grows bigger there 'n what they does here. Why, the corn grows so high 't they have to climb up a ladder to bind the stooks, 'n' my boy writ 't the punkins grow'd so big in the 'Hio that a six-foot man stan'in' stret up couldn't tech the top on 'em! What ye think o' that?"

"O shaw! Git aout! Go to grass!" were the comments on this statement.

"Yes, boys, it's sartinly so," Lisha persisted, with the twinkle of his eyes showing through his dim glasses. "I didn't scacely b'lieve it myself, 'n' I sot down 'n' writ George a letter 'n ast him ef that was r'aly so, an' he writ back it sartinly was. A six-foot man couldn't tech the top o' one on 'em—not 'thaout stoopin' jest a lee-tle. Haw! Haw! Haw! Ho!"

"Oh, aw," said Solon. "Yes, George writ ironical, in sportyve jest, as it ware."

"Wal," said Lisha when he had done laughing, and had got the last inside of a great boot that needed tapping, "Le's p'cede to business, 's they say in the leegislatur. We was talkin' 'baout aowls t' other night, wa'n't we? Solon he tole what made 'em hoot, 'n' Jozeff he tole 'baout shootin' one. Hain't ye got nothin' furder concernin' the faowl, Jozeff?"

"I d' know," Joseph Hill responded. "Lemme see. Didn't none on ye never hear how Zene Burnham come it on his father?"

If any one had heard it he made no sign, and Joseph proceeded with his tale.

"Yes, sir, his own father! O, what a darned crutter he was! Ye know the' hain't no spring nigh the ole man's, so they've got a well; puty good water, tew, that is, for water, with a reg'lar ole-fashion sweep—do' know though, mebby they've got in a pump naow. Lemme see, didn't Morrison sell 'm a pump? Seem t' me 't he did. Wal, 't do' make no diffunce, they hed a well sweep, then. One night in the fall—I guess 'twas; yes, know 'twas well 'nough, for fall's the aowliest time o' year—Zene he come tippytoein' int' the haouse 'n' spoke low t' the ole man, an' sez he, 'Father, the's the all-tummuttablest gret hoot aowl a-settin' on the top o' the well sweep! Git the gun an' shoot 'im. You c'n shoot better 'n I can in the dark.' The ole man kinder thought Zene was a-foolin' on 'im, but Zene said for 'im to go an' see for hisself; so the ole man got the gun 'n' 'twas loaded for fox, an' stuck a piece o' white paper ont' the sight, an' crep' aout the back door 'n' raound t' the nawwest corner o' the haouse—lemme see; no, 'twas the naweast—no twa'n't nuther, 't was the nawwest corner—an' peeked raound, 'n' there he seen the aowl, an ole whopper, settin' up there, jes' as demute! An' he drawed up an' took dead aim, he did, 'n' onhitched, 'n' the aowl never stirred! 'Wal, I'll be dummed to dumnation,' sez he, 'What 'n' thunderation 's the motter I didn't kill 'im? You ben drawin' the shot aouten this gun, Zene?' 'Hain't teched the darned ole gun,' sez Zene. 'Yew hit 'im in the head an' stunted 'im; load up an' give 'im 'nuther dost,' sez he. So they went back in an' loaded up agin, an' the ole man crep' aout agin, 'n' there sot the aowl yit, an' the ole man blazed away agin, 'n' by gosh! the aowl never stirred agin! Then the ole man he swore it beat the devil, if twa'n't the devil hisself, but Zene tole him 't he knowed he'd killed him. 'Pull daown the sweep,' sez he, ' 'n' git him. He's sartinly deader 'n hay.' So the ole man sot daown the gun an' begin te pull daown the sweep jes' as keerful, a watchin' the aowl all the time as he come daown, never makin' a motion. When he git him clus to an' was jest agoin' to take a holt on 'im, he seen 't wa'n't nothin' but a all-fired gret big cabbage tied on t' the end of the sweep! My! 't the ole man wa'n't mad! Zene he put er for in t' the haouse 'n' up stairs 'n' int' bed, 'n' by mornin' the ole man hed got good natur'd agin, but ye didn't want to say 'aowl' to him right off."

"Did he hit the cabbage?" was asked by him of an inquiring turn of mind.

"Those 'ere saw-whet aowls," Solon Briggs remarked, clearing his throat, "is a curosity thing—a frik o' natur' comin' daown to her onsignificantest teches—a nart'ral fewnonnymon, so to speak. A puffick aowl, mimus the gretness of the die-mentionest kinds."

"Wal, they be small, but reg'lar aowls," said Sam Lovel, "Cut the head off 'm one 'n' he 'll lack a aounce o' weighin', I shot one on 'em outen a tree jes' to see what he was 'n' he come a floatin' daown julluk a bunch o' feathers."

"An' their vocal voice," put in Solon, "is the fact smile of sharpnin' a saw."

"Guess 't is," said Sam, "egg-zack! Makes me think o' one time 't ole Mist' Van Brunt f'm New York, 's up here a lookin' arter his lumbrin intrus. 'T was long airly 'n the spring 'n' he was ridin' 'long hoss back 'n the evenin', 'n' when he got daown int' Stunny Brook holler, he hearn somebuddy a filin' a sawmill saw, screet er screet, er screet er, 'Some o' them damn maounting Aribs,' sez he, 'hes got a sawmill right here in the hairt o' my woods! Hello you!' he hollered, but the file kep' a goin', screet er screet, er screet! 'You owdacious villing!' sez he, he allus used high duck langwidge, 'You owdacious villing! I'll prosecute ye to the extents o' the law,' sez he, and he rid his hoss int' the woods where he hearn the noise, 'n' his sto'pipe hat ketched on a limb an' tumbled off, 'n his hoss stumbled agin a ruht 'n' throwed him off 'n' then the noise o' filin' stopped, n' then in two, three minutes it begin agin furder off. 'The pirutical scoundril,' sez the ole gentleman, 'hez got his damn sawmill on wheels!' 'n' he got back int' the path an' rid ont' the tarvern 'thaout no hat. When he got there he tole Hamlin (he kep' it then) what he'd hearn, 'n' Hamlin he laughed 'n' sez he, 'Mist' Van Brunt, 't wa'n't nothin' but a saw-whet 't you hearn.' 'A saw-whet!' sez th' old gentleman, 'I know it, but a two-legged saw-whet, sir.' 'Yes,' sez Hamlin, 'two-legged, but he wears feathers stiddy close,' 'n' 'xplained. Then the ole gentleman laughed at hisself, an' treated the hull craowd, a dozen on 'em, to ole Jamaiky sperrits 't he brought with him f'm York—twenty ye'r ole, they said 't was."

"Gosh!" ejaculated Joseph Hill, with a watering mouth, "wish 't I'd a ben there!"

"Ben where?" asked he of the inquiring mind.

"The study of nart'ral hist'ry things," Solon remarked, "is a most stumenduous subjeck, cal'lated to fill the human mind of man with—er—er—ah—"

"Puddin' an' milk," shouted Lisha, as he drove the last peg in the wide sole of the boot, "'n' I 'tend to ha' some an' go to bed."

So saying he took off his battle-scarred apron, and his guests departed and went out of sight with silent footsteps in the dusky whiteness of the snowy night.

* Solon is supposed to have meant aborigines.

ACROSS THE CASCADE MOUNTAINS.

IN the month of June, 1879, the writer and a friend E., feeling that a jaunt of a week or two among the mountains would be both beneficial and enjoyable, concluded to ride through the Snoqualmie Pass, in the Cascade Mountains. Twelve o'clock of June 27 found us on the backs of our steeds, with blankets and grub, guns and fishing tackle, etc., stowed and lashed in various manners about our persons and on our horses. The pass lies almost due east of the city of Seattle, and the summit is about seventy miles distant from that place.

Our road, for the first fourteen miles, lay along the Duwamish River, which flows into the Sound about a mile from Seattle. Three hours' ride through the cool shades of the gigantic firs and cedars and over the green meadows of the settled bottoms, brought us to the little town of Renton, situated at the confluence of Black and Cedar rivers. These two streams are cool and clear, and uniting, flow about two miles when they are joined by White River, and with that stream form the Duwamish. They are model trout streams, swift and gravelly, just small enough to be waded in the summer months, and are filled with myriads of trout. Renton we had visited often on fishing excursions. It is a coal mining town. Although the memories of past triumphs with the pliant rod filled our brains, and the old familiar pools and riffles seemed to gurgle a musical invitation to us to tarry a while, and greet their inhabitants with the deceptive fly, we had "other fish to fry," our journey for the day was only half ended, and we bade farewell to Cedar River, and proceeded on our way.

Leaving the main road at this point, we took the cattle trail which runs through the pass. This road is used to bring over cattle for the Puget Sound market, from the fertile valleys of the Kittitass and Yakima, and presents a singular appearance. The surface, wherever the ground is at all soft, is cut into regular ridges about two feet from summit to summit, with depressions between all the way from six inches to two feet deep. This is caused by the droves of cattle walking over the trail, though I have never been able to understand why it should have this singular effect. A more monotonous way of traveling than riding over these ridges could not easily be imagined. In places they would stretch for a mile at a time, nearly as high as a horse could step. Otherwise our ride was pleasant enough. The road was shaded nearly the entire distance. Every half mile or so, as we rounded a bend in the road, our horses would be startled by the whir of a covey of grouse or pheasant, interrupted in their feeding or wallowing in the dust on the trail. The thought occurred to us that half grown pheasants, broiled, would be a toothsome addition to our bill of fare for supper, so coming to a particularly large covey, E. dismounted, and stepped into the brush, while I sat on a log and held the horses and smoked. In a few minutes I heard the bang, bang, of his gun, and almost immediately afterward two more reports, and he returned with five young pheasants. We tied these to our saddle horns and went on.

Jogging slowly along, over hills and through grassy hollows, between rows of firs and cedars, about sundown the green fields of the Squak Valley came in sight, and stimulated by the thoughts of supper and rest, we spurred up our horses and were soon at the residence of George T., one of the solid farmers of the valley. Our day's journey was ended, and we were twenty-eight miles from Seattle. This little valley is at the head of Squak Lake, and forms the bottom of a small stream which flows into that lake. It contains possibly three thousand acres of fine farming land, and is a veritable garden spot. It is nearly all settled, and the settlers occupy themselves cheifly with hop raising. A ton to the acre is the average yield for vines more than one year old

Arising betimes the next morning we jointed our rods, and rigging a cast each, stepped out to Squak Creek, which runs almost at the door through the meadow. An hour's fishing brought to our pockets (for we had no creels) twenty-seven fine trout, none less than eight inches in length, and the largest weighing two and one half pounds on my pocket scales. Hastily cleaning enough for breakfast, we returned to the house, and turning the fish over to the cook, took towels, and going down to a large pool in the stream, had a glorious bath, and on returning found our fish hot, brown and—but why say delicious?

We were to await the arrival of a friend, S., who was to accompany us. Now an unforeseen difficulty presented itself. E.'s horse, a great raw-boned creature, had been slightly lame during the last few miles of our ride the evening before, and this morning was dead lame, and manifestly unable to proceed further. This was a trial which it was difficult to meet with a philosophical spirit, and we were beginning to feel rather blue over our misfortune, when we were joined by our host, who upon hearing of our trouble sent one of the men out to the pasture, whence he soon returned with one of the finest little horses I ever saw. He soon changed hands, at the price of fifty dollars, and was christened Rex on the spot. The lame horse was left to be sent back to Seattle when he should recover. E. kept his new purchase for four years, and only disposed of him when obliged to do so. He turned out to be one of the best riding animals I ever saw, and thus was the old adage exemplified, "'Tis an ill wind that blows nobody any good."

Some desultory whipping the stream, varied by intervals of smoking on the grass in the bright sunshine, and enlivened by the occasional capture of an exceptionally large trout, brought noon, and within a few minutes of that time S. hove in sight. He was as anxious to rest as we were to start, so lying under the trees, while lunch was preparing, he enlivened us by the recital of an adventure which he had met with on the way out. Coming slowly along the road, he had met a good-sized black bear, which had at first seemed inclined to dispute his passage. He had no firearms, so, riding back on the trail a short distance, he gathered a handful of rocks and setting his horse into a gallop charged the bear and put him to inglorious flight. At 1:30 we started for Falls City, on the banks of the Snoqualmie River, seventeen miles distant. Traveling steadily along at an easy pace, over hills and spurs of the mountains, we reached that place at 6 o'clock, laden with some half dozen pheasants for supper. Falls City is not what the name would imply, as the falls are some six miles distant, and the city is wholly wanting. There were, at the time of our visit, about three houses there, one of which was occupied. The location, however, is pleasant.

The Snoqualmie River, a good-sized stream, flows by, and is joined by Raging River at this place. This stream is small and is easily waded. It is clear and cold, and one of the finest trout streams I ever saw. Coming from the snow-covered mountains, it is raised to a formidable river in the spring by the melting snows, and being so large at that time, it keeps the banks free from trees and brush, and affords many fine places for uninterrupted casts. The Snoqualmie River here is also clear, cold and swift, and is navigable for steamers to this point, except at extreme low water. We camped for the night on the bank of Raging River, and proceeded to make ourselves comfortable. S. went to the only house and returned with hay for the horses and went back afterward for grain, while E. and the writer busied themselves about camp. To get a fire started, cut some cedar boughs for a bed, joint a rod and take a dozen ten-inch trout for supper, was the work of a short time, and inside of an hour from the time we struck camp we were feasting on smoking coffee and trout, garnished with bacon. The night was cloudless, but a little cool, and our blankets were all required to keep us warm. But lulled by the rippling of the water and the music of the frogs, with now and then the hoot of an owl by way of chorus, I soon fell asleep, and was only awakened by the shrill notes of some little songsters in a bush near my head, announcing that another day had begun.

Coffee and pheasant was the bill of fare for breakfast, and by the time the sun had risen we were in the saddle and away. A short level stretch, and we reached the foot of a mighty hill, where we concluded to be merciful to our horses, and took to our feet. After two miles of climbing we were at the top, where a fine panorama of mountain and valley, river and forest awaited us. A short rest and on we went five miles further to Jerry B.'s place, at the lower end of Snoqualmie prairie. This prairie fills a level space between two ranges of hills, and is about eight miles long and three or four in width. The Snoqualmie River is formed in the prairie by the confluence of four forks coming down from different cañons, and a short distance below the foot of the prairie are the celebrated Snoqualmie Falls, which we intended to visit. Stopping at Jerry's house we left our horses and crossing the river in a canoe started for the falls. A brisk walk of a mile and a half brought us within hearing of the falling waters, and pushing through the dense thicket of brush, which is watered by the spray of the falls, we came out about fifty feet down the river from the falls, and about the same distance below the top, on the edge of the vast cauldron into which the waters plunge. From our standpoint we had a fine view. The sheer descent of the entire river is two hundred and eighty-five feet, and when one considers that the river is so large at this point as to be navigable for steamboats nearly to the falls, and is clear as crystal, he can readily imagine the effect, with the sun shining as it was that beautiful morning.

After we had seen and heard enough, we went back up the river, stunned by the noise, and awed by the wonderful display of power we had witnessed. On arriving at the house, we mounted, and after a pleasant ride of five miles through the prairie, arrived at Lucinda G.'s place, on the banks of one of the forks of the river. This lady is something of a local celebrity. She was born and raised in this county, and so far as I know has never been out of the county. She is slightly inclined to *embonpoint*, weighing over three hundred pounds; is about five feet three inches tall, and is withal as jolly and good-natured a lady as could be found in a year's journey. She has a herd of cows that she milks, and which she has trained to a remarkable degree. We witnessed their regular performance at milking time in the evening. She seats herself on a stool in a corner of the barnyard, and the cows, some half dozen in number, come in their regular turn, or as she may direct, calling them by name, to be milked. They seem almost to understand the English language, and obey her every order perfectly and immediately. We stayed here the rest of the day, and all night. In the stream we caught trout in abundance, and E. went on a short hunting expedition, returning with a good supply of grouse. For dessert at our evening meal we had salmon berries and cream. These berries look much like a raspberry, and grow wild in great abundance on all the streams flowing into the Sound. They are yellow and nearly twice as large as a raspberry, and are delicious.

Arising in the morning refreshed and invigorated by a good sleep in the pure mountain air, we set out after a substantial breakfast, and started for the summit, thirty miles distant. Our road now lay along the branch of the river that we had fished in the evening before, and took us into the mountains in earnest. The first five miles after leaving

the valley lay along the top of a steadily ascending ridge called the "Devil's Backbone." This weary ascent made, we met with the river again and crossed it. The road then crossed the river seventeen times in less than that number of miles, but has been remodeled since so as to cut off some fifteen of the crossings. Some of the fords were particularly trying, being deep and swift, with huge bolders sprinkling the bottom of the channel. Our road this day was all up hill and very muddy. In places the horses would sink to the saddle girths, and the day's work was a hard one. Riding was an impossibility, and we walked all the way, towing our horses at the end of a rope. We made only a brief stop for lunch, as we were anxious to get as near the summit as possible before night.

The monotony of the day was varied by nothing of interest. Though we were high up, we could see nothing on account of the tall timber surrounding us on every side. Bears' tracks were plenty, but we did not search for the makers of the tracks. Night coming on, we stopped at the last crossing of the river, five miles from the summit. There was no feed for our wearied animals save leaves, and after a hastily-prepared supper of coffee and bacon, we rolled up in our blankets and slept. Tired as we were, with the first glimpse of day we were up; a repetition of the supper of last evening for breakfast, and we were off. This last five miles to the summit was the hardest of all. The mud seemed to be bottomless and the hills interminable. At the summit we found about a mile of snow, from one to two feet deep. Just before reaching the summit we saw a large gray wolf prowling among the trees, but before we could get a shot at him he had disappeared. There are still a large number of these animals in these mountains, but they are difficult to find, owing to their great cowardice. Arriving at the summit, we took a short rest and a smoke in honor of the event. We were then at an elevation of about 3,500 feet, in the heart of the mountains, with bristling snow-covered peaks all around us.

Starting on the down grade we went a couple of miles, when the road changed as if by magic. On the west side of the summit we had traveled through endless forests of fir and cedar, and the underbrush had been almost impenetrable. Now the scene changed. We were still in the midst of the peaks, but the timber had changed to pine, and the underbrush had disappeared, and in its place was the nutritive bunch grass growing luxuriantly. The mud had disappeared, too, and the road became almost dusty. This change was caused by our reaching the other side of the summit. The warm, humid currents of air, fresh from the Japan Current, which washes the shores of Washington Territory, are laden with moisture, and striking the mountains on the western side, cause an almost tropical growth of vegetation. On the other side, not reached by this damp air, the climate is totally different. It is dry and hot, and as a matter of course, the vegetable growth is modified.

We halted at the first stream we came to, and unsaddling our horses picketed them out, and allowed them to eat their fill. We also attended to our own wants in that line, and after noon started once more, feeling like new men with new animals. Lake Kichelass was to be our stopping place for the night, and following our road through pine groves and beautiful little grassy glades, on a continuous down grade, we were soon at the lake. This region is the paradise of the still-hunter. The vistas under and between the scattered pines give uninterrupted views for hundreds of yards, and the grass affords a fine feeding ground for deer. On the way down to the lake we saw a fine doe and fawn, and could easily have killed them both, but could not have used them, nor carried them out, so we refrained from shooting them, and with feelings of regret mixed with pleasure, that we had been sportsmen enough to resist the temptation, we watched the beautiful creatures as they bounded away. To the grouse we were not so merciful, and a few reports from E.'s breech-loader were enough to insure us a good supper.

Arriving at the lake, we found it was a veritable mountain jewel. It was about four miles long and two wide, and its setting was of snowy peaks on every side. This lake is the reputed home of trout of wonderful size, some of which are said to weigh a sufficient number of pounds to make the famous Rangeley trout ashamed of themselves. We had no means of verifying the stories we had heard, as they can only be caught with a spoon hook by trolling, and we had neither spoon nor canoe. A fly failed to raise them, but in the Yakima River, which has its source in this lake, and which is here a small stream, we found all we wanted, and after picketing our horses and taking a short rest, we jointed our rods and filled the air for the rest of the afternoon with the merry click of the reel. Our count at evening gave us about two hundred, with a three-pound "whopper" to E.'s credit, taken on a royal coachman. Our most killing flies in this portion of the Territory are about as follows: Coachman, royal coachman, Montreal, Canada, Seth Green, professor, both blue and yellow, claret, governor and alder. Brown hackles are of course always good; with a dash of color, as red tail or body, they are especially good. A gaudy fly with red or claret predominating, is best in our larger streams, coming from the snow mountains, while in the smaller streams, close to the Sound, a fly of quieter hue seems to be best.

About sundown an acquaintance from Seattle hove in sight. He was returning from a trip to the Kittitass Valley, and when he came in sight of our camp was meditating on the probable amount of enjoyment he would be able to get out of a night spent alone in that wilderness. He greeted us with a shout of relief, and, if I could judge from the expression of his countenance, was very much relieved at finding us. He spent the night with us and was off early in the morning. Satiated with the sport of the afternoon, we bethought ourselves of supper. Selecting a cosy place for a camp, E. and the writer prepared the meal of trout and grouse, while S. and our guest busied themselves in cutting boughs for bedding, looking after the horses, and getting firewood. After supper we turned in, as we fondly imagined, to sleep. But hardly had darkness settled down on the earth when our ears were saluted by the fiendish yells of what seemed like a thousand coyotes, but what was probably only three or four. The noise they make is almost indescribable to one who has never heard them. A sort of a combination of the howling of a dog and the braying of a jackass, delivered in double quick time, would be as near as I could come to expressing it. These charming beasts kept us awake for some two or three hours. They kept just out of shotgun range, and after two or three ineffectual shots into the darkness, we gave it up in disgust. They finally left our neighborhood, and we settled down to sleep.

After an early breakfast, we bade farewell to Lake Kichelass, and started for the foot of the mountains. Our road followed the general course of the Yakima River through groves of pine, and through little prairies. We occasionally caught glimpses of the river, which grew larger and larger with each view, until at our first crossing it was quite a respectable stream. At this crossing we did not ford, but led our horses across a huge log hewed flat on top. Following down the river, on a continuous down grade, through a beautiful country most of the way, after a thirty mile ride, we came out upon the summit of a bare hill about a thousand feet above the Kittitass Valley. Below us was the level expanse of the valley, traversed by green lines, which marked the course of the streams, and checkered with green and golden wheat fields. Winding through the valley till it was lost to sight in the distance, was our friend the Yakima River, and some fifteen miles away, near the river, was the little town of Ellensburg.

A gentle descent of about five miles brought us to the foot of the hill in the valley, where we found the residence of an old Seattle friend. We dismounted and waited while he had dinner prepared for us, and after partaking of that meal, started for Ellensburg, which we reached after a pleasant ride of two hours between grain fields and meadows. We had now reached the region where prairie chickens abounded, and we flushed great numbers of them, taking in a few on the way. At Ellensburg we put up at the only hotel in the town, and after supper hunted up some friends who were living there.

The town was small. There were at the time of our visit about one hundred inhabitants. It is in the center of the Kittitass Valley, which is, perhaps, the finest and most fertile valley in the Territory. It is a great stock region, and is also a fine wheat country, and great quantities of both are raised. There is no outlet for the valley at present, however. All freight has to be teamed from the Columbia River, nearly one hundred and fifty miles away. The country is quite thickly settled at the present time, though there are still large quantities of Government land open to settlement around the edges of the valley. A railroad across the Cascade Mountains will, in a very few years, become a necessity, and this road, when it is built, will unavoidably follow almost the same route we had traversed, passing through this valley and making it a very rich community with its great resources.

The Yakima River runs close by the town, and the next day we amused ourselves catching salmon trout with bait in the river. They would not take a fly, but would take a baited hook the moment it struck the water, and being very gamy afforded fine sport. They averaged about two pounds in weight, and we kept the sport up until it became monotonous. The next day was our national holiday, and was celebrated in a becoming manner by the people of the valley. Several companies of soldiers were at this time stationed temporarily in the valley, about five miles from town, and thither we went to join in the celebration, which was to be held at the soldiers' camp. A pavilion had been erected, and there were orations, dancing and dinner for all. During the day a summer shower drove us to shelter. I found it in the baker's tent, and spent a pleasant hour talking to him and feasting on his pies and cakes.

We spent the night at Ellensburg, joining in the dance in the evening, and the next day was whiled away alternately with the trout and lounging about the town. In the evening we started for Yakima City, thirty-five miles down the river, having preferred to wait and travel by night, thus avoiding the heat. Riding all night, morning found us at the camp of a friend who had a contract for building a road through the Yakima cañon, about six miles above Yakima City. We yielded to his solicitations to stay a few days with him, and made preparations to camp. Trout were abundant in the river, so were prairie chickens in the fields below the cañon, likewise rattlesnakes on the rocky sides of the cañon, and we spent the next three days in making war on the three, with great success. Rattlesnakes were so abundant here (and these were the first that we had seen) that it was a common thing to kill twenty in a day's fishing or shooting. After three days of this we moved on to Yakima City, a pleasant farming village of three hundred inhabitants. Here we found an itinerant photographer, and improved the opportunity to have our pictures taken. I regret that I cannot present them to the readers of the FOREST AND STREAM.

After a few days stay here, during which time we made numerous raids on the prairie chickens and trout, E. found his time was growing short. So, as I had determined to extend my journey to Walla Walla, I left my companions to return the way we had come, and leaving them my horse to be used as a pack horse on their return, at 6 A. M. of a beautiful morning, set out in a buckboard, in company with the driver and the United States mail for a 130 mile ride to Walla Walla. I reached that busy city after an uneventful ride of two days.

Thus ended one of the most enjoyable trips it has ever fallen to my lot to make. E. and S. returned home over the same route we had come, while I, after a two months' stay in Walla Walla returned home via the Columbia River and Portland, Oregon. ALKI.

PORTLAND Oregon.

Natural History.

A HYBRID SHEEP.

Editor Forest and Stream:

There is now to be seen in this city an interesting hybrid between a male bighorn (*Ovis montana*) and a female domestic sheep (*Ovis aries*). The animal is a male, and is about three years old. In size it is intermediate between the common sheep and the wild species, being about as tall as a large Shropshire ram, but shorter-bodied and with the appearance of much greater strength and activity. Except for the difference in the horns and the fact that it has a rather long tail, this animal resembles an undersized specimen of *O. montana*. The horns are like those of the male bighorn in shape, that is, they do not make a complete turn, but are very much more slender than in that species, being considerably longer in proportion to their thickness at the base. The general color of this specimen is very pale gray or whitish, much the same as that of *Ovis montana* in winter. It thus contrasts strongly with the male bighorn, which is its companion and father. It is wholly without the distinctive markings of the wild species. Its domestic origin on one side is shown by its slender tail, which is about seven inches in length, while that of the adult bighorn, an animal twice as large, is not more than two inches long. The coat of this hybrid, while showing a considerable admixture of wool, consists, like that of the wild species, mainly of coarse, brittle hair, beneath which the wool grows, as on *O. montana*, *Antilocapra* or *Cervus canadensis* in winter. It appears to have somewhat more wool than the wild species. I am inclined to think that the animal has not yet entirely shed its winter pelage, and that when it has got rid of this, it will show no more wool than a wild sheep does in summer, and that it will then resemble this species more closely in color than it does at present.

The history of this specimen, so far as it can be learned, is somewhat as follows: Four years ago the Ernest brothers, cattle men of Wyoming Territory, north of Rawlins, captured a male mountain lamb and tamed it. The same year they had about the ranche a pet female merino lamb, and these two grew up together. From their union this hybrid sprang. The male parent and this specimen were purchased by Wm. F. Cody for his Wild West show, with which they now are.

Although I have, in the past, heard vague reports of the existence of hybrids, similar to the one above described, I have never until now been fortunate enough to see one. Nor do I think that it is known generally that these occur.

GEO. BIRD GRINNELL.

NEW YORK, June 22.

"THE COUESIAN PERIOD?"

Mr. Chairman Section of Avian Anatomy, A. O. U.:

DEAR SIR—Thanking you for your courtesy in "taking cognizance of my communication," I would remark that I regret not to find any reasons for dropping my incognito. I asked a few simple questions. This did not pretend to be a "manly" deed, so I fail to see that it indicates a lack of "manliness" not "to attach my proper name" to them; my name is completely immaterial; any member of the A. O. U. might have put the questions (especially, perhaps, any member of the "Section of Avian Anatomy"), nor do I fully understand why it should be beneath the dignity of the esteemed chairman to be guilty of answering a few harmless questions of a purely technical nature, even if asked by an anonymous questioner; nor why it should be necessary to know the name of the writer who put such questions as: "Is it logical to name an epoch before the epoch has expired? How do you know that the epoch will expire in 1900? Whence comes the privilege of a botanist to name epochs in ornithology? Do you know that Baird, Brewer and Ridgway's grand work is still in course of publication? Are not the leading features of the present American ornithology still 'Bairdian,' and what are the scientific features distinguishing the new epoch from the past?" I say why should it be necessary to know the name of the man asking these questions in order to answer them properly? The esteemed chairman asserts that he is "too old an ornithologist to be caught 'gunning in the dark.'" I do not know your exact age as an ornithologist, but I refuse to expose my proper name as target even for your "gunning" in broad daylight. The questions are of importance, not my name. It is not a matter of persons, but of principles.

I am extremely sorry that you refuse to answer these questions until your curiosity as to the authorship be satisfied, not so much for my information, but for your own sake, as there really are persons so perverse that they insisted upon the article being "unanswerable" in spite of your assertion to the contrary. Of course I refused to listen to such talk.

But my questions are not so purely anonymous as they seem to be. We have an old saying in that part of the country in which I used to live: "Name me your friends, and I will tell you who you are." Now that is what I did, and so you should be able to tell who I am. "Doctor Socrates is my friend, Professor Plato is my friend, but Miss Veritas is more my friend" is the fit translation of the very correct Latin of the very old phrase,

AMICUS SOCRATES, AMICUS PLATO, MAGIS AMICA VERITAS.

WERE WE SUCCESSFUL?

THERE are times when one gets nearer to nature than others, and so there are times when one enjoys throwing aside the cares of business, and can go hunting, boating or fishing with more zest than at others.

All will probably agree with me that the true sportsman is one who while keenly enjoying his sport, engages in it not for the amount of game he may secure, but for the recreation and rest from business his excursions bring him, and who measures his success by the amount of pleasure derived from them. He enjoys a fine bag of game as well as any, but the mere securing it is not the highest and best part of his pleasure. To such an one a day on the water or in the field may be a great success, and he not have a feather or a fin to show for his endeavors. One of the most pleasant and profitable days the writer ever enjoyed in nature's solitudes largely partook of this character. It was a bright warm day in early June as for time, and the locality Spirit Lake, Iowa, and its vicinity. The day's adventures began before sunrise, when, breakfast over, two of us left camp to visit a colony of cormorants that inhabit a small island in Loon Lake, a pretty sheet of water just over the Iowa line in Minnesota, and on the banks of which we were camped. The surroundings were such as make one feel this is a lovely world, in which existence is a joy.

On one side of the lake, for two or three miles, the forest, just putting on its freshest, brightest green, sloped gently down to the lake, while on the other side was the broad prairie, covered by an emerald carpet, coming in places down to the water's edge so gently that one could scarcely distinguish a mile away where prairie ended and water began, and again breaking in bluffs fifty feet high, almost perpendicular from prairie to water. In places here and there along the shore were bright-colored boulders, lifted by nature's forces into symmetrical walls, for this is one of the famous walled lakes of this region. Directly before us was the island, rearing its head fifty or more feet almost sheer from the water, crowned by a clump of trees and bushes growing in such a position that it required no vivid imagination to fancy it some ancient castle, built there where it were easy to defend it from any foe.

The bright waves were rolling directly toward us, driven by a smart breeze, while prairie and forest, water and land, bathed in the bright, warm spring sunshine (for in that latitude June is a spring month), form a picture of such entrancing loveliness that one would seem never to tire of watching it. Nor was it a picture devoid of life—hundreds of cormorants wheeled through the air or swam on the water about their island home; here and there could be seen flocks of wild ducks, smaller birds of various kinds were everywhere, and an occasional splash in the water showed that its finny inhabitants were busy, and we knew from our experience the day before that they were numerous.

Our boat was a canvas skiff, ten feet long and weighing,

oars and all, thirty-five pounds, and would skim over the water like a duck, especially when J. W.'s strong arms were the propelling power, and on this excursion, at least, it was my good fortune to lie in the stern pretending to steer the craft with a bit of a paddle, but really enjoying myself watching nature's panorama as one only can when just released from a long imprisonment at hard labor in a newspaper office.

A close inspection of the cormorants and their island "pied" the romance of that baronial castle very suddenly. The east wall of the island is their nesting place; there were many generations of nest built on nest, probably for hundreds of years, every jutting rock or stunted tree that afforded a foothold being utilized. Not a spear of grass, a weed or a bush attempts to grow on this side, the rocks and clay being kept bare by the birds scrambling among their nests, the only vegetable life being a scattering grove of discouraged-looking ash trees, small in stature, yet presenting the appearance of aged and bent men who had once been larger, but were gradually shrinking up ready to blow away, as the Californians who never claim to die are supposed to do. Candor compels me to say that the home of these birds is the filthiest and worst smelling place I ever saw. Bullheads seem to be their favorite diet. These they bite off just back of the gills, leaving the head to rot, and there were hundreds of them strewn all over the ground.

An hour and a half from the time we started brought us back to camp; the pony was harnessed to the wonderful shay (a veritable rival to the deacon's), our boat and accoutrements loaded, and in ten minutes we were off for Spirit Lake, two or three miles away. This is the most famous fishing place in Iowa, and we would fain try its piscatorial possibilities. Coming to Little Spirit Lake first by the route we took, however, fancy led us to try our luck, thinking to accomplish something, J. W. being intent upon specimens for a collection of shells, while I had an ambition for fish or fowl, and carried gun and tackle.

The boat was soon launched, but finding the water shallow I did not attempt fishing. The ducks wouldn't come near me or let me get near them. A large blue heron waded along the woody shore, almost within gunshot, but the sunshine was warm, the scenery was fine, and it required an effort to get over that "almost" and come within shooting distance, and where was the good of killing it anyhow. It loved life as well as I and was no use to me dead, besides I would probably fail to get it if I tried, so drifted on and left it to its fishing. I watched a muskrat that probably took my boat for a floating log and wanted to get acquainted, and enjoyed myself hugely until a shout from J. W. warned me that he had made the detour of a long arm of the lake and wanted me, or more probably the boat, and I aroused myself and went to him. He had his shells, and I—I had a good time. Spirit Lake was reached long before noon, but so late that it was useless to attempt fishing, as they do not bite so well through the middle of the day. Shell hunting could go on, however, and did, but I not being an adept took myself to the clean sandy beach and laid down in the sunshine to watch the water fowl that came by, the waves that ran from me, an occasional sailboat that scudded along perhaps miles away over the clear, sparkling water, to dream of the stories of this wonderful place and lazily wonder if "Minnie Waukon" was yet watched over by the spirits so feared and respected by the Sioux, and if the ghost of old Inkpedotah ever comes back to visit the place where he made his last stand for the honor of his people, and if he did what would the old chief think of Hotel Orleans, that was visible eight miles away through the hazy air, looming up like some tower-crowned fortress, and to sleep.

Drops of water on my face and a sharp crash of thunder started me, to see J. W. standing near, watching with an amused expression my awakening by the shower that had, while I slept, come up as noiselessly as the Indians I had been dreaming of. Rubber coats were donned and soon the shower passed away, leaving the air purer, the leaves brighter and the water clearer and us ready for sport. Want of space prevents me narrating the successes of that afternoon, but, dear reader, I appeal to you, if this ended the day, were we not successful? W. S. P.

CUNNING AS A FOX.

THE term "cunning as a fox" is by no means an ill-jointed figure of speech. Those who know best the habits of the fox are the most ready to accord to him the well-earned epithet "wily reynard." Not only is he careful of his own reputation and life, but he has a sort of a masonic solicitude for all of his craft. Two incidents, as related by eye-witnesses, will serve well to illustrate this.

Near the boyhood home of one of the writer's old college professors there was a high hill. Its rocky sides were covered with small trees and bushes. Here and there were fissures and small caves, occupied in earlier days by bears and other animals. The larger animals had all retired before the tide of civilization to more desolate solitudes. One old fox seemed to hold undisputed sway of the wily throne. On a smooth surface of the rock near the summit she would remain for hours planning her campaigns and nightly raids on neighboring farmyards, while her young gamboled about her. From her outlook on the hill she could plainly discern the fowl in the yard of our friend, who lived under the shadow of her home, but her cunning (or reason shall I call it?) would not allow the thought of molesting them. She seemed to well understand that she and her young could be seen by the family, hence she reasoned that if fowl disappeared from the yard the theft would be charged upon her and her life would be sought.

Whatever her mental processes, she was never known to molest the farmyards nearest her retreat, but would often go miles from her home and there make havoc at the expense of some poor farmer. Her cunning enabled her to surely retain her home and prolong her days.

Another incident will show the solicitude that foxes have one for another. In Northwestern Maine there lives an old man who has become an expert trapper. One of his chief delights is to distance any other man in the number of foxes captured. While on a vacation last season I chanced one day to fall in with this famous trapper, and had from his lips the following: "I became satisfied years ago that foxes often helped their fellows out of trouble. Not long ago I went out as usual in late autumn and set some traps for foxes. Sickness called me away from home, so that I did not get an opportunity to visit my traps for more than a week. In the mean time there had been a light fall of snow. When I had a leisure half day I shouldered my gun and went out to see what the sport was. My traps were all unmolested except one, that was nowhere to be found. I began to circulate around the place where it had been, taking a wider and wider sweep every time. At length, about a quarter of a mile distant from where it had been placed, in a dense piece of woods, I found my missing trap and a fox in it, fast by the leg. The old fellow was remarkably fresh and active, although he had been in the trap apparently for some days. The snow about him was well trodden down, and lying all around him, within his reach, were an abundance of dead mice. If his fox friends could not release the captive they were determined that he should not starve."

B. S. RIDEOUT.

BIRDS AND THE ELECTRIC LIGHT.—Probably few persons have an idea of the great numbers and varieties of birds which pass and repass us in their migrations in the spring and fall. The flight of these birds occurs largely at night. Lighthouses and lightships have usually been selected as stations for observing these migrations. On starlight nights no birds are seen from these stations, but on dark, rainy or foggy nights they apparently become confused in their flight and dash against the lights, to which they are attracted, with such velocity that large numbers are killed, or, blinded and stunned, flutter to the ground. Tuesday and Wednesday nights were favorable for making these observations about the electric light on the standpipe in this city. Between the hours of 1 and 2 o'clock the birds were seen in swarms about the light, and more than a hundred fell to the ground. A few were caught alive, but the larger part were dead. Prof. Holzinger, of the Normal School, reports the following species among those collected during the past two nights, through the kind offices of Engineers Botham and Higgins, at the water-works, viz.: Catbirds, grosbeaks in variety, scarlet tanagers, golden-crowned thrushes, water thrushes, chestnut-sided warblers, magnolia warblers, Carolina rails, yellow-throated vireos, black and white creepers, Traill's flycatchers, green-crested flycatchers, savanna sparrows, white-throated sparrows, Maryland yellow-throats, black-billed cuckoos, helldivers, indigo birds, and yellow-bellied woodpeckers. On Tuesday night the grosbeaks predominated, and on Wednesday night the rails. Catbirds were numerous on both nights. The birds which breed in this locality were noticeably absent.—*Winona (Minn.) Republican, May 23.*

UTILITY OF THE CROW.—Few writers have allowed the crow any credit as a benefactor; and very few farmers can be found who are willing to add any testimony in behalf of its good character, if it really has any. Not long since, having occasion to bring up the topic of ornithology with a farmer in this section, who is a gentleman of considerable observation, the immediate cause being the killing of a crow upon his farm, he said, that in view of the services the crows rendered him, he did not like to have them shot. Hundreds and thousands of them, he said, roosted in his pine wood all through the winter, and the result was an immense layer of manure, which was carried down when the snow melted and enriched his land more than all the fertilizers he knew of. The fact that few farmers are thus benefited, nullifies a portion of his might-be-inferred good qualities, for these roosting places are few in any one part of the country, since the birds collecting from far and near, pass the winter in one spot, where they can get an abundance of food. This gentlemen also states that in some mysterious manner (still more to the credit of the crow) his cornfields have been unmolested for some years past, and that too in the very face of the fact that the birds are unusually numerous at all times of the year. I would also say that the gentleman spoken of is well acquainted with the birds which frequent his lands, and is able to discriminate between their good and bad habits without prejudice.—C. E. B., (Bridgeton, N. J.).

OWL AND STEEL TRAP.—On the 5th of June, H. S. Spackman, of Delaware, Pike county, Pa., was out looking for crows, when his dog started a large bird from the underbrush. Mr. Spackman was where he could not see the bird distinctly, but, supposing it to be a hawk, fired almost at random. The bird fell, and he thought he heard a peculiar sound as it struck the ground. Judge his astonishment when going to the place he found a great horned owl (*Bubo virginianus*), with a steel trap fast to one of its claws and three links of chain attached to the trap. The trap was of the ordinary kind used in catching mink and muskrats. It was quite rusty, and appeared to have been in its present position for some time. The writer measured the spread of the wings of the owl after it had been skinned and found it three feet ten inches. The bird had been caught just above the first joint of the middle right claw. The joint was considerably worn, as though the trap had swung somewhat as the bird flew and had chafed a ridge in the horny substance of the foot. The owl was in good order when shot and not as an owl that had to live by what it secured with one foot would be expected to be. How many poor mice, etc., must have been surprised by the rattling of a trap and the coming of a claw upon them at one and the same time? Mr. Spackman now uses his trap for rats.—A. H. G.

A RACE FOR LIFE.—It was a sultry afternoon in July. No rain had fallen for weeks and the dead leaves of last year's growth gave loud response to the lightest touch. Seated near each other on the banks of the Weoka Creek were Dr. Rawls and myself attempting to fish, but too languid to even strike at a "bite." Suddenly, to our right and rear, we heard an animated rustling of the dry leaves, and quickly looking around beheld a trout making desperate leaps toward the creek, hotly pursued by a black snake. It was a most exciting race, and so closely contested that it was quite uncertain whether the trout would reach water and safety or the snake win a dinner of fresh meat. Finally by one mighty effort, the trout leaped into the creek, and the snake halting on the bank, with head elevated, peered over, the very picture of blank dismay.—WATOOLA.

FISH AND SNAKES.—*Editor Forest and Stream:* In the issue of June 19 an article entitled "Fish and Snakes" recalls several incidents that have come under the writer's observation during the past thirty years of fishing and sketching. Thirty or forty years ago Ulster county, New York, would, I think, have taken the prize for snakes in variety and number, especially the Lower Esopus, for water snakes, four to six feet long, thick, of a grayish dark color on back, belly light and black, like a chess board. Several years ago, in Wallingford, Conn., I was walking along a brook. In a still portion among the weeds I noticed quite a disturbance in the water. I waited a few moments, when I noticed a snake, in a very lively manner, leave the brook with something in his mouth. I crossed the brook and followed the snake up an inclined bank among the grass. After it had reached some forty feet, I went up and struck it with a stick. It had in its mouth an eel some fifteen inches long. After I had struck the snake he dropped the eel, which immediately made a bee line for the water, swimming rapidly away. This snake was in shape very much like the usual black snake, lithe and active, color—back dark, belly checkered of light and deep orange yellow, like deep orange chrome. Is the variety poisonous?—J. W. [No.]

PAINTED FINCH ON LONG ISLAND.—Bay Ridge, L. I., June 16.—*Editor Forest and Stream:* While watching birds at the tank this morning, I was surprised to see a painted bunting (*Cyanospiza ciris*) among the number. The colors were well pronounced, the bird evidently having reached full plumage. No firearms being at hand, the specimen was unfortunately not secured. Wilson speaks of it as being numerous in Louisiana, and sparingly further north. Dr. Coues does not include it in his New England list.—A. L. TOWNSEND. [The occurrence is well worth recording, as this is entirely out of the bird's usual range. At the same time, the species is a common cage bird and may have escaped from captivity. We have more than once freed specimens and believe that there are one or two records of the bird having been taken in this vicinity.]

Camp Fire Flickerings.

"That reminds me."

120.

CAPTAIN BILL ELDRIGE was just pulling his boat ashore after a duck hunt one day, when a glance across the Absecom meadow showed him the long head and neck of a blue heron. "That's my blue-jimmy," said the Captain as he threw himself on his stomach and began to wriggle toward the game. Every now and then he would raise his head to be sure that his prey was still there, and then another rod of wallowing through the salt mud. At last he comes to an "aim," and raises to his knee—only to find that he had been stalking the flagstaff and pennant of a sloop in Beach Thoroughfare, three miles away! Fact. A.

121.

Years ago, before lucifer matches and the percussion lock were invented, when the old flint lock served the double purpose of "fire kindler" and "meat getter," Jones owned one of these ancient pieces. During his absence, Smith, his neighbor, came to borrow it. Keeping it only a short time he brought it back before Jones's return; and as he hung it on the wooden hooks above the fire-place, told Mrs. J. to be sure and tell Jones it was loaded, as it had no charge in when he took it. Jones returned late at night after Mrs. J. had retired, and went to bed. The next morning he arose before his spouse was awake and prepared to make a fire. Taking the gun down he put the tinder in the pan, pulled back the hammer and pressed the trigger, when boom went the gun. Mrs. J. sprang to a sitting posture in the bed at the report and yelled, "That gun's loaded." Jones carefully looked at the smoking piece, then at a hole made by an ounce ball in the head-board of the bed about six inches above where his wife's head had been, and then drawlingly said, "I'll be durned if it is." PEDAGOG.

122.

Uncle Jim C. was narrating to an appreciative audience some wonderful fish stories, and finally wound up by telling of an immense mud turtle he had caught with hook and line, the largest by far, he was very sure, that had ever been caught in this neck of woods.

Walt W. (the old man's nephew, standing near and listening to all the stories) could stand it no longer.

"Uncle Jim," cried Walt, "I'll bet anything I caught a turtle the other day that will lay right over yours." "How big was it?" said the old man, "go ahead now and tell about it. Show us how large he was" (giving a sly wink at the boys). "All right," says Walt, picking up a stick and proceeding to mark out a circle on the ground about the size of a large washtub. "Pooh! pshaw!" cried Uncle Jim, "you don't call that a large turtle do you? That's a mere terrapin, a nothing; why boy, my turtle was"— "Hold on, Uncle Jim, hold up," yelled Walt, (who saw that he was about to be crushed) "you are in too big a hurry, wait until I make the turtle, that's only his head!" A. T. R.

THE WILD WEST SHOW.

MANY of our readers may imagine that the Wild West Show, now open at the Polo Grounds, 110th street and Fifth avenue, in this city, is an ordinary circus performance, and that the exhibition is in popular parlance a "fraud." This is in no respect true. The men connected with it are, as a rule, just what they are represented to be, and the show gives, as a whole, a graphic picture of life in the Far West as it was a few years since, and no doubt still is in many places. Curiously enough it happens that many of the scouts, cowboys and Indians are men with whom in past years, long before the idea of this show was conceived, we have been associated in the West. Fifteen years ago this very summer we crossed the Nebraska sandhills under the guidance of Major Frank North, the daring white chief of the Pawnees, the hero then and since of many a hard fought battle with the Sioux, Arapahoes and Cheyennes. As Ney was among the Marshals, so Frank North among scouts and Western men, is *le brave des braves*. That same summer we first met Buffalo Bill, then post guide at Fort MacPherson. A year or two later we made a summer hunt after buffalo with the Pawnees, at which time we first met old *La-sharoo touraheh* (Good Chief) and *La-tah-kats tah-kah* (White Eagle), Skeedee chiefs, who are now with this troupe. Later still we stopped for a month or two in different years at the old ranch on the Dismal, where Buck Taylor was cowboy, riding the range and any bucking horses that showed up. Many others of those belonging to the troupe we have known, and the genial ex-sheriff of Platte county will remember having given us a "quiet place to write" some letters to FOREST AND STREAM.

Of the show itself, it may be said that it is in the highest degree realistic. Cody is perhaps the best horseback shot known. Bogardus's skill with the shotgun is familiar to all. The Indian fighting and buffalo hunting are very true to nature, while the roping and riding is superb. The Mexican vaquero Escabel, who rides the bucking mule, is, we think, the best rider we have ever seen, though Buck Taylor, Jim Lawson and others, can "stay with" a horse about as long as any one.

The whole exhibition brings back to our mind so many happy memories of life in the Far West that we confess to a good deal of sympathy with the New York *gamin* who said to his companion: "Say, Johnny, I'd like to take in dis show every day, and twice a day on Sundays."

Game Bag and Gun.

SMOKE MEMORIES.

It makes a difference which end of a match you try to light.

WE had met for planning where to lay out our first day's work on woodcock for the season. The old set were there, Jim, the three Johns, viz., John, Ho-John and Demi-John. Jim said he would be obliged to be absent for one, but a young man from New York, a first-rate shot and all that, would represent him this time; he knew all about him, as a cousin had written regarding him, and in his club he was counted authority on all sports pertaining to dog and gun. Jim also went on to state a good many things in his good-humored way, trying to gain our good will toward the stranger, and as usual, said so much as to make us suspicious that the man was something of a boaster, or not quite up to his professed capabilities.

With the evening train the man arrived and was introduced to us as Mr. Abel Nye, of New York. He had a good lot of luggage for two or three days' shooting; and everything in the sportsman's way had a new, unused look. The gun case wasn't frayed, bauged or rusty; the big sole leather trunk, also new-looking, wasn't our sort; but we greeted the newcomer cordially, and after a short chat he went into supper and we sized him. Jim had gone with him, and so we talked as we thought. John was the landlord, so Ho-John and Demi-John were the sizers. Ho said, "The chap's a fraud." Demi said let us draw him out and see. Agreed. Presently he appeared with Jim, and feeling pretty nicely, as most people do after one of of John's suppers, began to talk of what he had done in the past in the field and what he proposed to do on the morrow. We very soon had his caliber. He opened his gun case showing a brand new piece, and pulled out of an ammunition case from his trunk some new-fangled shells, and discoursed like a drummer over their virtues beyond other kinds; in fact he made an ass of himself.

By and by he went out for a walk with Jim; then we put up the job. John, the landlord, joined us, having come to the conclusion we had during supper from overhearing his conversation. The plot was this: A bet was to be made and dollar events were to be scored, based on his previous statements. First, that he would have first shot and would not get his bird; second, he would have the lowest score for the day's shooting; and third, he would not kill a single bird in the whole day's shoot. While away he had left his ammunition box out upon the table, and we took a corkscrew and drew all the wads which covered the shot and replaced the pellets with pieces of bar soap and then put the wads back again. It was quite a job, but we had finished some time before his return. By and by he dropped in, Jim having bade him good night and gone home. He soon resumed his boastful talk, and this being what we desired, we soon had our bets taken and went to bed contented.

Early in the morning we were out. Nothing could have been more superb—weather, dogs, birds, everything. Fan put up a bird inside of five minutes after we commenced work, and it got up lazy, too, giving Nye a splendid shot. I watched him; he did throw up his gun as though he had had one in his hand before and wasn't a bit excited; fired, and of course scored a miss, and John knocked over the bird on a long shot. Nye seemed surprised, but only remarked, "I expected to lose the first bet." As the day expanded and he missed good shot after another I really pitied the man, for I had long before come to the conclusion that he might be a "good un," even if he did talk too much; and presently I suggested to John the idea of getting a real shot cartridge into Nye's gun so he might kill one bird and win at least one event. But no opportunity offered. However, I saw that old John was getting close to Nye, and then I "smelt rat." Presently up popped a bird and both Nye and John fired and the bird fell, the guns making one detonation, Nye looked at John and not seeing him reload retrieved the bird exultantly, as well he might. I did not know this at the time.

Soon afterward we started for home, and on our arrival laid out the birds on a table in the office, and we all laughed at Nye for losing all events. Much to our surprise, John, the landlord, informed us that Nye had killed a bird, which, of course, we all doubted and asked for proof. Nye, poor fellow, with his ill-luck all day bearing upon him, had forgotten his bird, and going to his shooting coat hanging against the wall, produced a fine woodcock, which he added to the pile on the table. Ho-John picked it up and looked it over, and handed it to me without a word. I looked it over also, and found a bit of soap under one wing firmly imbeded in the flesh. I laid the bird down with the remark, "You can't dodge that, Nye has won one event at least."

After supper we squared bets and smoked our pipes as only tired men can. Presently Nye strolled off to see Jim, and we were free to talk about woodcock being killed by soap. "Soap," we knew, would buy them in and out of season, but killing them with soap was another thing. Landlord John was called to assist us and explained matters, after he found the bets were settled. While we were talking he had slipped out with a woodcock and placed the piece of soap where we found it. The joke was now upon us, and when Nye returned we told him the whole story—why we had put up this job and how much worse we were sold than he. We assisted him in replacing shot for soap, and found the next day he could shoot almost as well as he could boast. REIGNOLDS.

RIFLES FOR SMALL GAME.

IT has never been my good fortune to be so situated that I could do much hunting large game, so my rifle shooting has been confined to target shooting, hunting squirrels and other small game. Squirrel hunting with a small rifle is my favorite sport, and a good rifle for that kind of work is what I have been trying to get for some time. I formerly used a small muzzleloader that was all right in its day but is out of date now, for hunting. The past three or four years I have used a Maynard .35-caliber. It is a good gun, but is too large caliber for small game, so about two months ago I ordered a .22-caliber barrel from the Maynard Company to fit on the same stock as the .35 barrel. Not having much faith in rim-fire cartridges (as they are now made), though I would experiment a little on a central-fire shell for .22-caliber. Made a few brass shells long enough to hold 10 grains of powder, and large enough to take in the bullet full size at base. The bullet I made the same shape as the one used in the .35 caliber, and it weighed 35 grains, one part tin to fifteen of lead; chambered the barrel to fit this shell and bullet. After giving them a thorough trial I was so well satisfied that I have since made all that I need. They shoot very strong and accurate with the sights adjusted for 50 yards. I can use the same sights for any distance up to 75; for 100 yards requires a little elevation, using Hazard's electric powder No. 3. The inclosed target is of 12 consecutive shots at 50 yards, with muzzle rest, without cleaning. The string measures 6⅜ inches. This shows it to be accurate enough for all practical purposes at that distance. At 100 yards the accuracy is about the same in proportion, and that is about as far as a man generally shoots at small game. I write the above for the benefit of sportsmen, and to try and induce manufacturers to make a better class of ammunition for small-caliber rifles. The rim-fire cartridge is good enough for pistols but is no good for rifle shooting. They don't hold powder enough, and the bullet being compressed at the base destroys the accuracy. What we want is a cartridge holding at least 10 grains of powder, and made the same style as the best large-caliber cartridge. Such a one might cost a little more, but most any one would be willing to pay a little extra for a good cartridge. H.

AURORA, Ill., June 10.

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

In re choice of hunting rifles, I would like to add not arguments, but one or two plain statements of facts which may have some bearing upon the points of issue. In a tramp through Colorado and New Mexico, I used a .44-95-280 Sharps "Old Reliable." My pard, Ignotus, clung lovingly to his Winchester, model '76. One day we were up in the "Needles" after mountain sheep. Climbing one of its steep trails, we thought we saw, on the face of the cliff above, indications of a silver "lead." Leaning our rifles against the cliff, we scrambled up and began prospecting. One of us dislodged a stone, which rattled down, struck the guns, and knocked them over the cliff. They fell perhaps fifty feet. When picked up the Sharps showed several dints in the stock and one or two small scratches in the barrel and nothing more. The Winchester had the cock broken short off, the lever jammed so it could not be moved and the magazine bent badly. It had to be sent to Denver and repaired, at a cost of about twenty dollars.

Again: We were out one day, Ignotus one side of a ridge and I the other. Suddenly I heard a furious fusillade from his direction. Climbing hastily to the top of the intervening ridge, I saw him "pumping lead" (pardon O King! but nothing else will express it) into a big cinnamon that was coming at him about a hundred yards away. Every time the Winchester cracked, "Old Ephriam" would snarl, bite the spot where he was struck and keep on. When I spoke to him through the medium of the Sharps, he tumbled over, rolled down the hill, recovered himself and lay moaning. The second shot killed him. Six Winchester bullets hadn't stopped his rush; one Sharps stopped him, the second killed him.

Again: He and I had to go out at once to shoot for meat to supply a camp of twenty men. Deer were tolerably plenty, but wild, and Ignotus could shoot and hunt "all around" me. Results—Winchester nineteen shots and six deer—one struck three times, three struck twice. Sharps, five shots and four deer, none struck twice. "The p'int of these facts lies in the application on 'em." You can draw your own conclusion. Mine is, as regards the Winchester, that "for people that like that kind of a thing, it's about the kind of a thing such people would like." H. P. UFFORD.

DELAWARE, O.

NOTES ON "WOODCRAFT."

Editor Forest and Stream:

"Woodcraft" received, and it is needless to say, that, having once opened it, I didn't lay it down till I had finished it. Bless old "Nessmuk's" soul! How I'd like to grip his hand once and sit on a log and hear him talk. And yet, though I'm probably not half his years, I have the impudence to differ with him on one or two minor points which I will have the boldness to unfold.

First—As to knives. He says, "let their temper be of the best." That, I suppose, means first-class steel. Experience has taught me that a finely tempered steel knife, away from "scissor-grinders" and "sich," is a never ending cause of wrath and objurgation. The first week or two its razor-edge is admirable; then it gets dull and a nick or two comes in it, and your pocket wetstone (if you haven't lost it) is but little use to restore its pristine keenness. The best knife for "outing" purposes that I have ever seen (and I have tried a score or more), is the common, cheap, soft iron, Sheffield butcher knife. The blade is thin and will take as keen an edge as a razor, while, if in cutting it meets a sudden obstruction, the edge bends instead of nicks, and can easily be hammered straight again with a couple of stones. When dull, a razor edge may be given to it with the same labor that would hardly put a polish on the tempered steel knife.

Second—His four pans and camp kettle are good so far as they go, but a pressed tin coffee pot, made just large enough to fit snugly into the kettle, into which are slipped his waterproofed muslin bags of coffee, tea and sugar, and two or three strong tinned teaspoons and a fork or two, will add nothing to bulk, but a few ounces to weight, and a hundred per cent. to convenience and comfort.

Third—"*Chacun a son gout,*" but I wouldn't wear a pair of boots in the woods if I had to go barefoot. Did you ever try to get a pair of wet boots on over a pair of damp socks? "Nuff ced!" A pair of moderately high-low, strong calf skin, buckle shoes, with, for muddy or wet places, a pair of half-leg, thin canvas, three-buckle leggings, are, methinks, the *ne plus ultra* of foot gear.

By the way, may I suggest an addendum for a permanent camp, which I have found, if not "a thing of beauty" yet a "joy forever," where used? It is the "scrap-kettle." On first going into camp, set aside for this purpose your largest camp-kettle, and into it put every day the scraps that would otherwise be thrown away—the heads and feet of small game, giblets of fowls, scraping of soup kettle, cold potatoes, beans, tomatoes, rice, crusts of dry bread, with an occasional onion or red pepper for those that like them. Fish are good therein, if you don't get in too many small bones. Anything eatable, in fact (and some that are not, as marrow-bones, squirrel tails, *et al*) and clean, may go in. Keep the pot setting by a corner of the fire-place all the time, where it will keep warm, adding a little water, and when you want a hurried meal occasionally, dip out a panful, heat up on the coals, and you have a savory mess that will make you smack your lips with gusto.

I wonder if your correspondent who, in a late number, recommended "cheese and potash," has ever tried his own recipe? I did, following out his instructions carefully, with weighed and measured ingredients. Results, about a quart of thin, greasy fluid, which wouldn't "set like a custard" for any consideration, and a mass of indigestible, straw-colored gutta percha stuff, as edible as so much raw-hide. The family turned up their noses at the mess, and voted "cheese and potash" a fraud and a snare. Will your correspondent "rise and explain?" H. P. UFFORD.

DELAWARE, O.

WILDFOWL IN NEW BRUNSWICK.

Editor Forest and Stream:

In looking over some back numbers to-day I saw in your issue of April 24 a communication signed "C.," in which he says he lives on the Straits of Northumberland, and never saw the time when 100 birds could be bagged in a day. The statement may be true, but I doubt if your readers are particularly interested in what such correspondents have not seen. I have lived on the same shores all my life, and I can name several gunners who during the past spring have repeatedly come ashore with a bag of over a hundred of geese, brant and ducks, not "including coots," and the shooting was done from boats. True, an occasional tenderfoot, lacking the courage to try the boats, sets up on the board ice with decoys, but by far the greater part of the gunners use the boats mentioned.

During the week when "C." said the largest score was five geese and one duck, three different gunners brought in bags ranging from forty-three to sixty. If you would like bottom facts about this matter inquire of Mr. Tom Trenholm or J. O. C. Goodwin, veteran gunners of Cape Lormentine, who have killed thousands of shore birds where "C.," judging from his own statements, has killed units.

CAPE LORMENTINE, N. B. D.

THE TURTLE LAKE CLUB.

THE Turtle Lake Shooting Club was incorporated a few weeks since under the State laws. This is the organization referred to several months since in FOREST AND STREAM as having secured the shooting and fishing privileges of one of the finest deer countries of Northern Michigan. The club starts with a paid in capital of $2,000; membership limited to twenty, and its headquarters are at Detroit, Mich. I know of no finer deer and ruffed grouse shooting than can be found in the domain controlled by the club, while the lake upon which their camps are situated swarms with black bass and muscallonge. The officers and members are: E. H. Gillman, President; W. C. Colburn, Vice-President; Frank W. Eddy, Secretary and Treasurer; Fred. A. Baker, Judge J. J. Speed, Howard Barnes, William P. Holliday, H. W. Avery, Directors; all of the foregoing are of Detroit; other members are—Col. Morrison, of Locke Haven, Pa.; M. S. Colburn, Factory Point, Vt.; J. J. Parris, Bennington, Vt.; Harry S. New, Indianapolis, Ind.; Col. J. E. Pepper, Lexington, Ky.; J. J. Gore, Chicago, Ill.; Ira A. Paine, Providence, R. I., with several other gentlemen whose names I have not by me.

Such organizations ordinarily call for a simple notice, but this is, I believe, the pioneer in an attempt to preserve game right in the heart of a wilderness where game laws are nearly unheard of, much less ever observed. The club have already sent a steward or rather a game keeper to Turtle Lake. Last summer over one hundred deer were killed in the red coat at that point and it is hoped that such illegal slaughter can be guarded against this season. The gamekeeper reports deer as very numerous. He also writes that the bass fishing is simply superb in Turtle Lake. Several bass he caught measured twenty-one inches in length.

I heard of a mean performance the other day. A few days since Mr. Wm. Fisher, a jeweler of Detroit, sat in his store talking with several gunners, and in the midst of the conversation Mr. F. condemned in round terms the shooting of woodcock during the close season. All present coincided or at least seemed to in deprecating the unholy practice. But the very next morning, upon Mr. Fisher's opening the door of his store, he found attached to the knob, six heads of as many woodcock, four of them having soft bills. And the end is not yet, for if the miserable, spiteful, sneaking hypocrite, who killed the brood and hung the trophies on that door, can be discovered, he will be punished roundly. "Bad cess" to him any way.

The Terra Cotta Club took a trip to Monroe, Mich., last Thursday, upon the invitation of Hon. Harry A. Conant. The trip was made upon the steam yacht Lillie, and while at Monroe the club had their regular shoot. Mr. Geo. Avery won the medal with a score of fourteen out of twenty. Mr. Gaylord took second, breaking thirteen clay-pigeons.

Mr. Mershon's account of "Lassoing a Man Eater," in last week's FOREST AND STREAM, was capital. He also has a good story about a skunk eater, but I don't believe that he can write this last tale nearly as graphically as he can act it and speak it. I wish he could, however, and the readers of FOREST AND STREAM would laugh. DELTA.

DETROIT, June 21, 1884.

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

I have been much amused and some instructed by the various articles upon shotguns in your paper. My instruction is mainly in the lack of experimental knowledge with most of the writers. But a very few know what they are writing about. General Verity is as quotable for facts as most of them.

Every one knows who knows anything of mechanical work, that a piece of metal—iron, steel or brass—fashioned by a good machine, just as parts of watches, pistols and sewing machines are, is better in every respect of fit, finish and durability than hand-made pieces, and lower in price.

Take another fact, that two barrels of the same size and finish of bore, will shoot alike, whether made of iron, steel or brass. Any one can, or should see plainly, that an American gun of low price cannot be excelled in durability and execution, by any high-priced gun of home or foreign make.

In all gun trials in this or in other countries, by government tests, no account is made of price or quality of the arm, or of the kind of metal in the barrel.

A trial of sporting guns of 12 gauge, of 28 and 30 inches, cylindrical and chokebore, in England, tested for speed of shot by electrical apparatus and proportional velocities by Bushworth's tables, shows the velocity of shot at the muzzle and at different distances from the muzzle. It gives also the distance from the muzzle, where the shot have one-half the force—striking energy—they had when they left the muzzle. No. 8 shot at 30 yards and No. 5 shot at 70 yards have only one-half the force they had on leaving the muzzle. The

smaller the shot the more rapid the diminution of force. Chokebores did not uniformly excel plain cylinders. One chokebore, which was almost a perfect cylinder in addition to the choke, excelled. One good cylinder of 28 inches excelled several chokebores of 30 inches. Too little is known of the shape of the inside of our gun barrels.

Twenty-five years ago I stood on a yacht's deck with seven other shooters. We were at anchor, resting after a coot shoot. A measured line of fifty yards was attached to a wounded loon and he swam out to its length. We had muzzleloaders, double barrel, of various sizes and bores, 8 to 15 pounds and from 12 to 8-gauge. All were anxious for the first shot; all had their chance. Each one loaded to suit his fancy, as had been his habit, for coots. Every one of the sixteen barrels was discharged; the head and neck of the loon appeared well covered every time, but the loon was apparently untouched. The gunners were chagrined and astonished. The loon was drawn in to 25 yards. The sixteen barrels were discharged at him in succession as before, and the loon was unscathed. At 15 yards the first shot dispatched him. The gunners of that party learned something. Bear in mind that in the head and neck of a loon, not over the size of one's finger presented itself for shot. Thirty to 40 yards is as far as sea fowl are usually successfully killed. I have seen occasionally a fowl killed at 75 or more yards, but always with a shot through the soft part of his head or neck.

Ask any one of those gunners what was the force of the recoil of their guns on their shoulder, in pounds, with 3 drams and 1 ounce in 8-pound gun, or 5 drams and 1¼ ounces in 12-pound gun, and he would say 10 to 15 pounds. By experiment it is 75 pounds in light guns and 100 to 125 pounds in heavy guns 10 to 15 pounds. Some gunners have an idea that gun barrels can be constructed by some shrewd makers of such a form at the breech that when powder explodes in them, it will manifest force only in propelling shot and have no recoil. If gunners would consider the propelling force requisite to drive shot 50 yards through a duck, they would readily conceive, as the force of exploding powder is equal in every direction, that equal force must be exerted against the shoulder. Witness the pains taken to check the great recoil in heavy ordnance. AUSTIN.

MAINE.

THE SHOVEL HUNTERS.—A short time ago while out with dog and gun I met a couple of that peculiar type of "true sportsmen" who, instead of glorying in the skillful use of a modern gun, go armed with impiements which require less skill to handle and cost less money, namely, a pick and shovel. They had just finished a forenoon's job, and the one stood holding a poor kicking "cotton tail" while No. 2 cut its throat. As the rabbit was supposed to be breathing about his last breath, No. 2 suggested to "throw him down and let the dog smell 'im." This was done as soon as suggested, but the dog never "smelled 'im," as the rabbit had just enough life left to run a short distance and into another hole.—BERGOLD.

LONG ISLAND GAME PROTECTION FUND.—New York, June 20.—*Editor Forest and Stream:* We have received from the Brooklyn Gun Club the sum of $25, to be used for employing detectives to secure the conviction of game law breakers on Long Island. We have also received for the same purpose $25 from the Richmond County Game and Fish Protective Association.—FRANCIS ENDICOTT AND GUSTAVE WALTER.

PENNSYLVANIA.—Mount Pleasant, June 19.—I hear Bob White in every direction. Bob wintered well here, partially owing to the fact that some farmers were unable to husk all their corn till spring. Fall shooting will certainly be grand. Woodcock seem to be plentiful also.—FARMER.

NO RUFFED GROUSE IN AUGUST.—New York, June 19.—*Editor Forest and Stream:* I see Mr. Frank Kent, of Monticello, N. Y., advertises on page 405 of your paper, to furnish partridge shooting in August. How does he manage it? Where is the game constable?—W. HOLBERTON.

NEW YORK WOODCOCK.—*The general open season for woodcock in this State has not been altered. It will begin August 1. This applies to Long Island as well.*

Sea and River Fishing.

CAMPS OF THE KINGFISHERS.

Black Lake, Michigan.—VII.

WE found the other boys enjoying their after-lunch pipes in the shade of some bushes not far from the ledge of rocks and pulled in to see "what luck." Here another serious backset struck us in the shape of a distracting string of fish—mostly pickerel—tied to each boat, which the boys had taken coming up and along the rocky shore near the Rocks, and from some of the remarks fired at us we concluded that this must be our day to cut bait, not to fish. Taking a path leading through the bushes and swamp, we started to find a spring that the Deacon said he had discovered a few rods back from the beach near an old deserted house, which we had passed shortly after leaving the Frenchman's. Dick remarking as he took the lead, tin cup in hand, "Must be somethin's goin' to happen to the Deacon when he takes to huntin' up springs and cultivatin' a taste for water."

We found the spring, boiling up out of an old barrel sunk in the marshy ground at the foot of the low hill, a good strong stream, and for the benefit of any thirsty soul who may hereafter be fishing in the vicinity of the Rocks, I will say it is the sweetest and coldest water to be found anywhere around the lake. The waters of Black Lake are several degrees higher in temperature than the waters of any of the lakes in the Six Lakes region, beginning at Fountain Lake—the upper one of the intermediate chain—and having their outlet at Elk Rapids into Grand Traverse Bay on the other side of the State, and the streams and springs running into it are not nearly as cold and pure as those of the intermediate region, but this particular one is an exception, and it is certainly worth a two miles' pull in a boat at any time to get a drink of its waters.

[Anent springs, streams, and water in general, I am moved to make another digression. My letters in FOREST AND STREAM two years ago appeared to afford right smart amusement to a few of the brethren on account of the frequent reference in them to "clear streams, cold springs, brooks," etc., and I just want to say here that, should any of them hereafter be seized with a raging desire to have a little sport over the clearness and coldness of the waters I may take a notion to write about, they will be wasting their time, for I am a water bird, in camp and out of it; as Old Ben would say, "From my topknot, plumb down to the eends o' my toes," and I am going to talk, drink and write water perfectly regardless of any little pleasantries that may be indulged in at my expense, and I want every brother of the rod who goes to these North Woods for recreation, sport and health to know where all the good springs and streams are at which I have cooled my thrapple, for one-half the comfort and satisfaction of a trip to the wilds of North Michigan is to be had in drinking of the waters of its glorious springs and streams, unsurpassed as they are anywhere for their sweetness, coldness and purity. As to "camp drinks," I concede the right to every man to drink anything that seems best to him, but my voice will always be against "beverages in camp," for they are a fruitful cause of ill-feeling, quarrels, broken friendships and accidents. They work harm a score of times where they do good not once. Let us older fellows of the gentle craft set an example to the younger generation of anglers coming after us, by convincing them by our practice that spirits and fishing do not necessarily go together; that it only makes the load heavier to balance a lunch in one pocket with a bottle in the other. Let us teach them to shun all "beverages," and encourage them, like our Deacon, to "cultivate a taste for water." Here the digression ends, and I trust it may lead many of the bibulous brethren into a "train of reflection" before the fit seizes them to air their cleverness in an attempt to make sport of pure cold water as a beverage, or hold up to ridicule those that prefer the odors of the virgin woods to the assortment of smells in a brewery.]

Back in our boat again Dick and I felt it was high time to save our reputations from total wreck by taking a fish or two; and with this end in view we left the boys to their pipes and pulled along shore to the ledge where we were sure to find a bass or pickerel waiting to be snatched out of his native element without as much as a chance to say good-bye to his nearest neighbors. We felt we were capable of performing this feat with neatness and dispatch, would some fish of convenient size only give us the opportunity, but after pulling our boat up on the rocky shore and casting for half an hour over twenty yards of water in front and to either side, we scored another backset by failing to raise a fin. Then we set our rods—a sure sign we were getting lazy—and picking out a soft place among the rough and jagged rocks near the foot of the low cliff a few feet back of us, we seated ourselves about twenty yards apart to study the case over and wait for a "bite."

For lack of something better to do while waiting for the long-expected nibble, I removed a good sized flat stone from its resting place in the clay, and in so doing left a tiny stream trickling from the rocks above soon formed a little "cool spring," which afterward fully paid for the labor expended in scooping it out. Stretched out there on the rocks waiting for the spring to clear I fell into a doze, out of which I was presently aroused by the sharp chatter of a kingfisher winding up his reel, and looking sleepily up without changing position, there sat the emblem of our club balancing himself on a limb of a projecting bush that found a precarious hold for its roots in a fissure in the rocks over my head.

He was not more than four or five feet from me, but he was too busy trying to stop the swaying of the limb on which he sat to notice me at first, when, however, the limb stopped vibrating, he peered inquisitively down at me with his keen eyes, wondering, no doubt, how that curiously-shaped old stone had found its way there since his last fishing excursion to this, his favorite preserve.

I remained perfectly motionless and he finally seemed to be satisfied in his mind that I was one of the original stones included in the preëmption claim, as after a careful scrutiny he settled down on his perch, meditating, I had a notion, on the chances of going supperless to roost, and on the "onsatisfyin' natur'" of fish as a regular diet, especially when the demand exceeded the supply—exactly Dick's case and mine for that day as near as I could figure it out. Suddenly the emblem straightened up and unwound a few yards of line, with the familiar chatter that greets the angler everywhere in his wanderings where fish are and comfort is to be had with the rod.

Then he stretched out one leg behind, as though to kick the cramps out of it, and then a like movement was made with the other one, clearly a case of "rheumatiz" brought on by too much dabbling in the water.

Hitching along the limb an inch or two, he raised his tail with a preliminary flourish and made a profound bow in Dick's direction, this unaccountable mark of politeness being repeated at short and regular intervals for at least ten minutes.

Maybe he had just swallowed a young perch and the spines of the dorsal "wus a trublin' ov his innards," or a fishbone had lodged crosswise in his throat and he was humping himself to get it down, and it may have been a habit of his nature, like the funny tilting up and down of the little "teeter'snipe" one sees wherever he goes a fishing.

When this curious and ludicrous performance had continued until I was nigh bursting with smothered laughter, I ended it by suddenly jerking my hat from my head and swinging it up near where he grasped the limb. Whish! Like a flash he went upward, rheumatics, fishbones and all, and shot out over the water, too badly scared to chatter till he was a hundred yards away, and the last I saw of him was a devious, blue streak of chatter, growing fainter in the distance, going down the lake in the direction of our camp.

That "emblem," I venture, did not 'light on another twig or dead branch that day, nor for a week without first making a careful survey of the adjacent surroundings to satisfy himself there were no odd-shaped rocks lying around loose not indigenous to the soil that were liable to blow up and scare him baldheaded.

The interest I had taken in watching the kingfisher knocked all the doze out of me, and getting the rifle from the boat I found a place nearby where I, with some labor, climbed the rocky face of the ledge and stood on top, where I got a very fine view of the lake, which fully repaid me for an abraded shin that came in contact with a sharp stone just at the hardest point of the climb. I took the rifle along because one cannot always know what manner of varmint he may meet in these woods, and a breechloading rifle is a famous implement to have about you if caught in a tight place without having carefully mapped out your line of retreat beforehand. I might chance on a bear in my contemplated ramble in the woods, and we, the bear and I, might come to a misunderstanding about the right of way, and then the breechloader would be a strong argument on my side. The misunderstanding might bring on a difficulty, and as I was not in first-class practice on bears the result would, like as not, prove I would be knocked out in the first inning, in which case Dick's verdict as coroner and jury would have been carried back to the boys in about this shape, "served the durned fool right for not stickin' to his fish-pole."

I struck back up the ridge into a burnt district of a few acres, but the traveling was so hard that by the time I reached the woods lying between the head of the lake and the State road, I had enough of it and turned off the right and came out after a while on the lake shore near Merrill's landing. I saw no bear sign nor anything larger than a ground squirrel in the shape of game. I met an old acquaintance, however, from "Eel River, Eel River," as he persisted in telling me every few rods, in the person of a "sassy" bluejay that followed me for a quarter of a mile, scolding and telling me in the plainest of jay language just what he thought of me, until I was glad when he got so hoarse he had to hie away to the lake to wet his whistle and smooth his ruffled feathers. When I came out to the lake and started along the beach back to the rocks, I was reminded that my brief bear hunt was another failure as far as it had a bear-ing on a supply of meat for the camp, but I reasoned it was best perhaps as it turned out, for had I succeeded in killing a bear, life would have been a burden for the next week by reason of the congratulations and bear stories Merrill and the boys would have overwhelmed me with, and even now, as I write this, I feel profoundly grateful to any bear that may have been loitering in the vicinity that day, that he or she, as the case may have been, did not come within certain-death range of the breechloader.

During my absence Dick, with a streak of selfishness not usual with him, had selected the very softest bed in the rocks along the shore, and when I came on him he was lying curled up in the hot sun sound asleep and snoring with a vehemence that threatened to loosen the roots of the few stunted cedars and bushes growing along the brow of the low cliff overlooking the water some thirty feet directly above him. Rousing him up, we reeled in our lines to find the frogs on the hooks dead and stiff without a mark to show that they had been disturbed. Another backset.

After a hearty drink at the little spring which was now as clear as crystal, we got into the boat and pulled straight out from shore over sixty or seventy yards of rocky bottom that to a river angler would have indicated a "powerful good place for bass," but all signs had failed us that day and we were not much disappointed at not taking a fish here, although the other boys had at this very spot taken their best bass during the forenoon.

The bottom from the ledge nearly around to the mouth of the Rainy is rocky and free from grass and weeds, the water ranging in depth from one to ten and fifteen feet for a hundred yards or more out from the shore, and I am sure it must be as Merrill said, a famous place for bass in the fall.

Stizosteth—(life is too short to waste on this word)—pike-perch also flourish in this lake, albeit those we saw were not in a very flourishing condition. We counted five, floating along this rocky shore, dead and bloated, that were from a foot and a half to two feet long, but an examination disclosed no spear wounds or marks that might suggest they han been tampering with the fighting end of a maskalonge, or anything that would indicate the manner of their taking off, and as we were more interested just then in live fish than dead ones we spent little time in conjectures over them.

As the sun was now getting well down and our poor luck appearing to stick to us like a "pheasant burr," Dick suggested that we "make a straight shoot for camp and not squander our time in follerin' the synopsis of the shore"—a suggestion that furnished an immediate excuse for me to lean over the side of the boat to again water the frogs and prevent an explosion.

Synopsis was a good word, but it fell short a couple of syllable of the word Dick was reaching for; however, it answered his purpose just as well as though it were a yard long, and the satisfied expression of his countenance as he took a puff or two at his pipe said plainly, "Old Webster mustn't come foolin' round me with his big dictionary, for if he does I'll floor him every time."

We finally decided to "foller the synopsis" and turning shoreward we fished along the streak of grass clear down to camp with—let me record it truthfully and without hunting around for worn out excuses usually taken to camp in cases of this kind—exactly the same results that had attended us the whole day; but Dick and I were in the best of humor and at peace with ourselves and all the earth, for we had enjoyed the lovely July day and the scenery around the lake thoroughly, and we felt that, as a lamented brother of the rod has said, "it is not all of fishing to fish."

We however put it down in our mental log book as "chronicles of an unsuccessful day," (FOREST AND STREAM will please give us credit) for we had fished over fifteen or eighteen miles of good looking water without a solitary nibble, a day's experience so unusual that I was not surprised when Old Knots said that evening as we surrounded the camp-fire, "Boys, Old Hickory has forgotton how to fish; his right hand has lost its cunning, and I move we break up his rods and start him on the back track for home." KINGFISHER.

[TO BE CONTINUED.]

TIM AND SEVEN PONDS.

THE suggestion in your issue of June 12 that one may be undecided in selecting among the many advertised fishing grounds, prompts me to tell what I know about Tim Pond and Seven Ponds, having just returned from that locality, where I spent two weeks. I wanted trout fishing, and though I fully appreciate the satisfaction of taking and showing a seven-pound Rangeley trout, I did not want him this year. I wanted fly-fishing, and got it to a degree far exceeding all promises or my own anticipation. And I am fully convinced that this locality is the best in this country for my sport.

The region of the Dead River is yet in its infancy, and I would feel like wishing it kept a secret, but believe that under the influence of the present degree of intelligence of the people, the popularity of fish protection and observance of judicious laws, that it will not, like Rangeley, ever become so depleted as to require restocking.

You will here find all and more than is promised by Kennedy Smith, who has done so much to make these ponds accessible. The buckboard roads through the forest have been cleared of all obstructions since the gale of last year; and as evidence of their condition, I will say I made the distance of thirteen miles between camps on foot, with my pack, in four and a quarter hours, and had my morning and evening fishing.

The water of the ponds is as clear as a mountain spring. The trout rise to the fly in all the waters, and in all my experience I never saw their equal in fighting qualities. They take the fly with a leap clear of the surface and contest their final capture like a black bass. I need not tell any angler that such a trout is fat and solid, and when served on the table opens red as a salmon and is the finest fish in the world.

The camps are built to accommodate parties of from two to ten, are made convenient and comfortable with stoves and mosquito nettings, so one can rest undisturbed till late in the morning or rise at 4 A. M. and land twenty-five pounds of trout before breakfast. The table is served with sufficient variety and the food well cooked. The scenery and surroundings are peculiar and enchanting. Sitting in your boat on one pond you can count forty-two cone-shaped peaks of hills and mountains around you, which are covered to the summit with a dense dark growth of spruce, sprinkled and dotted with the bright leaves of the birch, the two contrasting colors producing an effect seldom surpassed in nature or art. I was more than satisfied with my whole trip and its results, and crave pardon if I am too enthusiastic over Tim Pond and Seven Ponds. M.

BROMFIELD House, Boston, June 16.

FISHING IN TEXAS WATERS.

SOME two years ago my brother, stationed at Colorado, Mitchell county, Tex.—at that time the terminal station of the Texas Pacific Railroad—wrote for me to make him a visit, and, knowing my fondness for fishing, he advised me to bring my tackle with me, as all the streams in his vicinity were full of fish. I landed in Colorado City, as it was then called, on the first passenger train ever run into the town. The car of Major Stocking, the terminal agent of the railroad, and that of his genial, jovial cashier, Charlie Harris, made part of our train. They were leaving Abeline to make Colorado their headquarters. The ride from Abeline was a long and tedious one, owing to the many construction trains, loaded with material for the railroad, on the track and on nearly all the side tracks. I was invited into the cashier's car, and then the time passed more quickly and decidedly more pleasantly, as my kind host was well fixed. He had a good bed, soft chairs, a piano and guitar, and was no mean performer and singer. Add to the above plenty of cigars and tobacco, and I know you will say this was good enough even for a fisherman.

After a day well spent in witnessing the rapid extension of the railroad toward El Paso, we formed a small party to try the fishing in Morgan Creek, some six miles to the south, and on the west side of the Colorado River, into which it ran. We had a pleasant ride over a fine rolling prairie, covered with good grass and small mesquite trees. Our guns were popping away at jack rabbits, quail, and cunning little prairie dogs which remained just a second in sight, and then with an elevation and quivering of their tails, descended into their holes. As we neared Morgan Creek, I descended from the wagon to find a good place to try our luck, and came upon a most inviting spot, a pool, apparently six or eight feet deep, and extending some three hundred feet up and down the stream. I quickly had a line out, and baiting a good-sized bass hook with some bird entrails, I made a cast. My line had just straightened out when my cork was under in vigorous style, and when I gave the pull I found I had hooked a good-sized fish of some kind. Up and down the pool he rushed. I let him have plenty of line, then would reel in till he was off again. You may imagine the excitement and delight of the party. They were soon at my side. When my fish was tired out, I reeled him to the bank, a cotton hook was used in place of a landing net, and my catch proved to be a four-pound blue cat.

Now all was excitement. Every line in the party was soon at work, and all were kept busy. Dinner was eaten very hurriedly and we went back to our lines again. Our catch was about one hundred pounds of cat, buffalo, and some few drum. All anglers who have fished in southern streams are familiar with this fish. It bites quickly and greedily, is easily hooked, and soon tired out and brought to hand. On our return, I was telling Mr. Coleman (lately of your street department) about seeing beaver dams on this little creek, and all the trees around barked by them. He insisted I was mistaken, as he thought it too far south for beaver. Who was right?

We were all so much pleased with our success, and enjoyed the fishing, the shooting and the ride so much that two days afterward Charlie Harris organized a party for another trip; this time our objective point was Champlain Creek, some nine miles south of Colorado, and emptying into the Colorado River on the east. After a charming ride, similar in every respect to the first, we reached Champlain Creek near the ranch of Mr. West. As it was near night we selected a place for camp a few hundred yards below this ranch. We sent our driver up to the house to see what he could buy for our table, and upon his return we found the traditional story of "no milk or butter in Texas" was not true, as he brought us a bucket of good rich milk, one of buttermilk, and three pounds of sweet, well-made butter. This was a rich treat for us, and with some topknot quail killed on the road, made us a royal supper. For once in camp, I saw coffee at a discount. While our cook was getting supper for us, I had commenced fishing, expecting the fish to bite as freely as in Morgan Creek, but to the great surprise of all, we did not get a nibble, so leaving our lines set we went to supper. Returning to my line after supper I found I had made a catch, and drawing in, found I had an eel about a yard long. From then till bed time, our party caught seven eels but not a bite from anything else.

We were up early the next morning to find plenty of cream on our milk—I made a cream punch, which all pronounced ambrosial. After a good breakfast, we began to fish in earnest, using liver and bird entrails for bait. We tried every pool down the creek to its junction with the Colorado, but not a bite rewarded our efforts. We found the stream similiar to Morgan Creek, full of deep pools, varying in depth and length, and having the appearance of good fishing places. We heard afterward that some pothunters had been using dynamite there.

Just before reaching the mouth of the stream and in sight of the Colorado River, I witnessed a battle royal between two large hawks. They were on a sandbar, fighting away, all covered with blood and dirt, and looked as if they might have been at it for some time. Our approach did not frighten them in the least, and they kept on striking and clawing each other until we shot them. I never saw so game a battle.

We were now on the banks of the Colorado River, where Mr. E. found a deep pool, at the side of which were two large sandstone boulders, one perpendicular and one horizontal, resembling the back and seat of a chair. The bottom one was about ten feet square on top, and from this we had fine fishing, the cat biting as freely and greedily as they did in Morgan Creek. We were greatly annoyed by the detestable garfish—they would seize our bait, but a few flops and the hook was out of their hard, miserable bills. About 4 o'clock we came to a deep pool, with sandstone boulders at each end and a hard sandy bottom, where we all enjoyed a fine salt bath. I neglected to say in our preparations for this trip we had to take with us a keg of water, as the waters in Champlain Creek and in the Colorado River are so salty we could not use them.

We now had our 100 pounds of catfish, ranging in size from one to four pounds, and a few eels. On our return we got a shot at some antelope, but they were too far off. Shortly after, I saw a young rabbitt dancing around on his hind legs in a circle, and when I spoke of it Charley H. at once said it was being charmed by a snake, and so we found it as we drove up. A shot from our Winchester cut the snake in two, when the rabbit sank to the ground, exhausted. We found it half covered with slime, as if the snake had been preparing for his meal.

I may be wrong in calling the birds spoken of above quail; they were exactly like our Bob White, only larger, and all had the "topknot." I read in the FOREST AND STREAM of Jan. 31 an article headed "California Quail in Confinement," which spoke of a pair sent to Texas from New Mexico. Now, if they are the same, I saw hundreds of them in Mitchell county, Texas.

At this, the close of my letter, I wish to give my testimony to the kindness I received everywhere in Texas. The passengers on the train, from Dallas out and return, would compare favorably with the people met on any train from Maine to California, and the much-abused cowboy I found kind and ready to help us. A heavy blanket, forced on me by one of them at Colorado City, added much to my comfort on our little excursion to Champlain Creek. JAY.

[There are several species of topknotted quail in Western Texas. The Gamble's partridge is perhaps the one referred to by our correspondent. This resembles in most respects the California valley quail, having the club-shaped, forward-directed plumes. The Massena quail and the scaled partridge have a full crest more like Bob White's.]

TROUT IN MAINE.

THE Maine trout fishing season is proving one of the most satisfactory for many years. All reasonable sportsmen are returning satisfied with their success. This may be explained in two ways. A strong sentiment in favor of saving the game fish, instead of wasting them, is opening the eyes of all true sportsmen and leading them to be satisfied with moderate catches—enough for the table while in camp—while the Maine law has effectually stopped much of the transportation, and hence the desire to fish for the market or to send home. On the other hand, the fishing in the Sebago waters, the Androscoggin lakes and Moosehead has proved unusually good. A gentleman who has visited the Androscoggin lakes every spring for twelve years, and is well acquainted with guides and the sportsmen who usually visit these waters, has just returned from a nine-days' trip to Richardson Lake, and feels compelled to consider it one of the most pleasing he has ever made. Parties are returning daily from Moosehead highly pleased with their success. They report trout enough, but their enough is less than formerly. They are learning to appreciate the woods, the mountains, the forests and camp life more than ever, and to be satisfied with trout enough to eat.

But for some reason unexplainable, unless the good work of restocking and the benefits of protection are being felt, the number of fish taken thus far from the Maine waters is greater than ever, and the size is certainly larger. Some remarkable trout have been taken from the Androscoggin waters. The catches from Oquonoc and Mooselucmaguntic lakes have been remarkable for size of trout, some of which have already been noted in the FOREST AND STREAM. But lately comes Richardson Lake to the front, with a perfect sample of the male *Salmo fontinalis*, or brook trout, weighing nine and one-half pounds. This noble trout was caught last Wednesday from the upper end of that lake and immediately brought to Boston, where it was displayed in Appleton & Litchfield's window on Washington street. It drew a crowd of admirers and is probably the largest specimen of the charr on actual record, with the exception of the great fish taken from Mooselucmaguntic Lake at the Upper Dam, Sept. 29, 1880, weighing eleven pounds, and now in possession of the Smithsonian Institute. Other fish are mentioned of various weights, from nine to ten pounds, but no absolute record of them is at hand. The nine-and-a-half-pound fish had the hook on the under jaw well developed for a trout in June, and the red on the sides was more like fall and the spawning season than the spring.

Among the other remarkable catches this spring may be mentioned the landing from one cast four trout—one for each fly. The trout were not large, to be sure, but probably weighed over four pounds. Mr. Stewart, of New York, is reported to have landed at the Upper Dam two trout at one cast, the united weight of which was sixteen pounds. This same Mr. Stewart went into the lakes as soon as the ice cleared, and was to stay till about June 20. His skilled rod has supplied many an unlucky fisherman with a handsome trout or two, while the tables of the most of the hotels and camps in the vicinity can testify to his bounty and skill as an angler.

What the late fishing may be is a question. At the Androscoggins the case is doubtful. At the Upper Dam, which controls a flowage twelve feet on Mooselucmaguntic, the work of drawing off the water, preparatory to rebuilding the entire woodwork of the dam, has begun. The lake will be drawn down to the lowest possible limit, and probably remain so till early winter, since the work of rebuilding cannot possibly be completed in season for any rains which would fill the vast expanse of lake before the late fall.

Some anglers of long experience in this vicinity believe that great numbers of trout will be driven into Trout Cove, and that the fishing there will be excellent. But the danger is far greater that the flowage will not be put on again till after the spawning beds are established in what then is running water at the mouth of the in-running streams, and that the flowage then coming on will destroy a vast amount of trout in embryo. It is a great pity that any manufacturing interest should have the damaging of the best trouting grounds in the world at its disposal. Richardson Lake, below the Upper Dam, will probably be kept more than usually full of water the most of the season, unless a long-continued drought should require the water to be drawn off for the factories at Lewiston.

Joseph Jefferson, the renowned actor, has had some rare sport with the landlocked salmon at his camp on Skiff Lake in New Brunswick. Travel by the Eastern and Maine Central Railroads to the fishing resorts has been excellent thus far, and with good promises for the shooting season a good year will be made. The stage and buckboard travel into the Wilderness is better arranged than ever this year, and later in the season the mountain roads are to be improved. The little steamers on Moosehead, Oquonoc and Mooselucmaguntic lakes are running regularly and promptly as ever, and the steamers on Richardson and Umbagog lakes are pleasing the public much better than for the past three seasons. SPECIAL.

BOSTON, Mass., June 16.

[It is reported that Mr. George W. Dillingham, of New York, while trout fishing at the outlet at Moosehead Lake, Me., on Wednesday last, had the remarkable luck to strike four trout at one cast, whose united weight was ten pounds, and was so fortunate as to succeed in landing them all. There were with him at the time as witnesses of his wonderful feat Messrs. P. O. Vickery of Augusta, Me.; R. L. Keach of Providence, R. I., and G. J. Geer, Jr., of New York city.]

THE NEWFOUNDLAND CODFISHERY.

ITS EARLY HISTORY IN NORTH AMERICA.

THE first result, and the chief result of the discovery of North America and Newfoundland by John Cabot, in 1497, was the immediate establishment by Europeans, of a great fishery around Newfoundland and the shores of the Gulf of St. Lawrence. England claimed the northern portion of the American Continent by virtue of this discovery, but strange to say, England made no use of the illustrious achievement; for half a century she sent no fishing fleet to North America. Hardy French sailors, Normans and Bretons, were the first Grand Bank fishery; in poor, frail little fishing craft, not half the size of a New York pilot-boat, these bold, adventurous toilers of the sea, dared all the perils of the great unknown ocean of the west. At first they came alone to face the fog banks and the icebergs of Newfoundland in quest of cod; but as early as 1504, we have an authentic account of their fishing expeditions to the New World; a few years later they were joined by the Portuguese and by the Northern Spaniards from the Basque Provinces. The manner in which these foreign fishermen took possession of the Newfoundland fishery, is a curious episode in our North American history; not only were they the first to catch codfish on our coasts, but they were the first whalers and seal killers, and more than a couple of centuries later, when England began the northern whale fishery, Spaniards had to be taken on their first trip to teach English seamen how to kill whales.

The explanation of these remarkable events in the history of commerce is not far to seek. It seems difficult for us now to imagine England with almost no commerce, and to think of a day when Englishmen were not sailors, but four centuries ago this was the true condition of our great mother country. In the reign of the seventh Henry and for a hundred years afterward, she was only slowly following her foreign competitors in the great Transatlantic codfishery. It was the pursuit of cod in Newfoundland that first drew English mariners from their narrow seas, and tempted them to brave the dangers of the Atlantic; and England's maritime power and the vast commerce of our race, whose ships now whiten every sea, had its birth and its real commencement in the Newfoundland fishery. Lest many of my readers should doubt this statement, I will quote from the records. In the reign of Henry VII. we have an account of only two voyages made to North America by English vessels. In the reign of his successor, the virtuous King Hal, we have only one, and as late as 1578 Antoine Parkhurst, a merchant of Bristol, thus writes of Newfoundland: "There were generally more than 100 sail of Spaniards taking cod, and from 20 to 30 killing whales; 50 sail of Portuguese, 150 sail of French and Bretons, mostly very small, but of the English only 50 sail. Nevertheless," he adds, "the Englishmen are commonly lords of the harbors where they fish and use all strangers' help in fishing, if need require according to an old custom of the country; which thing they do willingly, so that you take nothing from them more than a boat or two of salt in respect of your protection of them against rovers or other violent intruders, who do often put them from good harbors."

The question will naturally present itself, why did these Spaniards, Portuguese and Frenchmen leave the gold fields of Peru and all the riches of the southern part of the continent for the stormy north, with its fogs and icebergs? Some great attraction must have drawn these southern Europeans to Newfoundland. That attraction was fish, and in these North American fisheries they found a perfect El Dorado, more productive to them than the diamonds of Golconda, or all the fabled gold of the New World. To appreciate how great was this mine of wealth to them, we must strive to comprehend the state of the food supply of Europe in that age. Two great staples of modern agriculture did not exist, there were neither potatoes, turnips, nor many of the vegetables now in common use; tea and coffee were unknown; all the winter through fresh meat was almost unknown in England, fresh fish was uncommon; the monks and the wealthier classes had their fish ponds, and the very wealthy had game, but for the general population, salted meat and salted fish were the great staple food, and the latter was neither plentiful nor cheap. Imagine then, if you can, the effect on medieval Europe of this marvellous discovery of an unlimited supply of the finest fish food in the world. As a salted and dried fish, cod is *par excellence* the king of all fishes. When properly watered and properly cooked, the salted and dried codfish of Newfoundland is quite as good, if not better, than the fresh fish. In a warm country where meat will not keep a day, how great is the value of an article of delicious, relishing food that will keep any time, and only needs steeping in water and proper cooking to make it into a most palatable dish. Among the Spaniards, Portuguese, Brazilians and Italians "bacalao" (or dried salt codfish) has for the last 400 years been a favorite article of food. One reason is that they thoroughly understand how to cook it, which Englishmen generally do not. Spain alone consumes about one million quintals of codfish.

Great wealth was gathered by the Spaniards, especially in this fishery, and to this day the grand old mansions scattered about the Basque provinces, the Carlist country in Spain, attest the great proceeds of the whaling and fishing carried on by these ancient fishermen on the banks and shores of Newfoundland and the Gulf of St. Lawrence.

In another paper I will endeavor to describe the manner in which these ancient mariners carried on their transatlantic fishery. Their fleet was a large one, and Spaniards, Portuguese and Frenchmen extended their operations from Newfoundland to New England, fishing there more than a hundred years before the landing of the Pilgrim Fathers.

ST. JOHNS, Newfoundland. D. W. PROWSE.

THE CANADIAN SEA TROUT.

PROFESSOR JORDAN, in an interesting paper in FOREST AND STREAM, June 12, admits "that it may be best to recognize the above fish as a distinct sub-species, as we do the landlocked salmon."

Anglers have, I think, always done so, although naturalists have not. If, as I understand, Professor Jordan is an angler, the concession may be due to that fact. Perhaps he may have killed the Canadian fish on his own rod, and may have noticed its coloration and habits, so different from those of the brook trout, and may have tasted its superior flavor on the table. I notice that he gives it the name *Salvelinus fontinalis immaculatus*—"the unspotted trout," a name which, I think, was first used by Professor Storer, of Boston, on a specimen from Labrador.

Now the Canadian sea trout, so abundant in the tidal waters and rivers of the Dominion, is a red-spotted fish, much more silvery and brilliant of hue than the brook trout taken in the same waters. So obvious is this difference, that all the guides and local anglers of those waters will point it out at once. The fish vary in size in different rivers. Thus in the Restigouche, a large river, I have found them in company with brook trout averaging in size about six ounces.

In the Tabusintac, one of the most famous trout streams of New Brunswick, but a small river, I found the sea trout very abundant, with a few brook trout, the average size of the former about ten ounces. A lot of fifty, which I captured there in about four hours, weighed thirty pounds.

In the Nouvelle, a beautiful river on the north shore of the Bay of Chaleurs, P. Q., my string of trout, fifteen in number, averaged two and a half pounds. Few, but large, and no brook trout in the stream; all sea trout, almost as silvery as salmon.

In Wilkie's River, Prince Edward's Island, sea trout and brook trout were found together, about three to the pound. In these waters the fly alone was used, and in the Nouvelle the large trout were taken with the same flies which I had used for salmon the week before. In this river, which is very swift, icy cold, and clear as crystal, the trout lay in pools like salmon, and were to be found nowhere else. My Indian guides before coming to a pool would go ashore and climb the high bank to look for the fish, which they could easily see in the clear water, then they would place the canoe near the pool for me to cast from. The trout took the fly under water, like the salmon, and their play was much like that of a grilse or young salmon of three pounds weight. Any one who has killed a grilse will appreciate this praise.

I have never taken this fish in salt water, and, therefore, cannot say anything about the sea trout described by Herbert, Perley, and others, as coming into the river mouths with the tide in great schools, like mackerel. I have only met with them in fresh water, and these certainly appear to differ more from brook trout than do the large and small-mouth black bass from each other.

This Canadian fish seems to be a most loyal subject of Victoria, always keeping within her dominions, and never, as far as I know, straying, like its fellow subjects, into the richer pastures of Yankee land.

I could wish that some angler-naturalist might do for the sea trout what Dr Henshall has done for the black bass, and settle the vexed questions of identity and nomenclature.

MARIETTA, Ga. S. C. C.

ENGLISH TROUT FOR AMERICAN STREAMS.—Paterson, N. J.—It is a deplorable fact that our brook trout is fast disappearing from the numerous streams where he once was plentiful. This would not have been the case if the streams were properly protected by taking care not to cut down the trees which shelter from the fierce rays of the sun the springs flowing into the brooks. In the spring such streams become torrents, and in the summer are almost stagnated water. In some of them not a drop of water can be found. No trees in the near vicinity of a stream ought to be cut down. A great deal of money has been expended on restocking our streams, but without very satisfactory results, because our trout require cold spring water and will thrive in no other. The best trout for restocking our streams, I think, would be the English trout; they thrive in almost any slow running water, and I have caught some splendid ones in a sluggish canal. The trout of Great Britain grow rapidly, are a beautiful fish, and I think they possess more gameness than our trout. As a table fish he is excellent. I think that if this fish were placed in our streams he would do as well here as in England, and in a few years we would have splendid fishing for him.—PASSAIC.

MICHIGAN FISHING.—The grayling fishing this season is said to be better than for several years. I have heard direct from the Ausable River as well as several other streams containing the dainty beauties, and all reports coincide as to the fishing being above the average. Mr. E. S. Baker, of Detroit, has just returned from a two weeks' trouting trip to the Jordan River. During the expedition he had most excellent sport, landing in all over one thousand brook trout. The fish do not run very large in the Jordan. The largest caught by Mr. Baker weighed one pound, while the average of his catch was about six ounces. But their numbers make up in part for their lack of size, for he caught in seven hours' fishing over one hundred of the toothsome fishes. Black bass are being taken in small numbers from the Detroit River. The best catch I have heard of in the vicinity of Detroit was that made by Mr. H. B. Bromley, who with his brother landed nine bass the other day. They also caught the same day thirty-six pickerel averaging in weight from two and a half to three pounds each. These were caught near Belle Isle, and such sport to be had at home and inside three or four hours' time taken from business makes me think that Detroit is a good place for an angler to live in.—DELTA.

MICHIGAN CAMP GROUND.—The finest bass and pickerel I ever saw and the most of them were at Hubbard Lake, Mich., last fall. Also deer and ruffed grouse in season. Go to Alpena by boat, thence down to Ossineke by daily steamer (fare fifty cents), then by "tote road," nine miles to the lake. It is right in the pine woods. Take tent along. Fine camping ground. I don't tell "fish stories," but if the fishing there does not satisfy any lover of the sport, he must have "an awful appetite for fishing."—PEDAGOG.

OQUOSSOC ASSOCIATION.—Officers of Oquossoc Angling Association were elected as follows in camp, June 4: President, Weston Lewis, Boston; Vice-President, Senator Francis Fessendan, Portland, Me.; Clerk, Galen C. Moses, Bath, Me.; Treasurer, James A. Williamson, New York. Mr. Carpenter, of Providence, R. I., was elected Trustee in place of Mr. Lockwood, deceased. Other trustees were elected.

WEST VIRGINIA FISHING GROUNDS.—Mt. Pleasant, Pa., June 16.—I spent a month lately on the trout streams of West Virginia. One can find excellent sport there. Unfortunately for me I was too early. The Upper Cheat contains many trout, and I've taken some of good size, say from fourteen to sixteen inches, that's a good trout with us. If one should go to Cheat, Black Water or Greenbrier after a little while he could have rare sport. I take the Baltimore & Ohio Railroad to Oakland, Md., thence 28, 35 or 42 miles cross country to Cheat. Conveyance can be had at reasonable rates. Go well prepared to wait on yourself. I found the habitations of man scarce. The greatest event of my trip was the taking of a pike in the Middle Island, a small stream flowing into the Ohio, just above Parkersburg. The water was very clear; bait, a white sucker about eight inches long; tackle, pike hook and staging, and common chalk line; time of battle, twenty-two minutes. This magnificent fellow measured forty-two and a half inches, and weighed nineteen pounds. I have the head and tail of this monster in a good state of preservation.—FARMER.

SHAD IN THE CONNECTICUT.—Holyoke, Mass., June 23.—The prayers of the wicked availeth little—for between the wickedness of the Holyoke anglers, and the horde of cowboys who are running the net at South Hadley Falls, and probably a few sins laying on the Fish Commissioner's door steps, few shad have put in an appearance, eight shad only being taken with the hook, and not many more with the net. Several hauls of the net this morning did not show a scale. The flow of water in the river this spring, up to this mouth, has been the best for many years, yet the shad don't come. If the saying, "as good fish in the sea as were ever caught" is true, can't "you uns down thare" suggest to some of the fish tribes that there would be room and a welcome for them up here, or are all the fish put on the Chinaman's ticket; excluded and forbidden to enter the Connecticut River, on pain of a lingering death by poison?—THOMAS CHALMERS.

THE WINDFISH.—Sing Sing, N. Y., June 23.—In a late number of the FOREST AND STREAM inquiry is made as to the proper name of the windfish, which inhabits the streams of the lower Hudson valley. The fish which is usually known by that name in this vicinity is *Uliola hudsonia* (Clinton) J. & G. It is also known by the name of "river bass." In some of the large streams, as the Croton River for example, it grows to the length of twelve to sixteen inches, and affords considerable sport to anglers.—A. K. FISHER, M. D. [The *C. hudsonia* does not grow to a size to attract the attention of anglers. It is seldom above a finger in length, and is known as "spawn-eater" at Albany. We suspected the fish mentioned by "N." in our issue of June 5, and by "Niagara," June 19, to be the big chub, dace or fall fish, *Semotilus bullaris*, (Raf.) Jor., but the description was too meagre to decide. The size alone determined our guess.]

SALMON AND TROUT IN CANADA.—Montreal, June 16.—Some large catches of trout have been made recently north of here in the Laurentian waters. Reports of good sport from the eastern township waters are daily received. Campbellton, N. B, June 20.—Salmon fishing here so far this season has proved a total failure, as not more than three or four have been taken in the Restigouche and Matepedia rivers, and but a very few fish are taken in the nets below tidewater in Bay Chaleur. Trout fishing is also poor, but a few good catches are reported. The writer and a friend will to-morrow start for some small lakes back in the interior, and will at a later date report success or failure.—STANSTEAD.

RICE LAKE FISHING.—Harwood, Rice Lake, Ontario, June 17.—The prospects for summer duck shooting are good. A great many wood and black ducks are hatching here this season. The maskinonge fishing is good and has been since the season opened, May 24. Large quantities have been caught by the Indians and whites trolling. Black bass fishing commences about the middle of July. I see by your issue of June 5 that "W. C. M." wishes to find a place where good bass fishing and partridge shooting can be had in August and September. He can get both here. Abundance of partridges on the islands and main land. Partridge season commences Sept. 1.—CHAS. GILCHRIST.

THE MARYLAND COAT OF ARMS.—Maryland is a paradise of anglers. The State motto is *Crescite et multiplicamini*, increase and multiply, and the coat of arms consists of a man who holds a spade with which he has been digging worms, and an individual on the right who has just returned from a fishing trip with a string of fish. He is evidently telling the other fisherman that he was only fishing half an hour and that he caught a lot, but having a very small family threw the biggest fish back into the stream.—*Newark (N. J.) Sunday Call.*

BLACK BASS IN CONNECTICUT.—A friend and myself recently made a trip on the Hartford and Connecticut Western R. R., in search of reported black bass. At Copake Lake we found good fishing near the Beach House, and took many good fish. From there we went to Ancram and found fair sport on the upper and lower Rhoda, Long Lake, Snyder and Miller lakes, all of which are within easy reach from either Copake or Ancram.—POKE O-MOONSHINE.

BLACK BASS IN OTSEGO LAKE.—Some years ago black bass were put in Otsego Lake, near Cooperstown, N. Y., but there have been no results from them until in the present month. Two small boys lately took over twenty fish which would average two pounds each, in a small stream at the head of the lake.

ST. CLAIR FLATS.—Star Island House, June 21.—Bass fishing has just commenced; Mr. Charles Miller, of Chicago, made a fine catch of 109 in four days. Mr. James Slocum, of the Star Island House, has made quite extensive improvements since last year, adding thirty-five large sleeping rooms and a dining room with a capacity for 250 people.

LARGE TAUTOG.—A large tautog, or blackfish (*Tautoga onitis*) was caught in Long Island Sound, at Little Captain Island, off Greenwich, by Mr. P. Scutt, of Riverside, which weighed 10¼ pounds. We believe that the largest one on record weighed 13 pounds.

SEVENTEEN THOUSAND MEN in 1883 were paid cash benefits under accident policies in the Travelers of Hartford, or $4 for every working day.—*Adv.*

Fisciculture.

PROTECTION OF THE OCEAN FISHERIES.

[A paper read before the American Fisheultural Association.]

BY E. G. BLACKFORD.

ONE of the questions that frequently perplexes the mind of the fisheulturist and the legislator is, how to protect in the best manner the valuable food fisheries of the sea coast and ocean.

On the one hand, there are the market fishermen, who use sailing vessels, and work either in the deep outside waters, or with net and hook, gather their prey along the shores and in the bays of our coast. This industry gives employment to over 85,000 men, and a capital of over $30,000,000.

On the other hand, we have the large fleet of steamers that patrol the ocean catching the menhaden, and from them manufacture oil and fertilizers. An occupation involving nearly $3,000,000 and giving employment to over 2,000 men. These facts give some idea of the magnitude of the interests involved and of the importance of the question under discussion.

For the last five years a large number of the former class of fishermen have claimed that the steamers seriously affected their business, stating that many kinds of fish that were formerly abundant, are now scarce, and that, unless laws are passed, prohibiting the menhaden steamers from fishing within three miles of the shore, or in some way restricting their operations, many kinds of the valuable fishes will be exterminated or driven from our shores. In pursuance of this idea, they have petitioned both State and National Legislatures to that effect.

The question has been largely discussed by the press, the State and National Fish Commissions, and in the United States Senate. The latter has appointed a Committee on Fisheries, with Hon. E. G. Lapham as chairman. This committee has for the past two years taken the testimony of all classes of fishermen, and obtained the views and theories of fisheulturists and ichthyologists. And, in addition to this, we have the valuable information and statistics gathered with great care by Prof. S. F. Baird, the eminent Commissioner of Fish and Fisheries of the United States.

It has been my privilege to assist in obtaining information on the subject for the Senate Committee, the United States Fish Commission and the New York State Fishery Commission, and I have read with great interest all of the evidence that has been taken by them bearing on this subject. And now, in discussing the question as to the advisability of any legislation to protect the ocean or sea fisheries, it is best to look over the facts which have thus far been brought out and see what would be the best way to provide for the continuance of the abundant supply that we now enjoy.

The first thing that we want to ascertain is whether what we know as salt-water fish, are scarcer now than in former times, and I would say here, that the absence of statistics covering any considerable space of time, makes an answer to this question somewhat difficult, but, thanks to the New York Fishmongers Association, and to the Boston Fish Bureau, a beginning has been made to supply this hiatus, and it is hoped that the National Government will very soon take definite measures for the purpose of getting, annually, correct statistics of the amount of fish caught in the waters and on the coast of the United States. Having been a dealer in fresh fish in Fulton Market, New York, for the past seventeen years, I have had the opportunity of noticing during this period, the varying supply of various kinds of fish, and I beg leave to submit my views as to the scarcity or plentifulness of some of these various species.

First and most important of all our fishes is the cod. I believe that there has been no considerable diminution in quantity in the last decade, judging from the quantity brought to market and the prices obtained; and as some indication of the range of price, I may say that during the year 1883 cod sold as low as one dollar per hundred weight. In some years there has been a perceptible decrease in the catch, but it has been followed by such enormous catches that the markets have been glutted. The statistics of the Boston Fish Bureau show the catch of the New England fleet to be: for 1881, 775,027 quintals; for 1882, 898,904 quintals; for 1883, 1,061,698 quintals, showing an absolute increase in two years of nearly 300,000 quintals. Surely these figures need not occasion any alarm or fear that codfish cakes will be beyond the reach of the most impecunious fisheulturist.

Next, and hardly second in importance, is the bluefish. It is a matter of historical record that these fish disappeared entirely from our coast in the year 1764, and did not make their appearance again for several years, and then they were taken in vast numbers. Suppose such a disappearance should take place this summer. How quickly the fishermen would appeal to the Legislatures to abolish the menhaden steamers, and the angler would cry out for the destruction of the pound and trap nets. Each would probably claim that the scarcity was owing to these instrumentalities. This one instance of the bluefish in 1764 should lead us to be careful and conservative in regard to legislation, and to carefully consider whether there are not some great natural laws that determine the appearance and disappearance of fish on our coast, rather than attribute it to the comparatively puny efforts of man to affect the supply.

But let us turn to the question as to their present apparent scarcity or plentifulness. During the year 1882 bluefish were scarcer than they had been for some years, and the wholesale price did not go below five cents. This scarcity was particularly noticeable on the New Jersey coast. But, the season of 1883 was unusually productive, and bluefish sold as low as two and a half cents per pound, and, had it not been for the large quantities that were taken out of the market and stored in refrigerators for winter use, the price would have declined to one cent per pound.

It would seem to be a fair inference that the bluefish needs no protection at present.

The fresh mackerel is another important factor in the food supply of the people. It has attracted a great deal of the attention of fish economists, and it is one of the fishes in regard to which, through the statistics of the Boston Fish Bureau, we can speak somewhat intelligently.

In 1825 the New England catch was 260,000 bbls.; in 1826, 160,000 bbls.; in 1827, 200,000 bbls.; in 1828, 240,000 bbls., and in 1831 the largest quantity on record was taken, amounting to 330,000 bbls. After this wonderful catch the number steadily declined, until the year 1840, during which season only 55,000 bbls. were taken. In 1851 there was another wonderful catch of 330,000 bbls.; in 1859, only 100,000 bbls.; in 1863, 310,000 bbls.; in 1868, 180,000 bbls.; in 1870, 320,000 bbls.; 1877, 110,000 bbls.; in 1880, 245,000 bbls.; in 1881 and 1882 the number is the same—260,000 bbls.; 1883, 160,000 bbls. These figures, covering a period of fifty-eight years, would seem to indicate that their plentifulness or scarcity is not governed materially by the purse seines of the Gloucester fleet.

In my own experience in the New York markets I have seen just such fluctuations in the quantity brought to that city, and whenever there occurs a bad season the fishermen and others interested talk of the probability of the mackerel being all caught up, and of the necessity of some protection for the mackerel fisheries.

The opening of the present season has been a remarkable one. The first vessel arrived March 24, and the mackerel were so small that the captain refused to take off his hatches to show the fish, and insisted upon selling them "unsight unseen," and he was fortunate enough to find a purchaser on those terms, at two and a half cents each. There were something like 100,000 fish in the load, and they were so small that it took five of them to weigh a pond. The firm that bought them

succeeded in selling a few hundred at four cents each, and then the price rapidly declined, until the larger portion of the cargo was sold at 50 cents per 100. About that time the unfortunate buyer called my attention to the fact that it was a great shame that such small mackerel were caught, and that Congress ought to pass a law to prohibit such a wicked waste.

The first load of mackerel was followed by several loads, with fish a very little larger in size, but about the 20th of April a new school made its appearance, the average weight of the fish being about one pound each, and at least 1,500,000 of this size have, up to the present time, been marketed, and a large portion of them have been sold as low as two cents each.

The porgy, or, as it is sometimes called, the scup, is another important fish that furnishes abundant and cheap food, and about which considerable controversy has been had during the past few years between the net men on one side and the hook and line men on the other, the latter claiming that the pounds and traps of the former were exterminating these fish, and efforts were put forth to have laws enacted that should restrict or abolish pound and trap fishing. But nothing came of such endeavors. This was in 1871, and fishing has been carried on in the same manner ever since, and in the New York market last week porgies sold as low as 75 cents per barrel, or about one-half a cent per pound.

I might continue on through the list of food fishes, and occupy your time and, possibly, your attention, but I think I have said enough on this branch of the question.

Now, let us consider the menhaden fisheries, against which is brought the charge that they are prosecuted to such an extent, by both sail and steam vessels, that they have materially decreased the numbers of menhaden, and seriously impaired the catch of food fishes. You will find, by referring to the reports of the United States Menhaden Oil & Guano Association, that in 1875, with 283 sailing vessels, and 25 steamers, 492,878,000 fish were taken, that in 1881, with 286 sailing vessels, and 73 steamers, 454,192,000 fish were caught, and in 1882, with 83 steamers, and 212 sailing, only 346,638,000 were caught, and last year, 1883, with 136 sailing, and 69 steamers, there was the enormous catch of 613,461,000 fish. These figures, taken in connection with the statements that have been made to me by captains of merchant vessels and fishing smacks, that during the fall of 1883 they sailed through miles of menhaden, would warrant the belief that this fish is very far from being exterminated, and that, with them as with the food fishes that are taken for market, there are seasons of great abundance, and seasons of scarity, and that up to the present time, these seasons have not been affected, either one way or the other, by human agency.

Another significant fact is, that during the early part of the menhaden season of 1883, and up to nearly its close, the fishing was so poor and unprofitable, that the fishermen themselves began to think they had "killed the goose that laid the golden egg," when all at once the fish appeared in countless numbers, and in a few days they had taken enough to turn, what had promised to be a most disastrous season, into one of large profit to all concerned.

Now, having presented these facts to you in a crude and disjointed form, permit me to say in closing, that although what are known as the hook and line fishermen, almost without exception, testify (and I believe truly) that they find their occupation and means of living seriously impaired, yet, from my experience and observation in the markets, I believe the facts to be that, with the exception of striped bass and lobsters, all kinds of sea food fishes are as abundant now as they were fifteen years ago, and, believing this, I am forced to the conviction that any legislation looking to the restriction of the fishing by the menhaden fishermen is unnecessary, and that any laws prohibiting pound and trap net fishing would cut off a large proportion of abundant and cheap food for the people, and nothing would be gained.

But I do hope that Congress will take some action that will provide for the collection of statistics as to the quantities of fish taken, so that in future, when questions affecting these vast industries come before them, they will then be able to frame legislation that will protect the fisheries, and not oppress the fishermen.

MR. ENDICOTT—I would like to ask Mr. Blackford to state whether in his opinion the pollution of the waters by gases and oils has a detrimental effect upon the fisheries.

MR. BLACKFORD—That is a question which, I believe, received some attention at the last meeting of the Association in the Cooper Institue, New York. On that occasion some action was taken, which looked toward a petition for legislation to prevent the pollution of the water. I think it was admitted by all that it had been a source of great detriment to the fishing in our bays and especially in the New York Harbor. I will quote from the Report of the Association for 1883, page 75.

"Mr. Benkard: I would like to bring up the subject of the pollution of our waters, which brings many of our fishcultural efforts to nought. I would respectfully offer the following:

"*Whereas*, It is the sense of this Association that the continual and increasing pollution of the waters of New York Bay from the refuse of certain factories, threatens eventually to kill or drive away all fish, shellfish and bivalves natural to said waters·

"*Therefore*, Be it resolved that this Association beg to call the immediate attention of the Fish Commissioners of the State of New York and New Jersey, also of the members of their Legislature, to this impending calamity."

I seconded that resolution and made a few remarks to the effect that a great many fish, which had formerly been abundant in the Bay, were no longer to be found there. Striped bass, and particularly lobsters, had been driven out entirely. These latter used to be taken abundantly on the Jersey flats. Shrimps, too, which were very numerous and formed food for larger fish, were almost exterminated, and what few remained were tainted with a flavor of kerosene. Oysters and clams have been killed by thousands in the vicinity of Rockaway. The water has been so polluted by the factories of Barren Island as to render a number of oyster beds, that used to be considered valuable, of no importance whatever. I think, though I am not certain, that the New Jersey Legislature has taken some action, and I am of the decided opinion that if our Association moved in the matter, legislation could be brought about which would be able to control this matter at least in our own State of New York.

THE PENNSLYVANIA COMMISSION.—On June 16, Governor Pattison appointed the following gentlemen to be Commissioners of Fisheries in place of the old board of which the first three were members: James Duffy, Marietta; Arthur Maginnis, Swiftwater; John Gay, Greensburg; A. M. Spangler, Philadelphia; August Duncan, Chambersburg; Henry Derr, Wilkesbarre.

WHAT THEY SAY OF "WOODCRAFT."

"Woodcraft" is the outer's *vade mecum* and will at once take rank as a standard authority, for it was written by "Nessmuk," a veteran who has spent fifty years in the woods. Within its covers is a mass of condensed information, which will enable even the tenderfoot to "smooth it," a term which the author would have take the place of the familiar "roughing it." The subject of overwork and recreation is briefly considered and some sensible advice given. Then the woodsman's outfit is described in detail; camps and camp-fires are explained with simple directions for making them properly; hunting and fishing are touched upon; and camp cooking, that source of so much trouble to the uninitiated, is treated at length, until the vexed question is made perfectly plain and with the simple receipts laid down one may fare sumptuously in camp. Going it alone for ten days in the wilderness forms an interesting sketch, and the book winds up with a couple of chapters on canoeing. Some canoeists may take exception to a few of the ideas advanced concerning canoes, but they will nevertheless glean some useful hints and learn to admire the man who can transport himself and his "duffle" so many miles in a ten-and-a-half-pound canoe.—*Lowell (Mass.) Courier.*

The Kennel.

FIXTURES.

BENCH SHOWS.

Sept. 16, 17 and 18.—Collie Bench Show and Field Trials of the Ontario Collie Club, Toronto, Ont. Mr. H. J. Hill, Secretary, Toronto.

Sept. —.Bench Show of the Philadelphia Kennel Club, Mr. Benj. C. Satterthwaite, Secretary.

Oct. 8, 9, 10 and 11.—Third Annual Bench Show of the Danbury Agricultural Society, Danbury, Conn. E. S. Davis, Superintendent, Danbury, Conn.

Oct. 21, 22, 23 and 24.—Non-sporting Bench Show of the Westminster Kennel Club, Madison Square Garden, New York. Mr. Charles Lincoln, Superntendent.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1319.** Volume I., bound in cloth, sent postpaid, $1.50.

POINTERS AT THE NEW YORK SHOW.

Editor Forest and Stream:

With humility and awe I have folded my hands and listened to the storm of "wordy war" that has been raging on this subject, till at last I have been impelled to have a word to say, just to keep the fun going.

First about Bang Bang. I do not quite understand the objection to the black cropping out in his get. A few years ago, Princess, a black bitch, stood at the head of the heavy weight bitches, and I have never heard or supposed that black was not a pointer color. If black, why not black and white? It surely is not impossible, nor if so, discreditable, that some of Bang Bang's ancestors may have been of that color. Is not the objection purely a matter of fancy? Mr. Wilms insinuates that the superfluous hair had been removed from Bang Bang's tail, but even if it was, I do not see how the carriage of it could have been changed. I had a capital chance to examine the dog, as he was taken down from his bench for me, and I must say that he is a very taking and handsome little dog, and that his tail is absolutely perfect in carriage, length and fineness of bone, however it may have been about the hair. I do not think that Bravo is better than or as good as Bang Bang. Bravo is a dog that I have never liked. I consider him very deficient in pointer character.

When Mr. Cornell says, however, that Bang Bang is "the most strikingly handsome pointer in America to-day," I wonder how he succeeds in blinding himself to the dog's loaded shoulders and short neck. On the same principle, I suppose, that he sees the crook in Beaufort's legs "before and behind." Mr. Cornell does not show very good judgment in calling renewed attention to his remark about Beaufort, that "his hocks are [likewise] also bent." The tautology was not the worst fault. The whole remark was either "too much to say" or a great deal too little. It is time that writers were more definite in their language and more careful to use proper technicalities in criticising dogs. Would Mr. Cornell prefer to see the dog's hindleg a straight line from the hip to the foot? A dog's hindleg, being the motive power (Mr. Tracey to the contrary notwithstanding), ought to be bent at two places. The hip and the foothold on the ground are the two fixed points; the stifle (answering to the human knee) bent forward and the hock (answering to the heel) bent back are the two angles at which the whole leg is doubled up like a zig-zag spring. The proper formation for any animal that has to gallop is—long from the hip to the stifle, long from the stifle to the hock, but short from the hock to the ground, and the hocks well bent, bringing the hindfeet under him. To say simply that a dog's hocks are bent is to praise him at a most important point. If Mr. Cornell meant that Beaufort's are bent outward, or inward (cow-hocked), why not say so? I do not suppose he meant that they were bent forward, and the only other way possible is to be, as they are, bent backward, bringing his feet forward and the leg from the hock down well under him.

As to Meteor—the exponent of blue blood and high breeding, long price and market value—how any one could put that bitch-headed brute before Beaufort I cannot understand. His head is hopeless, his loin is too much tucked up, his color is light and coarse, not the rich dark liver that Beaufort has, and he is utterly lacking in quality. He has good legs, feet and body; altogether he is a fair workmanlike dog, but miles away from champion form. Beaufort, on the contrary, though badly shown, is full of quality, and, except for a little "straddle" behind and the throatiness he gets from his sire Bow—who with Faust was held up for universal admiration as "the large pointer type" by Mr. Munson and his confrères of the St. Louis Kennel Club—he is beyond criticism as a show dog. Mr. Nixon speaks well of Beaufort's field qualities, and I wonder if a bitchy head, poor color and general plainness make Meteor a better field dog. A challenge on this point would be in order about the end of November.

Mr. Munson gets a good free advertisement by doing what Mr. Mason very carefully refrained from—criticising his own dog. Mr. Mason refused to say a word about Beaufort "for obvious reasons;" the reasons are not sufficiently obvious after all, it seems. Next time let not Mr. Mason leave any reason unexplained because it is obvious. Explain it in capitals, underlined and with three exclamation points, and perhaps it will be understood.

Mr. Munson's fiat of "mongrel" fired at Glenmark and Lily, coming at this late day, is simply amusing. Girl and Icicle I know nothing about, but Glenmark was by Rush out of Romp, Rush by Flake out of the despised Lily. Poor Lily! Why did she not peacefully turn her toes up toward the beautiful daisies without having left any unfortunate progeny to fall under the crushing weight of Mr. Munson's disapproval? In short, why did she dare to exist at all? A bitch that produced six prize winners in a single litter, and in the second and third generation, more show winners and good field dogs than I care to try and count, is a pretty good "accidental" breeder. Rush was beaten once when a pup by his sire Flake, (was he a mongrel, too?) but never since in his class. I believe that he was beaten two or three times for specials and sweepstakes by heavy weight dogs. What small pointer had any chance against Rush and Rose, and later Rush and that Queen of beauty, little Rue (out of Ruby, by Flake out of Lily)? In mercy to the younger lot, the old dog was retired to give them a chance and, though nine years old, I doubt if any small pointer on this side of the water can beat him to-day. Not knowing what they have in England, I do not want to claim absolutely that he can beat the world, but I am willing to risk a few dollars on his ability to do so. With the exception of his tail, which, though fine and short, is not carried quite straight, and a very very little more finess than I like, I think him absolutely perfect. How many there are who agree with me, his record satisfactorily proves, and I question the taste of impugning Mr. Orgill's honesty and the "straightness" of the pedigree of his strain when he and the handsome and typical dogs he has bred (not bought) and shown have taught Americans what a pointer should be.

As might be expected from so thoroughly sportsmanlike a breeder, all Mr. Orgill's dogs are field dogs, and Rush, though beaten by La Guy at the Eastern Field Trials in 1880, proved himself a game and level-headed little worker. It was thought (from the confused orders of the judges) that his turn would not be reached the first day, so, as he had had just a week's preparation, the opportunity was seized by his handler to give him a hard morning's work, and as he was called on to run that day after all, about half an hour after his well-earned dinner, he went rather stale compared to a fresh and fasting dog. He made one flush and a false point where birds had lately gone away, making out his mistake very nicely in the latter case, though he got no credit for it. Nothing could be finer than his attitude, on that point particularly, and in short, in spite of the disadvantage he was under, he proved himself a thoroughly good field dog.

We breed pointers, I believe, for work and for looks, and when Rush himself and so many of his blood have proved themselves as good as the best for both, it is natural to conclude that the breeding is all right. I will venture to say that the progeny and descendants of no one other pointer bitch on record, have been remarkable for so high an average of excellence as those dogs that, to their honor and credit, number the illustrious "mongrel" Lily among their immediate ancestry. The first pointer bitch in America to win at both bench show and field trial, dam of a dozen winners, grand dam and great-grand dam of numbers almost uncountable—if she is a mongrel and her success as a brood bitch accidental, Heaven send me a few such accidents.

GEO. D. MACDOUGALL.

NEW YORK, June 17.

Editor Forest and Stream:

For the edification of Mr. Mason and in justice to Mr. Cornell, allow me to state through your paper that my breeding Grace to Beaufort did not in the least "gall" that gentleman, for I had the honor of consulting with him about the very breeding in question, and here are his own words before I bred to Beaufort: "I would prefer Vandevort's Don on account of his breeding, but if you can't get him I would advise you to breed to Beaufort, he is a good dog, but not the handsomest pointer living by any means; I would be very sorry to let a feeling against the owner interfere with the use of a good dog. He is throaty, bad at the pasterns and crooked the wrong way behind, but Grace is old and he being a young vigorous dog, he should get something good, especially as she is particularly good where he is faulty." Those words clearly show that my breeding to Beaufort is not "galling" to Mr. Cornell, or I may add to any other member of the W. K. C., for I have given my opinion freely to several of them, and although they did not agree with me they showed no signs of "galling."

I have broken dogs for the club, but am not entitled to the honor of being called the club's breaker, for I am not the only one that breaks for the club, and I am just as independent of the club as Mr. Mason. I do entertain the highest respect and esteem for some few members of the W. K. C. whom I have the honor of knowing, and Mr. Cornell is foremost among them. I met him accidentally at the first New York show, and have very frequently met him and shot with him in the field since that time. He is a first-class field shot, an ardent lover of good dogs, and a perfect gentlemen, besides being a most excellent friend; and for those qualities alone and not because I care about breaking dogs for the club, do I hold him in the highest esteem that I am capable of. I did say, and I now repeat that Beaufort is [the best looking pointer of his size I ever saw, but if both dogs were the same age and I had my choice, I would take Sensation in preference. No matter where or what he won, he has the grandest head and neck that ever a dog possessed. I bred to him three times, got thirty-six pups and not a weed among them. Which one of them over ran at a field trial or was shown on the bench without getting noticed? If I do as well with Beaufort's get I will be happy.

Much as I admire Beaufort, I am not so blind but I can see some foundation for Mr. Cornell's criticism of him, and if those people who have lately made insinuations against Mr. Cornell will use reason, they will see that a person arguing a point will always give as much force to his words as possible, and while Beaufort is not a deformed cripple, but a grand dog, he does toe in, is throaty, and stands so wide behind that a person might say he was extremely crooked, and still be a good judge of dogs and an honorable man. Mr. Mason does injure the looks of his magnificent dog by dragging and lifting on the chain and trying to improve upon nature.

In justice to Mr. Cornell, I would here state (and perhaps you will remember the occurrence, Mr. Editor) that the same criticism of Beaufort, given through your paper, by him lately, was made to me at the New York show of 1882. I talked of buying Beaufort for a friend, and knowing that Mr. Cornell had a knowledge of the dog which I had only heard of, I asked his opinion, and here is his reply: "A fine dog, but is bad at the pasterns. Very throaty and bent the wrong way behind. I would not think of giving over three hundred dollars ($300) for him." Those words were spoken by Mr. Cornell to me long before Mr. Mason owned the dog, and will show clearly that Mr. C.'s opinion has not been changed on account of any feeling that may have since sprung up between them.

I would respectfully ask Mr. Mason or some one else who has used the term "type" so much lately, to define the meaning of the word as applied to pointers. I only know of two distinct types of pointers, viz.: the Spanish and English. A dog may differ a little in form from another of the same type. With propriety, I think, a long back is just as good as a short one if well-ribbed and strong at the loin, or a short back is not a fault if the chest is deep, shoulders long and flat, and stifles well bent. So long as the general principles of equality are carried out, there is plenty of room for individual difference within the same type.

There is also too much said about bone. I never saw a duffer yet but had "plenty of bone," and would often prefer looking for more to hunting game. Mr. Donner's remarks were correct, and time will prove it so. We want quality, not quantity, of bone.

A man who is not a practical sportsman will not be a successful breeder of pointers or setters, neither can a man who has never handled a dog in the field be a competent judge in the ring of pointers and setters, and if we are to have "logical" judges, our sporting dogs will only be such in theory by and by. We want practical dogs, therefore, practical breeders and practical judges.

LUKE W. WHITE.

BRIDGEPORT, Conn.

Editor Forest and Stream:

In the *American Kennel Register* alone there are more than sixty pointers who trace more or less remotely to Lily. Among them are such dogs as Rush, Rue and Sefton. According to Mr. J. W. Munson she is a "mongrel." Assuming that all owners are interested, and having two of her blood myself, I now summon Mr. Munson to prove his assertion in the most clear and definite manner, or to stand convicted of something a little worse than the misrepresentation he objects to so forcibly, and I want proof and not assertions.

In reply to Mr. Aldrich, I would simply say that if Beaufort be a cart horse in his opinion, I am content to be with a good many breeders in thinking his opinion of not much value. When he talks of showing eight weeks' old pointer puppies on the bench he must want to show us how little he knows of pointers. A dog that takes at least fifteen months to mature can scarcely, in my opinion, be fairly judged at two months, and Major Taylor indorses this by his decision at Chicago last week.

T. B. DORSEY

ELLICOTT CITY, Md.

Editor Forest and Stream:

To those who do not know the membership of the W. K. C., it would appear that those gentlemen who have defended the recent pointer judging at the New York show are disinterested persons, whereas they are either members of, or closely connected with, the club; therefore I would suggest to those gentlemen that in order to economize the space of the FOREST AND STREAM, they should all unite in one article and sign it W. K. C., and not their individual names.

Mr. Smith says a "good dog is never a bad color." A good

dog. Mr. Smith, may be of the worst possible color, but a good-looking dog cannot be a bad color. When we breed lemon and white bitches to lemon and white dogs, we want lemon and white pups, not all the colors of the rainbow in one litter.

Mr. Tileston, in his "Points of Judging," says the color of nose should be black or very dark brown in all except lemon and white. In these it may be of a deep flesh color, not black. I do not deny Bang Bang came honestly by his black nose and eyes, I simply state it as a blemish in a dog of his color.

Mr. Aldrich states that there were few dissatisfied with Mr. Sterling's decisions. The editorial remarks of the FOREST AND STREAM two weeks ago, don't verify this statement. Of course, the members of the Westminster Kennel Club are satisfied with the decisions on their own dogs by judges appointed by themselves. No one else is. The protest of forty gentlemen proves the dissatisfaction to be very great. The protest is public opinion, not that of the members of any club.

A BREEDER OF SPORTING DOGS.

Editor Forest and Stream:

In your issue of June 12 Mr. John W. Munson states in his letter that he was informed that I pronounced Meteor the handsomest pointer I ever saw. There must be a mistake somewhere, as I find it impossible to make accurate comparisons between the forms of animals with only a part of them present. After seeing Meteor and his kennel companions at exercise, during the Toronto dog show last March, I did say he was the most handsome-moving pointer I had seen move in the country, and that I would sooner own him than the balance of his kennel companions, from which statement I make no retraction. JOHN DAVIDSON.

MONROE, Mich., June 17.

Editor Forest and Stream:

For the benefit of any of your readers who have not an acquaintance with the members of the Westminster Kennel Club, I desire to say most emphatically that every insinuation and direct accusation conveyed in C. H. Mason's intemperate letter are wholly and unqualifiedly false. If my criticism of his first letter caused him merriment, as he says it did, his merriment partakes more of the form of rabies than rapture. For myself I have had quite enough newspaper controversy.

ROBT. C. CORNELL.

NEW YORK, June 21.

Editor Forest and Stream:

As some stress seems to be laid upon the statement that the Westminster Kennel Club attempted, in 1883, to buy Beaufort, let me say (though I fear it is not a matter of interest to any one) that Mr. Cornell and I, representing the club at Washington, in that year offered $300 for the dog on their behalf, and that I personally afterward raised the offer to $350. At this time neither of us had made a thorough examination of him. When later we had him out, the peculiarities (I use the word as there seems to be a difference of opinion as to whether they are points of merit or defects) which Mr. Cornell refers to were apparent, and we therefore made no further offer.

ELLIOT SMITH.

Editor Forest and Stream:

Of the forty names appended to the so-called protest of Messrs. G. W. Amory and others, appearing in your issue of 19th inst., sixteen do not appear in the list of exhibitors; two more did not exhibit pointers, and as to one (the Baltimore Kennel Club) it would be interesting to know by what right the name was signed, inasmuch as the club is said to have gone out of existence long since. The Knickerbocker Kennel Club add great strength to their signature by signing first in their corporate name and then adding a list of their officers, etc. ELLIOT SMITH.

Editor Forest and Stream:

Nothing less than the possession of exceptionally great knowledge can excuse the severity of tone assumed by Mr. Mason toward those who are so unfortunate as to differ from him. Nobody will deny his long experience, but if that experience has not brought wisdom it is all the more to his discredit. In taking Mr. Cornell to task for having admired pointers of several different types, Mr. Mason clearly implies that there is one correct type only and assumes to know that type himself beyond mistake. In this he puts himself in contradiction with the entire record of shows and field trials both here and in England. It clearly appears from this record that there are several types of form, any one of which may win according as its representative may be most perfect in his type. Nor do we even find that individual judges adhere very closely to the same form through several classes. Even Stonehenge's scale of points is quite elastic enough to cover a variety of forms, and it is manifest from his writings that he intended it should be so. (See remarks on fox-terrier judgment, page 52, "Dogs of the British Islands.") Indeed it appears that this scale was invented mainly as a check on those judges who, believing in unity of type, were prone to give preference to inferior specimens of their favorite types over better, but typically different, dogs. Mr. Mason seems, therefore, to assume that the judges of public events have hitherto been, on the average, a lot of dolts, since they have generally failed to recognize that perfect form that he knows so well.

Let us see now how he makes good his claim to superior knowledge. What dogs has he put himself on record by denouncing? Croxteth, Sensation—and to draw an example from setters—Thunder. Now, all these have been publicly shown to be very superior field dogs. The record of their running can be found in the back numbers of FOREST AND STREAM, together with comments by many sportsmen. Moreover, their qualities have been privately tested by so many persons as to have become notorious. But Mr. Mason says they are ill-formed. Experience and fact say that they must be well formed for their work, else they could not have performed it. It is not to the purpose to say that two of them have been beaten. There probably are better performers in existence, but these are uncommonly good ones all the same. That Maud S. has beaten Goldsmith Maid's time does not prove the Maid to be a slow one. Will Mr. Mason try to evade this logic by saying that he referred to show form? He has no right to do so in discussing the awards at the late show, at least such ones as I was concerned in. When I was called into the ring to take the place of a judge who would, if present, have doubtless given wiser decisions than I could, I was informed by the steward and the other judges that the basis of decisions was to be the best form for field work regardless of "bench show standards."

If that basis was improper, the responsibility should be laid upon those who established it. The judges could not do otherwise than conform to it to the best of their ability. There has been a large class of breeders demanding such a basis for a number of years past, and I think it is well to have made a trial of it, even if more or less error has resulted, which is likely enough, seeing that judges are mere fallible mortals. If errors there are, it is important to have them corrected, and I hope it will be done, for though painful to the vanity of judges, it is for the good of the cause. Meanwhile no would-be authority, who selects for special condemnation such exceptionally good field dogs as does Mr. Mason, can hope to get "solid" with me by applying the flattering title of "Artist of the W. K. C." It would be a pleasant and a profitable title, but I have no right to assume it. I am glad to boast the personal friendship of several members of that club, and also that several of them have thought well enough of my works to buy them. One of them has, as I understand, donated his purchase to the club. But all this is true of several other clubs, and up to the present date I have had no opportunity to enlarge my bank account at the expense of the W. K. C.

I can only hope Mr. Mason's fling may serve to "grease the horse's teeth." Many good judges are being kept out of the ring by the latitude allowed in the press for personal attack. I affirm that an erroneous decision forms no ground for a personal question with the judge. Nor should the remotest hint of such a thing be allowed, save in the case of formal charges of intentional misconduct or collusion, substantiated by considerable evidence.

If a man of great experience and undoubted probity, like Mr. Sterling, consented to act as judge, he is entitled to kind and considerate treatment, and if gentlemen dissent from his opinions they can certainly vindicate their own without going to such extremes as have been witnessed. It is well known that Mr. Sterling and myself differed radically about some of the decisions. Yet, after hearing his reasons, if I continued to differ from him I must own to the possibility that further study and experience may show his views to be correct. I can, at best, claim the Scotch verdict of "not proven" against him, and so, I think, his various opponents will find it if they will temperately consider the matter. Meanwhile, this avalanche of personalities puts us further and further away from what ought to be the goal of all—the truth. JOHN M. TRACY.

Editor Forest and Stream:

In this week's issue the New Haven Kennel Club are credited with having signed the protest against the judging of pointers at the late New York show. To begin with, the New Haven Kennel Club own no pointers, did not show any, and lastly, did not authorize any one to sign any such protest. The club are incapable of showing the discourtesy of "protesting" at another club's judges. We do not like to be "kicked" at ourselves, and certainly would not protest at other shows, especially when we have no cause. By Mr. Mason's explaining how and where he obtained the signature of the club he would greatly oblige G. E. OSBORN,

Ass't Manager N. H. K. C.

NEW HAVEN.

In response to Mr. Osborn's request we wrote Mr. Mason, who replies as follows:

Editor Forest and Stream:

Mr. E. S. Porter, Secretary of the New Haven Kennel Club, told me that he would in the name of his club sign a protest against the judging, which he said was infamous. I did not think it necessary to send the protest on to New Haven for indorsement after getting the word of a gentlemen in Mr. Porter's position. CHAS. H. MASON.

TOMPKINSVILLE, Staten Island.

THE NEW ENGLAND KENNEL CLUB.

THE New England Kennel Club, which was started in this city last March, is now in such a condition that there can be but little doubt of its success. At one of its former meetings a committee was appointed to secure quarters, and as a result of their labors the members were last Friday evening invited to the opening of the club's headquarters, on Tremont street. The apartments are reached by an elevator, and are on the second floor above the street. They are large and roomy, and the main room overlooks the Common and its ever changing panorama. The furniture and fittings are of a dark cherry, with carpets and draperies to match. The walls are tinted, and the whole effect is pleasing and elegant. In one corner is a parlor grand piano, at which any of the music-loving members of the club may while away a few idle moments. As might be expected, there are a large number of dog portraits in the rooms, being from the brush of such artists as Alexander Pope, Henry Smith and W. Beaman. Among these pictures are portraits of Dr. Jarvis's Elcho and Rose; Fay's Coin, the famous Berkley, and Mr. Nickerson's Newfoundland Sam. Dr. F. S. Billings, a member of the Executive Committee, in a short address of welcome, explained the objects of the club and its purposes, which is to have as soon as possible a country house and kennel, where members may send their dogs for breeding, treatment or breaking. The club intends, when it holds its bench show, to give a show, and all prizes will be awarded with reference to merit only. There was a large gathering, many well known gentlemen being present. The club rooms will be kept open until a reasonable hour in the evening, and will be the headquarters for all dog men. HUB.

BOSTON, Mass.

A STREET SCENE.

IT was a pretty picture. The little girl with flaxen hair in profusion about her small head standing on tiptoe putting a letter into a street box on the lamp post at the corner. Her companion, a Scotch terrier, with well-kept, wiry hair, short, stubby tail, wagging with interest in his little mistress' occupation, head on one side as much as to say, "I am mentioned in that letter and I want to see it properly mailed."

While the little miss was struggling with the perversity of the lid, which wouldn't lift high enough for so short a midget as she, a big hulking navvy came along, and without a word, kicked poor doggy with his great hob-nailed shoe into the street with so much force that the poor little fellow was dead ere he struck between the rails of the street cars.

A plainly, well-dressed young man, with a heavy black mustache as his only marked feature, who had stood on an opposite corner watching the little maid and her companion with evident interest, upon the occurrence of the tragedy, stepped quickly across and confronted the ruffian with "Why did you do that?" "You ——," replied the rascal (calling him a brother of the dead animal), "'cause I chose to." "Well," said our young friend, "I choose to avenge my brother's death since you say I am one of his sort," and with this gave him a left-hander which laid him upon his back minus several teeth and a terribly demoralized countenance.

Stepping toward the little one who was now thoroughly frightened, with a few words soothingly spoken, he took up her now motionless dumb companion tenderly in his arms, and with one of the tiny hands of the little maid in his great red hand, soothing her as he went, they passed down the street out of sight.

The miserable fellow who had caused all the trouble looked after them as he held his aching face in one hand and murmured, "Be jabers, I believe it was 'our John' himself."

REIGNOLDS.

BEAGLES.

Editor Forest and Stream:

Seeing in the columns of your valuable paper comments on the "Proper Size of Beagles," written by "Flat" and "Rusticus," I propose to give my opinion as to the proper size of the working beagle and my mode of working them.

I prefer beagles from thirteen to fourteen inches high and say from fifteen to twenty pounds weight. Dogs of this size can stand hard working, and have stronger notes, making a much more lively clash when in full pursuit of their game, and, moreover, dogs of this size can make a rabbit run when started and will not give him so much time to back track and bother the dogs, even in heavy cover.

I can't agree with some of my brother sportsmen when they say "the only way to use the beagle is to shoot the rabbits in front of the little hound."

I moreover say any pack of beagles having their game always shot in front of them will spoil any pack of dogs it is practiced over. They will gradually lose their ambition and perseverance, and on a bad loss of trail will come in and give up. My mode of hunting is to let the dogs run down and catch some of the rabbits on every hunt, and sometimes hunt without a gun, and let the dogs chase and catch their game on fair footing. That gives the dogs perseverance, and makes them press their game, looking for the sight chase and close of race. There is but little amusement in the chase if the rabbit is not made to run; that is the fun when dogs and man are all excitement, and the rabbit is sighted from cover by the little hounds, and the rabbit gradually failing and the dogs well set to their work, and growing more eager at the close of chase. What amusement can there be to only make a rabbit tip along in cover and at first opportunity shoot it? That is to me tame sport, fit for pot-hunters. Dogs must be allowed to mouth their game, and do it by hard work, if you want them to stick and work well. I claim if a pack of beagles can't catch on fair footing a majority of rabbits started, if the cover is not too dense and briery so the dogs can't make a run at them, are not handled properly if well bred. Beagles, like setters, their instinctive qualities can be greatly improved by proper handling. POTTINGER DORSEY.

YORK ROYAL DOG SHOW.

THE Royal York Dog Show's second annual exhibition was held May 31 and June 2 and 3, with a total entry of 708. A great many entries were cancelled owing to some of the classes not filling, which seemed to give general dissatisfaction to exhibitors, who objected to have some of their entries returned and others held, as in many cases the entries returned were the ones they most desired to exhibit and the only ones depended upon winning with. In some cases the committee acted anything but generous, as knocking two classes into one for instance, where dogs and bitches of one variety were offered a separate class in the schedule and the entries in both classes were not satisfactory to the committee, they put the two classes into one. This departure from the general rule also seemed to give rise to a deal of grumbling. The comfort of the exhibits seemed to be very well attended to under the management of Mr. George Hellewell. The judging was got through at a reasonable hour on the afternoon of the first day, owing to plenty of available space to provide rings for all the judges to be working at once. But a scarcity of keepers to bring the dogs into the several rings was very apparent, which could be reasonably accounted for owing to so many rings being filled at once. However, taking everything into consideration, the committee worked well and things went along satisfactory. The weather during the show was everything that could be wished for, but the attendance was very small, and no doubt the result will be a financial loss to the committee.

The first class was bloodhounds (champion) for which there were two entries Nestor, and Lawyer, neither of which put in an appearance. In the next class for dogs and bitches, other than champions, first went to Dorset, a very well made dog, certainly the best in that respect, but not possessing the head, ears or expression of the third prize Phryne, which we preferred to any in the class.

In champion mastiffs Crown Princess was first, beating Cardinal, who was not in as good form as when we saw him at Warwick. The open dog class consisted of Monk, a small brindle, rather long of face, Cardigan also a brindle, rather weak in muzzle, Surajah, good ear and a fair typical dog and The Prince, first at Warwick and first again here, an easy winner. In bitches Mr. Taunton won first and extra prize with Cleopatra; Ilford Claudia, rather light in body, coming second, and her kennel companion coming third. The puppies were a very moderate collection, the winner a good way ahead.

In St. Bernard champions, Ilfreda, looking well, was first. In the open class Glacier, first, we have often described, we preferred the vhc., Faust, to any in the class, but his condition is still against him. Cloister won first in bitches, she is a real good stamp and grand in color and markings; Crevasse II. is rather light in bone; Khiva, a well known winner, showing age; Lady Florence, hc., is typical and of good color and markings, but small. In smooth dogs, Bruce, the winner, is rather short on the leg. Her Majesty, first in the corresponding bitch class, was also winner of first at the St. Bernard Club Show. The puppies were a very moderate collection, none calling for special comment.

In Newfoundlands, first went to Mr. Nichols's Nelson I., looking well, and second to Sultan II., a fair dog, whose appearance is much spoiled by the feather on his tail being quite gray in color; the Landseer Newfoundland Charlemagne coming third. He is a good up-standing dog, much the largest in the class, with a longer and different type of face. Towser, vhc., is small and typical, but was in bad coat. The bitch class was cancelled, owing to insufficient entries, and the three following classes for Great Danes were also cancelled.

In deerhounds, the well-known Chieftain, looking as well as we ever saw him, was at the head of affairs, and no doubt was in his proper position, Lord Arthur Cecil coming second with Glengrieff, a mustard-colored dog.

The well-known Bonny Lass won in champion greyhounds, and was looking remarkably well. The greyhound dog class was cancelled; Messrs. Hill & Aston winning first in bitches with a brindle showing age. Second went to Acalia, a well-known brindle and white.

In champion pointers, Graphic was first, looking in the pink of condition and good health. We consider him the best pointer at present going. In the open dog and bitch class first went to Mr. Shorthose's Quickshot, a good, stylish dog, rather deficient in head properties, and not the color of Mr. Norrish's exhibits; second went to Revel II., who is a little weak before the eye. The well-known liver and white Ruby won for best bitch, the class having been divided. In smallsized pointer dogs, first went to Donald III., a liver and white, with good chest and shoulders, and good all through. He seems rather high on the leg, which gives him an appearance of being rather short in back and stilty. In bitches under 50 pounds, first went again to Mr. Norrish's Beau Ideal, a very nice liver and white. There was a class for field trial dogs and Graphic won quite easily.

In champion English setters, Sting, the winner at Warwick, won first. In the open classes of setters the awards seemed to cause a great deal of dissatisfaction. First went to Royalty, a very fine, strong, well-made dog of good coat and color, but not as sweet in head as we would like him. Second went to Junior Carlton, a lemon and white, very bad in coat and plain in head, and with ears set on too high. Glencaire, third, is a real good dog throughout. The hc., Lord Westmoreland, is another good one, faulty in head, but we fancy him quite as much as the winner, and certainly much more than the second prize dog. The vhc., King Ned, is another good dog. He was rather out of coat. In bitches, Plimsy, who won first, was shown in remarkable good condition, which was more admired than herself. Wild Rose, third, is small and was not in good form, otherwise she was the best in the class. Beauty Queen is plain in head and faulty in coat. Fernie, a lemon and white not mentioned, is a very good bitch and ought to be noticed. Belle of the Isle has remarkably good head and ears, but otherwise was out of form. Bessie IV. is only moderate and faulty in coat. Black and tan setters had not a good one in the class; the winning bitch, Kate IV., was the best of the collection. The Irish setter classes were cancelled owing to want of entries. In the class for field trial setters the curly coated lemon and white Junior Carlton, second in open dog class, and Bessie IV., were placed equal first.

In champion retrievers, first went to Wonder, but we preferred the same owner's Doctor, as showing more quality. In the open dog class, first went to Mr. Skipworth's Smiles, a good young one but rather leggy. In bitches, first went to a young one wavy-coated; second to Jessie; we fancied Mr. Leeson's entry as much as any in the class, she was a little faulty in tail and her name was not given in the catalogue.

In sporting puppies, first and second went to Mr. Bower's spaniel and Mr. Easten's spaniel. As spaniels no doubt they were properly placed, but we think Mr. Hartley's setter, Lord Westmoreland, and Mr. Buckley's pointer, Merry Duchess, ought to have held premier place in this class.

In water spaniels, first went to Mr. Hockey's Lady, who was looking well; second was won by Mickey Free, who was not so good in coat as we have seen him.

Clumber spaniels were a good collection, which were mostly all the property of His Grace the Duke of Portland. The Messrs. Charles's second prize bitch, Foxley Beauty, was looking very well; she is rather short in body.

Sussex or liver-colored spaniels were moderate, the winners all well known.

In black spaniels, champion class, the Messrs. Willets altered their Warwick decisions, where they placed Solus and Roysterer equal first, now placing Solus at the head of affairs, and we think quite correctly. In the open dog class, first went to Easten's Bracken. He is rather thick in skull and shows haw in his eyes. Lord Bute, second, is deficient in character, short in coat and has white on chest. President and Le Role were equal third, the former is too high in legs and the latter has the same fault, with curly coat. The bitches were really good. Easten's Busy is a good specimen, but is out at elbows. Thyra, second, is also a good one, a trifle short in face. Lava Jet, vhc., has white on chest, but otherwise is the best in the class. Coy has her expression spoiled by a lump on her forehead over her eyebrow. Silvia, third, is too fine in muzzle.

Cockers, any color, were a moderate collection. Freda, first, is a mottled colored blue black, white and tan with quite too straight a head. Little Dan is only a puppy and will be quite too large. Nellie VII., by some accident was not taken out of her box until after the judging. She was the best in the class, but is wide in front and light of eye, also short of coat, but is the best stamp of a cocker. In any other variety, first went to Lass o' Devon. She was looking better than we have seen her. In the open class, first went to Easten's Bruce, a liver and tan. He has a good head, is long and low with a good coat, but is not as straight on the leg as we would like. In the corresponding bitch class, Beauty II., first, a black and white of good stamp, but out at elbows. Fanciful, second prize, a black, white and tan, and about the best in the class. Easten's Pride and Zuess were equal third, the latter was rather out of coat. In puppies, first went to Coy, second to Le Roi, both exhibited in the open classes.

Champion collies had four entries, only Donald and Rutland competing, which made it an easy win for the latter, who was not as good in coat as we have seen him. In the open dog class first went to a bluish sable, a good, strong-bodied dog with good coat and head, but rather deficient in carriage of ears, which gives him anything but a showy appearance on the bench. He was, however properly placed. Second was won by a sable, tan and white dog with good face and ears, but light in body and out of coat. Third was a yellow-colored dog, too fine in bone and face. He has dew claws. In bitches first went to Mistress Beatrix, a nice golden sable and an easy winner. Lass, second, is light in bone and fine in face. Oola, third, is leggy, and short of coat. Novelty, vhc., is good in coat, short in back and out at elbows, and walks very badly. In smooth-coated collies we preferred the second prize dog to any in the class. The puppy class was divided into dogs and bitches, the three winning dog puppies were also the three winners in the open dog class. In bitch puppies Glenrosa, first, is fine in bone. Novelty, second, was vhc. in the open bitch class.

In champion Basset hounds, first went to Fino V. Pallas II., vhc., with Theo, in the open class, won the cup for the best pair. In the open class, dogs and bitches, Bourbon first, is full brother to the winner in the champion class.

The champion class for bulldogs had no entries. In bitches, first went to Redowa in the absence of Britomartis, who was entered but did not put in an appearance. In the open class for dogs, Robinson Crusoe, litter brother to Britomartis, won. He is particularly good in head and chop, has a good body and is low on legs. He was not in the condition he ought to be. He also won the cup presented by Spratt's Patent, value £5 5s. The bull bitch class was cancelled.

Dachshunde were a good collection, and, as usual, Mr. Jones's awards were well received.

Champion bull-terriers had no entries. The open class was a moderate collection, and we prefer the second and third to the winner, who is light in bone and hollow under the eye.

In champion fox-terrier dogs Spice beat Climax, whose ears are still badly carried, Sutton Veda winning in the bitch class. In the open dog class first went to Splinter, the Warwick winner, second to Earl Leicester, a remarkably well-made dog with good feet, legs and shoulders, but coarse in head and ears. Dandy Dick, third, is a compact little dog with one ear wrong. In bitches first went to Richmond Nettle, a well-known good one. Delta, second prize, is too fine before the eye. Richmond Patch, third, is a very nice bitch all round, of good size and the best of feet, legs, body and bone. She is rather fine in coat. The winning puppies were above the average, all to be heard of again some day.

The wire-haired terriers were very fair classes, but were faulty in coat. Scarcely two were coated alike, and few among them had the correct wire-hair jacket.

In champion Bedlingtons first went to Dina. Our fancy lay for Topsy. In the open dog class the winner, Bishop, is rather large and coarse. Tinner, third, is of good size, but is too broad in front and carries his tail too high. The bitches were only moderate. The second prize, Domino, we always admired, and think that she has seldom got her dues, and we know many who hold the same opinion. Zulu, third, has not quality enough.

We could not agree with the awards in the Irish terrier champion class. Sting, first, is a bad color and as smooth as a black and tan terrier. Playboy ought, in our opinion, to have won easily, Poppy being absent. The two winners in the open dog class also won in puppies.

Burke won again in black and tan terriers, with a very handsome little bitch coming second to him.

Skye terriers were a good class; Scottish Queen, first, is much the longest and lowest; she would be improved were her ears better carried.

In Scotch terriers, Capt. Mackie had everything his own way, his exhibits standing clear winners from the others, who can't come near them in head qualities or texture of coat.

Dandies had small entries, the winners are all well known. In bitches, second and third prizes were withheld.

The classes for Pomeranians and poodles were cancelled.

In champion pugs we would have preferred Challenger to Jenny. In the open class we would have placed Bradford Ruby first, being better in size, straight on legs, smaller in ear and better color and tail than the winner, who is a little larger in skull. In the bitch class it is only a matter of opinion which of the winners were the best. Only a second prize was awarded in the puppy class.

The classes for Yorkshire terriers and toy spaniels were cancelled. Foreign dogs once more saw Mr. Taunton to the front with our old acquaintance Sir John Frankland, looking well. No less than six prizes were awarded in this class, and only a sum of £6 to be disposed of. There was nothing in the local classes to call for special comment. There was an auction of dogs held on the last day of the show, but nothing good being set up the prices obtained were small, one collie selling for £5 10s., which we consider a very good investment.

Following is a full list of the

AWARDS.

BLOODHOUNDS.—1st, J. Harrison's Dorset; 2d, W. Marshall's Hotspur; 3d, E. Nichols's Phryne.

MASTIFFS.—CHAMPION—J. Royle's champion Crown Princess.—OPEN CLASSES—*Dogs:* 1st, J. Royle's The Prince; 2d, E. D. Tyrer's Surajah; 3d and breeder's prize, W. K. Taunton's Commodore. *Bitches:* 1st and breeder's prize, W. K. Taunton's Cleopatra; 2d and 3d, Capt. C. Dewar's Ilford Claudia and Ilford Charity. *Puppies:* 1st, G. Renton's Guelph; 2d, C. A. Longest's Imperial Chancellor.

ST. BERNARDS.—CHAMPION—ROUGH OR SMOOTH-COATED—H. C. Joplin's Elfrida.—OPEN CLASSES—ROUGH-COATED—*Dogs;* 1st, E. Hodgson's Glacier; 2d, W. G. Marshall's Courage II.; 3d, W. J. Orwin's Storm King. *Bitches;* 1st and cup, W. G. Marshall's Cloister; 2d, L. C. R. Norris-Elye's Crevasse II.; 3d, J. K. Kaye's Khiva. SMOOTH-COATED—*Dogs:* 1st, S. Smith's Bruce. *Bitches:* 1st and cup, G. Porter's Her Majesty; 2d, T. H. Goodwin's Nell Gwynne. *Puppies:* 1st, T. H. Goodwin's Silver King; 2d, J. K. Kaye's Right Hon. W. E. Gladstone; 3d, O. W. Jackson's Hubert.

NEWFOUNDLANDS.—*Dogs:* 1st, E. Nichols's Nelson I.; 2d, H. W. Hart's Sultan II.; 3d, R. W. Moll's Charlemagne.

DEERHOUNDS.—1st, H. C. Joplin's Chieftain; 2d, Lord R. Cecil's Clengriff; 3d, W. Gordon's Beatrice II.

GREYHOUNDS.—CHAMPION—H. P. & P. J. Charles's champion Bonny Lass.—OPEN CLASS—*Bitches:* 1st, Hill & Ashton's Nancy; 2d, H. P. & P. J. Charles's Acalia; 3d, F. Hastie's Meed.

POINTERS.—CHAMPION—E. C. Norrish's champion Graphic.—OPEN CLASSES—OVER 55LBS.—*Dogs;* 1st, J. Shorthose's Quickshot; 2d, C. H. Beck's Prior; 3d, J. Taylor's Earl of Croxteth. *Bitches:* 1st, Lieut.-Col. H. C. Leigh's Devon Wagg; 2d, E. C. Norrish's Revel III. UNDER 55LBS.—*Dogs:* 1st, E. C. Norrish's Donald III.; 2d and 3d, Sir T. B. Lennard's Belhus Hector and Earl. *Bitches;* 1st, E. C. Norrish's Beau Ideal; 2d, T. E. Issard's Ruby of Homestay; 3d, Lieut.-Col. Leigh's Lotus. *Field Trial Class:* E. C. Norrish's champion Graphic.

SETTERS.—CHAMPION—J. H. Platt's Sting.—OPEN CLASSES—ENGLISH—*Dogs:* 1st, J. Shorthose's Royalty; 2d, H. F. Grant's Junior Carlton; 3d, J. Royle's Glengairn. *Bitches:* 1st, J. H. Platt's Flimsy; 2d, T. B. Bower's Bessie IV.; 3d, Major H. Platt's Wild Rose. BLACK AND TAN—*Dogs:* 1st, J. Shorthose's Don I.; 2d, H. R. Gibb's Heather Jock; 3d, H. R. Gibb's Heather Rake. *Bitches;* 1st, R. Chapman's Kate IV.; 2d, W. G. Bottomly's Busy Body; 3d, H. R. Gibb's Bella III. *Field Trial Class:* Equal, H. F. Grant's Junior Carlton and T. B. Flowers's Bessie IV

RETRIEVERS.—CHAMPION—S. Darbey's champion Doctor.—OPEN CLASSES, ANY COLOR.—*Dogs:* 1st, H. Skipworth's Smike; 2d, J. T. Pilling's Falcon; 3d, S. M. Thomas's Silkstone. *Bitches;* 1st, Harding, Cox & E. Jaquet's Black Satin; 2d, Major H. Platt's Fern; 3d, A. Large's Jessie. SPORTING PUPPY, ANY VARIETY,—1st, T. B. Bowers's Le Roi; 2d, A. H. Easten's Busybody; 3d, Harding, Cox & E. Jaquet's Black Satin.

WATER SPANIELS.—IRISH OR ENGLISH—1st and cup, G. S. Hockey's Lady; 2d, J. S. Skidmore's Mickey Free; 3d, G. F. Smurthwaite's Barney Malone.

CLUMBERS.—CHAMPION—Duke of Portland's Fairy III.—OPEN CLASSES—*Dogs:* 1st, 2d and 3d, Duke of Portland's Damper, Dot and Dart II. *Bitches:* 1st, Duke of Portland's Riot; 2d, S. W. Frankland's Rose III.; 3d, Mr Charles's Foxley Beauty. SUSSEX OR LIVER COLOR—*Dogs:* 1st, S. M. Thomas's Guy; 2d, Messrs. Holley Bros.' Horatio; 3d, C. Newington's Laurie.

BLACK SPANIELS.—CHAMPION—J. Royle's champion Solus.—OPEN CLASSES—*Dogs;* 1st, A. H. Easten's Bracken; 2d, J. H. Hussey's Lord Bute; equal 3d, J. K. Kaye's President and T. B. Bowers's Le Roi. *Bitches:* 1st, A. H. Easten's Easten's Busy; 2d, J. Etchell's Thyra; 3d, J. Hill's Sylvia. COCKERS, ANY COLOR.—1st, H. B. Spurgin's Freda; 2d, R. Lloyd's Little Dan; 3d, A. H. Easten's Busybody. ANY OTHER VARIETY—*Champion;* S. M. Thomas's Lass o' Devon.—OPEN CLASSES—*Dogs:* 1st, A. H. Easten's Easten Bruce; 2d, H. B. Spurgin's Counsellor; 3d, A. Heath's Dash. *Bitches:* 1st, J. Etchell's Beauty II.; 2d, H. B. Spurgin's Fanciful; equal 3d, A. H. Easten's Easten Bride and J. Royle's Zuess. *Puppies:* 1st, H. R. Spurgin's Coy; 2d, T. B. Bowers's Le Roi; equal 3d, A. H. Easten's Busybody and H. B. Spurgin's Carol.

SHEEPDOGS.—CHAMPION—S. Boddington's champion Rutland.—OPEN CLASSES, ROUGH-COATED—*Dogs:* 1st, S. Pirie's Kintore; 2d, W. R. Dockrell's The Squire; 3d, J. Pirie's The Scott. *Bitches:* 1st, G. R. Krehl's Mistress Beatrix (late Myra III.); 2d, W. A. G. James's Tawnay Lass; 3d, M. C. Ashwin's Oola. SMOOTH-COATED—1st, W. A. G. James's Lady Help; 2d, J. Royal's Clyde; 3d, W. A. G. James's Gazelle. ROUGH OR SMOOTH—PUPPIES—*Dogs:* 1st, J. Pirie's Kintore; 2d, W. C. Dockrell's The Squire; 3d, J. Pirie's The Scot. *Bitches:* 1st, W. A. G. James's Glenrosa; 2d, J. H. Turner's Novelty.

BASSET HOUNDS.—CHAMPION—M. B. Kennedy's Fino V. Very high com and cup, G. R. Krehl's Pallas II. OPEN CLASS—1st, F. W. Blain's Bourbon; 2d and cup, G. R. Krehl's Theo; 3d, Rev. A. Carter's Narcissus.

BULLDOGS.—CHAMPION—J. Pease's Redowa. OPEN CLASS—*Dogs:* 1st and cup, G. Raper's Robinson Crusoe; 2d, Mrs. F. Slinger's Query; 3d, J. Peace's Nero.

DACHSHUNDE.—CHAMPION—Mrs. P. M. Hoare's Superbus.—OPEN CLASS—*Dogs:* 1st and cup, Mrs. P. M. Hoare's Carlowitz; 2d, J. S. Pearson's Zangwong; 3d, medal and cup, Mrs. P. M. Hoare's Drachen. *Bitches;* 1st, J. C. L. Knight Bruce's Lady; 2d, W. A. Benson's Sylvia; 3d, E. W. Haslewood's Schlank.

BULL-TERRIERS.—1st, H. C. Joplin's Bullet; 2d, H. Thompson's Sheffield Prince; 3d, F. Jagger's Marquis of Trentham.

AIREDALE TERRIERS.—*Dogs:* 1st, J. Birkly's Toss; 2d, J. Naylor's Rodger; 3d, S. Wilson's Tanner. *Bitches:* 1st, T. Carr's Airedale Lass; 2d, J. Oates's unnamed.

FOX-TEEIERS (SMOOTH).—CHAMPION—*Dog:* L. Turner's Spice. *Bitch:* A. R. Wood's Sutton Veda.—OPEN CLASSES—*Dogs:* 1st, A. R. Wood's Splinter; 2d, L. Turner's Earl Leicester; 3d, F. Redmond's Dandy Dick; 4th, A. H. Clarke's Forest. *Bitches:* 1st and 2d, L. Turner's Richmond Nettle and Delta; 3d, G. Raper's Patch; 4th, A. H. Clarke's Russet. PUPPIES—*Dogs;* 1st, G. Raper's Raby Nailer; 2d, J. J. Stott's Boswell; 3d, F. Redmond's Doric. *Bitches;* 1st, F. Redmond's Dusky; 2d, A. H. Clarke's Douglas Nettle; 3d, G. Raper's Richmond Myrtle. WIRE-HAIRED.—*Champion;* G. Welsh's Mischief.—OPEN CLASSES—*Dogs;* 1st, W. Carrick, Jr.'s Test; 2d, J. W. Corner and W. Marfitt's Rocket; 3d, W. S. Heaton's Badger Broom. *Bitches:* 1st, J. W. Corner and W. Marfitt's Ryedale Thistle; 2d, S. Boddington's Rayleigh Stinger; 3d, H. Cox and E. Jacquet's Fedora Foiler. *Puppies:* 1st, G. Raper's Ringleader; 2d, F. W. Fellowes's Voila; 3d, H. Cox and E. Jacquet's Fedora Foiler.

BEDLINGTON TERRIERS.—CHAMPION—J. A. Baty's champion Diana.—OPEN CLASSES—*Dogs:* 1st and medal, J. A. Baty's The Bishop; 2d, A. N. Dodds's Hairdresser; 3d, G. F. B. Milner's Tinner. *Bitches:* 1st, J. Robson & Co.'s Lillie; 2d, A. Holcroft's Domino; 3d, G. F. R. Milner's Zulu. *Puppies:* 1st and cup, J. Cornforth's Sentinel; 2d, J. Nixon's Byker Lad.

IRISH TERRIERS.—CHAMPION—R. B. & T. S. Carey's champion Sting.—OPEN CLASSES—*Dogs and Bitches:* 1st, W. Graham's Gilford; 2d, C. H. Backhouse's Buster; 3d, H. A. Graves's Pretty Lass. *Puppies:* 1st, W. Graham's Gilford; 2d, C. H. Backhouse's Buster.

BLACK AND TAN TERRIERS.—ANY SIZE—1st, J. Royle's Burke; 2d, R. Brew's Wiz; 3d, J. E. Croft's Lady Langtry.

SKYE TERRIERS.—1st, W. E. Easten's Scottish Queen; 2d, M. Gretton's Kilt; 3d, W. E. Easten's Warlock II.

SCOTCH TERRIERS.—CHAMPION—Captain W. W. Mackie's Dunolly.—OPEN CLASSES—*Dogs:* 1st and 2d, Captain W. W. Mackie's Dunvegan and Dunara; 3d, W. W. Spelman's Teazer. *Bitches:* 1st, Captain W. W. Mackie's Glen Gogo; 2d, C. E. Hammond's Rowdie.

DANDIE DINMONTS.—CHAMPION—1st, W. E. Easten's Border Queen.—OPEN CLASSES—*Dogs:* 1st, J. Lock's The Astrologer, 2d, J. Flinn's Border King; 3d, H. Strong's Habbie Ker. *Bitches:* 1st, W. Tait's Hannah; 2d and 3d, withheld.

PUGS.—CHAMPION—Mrs. M. A. Foster's champion Jenny.—OPEN CLASSES—*Dogs:* 1st, cup, 2d, and 3d, Mrs. M. A. Foster's Diamond, Victor II. and Bradford Ruby. *Bitches:* 1st, Mrs. M. A. Foster's Maggie; 2d, H. Maule's Lady Cloudy; 3d, Lady Brassey's Sunbeam. *Puppies:* 1st, withheld; 2d, H. Maule's Little Dowager.

EXTRA CLASSES.—FOREIGN VARIETY (not previously classified)—1st and 2d, W. K. Taunton's champion Sir John Frankland and Chinese Ambassador; 3d, J. Peace's Bob; 4th, J. Coleman's Canton Ching; 5th, A. Haskins's Romus; 6th, F. G. Hawdon's Dawney. LITTERS (sporting and non sporting puppies, not over four months old, or less than three in a litter).—1st, J. Taylor; 2d, C. E. Hammond; 3d, J. W. Craven; 4th, A. Sapcote.

LOCAL CLASSES.—FOX-TERRIERS—1st, Montague Brougham's Briton; 2d, J. Sharleston's Snap; 3d, R. E. Waterhouse's Sir Frederick.

ANY OTHER BREED.—30LBS. AND UPWARD—1st, J. E. Crofts's Lady Agnes; 2d, J. S. Cowell's Clifton Ruby; 3d, Hon. K. D. St. Lawrence's Empress. UNDER 30LBS.—1st, E. R. Dodsworth's Grace; 2d, Miss E. S. Ellis's Zutven II.; 3d, T. G. Mann's Jock.

MISTAKE IN PEDIGREE.—Rosendale, Wis., June 14.—*Editor Forest and Stream:* In an advertisement in your issue, June 12, by Mr. H. C. Miller, Hudson, N. Y., is offered for sale a bitch claimed to be by Croxteth ex Royal Fan. I think there is some mistake in the pedigree of this pointer—three years old. I sold only one bitch from the issue of Croxteth ex Royal Fan, namely, Cora C., who is about two years and six months old. Dolly was not imported. Will Mr. Miller please explain?—S. B. DILLY.

SAN FRANCISCO.—The *Sacramento Bee* announces that a kennel club is being organized in San Francisco. There will probably be no bench show there this year.

PHILADELPHIA KENNELS.—Philadelphia, June 18.—*Editor Forest and Stream:* Your readers who read the communication of "Homo," in your last number, wherein the Philadelphia Kennel Club desires it to be known that it has no connection with the Philadelphia Kennels, may have naturally supposed that the latter was a swindle, and that the kennel of a firm who sell "canary birds, rabbits and ferrets" might be rather a mythical affair. Notwithstanding the fact that the selling of small pets of various kinds is one branch of our business, we have a kennel covering five acres near Angora, Pa., and are endeavoring to build up a business in selling dogs (more especially the non-sporting varieties) on a legitimate basis. The book (the one advertised in your columns) which we mail you with this will convince you that we at least give the biggest ten cents' worth that has ever been gotten out in that line. We find no fault with the club in disclaiming connection with us; that is but natural and perfectly just. The selection of the name, "Philadelphia Kennels," was rather unfortunate on our part, and was done unthinkingly. The only excuse we can offer is that at the time the name was adopted the club was not the active organization it is now, and we did not then see how it was possible for the two names to clash. We desire just here to pay a tribute to the value of the FOREST AND STREAM as an advertising medium. From the little one-inch card inserted four times we have, to date, received 228 replies mentioning the name of your paper. We are so much pleased with the investment that we shall continue it for a year.—ASSOCIATED FANCIERS.

PHILADELPHIA KENNEL CLUB.—It has been decided by the Philadelphia Kennel Club to abolish the black and tan setter class at the coming dog show of the society. At a meeting lately held to draft a premium list and standards for judging, this was unanimously agreed upon, and a motion was made to adopt the Dixon standard for Gordons, which would have been carried had not the president of the club, Mr. J. G. Dixon, objected to it as reflecting upon himself. In justice to this gentleman it should be understood that he was in no manner a mover in this dropping of the black and tan setter class. It was evident to the members of the Philadelphia Kennel Club who attended the late New York bench show that justice was not being done to the breeders of Gordons of straight pedigree when they were compelled to compete in a class where half Gordons and half Irish setters were allowed to enter. Breeders who are devoting their energies to the improvement of this breed should be protected; and it seems to be the general opinion of the management of bench shows in this country that hereafter no black and tan class will be allowed at canine exhibitions. The dates for the holding of the bench show of the Philadelphia Kennel Club will shortly be made known. The special prize list is daily increasing in number and value.—HOMO.

WILD DOGS OF MAINE.—Machias, June 16.—Game prospects for this part of Maine are good. Deer are more plenty than last year at this season, as well as grouse; due to our present game laws, Commissioner Payson Tucker, and the efficiency of the game wardens. If we can retain our present laws and have the same appropriation for the next two years, we shall see still greater changes. But the danger is that the market hunter will overturn the whole, for he cannot bear to see game increase for fear his neighbor may have a nibble. Wild dogs are increasing, but as soon as they can eat meat they will go the way of their fathers. There is not a well-trained dog in all Washington county or a proper kennel. They roam at will, breed, steal, destroy sheep and game, pollute with their filth, endanger men with their teeth and disease; in short, a complete nuisance, producing nothing and destroying much. They are all "yaller" in this part of Maine. I like a well-trained dog that is properly used and kept; but I have seen so much of the natural cussedness of the dog as he exists in Maine, that I agree with others that he is wild, not domestic. In his place he is a luxury, but out of it, a nuisance.—H.

COLLIE SHOW AND FIELD TRIALS.—In connection with the Toronto Industrial Fair this fall will be held under the auspices of the Ontario Collie Club, a collie show and field trials. These will take place on the exhibition grounds Sept. 16, 17 and 18. In the bench show prizes will be given in four classes, each with sub-sections. There will be two sections (dogs and bitches) in the champion rough-coated class, and three sections (dogs, bitches and puppies) in the open rough-coated class. There will be the same classes and sub-divisions for smooth and medium-coated collies. The field trials will probably be for each dog to take sheep between two posts and back to a pen, or such other trial as the judges will decide. There will be two classes (dogs and bitches), in each of which three prizes, $25, $15 and $8, will be given. Further information is to be had from Mr. H. J. Hill, secretary of the Industrial Exhibition.—*Toronto Mail.*

DOGS AND RAILROADS.—The Chesapeake & Ohio and Kentucky Central Railway Companies will "receive and carry free of charge in baggage cars, at the owners' risk, and without checks, bicycles, light equipment of sportsmen, and their game; also one dog free for each sportsman, when accompanied by their owners, holding first-class tickets. Owners to load and unload their own property."

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex,
4. Age, or
5. Date of birth, of breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Keno Ranger. By Mr. S. B. Dilley, Rosendale, Wis., for liver and white pointer dog, whelped April 3, 1882 (Ranger Croxteth—Fanny Faust).

Glencho II. By Mr. H. P. Kent, Lancaster, N. H., for red Irish setter dog, whelped Oct. 15, 1883, by champion Glencho out of Lulu II. (Berkley—Lulu).

Edgewood Jessie. By the Surrey Kennel, Ellicott City, Md., for black-gray, with white and tan markings, collie bitch, whelped March, 1884, by Douglass (Lad o' Kyle—Flora) out of Chloe (Ring—Jane).

Flora. By the Surrey Kennel, Ellicott City, Md., for black and white pointer bitch, whelped Nov. 14, 1883, by Sport (Dick—Fan) out of Vicross (Sancho—Nettie).

Surrey Sam. By the Surrey Kennel, Ellicott City, Md., for fox-terrier bitch, whelped April 15, 1884, by Flippant (Royal—Tussle) out of Trix (Trig—Patch).

Nun and Brenda. By Mr. Fred. W. Rothera, Simcoe, Ont., for tawny and white St. Bernard bitches, whelped April 25, 1884, by his champion Priam (A.K.R. 485) out of his imported Novice.

Colin, Donald, Stella, Lorna and Lorne's Lass. By Mr. Fred W. Rothera, Simcoe, Ont., for black, tan and white collies, two dogs and three bitches, whelped April 30, 1884, by his Lorne (A.K.R. 446) out of his Lassie (A.K.R. 445).

Fringe. By Mr. F. M. Shumway, Cooperstown, N. Y., for liver and white cocker spaniel bitch, whelped Feb. 7, 1884, by Colonel Stubbs (A.K.R. 302) out of Daffodil (Sam—Daisy Dean).

Jenny Glencho. By Mr. John R. Hope, Swanzey, Mass., for red Irish setter bitch, whelped Oct. 16, 1883, by champion Glencho out of Lulu II. (Berkley—Lulu).

Draco, Brian, Milo, Leonora and Minerva. By Col. U. G. Schoonmaker, Scranton, Pa., for mastiffs, three dogs and two bitches, whelped June 16, 1884 (Nevison—Jersey).

Fanchon. By Mr. T. H. Adams, Pawtucket, R. I., for pug bitch

whelped July 6, 1883, by Mrs. H. A. Recketson's Echo out of Crawford's Victoria.

Pinkey By Mr. T. H. Adams, Pawtucket, R. I., for pug bitch, whelped Jan. 25, 1884, by Mrs. H. A. Recketson's Echo out of Racket.

Rosalie. By Mr. C. T. Pierce, New York, for red Irish setter bitch, whelped Dec. 6, 1883, by Pat O'More (Rory O'More—Norah O'More) out of Pearl (Dash—Kate).

Flirt Warren. By the Strawberry Hill Kennel, Leicester, Mass., for black and white English setter dog, whelped Feb. 12, 1884 (Dash III.—Matchless).

Noreen III. By Mr. T. H. Adams, Pawtucket, R. I., for red Irish setter bitch, whelped Feb. 16, 1884, by champion Elcho (A.K.R. 295) out of champion Noreen (A.K.R. 297).

Scarlet III. By Mr. Frank F. Dole, New Haven, Ct., for bull-terrier bitch, whelped Feb. 26, 1884 (Young Royal—Scarlet II.).

Belle of Orange. By Mr. J. C. Vail, Warwick, N. Y., for orange and white English setter bitch, whelped Aug. 2, 1883, by champion Thunder out of Mr. J. O. Donner's Bessie.

Count Bondhu. By Mr. P. Moeller, Nyack, N. Y., for white, black and tan English setter dog, whelped Feb. 27, 1884, by Gus Bondhu out of Countess Mollie.

NAMES CHANGED.

☞ *See instructions at head of this column.*

Minda to Norah Mavourneen. Red Irish setter bitch, whelped July 6, 1883 (Rory O'More—Norah O'More), owned by Mr. Geo. E. Styles, Burlington, Vt.

Guard to Marmion. Mastiff dog (A.K.R. 1142), owned by the Strawberry Hill Kennel, Leicester, Mass.

BRED.

☞ *See instructions at head of this column.*

Speck—Blue Blood. Mr. J. A. Backus's (Newark, N. J.) English setter bitch Speck (Roderick—Speck) to Mr. L. J. Gaines's Blue Blood (Leicester—Doll), May 6.

Peg—Don Juan. Mr. Jas. H. Goodsell's (New York) pug bitch Peg to Mr. W. R. Knight's Don Juan (Comedy—Chloe), May 1.

Fairy II.—Prince. Mr. James H. Goodsell's English setter bitch Fairy II. (Victor—Daisy) to his Prince (Pride of the Border—Petrel), May 10.

Beauty—Coin. Dr. F. B. Greenough's (Boston, Mass.) English setter bitch Beauty (A.K.R. 122) to Mr. F. B. Fay's Coin (Leicester—Rose), June 8.

Maude—Mack B. Mr. W. W. Higgins's (Pawtucket, R. I.) English setter bitch Maude (Sam—Smut II.) to Blackstone Kennel's Mack B. (Dick Laverack—Twilight), June 13.

Critic—Obo II. Mr. Winchester Johnson's (Boston, Mass.) black spaniel bitch Critic (Brush II.—Blackie II.) to Mr. J. P. Willey's Obo II. (A.K.R. 432), May 30.

Nettle—Flippant. Mr. W. H. Cookson's (Hudson, N. Y.) fox-terrier bitch Nettie (Gamester—Vixen) to the Surrey Kennel's Flippant (A.K.R. 528), June 12.

Lufra—Friday Night. Mr. H. W. Smith's (Worcester, Mass.) greyhound bitch Lufra (A.K.R. 1138) to his champion Friday Night (A.K.R. 753), June 15.

Lady Nell—Young Bill. Mr. Frank F. Dole's (New Haven, Conn.) bull-terrier bitch Lady Nell (Paddy—Daisy) to his Young Bill (Bill—Dutch), May 28.

Flake—Young Bill. Mr. Frank H. Howe's (New Haven, Conn.) bull-terrier bitch Flake (Mat—Vixen) to Mr. Frank F. Dole's Young Bill (Bill—Dutch), May 19.

Trallee—Dan O'Connor. The Milwaukee Kennel Club's (Milwaukee, Wis.) Irish water spaniel bitch Trallee (Bob—Irish Nell) to their Dan O'Connor (champion Barney—Kathleen), April 4.

Irish Nell—Dan O'Connor. The Milwaukee Kennel Club's Irish water spaniel bitch Irish Nell (Patsey—Jess) to their Dan O'Connor (champion Barney—Kathleen), April 4.

Isle - Scot Guard. The Kilmarnock Collie Kennel's (Mattapan, Mass.) imported collie bitch Isle to Mr. P. C. Lounsbury's Scot Guard (E.K.C.S.B. 11,854), May 11.

Lucia—Bang Bang. Mr. D. S. Gregory, Jr.'s (New York) pointer bitch Lucia (A.K.R. 209) to the Westminster Kennel Club's Bang Bang (A.K.R. 394), May 26.

Lass—Bang Bang. Mr. B. F. Seitner's (Dayton, O.) pointer bitch Lass (Sleaford—Dawn) to the Westminster Kennel Club's Bang Bang (A.K.R. 394), May 29.

Bess—Prince. Mr. M. F. Campbell's (Kansas City, Mo.) Irish water spaniel bitch Bess (Cap—Nell) to Mr. W. J. Mente's cocker spaniel Prince (Cash—Beauty), May 15.

Myrtle—Briar. Mr. C. Schwein's (Cincinnati, O.) beagle bitch Myrtle (Rattler—Lulu) to his Briar (Mose -Melody), May 25.

Cleopatra—Tiny. Mr. W. Wade's (Pittsburgh, Pa.) mastiff bitch Cleopatra (A.K.R. 258) to his Tiny, May 20.

Tantrums—Young Toby. The Chequasset Kennel's pug bitch Tantrums (A.K.R. 220) to their Young Toby (A.K.R. 473), May 8.

Belle II.—Harry S. Mr. Harry May's (Augusta, Ga.) English setter bitch Belle II. (A.K.R. 362) to his Harry S. (A.K.R. 223), April 25.

Chlo II.—Obo, Jr. Mr. F. F. Pitcher's (Claremont, N. H.) cocker spaniel bitch Chloe II. (Dash—Nellie) to Mr. J. P. Willey's Obo, Jr. (Obo—Nellie), April 25.

Daisy—Obo II. Mr. F. F. Pitcher's (Claremont, N. H.) spaniel bitch Fanny to Mr. J. P. Willey's Obo II. (A.K.R. 432), April 26.

Quiver—Silk II. Mr. J. P. Stinson's (Leavenworth, Kan.) bull-terrier bitch Quiver (A.K.R. 756) to his Silk II. (A.K.R. 738), May 9.

Spice—Saxon. Mr. J. P. Stinson's (Leavenworth, Kan.) bull-terrier bitch Spice (A.K.R. 739) to his Saxon (Young Royal—Empress), May 7.

Titania—Young Toby. The Essex Kennel's (Andover, Mass.) pug bitch Titania (Fritz, A.K.R. 569—Beauty) to the Chequasset Kennel's Young Toby (A.K.R. 473), June 6.

Daisy—Treasure. Mr. T. H. Adams's (Pawtucket R. I.) pug bitch Daisy to the Chequasset Kennel's Treasure (A.K.R. 472), June 5.

Deborah—Foreman. Mr. W. H. Ashburner's (Philadelphia, Pa.) beagle bitch Deborah (A.K.R. 1119) to his Foreman (A.K.R. 1120), June 1.

Fly—Foreman. Mr. J. Satterthwaite, Jr.'s (Jenkintown, Pa.) beagle bitch Fly (A.K.R. 1012) to Mr. W. H. Ashburner's Foreman (A.K.R. 1120), June 10.

Daphne II.—Cæsar. The Essex Kennel's (Andover, Mass.) smooth-coated St. Bernard bitch Daphne II. (A.K.R. 489) to the Forest City Kennel's champion Cæsar (A.K.R. 221), May 25.

Petrel III.—Don Juan. Mr. Jas. H. Goodsell's (New York) English setter bitch Petrel III. (Carlowitz—Petrel) to his Don Juan (Tam O'Shanter—La Reine), May 22.

Daisy Laverack—Plantagenet. Mr. James H. Goodsell's (New York) English setter bitch Daisy Laverack to his champion Plantagenet, May 22.

Queen Petrel—Plantagenet. Mr. James H. Goodsell's (New York) English setter bitch Queen Petrel (Thunder—Petrel) to his champion Plantagenet, May 24.

Young Swan—Drake. The Milwaukee Kennel Club's Irish water spaniel bitch Young Swan to imported Drake, April 12.

Quail II.—Tim O'Connor. The Milwaukee Kennel Club's Irish water spaniel bitch Quail II. (Shamrock—Floss) to their Tim O'Connor (Dan O'Connor—Queenstown), April 22.

Rose—Promise. Mr. T. M. Pinkney's (Madison, N. J.) setter bitch Rose (Ned—Rose) to Mr. Chas. DeRonge's Promise (Pride of the Border—Flash), June 16.

WHELPS.

☞ *See instructions at head of this column.*

Bess. Mr. F. J. Goldwait's (Boston, Mass.) imported red Irish setter bitch Bess (Gold—Siss), May 29, twelve (five dogs), by Mr. Jos. Hayes's Suil-a-Mor (Claremont—Dido).

Flake. Mr. J. J. Scanlan's (Fall River, Mass.) English setter bitch Flake (Druid—Swaze), June 8, eight (three dogs), by Cashier (Dash III.—Opal).

Victoria. Mr. A. E. Burche's (Washington, D. C.) English setter bitch Victoria (Warwick—Belle), June 11, eight (four dogs), by Dashing Lion (Dash II.—Leda); all black and white.

Fairy III. Mr. Jas. H. Goodsell's New York) English setter bitch Fairy III. (A.K.R. 35), May 8, nine (five dogs), by his champion Plantagenet.

Countess Bess. Mr. A. Miller's (Shickshinny, Pa.) setter bitch Countess Bess (Fred—Flirt), June 15, six, by Rex (Reed's Druid—Bessie Lee).

Domina. Mr. A. G. Chisholm's (London. Ont.) English setter bitch Domina (Prince Royal—Nettie), June 17, five (two dogs), by Harrison's London.

Gypsy Queen. Mr. C. F. Kent's (Monticello, N. Y.) beagle bitch Gypsy Queen (Brier—Bush), June 17, seven (four dogs), by Mr. N. Elmore's imported Ringwood.

Dotta. Mr. W. E. Scssious's (Worcester, Mass.) mastiff bitch Lotta (Romeo—Juliet), June 15, five (three dogs), by imported York.

Jersey. Col. U. G. Schoonmaker's (Scranton, Pa.) mastiff bitch Jersey (Pluto—Jessey), June 16, five (three dogs), by champion Nevison (Gurth—Juno).

Lassie. The Westminster Kennel Club's pointer bitch Lassie (A.K.R. 208), June 1, eight (four dogs), by Vandevort's Don (A.K.R. 165).

Laura. Mr. T. F. Nealis's (Philadelphia, Pa.) pug bitch Laura (Punch—Minnie), June 12, six (two dogs), by Smut.

Betsy. Mr. T. F. Nealis's (Philadelphia, Pa.) pug bitch Betsy (Punch—Judy), five (two dogs), by Smut.

Bertha. Mr. W. Wade's (Pittsburgh, Pa.) mastiff bitch Bertha (A.K.R. 151), May 17, eleven (seven dogs), by his Tiny.

Gipsey. Mr. W. Wade's (Pittsburgh, Pa.) mastiff bitch Gipsey (A.K.R. 15), May 14, five (three dogs), by his Tiny.

Lodin. The Ashmont Kennel's (Boston, Mass.) imported mastiff bitch Lodin, April 8, eleven (four dogs), by Diavolo (A.K.R. 543).

Juno. The Forest City Kennel's (Portland, Me.) pug bitch Juno (A.K.R. 406), May 19, five (two dogs), by Young Toby (A.K.R. 473).

Abbess. The Schoonhoven Kennel's (Black Rock, Ct.) St. Bernard bitch Abbess (A.K.R. 783), May 9, eleven (nine dogs), by champion Bonivard (A.K.R. 361).

Alma. The Chequasset Kennel's St. Bernard bitch Alma (A.K.R. 27), May 12, eleven (two dogs), by Prince (A.K.R. 1052); one living.

Blackie III. Mr. J. P. Willey's (Salmon Falls, N. H.) cocker spaniel bitch Blackie III. (A.K.R. 428), April 19, seven (two dogs), by Obo II. (A.K.R. 432); all black.

Clio. Mr. J. P. Willey's (Salmon Falls, N. H.) cocker spaniel bitch Clio (A.K.R. 429), April 16, three (one dog), by Obo II. (A.K.R. 432); all black.

Girl Mr. R. T. Greene's (Jersey City, N. J.) pointer bitch Girl (A.K.R. 697), June 12, seven (five dogs), by Glenmark (Rush—Romp).

Bush. Mr. A. H. Wakefield's (Providence, R. I.) beagle bitch champion Bush (A.K.R. 139), May 30, five (three dogs), by imported Foreman (A.K.R 1120).

Fanchon. Mr. T. H. Adams's (Pawtucket, R. I.) pug bitch Fanchon (Echo—Victoria), April 29, two, both dogs, by Young Toby (A.K.R. 473).

Trallee. The Milwaukee Kennel Club's (Milwaukee, Wis.) Irish water spaniel bitch Trallee (Bob—Irish Nell), June 1, seven (three dogs), by their Dan O'Connor (champion Barney—Kathleen).

Irish Nell. The Milwaukee Kennel Club's Irish water spaniel bitch Irish Nell (Patsey—Jess), June 13, five (three dogs), by their Dan O'Connor (champion Barney—Kathleen).

Clio. Mr. H. W. Huntington's (Brooklyn, N. Y.) black greyhound bitch Clio (Badger—Fan), June 11, eight (five dogs), by his Doublehot (A.K.R. 73); two black and white, one black, one blue and one fawn dog, and three black and white bitches.

SALES.

☞ *See instructions at head of this column.*

Sweetheart. Red Irish setter bitch (A.K.R. 299), by Mr. James B. Blossom, Morrisania, N. Y., to the Ashmont Kennel, Boston, Mass.

White Lily. Liver and white pointer bitch, age not given (Dime—Queen), by Mr. S. B. Dilley, Rosendale, Wis., to Mr. C. W. Stewart, Ripon, Wis.

Keno Ranger. Liver and white pointer dog, whelped April 3, 1884 (Ranger Croxteth—Fanny Faust), by Mr. S. B. Dilley, Rosendale, Wis., to Mr. W. C. Percy, Bayou Tunica, La.

Ruby. Red Irish setter bitch, 4yrs. old (Elcho—Rose), by Mr. H. H. Tate, Greensboro, N. C., to Mr. Max Wenzel, Hoboken, N. J.

Dell. White, black and tan beagle bitch (A.K.R. 319), by Messrs. R. & W. Livingston, New York, to Mr. Andrew Winser, Providence, R. I.

Rock—Kate whelps. English setters, age and color not given, by Mr. William Tallman, South Attleboro, Mass., a dog to Mr. W. W. Higgins, Pawtucket, R. I., and a bitch to Mr. J. I. Farrell, North Attleboro, Mass,

Dido. Italian greyhound bitch, age not given (Mayo—Vero), by Mr. E. W. Jester, St. George's, Del., to Mr. W. H. Wilson, Washington, Pa.

Ida. Italian greyhound bitch, age not given (Mayo—Vero), by Mr. E. W. Jester, St. George's, Del., to Mr. George E. Numsen, Baltimore, Md.

Zoo. Italian greyhound dog, age not givan (Mayo—Vero), by Mr. E. W. Jester, St. George's, Del., to Mr. G. E. Stockbridge, Kalamazoo, Mich.

Ruth. English setter bitch, age and color not given (Dashing Lion—Armida), by Mr. E. W. Jester, St. George's, Del., to the Highland Kennel, Ashfield, Mass.

Obo II.—Smut whelp. Black cocker spaniel bitch, whelped April 29, 1884, by Mr. H. C. Bronsdon, Boston, Mass., to Mr. F. McDewell, same place, who has resold her to Mr. Robert Walker, Franklin, N. Y.

Lennox. Lemon and white pointer dog (A.K.R. 1045), by Mr. H. W. Smith, Worcester, Mass., to Mr. Robt. M. Washburn, same place.

Flirt Warren. Black and white English setter dog, whelped Feb. 12, 1884 (Dash III.—Matchless), by Mr. D. A. Goodwin, Jr., Newburyport, Mass., to the Strawberry Hill Kennel, Leicester, Mass.

Flake. Bull-terrier bitch, age not given (Mat—Vixen), by Mr. F. C. Wheeler, London, Ont., to Mr. Frank F. Dole, New Haven, Ct., who has resold her to Mr. Frank H. Howe, same place.

Scarlet II. Bull-terrier bitch, 3yrs. old (Randall—Scarlet), by Mr. Geo. B. Foss, Dover, Me., to Mr. Frank F. Dole, New Haven, Ct.

Scarlet III. Bull-terrier bitch, whelped Feb. 26, 1884 (Young Royal—Scarlet II.), by Mr. Geo. B. Foss, Dover, Me., to Mr. Frank F. Dole, New Haven, Ct.

Sensation—Flirt whelp. Pointer dog, whelped April 11, 1884, by Mr. Wm. S. Thurston, Huntington, L. I., to Mr. A. L. Titus, Centerport, L. I.

Obo II.—Gem whelps. Black cocker spaniels, whelped April 24, 1884, by Mr. Geo. L. V. Tyler, West Newton, Mass., a dog and bitch to Mr. N. P. Warren, same place, and a dog to Mr. George A. Mead, same place.

Black Rose. Black cocker spaniel bitch (A.K.R. 249), by the Surrey Kennel, Ellicott City, Md., to Mr. C. E. Lewis, Suspension Bridge, N. Y.

Success. Black field spaniel dog (A.K.R. 735), by the Surrey Kennel, Ellicott City, Md., to Mr. J. H. Winslow, Philadelphia, Pa.

Growler. Black, tan and white collie dog (A.K.R. 759), by Mr. George A. Fletcher, Milton, Mass., to Mr. David C. Smith, Lexington, Mass.

Rover. Black, tan and white collie dog (A.K.R. 750), by Mr. Geo. A. Fletcher, Milton, Mass., to Mr. Daniel Wheeler, Oxford, N. H.

Jeannie C. Black, tan and white collie bitch (Sandy, A.K.R. 751—Daisy, A.K.R. 748), by Mr. Geo. A. Fletcher, Milton, Mass., to Mr. Chas. W. Cook, same place.

Bruce Ranger. Liver and white pointer dog, whelped Nov. 3, 1883 (Ranger—White Lilly), by Mr. S. B. Dilley, Rosendale, Wis., to Mr. Amory R. Starr, Marshall, Tex.

Nell Ranger. Liver and white pointer bitch, whelped April 3, 1884 (Ranger Croxteth—Fanny Faust), by Mr. S. B. Dilley, Rosendale, Wis., to Mr. David Cratt, Wabasha, Minn.

Minnie Ranger. Liver and white pointer bitch, whelped April 3, 1884 (Ranger Croxteth—Fanny Faust), by Mr. S. B. Dilley, Rosendale, Wis., to Mr. John S. Dilley, Lake City, Minn.

Duke of York. Lemon and white pointer dog, whelped Sept. 13, 1883, by Sensation (A.K.R. 217) out of Lass (Sleaford—Dawn), by Mr. B. F. Seitner, Dayton, O., to Mr. O. B. Brown, same place.

Dandy Sensation. Lemon and white pointer dog, whelped Sept. 13, 1883, by Sensation (A.K.R. 217) out of Lass (Sleaford—Dawn), by Mr B. F. Seitner, Dayton, O., to Mr. A. A. Winter, same place.

Gus Bondhu—Countess Mollie whelp. White, black and tan English setter dog, whelped Feb. 27, 1884, by Mr. P. Moeller, Nyack, N.Y., to Mr. Eugene A. Austin, Providence, R. I.

PRESENTATIONS.

☞ *See instructions at head of this column.*

Obo II.—Gem whelp. Black cocker spaniel dog, whelped Sept. 27, 1884, by Mr. Geo. L. V. Tyler, West Newton, Mass., to Dr. F. E. Crocket, same place.

Rifle and Trap Shooting.

RANGE AND GALLERY.

BOSTON, June 17.—Bunker Hill day brought a crowd of marksmen to Walnut Hill. The scores stood:

Creedmoor Practice Match, possible 50—E. Burleigh 48, A. B. Edwards 47, C. B. Edwards 46, R. Reed 46, W. Daly 44, G. J. Boardman (mil.) 43, F. Wallace 43, M. Wilhams 42, A. Steele 42, C. Smith 41, J. James 41, W. H. Ober 41, G. J. Boardman (mil.) 41, L. Winslow 40, H. Newton 39, Frank Smith 38, F. Wilson 38, W. Jones 38.

Creedmoor Prize Match, possible 50—H. Cushing 47, F. W. Perkins 47, C. H. Cushing 47, J. B. Fellows 46, J. N. Frye 46, J. Armstroug 46, F. Wallace 45, F. Smith 45, W. French 45, F. J. Bent 45, B. Higgins 44, C. Bailey 44, J. Morse 43.

Decimal Match, Rest, possible 100—W. Gardner 95, S. Wilder 90, B. C. Booz 90, B. F. Clark 89, H. S. Sturgis 80.

Decimal Match, possible 100—J. B. Fellows 96, J. Francis 83, H. Steele 66, H. Newton 47.

June 21.—The weather was so warm that but a few gentlemen were at Walnut Hill to-day, but those who were there had an excellent chance to do some good shooting, for the conditions were superb. Messrs. J. P. Bates, R. Reed, E. B. Souther, J. B. Fellows and F. W. Perkins made 47 each on the Creedmoor target, and Mr. W. D. Palmer of the Merrimac Club made a fine 48 and a 47. Mr. J. B. Fellows, who won the Directors' medal, had his twelve-year-old son Fred with him, and the lad made a fine 92 on the rest target. The following are the best scores:

Creedmoor Practice Match.—W. D. Palmer 48, R. Reed 47, C. E. Berry 46, W. H. Ober 45, A. J. Look 45, J. E. Darmoody (mil) 41.

Creedmoor Prize Match.—J. B. Fellows (E) 47, E. B. Souther (E) 47, F. W. Perkins (B) 47, J. P. Bates (B) 47, W. H. Ober (B) 46, C. E. Berry (B) 46, C. B. Edwards (B) 45, J. A. Cobb (B) 45, W. C. Adams (E) 45, A. J. Lock (E) 44, B. A. Lappin (E) 44.

Decimal Match.—W. Charles 88, J. B. Fellows 78, A. J. Look 70, W. H. Ober 69, A. Darling 52.

Rest Match.—W. Charles (E) 93, J. Francis (D) 92, C. Fred Fellows (A) 92, E. B. Souther (E) 79, S. Wilder (A) 75.

Directors' Match, possible 25.—J. B. Fellows 24, J. Francis 23, R. Reed 22, F. Wallace 21.

BUFFALO, June 17.—The ninth annual spring match of the Bay View Rifle Association was shot at their range to-day. The weather throughout the day was exceedingly fine, but the rays of the sun were so bright as to blur the sight on the long ranges. The programme of matches and prizes this year is unusually large, and special inducements are offered to junior marksmen. The work of the day is given below:

Competition No. 1, Directors' Match—Open only to directors of the Bay View Rifle Association. Distance 200yds., rounds 10, position, standing, weapon, any military rifle, entrance fee $1.

Prize—The directors' championship gold badge, shot for annually, and held by the winner during the year; presented to the Association by Brig.-Gen. Edgar B. Jewett, value $25.

Col T S Ward	3	4	3	4	4	4	4	5	4	39
Capt H A Menker	4	4	4	3	2	4	5	4	4	38
Lieut Jas Sheldon, Jr	3	3	3	4	5	4	3	2	4	33
Brig-Gen E B Jewett	0	2	3	3	4	3	4	3	4	30
Capt Wm Franklin	3	3	4	3	4	4	0	0	0	22

Competition No. 2, Qualification Match—Open to all members of the Association, Remington rifle (New York State model), 200 and 500yds., 5 shots at each distance, no sighting shots.

First Prize—A Remington, Keene magazine sporting rifle, presented to the Association by Col. P. P. Beals, to become the property of the person winning it the greatest number of times during the season, value $35.

Competitors divided into three classes, third class allowed to shoot for any prize, second class for first three and last four only, and first class for first two and last three only.

	200yds.	500yds.
Lieut Jas Sheldon, Jr	3 5 5 3 5—19	3 5 6 4 5—22—41
Capt H A Menker	4 4 4 5 4—21	2 0 4 4 4—14—35
Col T S Waud	4 3 4 4 4—19	4 2 4 2 2—15—34
Corp Graves	3 4 4 3 4—19	2 4 3 3 3—15—34
Col William Bloomer	4 4 3 3 4—18	3 4 3 2 3—15—33
Brig-Gen E B Jewett	4 5 3 3 4—19	0 0 5 3 4—12—31
Capt Wilham Franklin	4 4 4 4 3—19	0 0 4 3 4—11—30
Sergt Matthew Wasser	4 5 3 4 2—18	0 2 0 0 4—6—24
Col P P Beals	4 4 3 4 5—20	0 4 0 0 4—8—28
Private R E Emblidge	3 3 4 3 2—15	0 2 3 3 0—8—23
Capt Frank T Bloomer	3 4 0 4 0—10	2 2 4 0 4—12—22

Competition No. 3, Champion Marksmen's Class Match—Open to all members of the N. G. S. N. Y. and members of the Bay View Rifle Association, the latter, however, not being eligible to win the principal prize. 200 and 500yds., five shots at each, Remington rifle (the New York State model).

First prize—A gold marksman's badge for 1884. The badge to become the property of the competitor who, at the close of the season of 1884, shall have won it the greatest number of times. Ten other prizes (medals) presented by the Bay View Rifle Association to the highest competitors in the order of merit. Winners with a score of thirty-six points and over to receive a silver, and winners having a score of under thirty-six to receive a bronze medal. The same man can only win one medal during the season.

	200yds.	500yds.
Lieut James Sheldon, Jr	4 4 4 4 4—20	5 4 5 2 4—23—43
Col T S Waud	5 5 4 5 5—24	2 5 4 3 3—18—42
Col William Bloomer	4 4 3 5 4—20	5 5 3 5 3—21—41
Corp Graves	4 5 4 4 3—20	3 5 4 2 4—18—38
Priv R E Emblidge	3 4 4 4 3—18	5 3 4 3 3—18—36
Capt William Franklin	4 3 5 5 3—20	4 0 3 5 4—16—36
Col P P Beals	4 3 1 2 4—17	2 4 2 4 5—17—34
Capt H A Menker	4 4 5 4 4—21	4 5 2 2 0—13—34
Sergt Matthew Wasser	3 3 2 4 3—15	4 5 4 3 0—16—31
Sergt G A Rogers	4 3 2 2 5—16	0 0 0 4 3— 7—23
Brig Gen E B Jewett	3 4 3 3 4—17	2 0 0 4 0— 6—23
Lieut H R Clark	2 0 4 3 3—12	0 0 0 4 4— 4—16

Competition No. 4, Scoville-Moulton Match—Open to all members of the Association, Weapon, the Remington rifle (New York State model); distances, 200, 500 and 600yds.; seven shots at each distance; position at 200yds, standing, at 500 and 600yds, any with head toward target; no sighting shots allowed.

First prize—The "Scoville" trophy, presented to the association by the Hon. N. C. Scoville. To become the property of the person winning it three times (not necessarily consecutively), value $100; second, the "Moulton" trophy, presented to the assooiation by the Hon. John F. Moulton. To become the property of the person winning it twice (not necessarily consecutively), value $50.

	200yds.	500yds.	600yds.
Col T S Waud	4443341—27	3543233—25	3343404—20—72
Col P P Beals	4424444—24	0333324—18	3434245—25—67
Lt. James Sheldon, Jr	3434444—26	4534400—23	2202533—17—66
Capt H A Menker	4555443—30	2033003—11	2330330—23—64
Capt Wm Franklin	4523433—26	4203355—21	2330330—14—61
Lt H R Clark	4344534—26	0000235—10	4033523—19—55
Corp Charles Graves	4023133—19	3303433—21	0322102—15—55
Col William Bloomer	4434434—26	2250403—16	3020024—11—53
Sergt M Wasser	0334434—21	2002104—12	3034000—10—43

Competition No. 5, Junior Marksman's Match—Open to all junior marksmen of the Association. Remington rifle (New York State model), 200 and 500yds; five shote each distance. Position, 200yds., standing; at 500, lying with head toward the target. No sighting shot.

First prize—Military rifle, New York State model, to be awarded to the competitor winning it the greatest number of times during the season. Presented by Col. P. P. Beals, value $25.

	200yds.	500yds.
Sergt G A Rogers	3 2 3 3 4—15	0 3 4 4 3—14—29
Gen T B Jewett	4 4 3 0 4—15	0 3 3 3 0— 9—24
Capt Frank T Bloomer	4 3 4 4 0—15	2 4 3 0 0— 9—24
Corp E A Smith	3 2 3 4 4—16	0 0 0 3 3— 3—19
Sergt Matthew Wasser	3 0 2 2 3—10	0 3 0 0 0— 3—13

Competition No. 6, Cleveland Match—Open to all members of the Association. Weapon, Remington rifle (New York State model); distance, 100, 300 and 500yds.; rounds, five at each distance; position, at 100 and 300yds., standing, at third-class target, at 500yds., any with head towards the target; two sighting shots each at 300 and 500yds. First prize, a gold badge, presented by the Hon. Grover Cleveland, to be won three times (not necessarily consecutive), value, $30.

	100yds.	300yds.	500yds.
Capt H A Menker	55455—24	45245—20	44434—19—63
Capt William Franklin	45554—23	44344—19	32435—20—62
Col P P Beals	54544—22	31442—17	43544—20—59
Corp Charles Graves	44444—20	33544—19	24234—14—53
Col William Bloomer	55445—23	42063—12	42434—17—52
Priv R E Emblidge	45443—20	30305—11	43245—18—49
Lieut James Sheldon, Jr	44435—23	23232—12	33354—17—40
Col Thos S Waud	31444—18	12043— 9	02553—20—47
Corp E A Smith	43433—17	30332—10	54404—17—44
Lieut H R Clark	44435—20	04324—13	50002— 7—40

A final award of first prize was made to Capt. H. A. Menker, he having won it in two previous matches.

Competition No. 7, Plumb Match—Open to all members of the Association. Weapon, any military rifle; distance, 200 and 500yds.; rounds, ten at each distance; position, at 200yds. standing, at 500yds. any with head toward the target. Two claims on first prize have heretofore been won by Capt. Menker.

First prize—The "Plumb" gold and silver badge, to be won three times (not necessarily consecutively), value, $25.

	200yds.	500yds.
Col P P Beals	5320424443—37	1145344111—42—79
Col T S Waud	4442433344—37	3535343532—38—75
Lieut James Sheldon, Jr	3551342443—37	3325053152—33—70
Priv R E Emblidge	4533345444—37	0333455542—33—70
Capt Wm Franklin	4453443434—39	5405443230—30—69
Capt H A Menker	3455344438—37	2400443533—30—67
Col Wm Bloomer	4444353244—37	0003353234—32—59
Lieut H R Clark	4554433454—21	0200330320—13—54
Corp Chas Graves	3021334333—27	2000032241—12—39

Competition No. 8, Short Range Continuous Match—Open to all members of the Association, 200yds., rounds 5, standing, any military rifle, cash prizes:

Capt H A Menker	44355—23	Capt Wm Franklin	44434—19
Corp Charles Graves	34454—20	Lieut J Sheldon, Jr	34045—16
Col T S Waud	44454—19	Sergt C A Rogers	32434—14
Lieut H R Clark	35245—19	Col P P Beals	00444—12

The next regular shoot will take place on July 8, when qualification and champion matches will be the order.

THOMASTON, CONN., JUNE 21.—At the weekly shoot to-day of the Empire Rifle Club the following scores were made: A. S. Hubbard 101, W. H. Dunbar 103, G. P. North 101, G. A. Lemmon 99, B. W. Pease 99, F. Carr 87, C. L. Alling, 87, A. Fox 83, C. F. Williams 75, W. Kerwood 74, E. Thomas 71. C. F. Williams's low score was undoubtedly owing to his using a new gun. Holmes, of the Independent Gun Club, of Waterbury, visited the range and made a score of 99. At the shoot a week ago C. F. Williams won the badge with a score of 103, G. A. Lemmon made 102, A. S. Hubbard 101, G. P. North 97, W. H. Dunbar 96, F. Carr 93, C. L. Alling 87, A. Fox 84, B. W. Pease 75, W. Kerwood 75, G Smith 71.



FIG. 3.

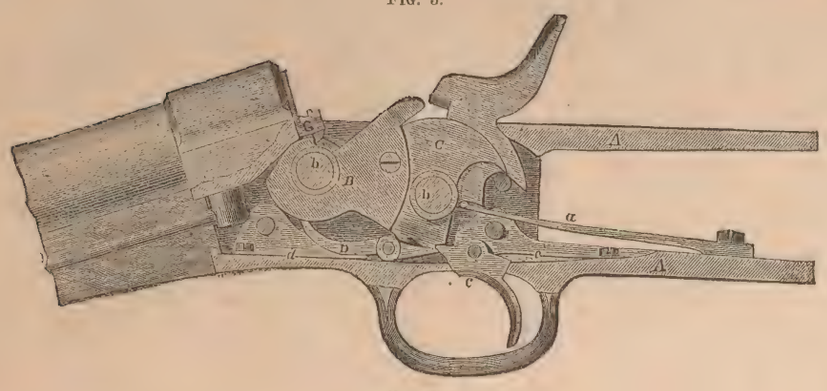


FIG. 2.

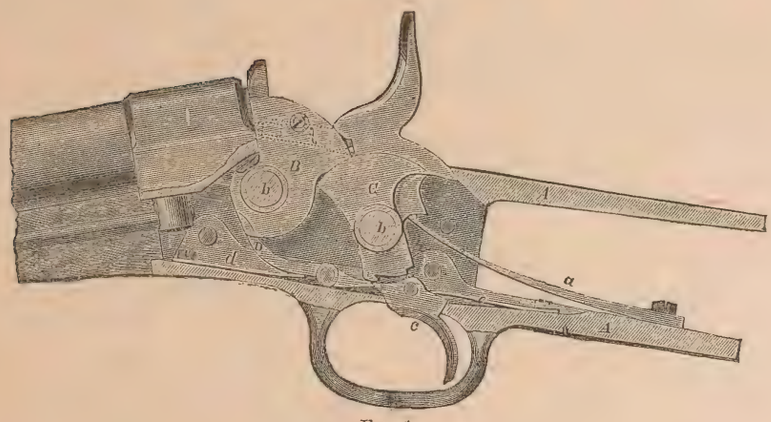


FIG. 1.

RIFLES OF TO-DAY.

THE REMINGTON RIFLE.

THE story of the first Remington gun, the manufacture of which arm, under peculiarly adverse circumstances, laid the foundation of the largest armory in the world, has been many times retold, and will probably be new to but few of our readers. Briefly stated, it is as follows: In 1816, Eliphalet Remington, the founder of the Remington armory, was a boy working on his father's farm in Herkimer county, N. Y. Like other boys, he was very anxious to obtain a gun, but when the subject was broached to his father, he was told to make one. This advice, undoubtedly given in jest, he at once proceeded to act upon, and notwithstanding his tools were of the rudest character and his "plant" consisted of an obsolete farm forge, the gun, when finished, proved such a success, that the young man, although untutored in mechanics, recognized gunmaking as his life work, to which business he thereafter applied himself assiduously.

For nine years he continued the forging of gun barrels, making his father's farm the scene of his operations, and pluckily overcoming the difficulties which the many disadvantages under which he labored, necessarily engendered. In addition to the other work, he quarried the grindstones necessary for his use. Each piece of work was conscientiously performed each barrel added to the reputation of the young gunmaker, and each test of his productions was the means of bringing new customers to his humble factory. The most important part of a gun is the barrel, and there is no doubt that to the reputation for making safe and accurate barrels, thus early established and subsequently maintained, much of the success of the Remingtons may be attributed.

In 1825 Mr. Remington was enabled to purchase the present site of Ilion, N. Y., a few miles from the old forge—his reasons therefore being that he could obtain a better water power, and the Erie Canal having recently been constructed, better facilities for transportation as well. His first venture in building was a modest one-story structure which still stands, forming a part of the forging shop. Space will not permit a detailed account of the progress made in the manufacture of arms, the various improvements in the way of machinery, and the enlargement of the plant. A casual mention, however, may prove interesting. The first contract for making a few thousand stand of arms was undertaken in 1835, at which time, and until 1840, there were but six machines in operation at the works. This contract was soon supplemented by others for 5,000 rifles each, which in those days were no doubt looked upon as important as contracts a score of times as large have since been considered. As his three sons grew to manhood, Mr Remington admitted them to partnership, and having been educated to the business, they at once took a prominent part in its management.

During the succeeding years the Remington arms, in a constant state of improvement, after subjection to the severest tests by government commissions, composed of the best mechanical and military experts, have been issued to troops in every quarter of the globe, placed in the hands of the most intelligent as well as the rudest and most ignorant soldiers, and have invariably withstood the consequent wear, exposure and abuses. There have been made at this armory 1,500,000 stand of military rifles, 100,000 sporting arms, and upward of 600,000 pistols. Military arms have been furnished to the following-named governments, contracts for these guns being consummated by recommendation of the commissions appointed to test the best patterns manufactured; Spain, France, United States (for navy), Egypt, Mexico, Argentine Republic, Denmark, United States of Colombia, Spain (for Cuba), Sweden and Japan. After years of subjection to rough usage on land and at sea, no fault has been found with this weapon, it having successfully withstood that test of tests, active military service. In official reports made by representatives of the different governments which have adopted this arm, the most complete satisfaction concerning its performance is expressed, their recommendations being frequently accompanied with supplemental orders.

Certainly, a weapon capable of withstanding such tests and service is sufficiently durable for use either as a military, hunting, or target rifle. When the Remington rifle is cocked and the breechblock opened, it is impossible to pull it off, as it is furnished with a locking lever, but a pull on the trigger of some of the advertised imitations releases the hammer, which falls to half cock when the breechblock is closed, and if the point of the sear breaks, as it is very likely to do, the gun will be discharged. The function of the locking lever is twofold; one of its offices being to lock the trigger, so that it cannot escape from its notch in the tumbler when the breechblock is opened, and a second to secure the breechblock when closed by the force directly transmitted of the lever spring.

Notwithstanding the improvements made in breechloading rifles and ammunition for many years past, and the attention that has been devoted to their use, it is of comparatively recent date that the range of the arms and their efficiency at long distances have been properly understood. Tests of the Remington military service rifle at a distance of 1,800yds. have resulted in the penetration of two inches of seasoned timber and five inches of solid earth, the charge used being the regular Spanish cartridge, 5 grammes (77grs.) powder and 385grs. lead. The accuracy attained—common military sights being used—fully established the fact that at the distance named a body of troops can easily be driven from any unprotected position. Well authenticated instances are given in which men and horses have been disabled at a greater range than that mentioned.

As an illustration of how work is done at the Remington Armory, we may instance the fulfillment of the French contract, begun in the fall of 1870, and finished in the following spring—155,000 stand of arms having been made and shipped to France within seven months; a rate of production never approached by any similar establishment. On each of the last three days, 1,530 stand of arms were manufactured and 1,300 stand of arms on each of the fifteen working days preceding, in addition to 200 revolvers per day. Referring to this showing, the London *Times* asserted that the combined armories of England could not equal such a production. The Remingtons have filled larger contracts—notably one with Spain for 265,000 stand of arms—but this is their most rapid rate of manufacture, 1,400 workmen being employed.

Figures 1 and 2 are sectional views of the Remington rifle system used in the military service rifle and in the sporting rifles designated as Nos. 1, 1½ and 2. No. 1 varies in weight from 8 to 12lbs., using cartridges of the following sizes: .22, .32, .38, .40, .44, .45 and .50 cal., No. 1½, 6 to 8lbs., .22, .32, .38, and .40cal., No. 2, 5 to 6lbs., .22, .32 and .38cal., either rim or center fire, as may be adapted to same; there being no difference in price of same quality, only in caliber and weight. Figure No. 3 shows a plain sporting gun, many varieties of which are made by the addition of sights and other extras. The system is so well known as to render a technical description of its construction and operation unnecessary.

The Remington target rifles are intimately associated with the history of Creedmoor and other rifle ranges, from the time that Major Fulton led the field by eight points in the first international match, until Sergeant Dolan won the military championship match in 1883, leading all competitors eleven points and beating all former records by eight points, the Remington winning in each instance. Nearly all the expert long-range mark-men in the country use this arm, and it is also shot by some of the principal prize winners at Wimbledon. The annual reports of the National Rifle Association teem with victories won by the Remington, and these are so numerous and this fact is so well understood, that it is not necessary to reproduce them here. It has won more matches than any other weapon and upheld its reputation from the shortest to the longest ranges.

Like the soldier, the hunter requires a gun that is proof against all kinds of exposure. As a reliable hunting weapon, the Remington has an excellent record, all kinds of game being numbered among its victims. It has furnished food and protection to explorers in all climates, from the Arctic regions to Africa, its accuracy and effectiveness remaining unimpaired throughout years of exposure, when far from the reach of gunsmiths. Lieut. Schwatka, U. S. A., whose explorations have given him a world-wide reputation, writes as follows concerning the Remington rifles, used by him during his memorable search for relics of Sir John Franklin:

"In justice to yourselves as generous contributors to my late expedition in search of the relics of Sir John Franklin from 1878-80, I would state that the two rifles furnished by you exceeded my expectations. They were frequently used during temperatures ranging from 50 to 60 degrees below zero and at distances from 200 to 600yds. with perfect working of their parts, and with deadly effect. I consider that on my expedition the arms used were subjected to the severest practical test to which guns have ever been exposed. Compelled to be kept out of doors constantly to avoid the moisture of the igloos, lashed in convenient places for immediate use on constantly overturning sledges, used at a moment's notice under all variations of temperature and weather, the Remingtons never failed us on this expedition, where the lives of nineteen human beings and an average of thirty draft animals depended for over ten months upon the efficacy of our firearms."

The subjoined extract from the journal of Chief Engineer Melville, U. S. N., kept by him during his search for the Jeannette officers and crew, was written, Mr. Melville states, just after shooting a ptarmigan at long range with the rifle mentioned, it having been found and pulled out of the snow where it had lain for months after a long period of careless use by Alexy, the Indian:

March 20.—The Remington gun is the gun of guns. All of our other sporting rifles gave out one after another. We have one Remington that Alexy used for two years, and then it hung out all winter, muzzle up, in snow and storm, and we go on shooting with it as if it came out of the armory to-day."

Gen. Thomas Jordan, speaking of the arms used in Cuba, says: "Nowhere else in active service, in my belief, has any firearm been subjected to such trying tests as the Remington rifles in Cuba, both by Spanish and Cuban troops, taking into consideration the warm damp, corrosive climate and the character of the men who handled them—very often negroes who had never before been used to handling a gun of any sort. The mechanism proved as strong and enduring as it was simple and easy working. Scarcely any sort of hard usage or any degree of moisture impaired its efficiency. Other breechloading arms were in use, both by Cubans and Spaniards, but none gave the same degree of satisfaction. In close observation of the Remington arm, under circumstances daily of the keenest solicitude, when a single firearm in thoroughly effective condition, more or less, was a matter of great importance to me, I could discover no defect in it."

Numberless recommendations like the above might be cited, but these are merely given to show the behavior and satisfactory working of the arm in climates of the opposite extremes.

The Remington armory has five and three-quarter acres of floor space, equal to one room 40ft. wide and 6,210ft., or nearly one and one-fifth miles, long. Machines to the number of 1,760 are driven by a force of 900 horse power, with the aid of 4,900ft. of line shafting and 70,400ft. of belting. The estimated value of the plant, not including either stock or materials, is $2,500,000. It is next to impossible to give an idea of the various styles of arms manufactured, in which are included military, sporting and target rifles, shotguns, pistols and rifle canes; the different patterns of sporting rifles alone, lengths, sights, chambers, etc., considered, being "too numerous to mention."

One feature of this industry is worthy of a special mention, as it undoubtedly exerts a material influence in promoting the efficiency of the arms manufactured by this firm. We refer to the exhaustive experiments continually carried on with the view of deciding questions concerning calibers, rifling, chambering, the proper distribution of metal, and various other points relating to gun manufacture, as well as the correct ammunition for the different styles of guns. Gunmaking is more than a trade in Ilion—it is a science. The places of men grown old in the service are filled by their sons, who, although using the prevailing ideas as a basis, are fully alive to the necessity for continual improvement, and eager to detect any fallacies that may exist. No theory, however plausible, is accepted as correct until actual experiment has proved it to be of practical value.

Ilion has been represented on the battle fields and rifle ranges, as well as in the hunting camps throughout the world. In the principal expositions these guns have always held a leading place, and the men who make them take a pardonable pride in their successes. Many of the gun makers are expert marksmen, as those who have seen the Ilion team on the rifle range will remember. Eliphalet Remington, Senior, the founder of the business, died in 1861. On January 1, 1865, the firm was incorporated, retaining the name of E. Remington & Sons. Samuel Remington, at that time president of the company, died in 1882, the stock being now controlled, and the business managed by the two surviving brothers, Philo and Eliphalet Remington.

As a fitting conclusion to this article, an extract from an editorial in a former issue of this journal is appended: "It was the assurance from the Remingtons that a rifle could and would be prepared in time for the opening contest which led to the acceptance of the first Irish challenge in 1873, and from that time on, at considerable inconvenience and loss in a purely business point of view, the entire appliances of the Ilion armory have been at the disposal of American riflemen when trials on the range led them to think that certain changes in rifles and fixings would bring about better scores. Full credit has not always been given for these efforts to second the men who give time and labor to practice before the butts. The whole record of American victories on the ranges here and abroad would have been a series of defeats but for the rifles sent out by the Ilion armory. Without going into the well-known story of these favorite rifles in the hands of a dozen foreign armories, the fact is now more than ever brought home to those who feel a patriotic pride in American successes that much of the credit of what has been done since 1873 properly belongs to this energetic American arms manufactory."

TORONTO, June 17.—Guelph vs. Toronto. An interesting match was fired by the above associations to-day. Ten men a side, at 200, 500, and 600yds., 7 shots at each. Position—Kneeling at 200; prone at 500 and 600yds., military rifles. The meeting took place on the Guelph ranges, and resulted in a victory for the Toronto by 70 points. The shooting was good considering the day, which was hot and bright, and a variable wind, making things difficult for the riflemen. A return match will be fired soon on Garrison common.

Toronto.	200	500	600		Guelph. 200	500	600	
A Bell	25	23	29—82	J Crowe	26	30	22—78
W Foreman	21	33	25—79	Cottis	20	21	14—55
T Mitchell	31	29	18—78	Sleeman	24	18	23—63
Graham	21	25	13—59	Goldie	20	23	15—58
S F Walker	23	25	27—74	Rook	30	28	20—78
Ashall	23	26	17—66	Macdonald	27	28	22—77
G Bell	19	25	19—63	Armstroug	28	19	29—76
A Anderson	25	29	22—77	Stewart	15	24	7—49
G Lewis	29	25	20—74	Smith	20	16	16—52
Mowatt	26	23	21—70	Wiedman	22	25	22—69
	248	264	210 722		231	231	190 652

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

THE CLAY-PIGEON PUZZLE.

Editor Forest and Stream:

"B.," in your issue of June 12, puts some queries well and to the point. I have, with him, wondered how so many clay-pigeons get away. Of course we all know—

First—That it is possible to miss them clean.

Second—That they get out through a hole in your "pattern."

Third—They are frequently hit but not broken. They do not present much of a target; not near as much as a bird on the wing. I doubt very much that any given system of loading or holding would surround these difficulties. In field shooting we often miss very easy shots. To pool all the conditions of man, gun, powder, shot and bird and make them work together every time, "cannot be did." TEXAS.

GALVESTEN, Tex.

THE KNOXVILLE TOURNAMENT.

SECOND annual tournament of the Knoxville (Tenn.) Gun Club. Match No 1, first day, purse $200; 10 single clay-pigeons from 5 traps, 18yds.:

W S Perry	1111111111—10	A E Mead	1111011001— 7
Wm Jenkins	1111111111—10	S B Dow	1011010110— 6
J W Slocum	1111111011— 9	J C Duncan	1110111100— 6
E L Mills	1111110111— 9	J M Ross	1011101001— 6
F W Armstrong	1111111101— 9	C Deadrick	1001011011— 6
S W Rhea	1101111110— 8	M G McClung	0010001111— 5
V S Lusk	1010111111— 8	P C Eldridge	1101000110— 5
W H Hicks	1001111111— 8	W Sparger	0101000111— 5
G W Woods	1101110111— 8	R L Carter	1010101100— 5
J A Campbell	1111110101— 8	W Rutherford	1110100001— 5
Capt Jacques	1111100111— 8	R Cleveland	0010010011— 4
W F Kerin	1100101111— 7	A Hayward	1010000101— 3
W Wagner	0101111110— 7	H Worsham	0010001000— 2
C C Hebbard	1100101111— 7	T L Rogers	0100000100— 2
J F Jordan	1111100101— 7	F Harrison	0000000010— 1
S Townsend	1111100101— 7	A McInturff	0000010000— 1

Perry and Jenkins divided first, Slocum, Mills and Armstrong second, Campbell, Lusk and Rhea third, Mead and Wagner fourth.

Match No. 2, first day, purse $120, club added $30; 8 single clay-pigeons, 21yds., use of both barrels:

Wagner	11111111—8	Carter	11101010—5
Perry	11111111—8	Mead	11011010—5
Deaderick	01111111—7	Dow	11011001—5
Rhea	11111011—7	French	11100101—5
Mills	11111110—7	McClung	11010011—5
Townsend	10111111—7	Moss	01101100—4
Jordan	11111110—7	Capt Bob	00001111—4
Armstrong	01110111—6	Jenkins	11100100—4
Hebbard	10101111—6	Campbell	10110000—4
Rose	01110111—6	Misser	11010000—4
Woods	11100111—6	Worsham	10001010—3
Hayward	11111010—6	Cleveland	01000011—3
Slocum	01100111—5	Rutherford	01100001—3
Eldridge	01101101—5	Franklin	00100001—2
Duncan	11011001—5	Jaques	10000001—2
Lusk	11001101—5	Kerin	01010001—2
Rogers	01010111—5	Sparger	00101000—2
Hicks	10101101—5		

Wagner and Perry divided first, Deaderick won second, Armstrong won third.

Match No. 3, first day, purse $75, club added $25; 5 doubles, 15yds. rise:

Jordan.....11 11 11 11 11—10
Mills.....11 10 11 11 1— 9
Jenkins.....11 11 11 11 01— 9
Ross.....11 11 11 10 10— 8
Duncan.....10 10 11 11 11— 8
Dow.....10 11 11 11 10— 8
Wagner.....11 11 10 01 11— 8
Townsend.....10 01 11 11 10— 7
Perry.....11 11 00 11 10— 7
Rhea.....11 11 10 10 10— 7
McClung.....11 10 11 10 10— 7
Armstrong.....0 00 11 11 11— 6
Nicholson.....10 10 10 11 10— 6
Hicks.....11 01 10 11 00— 6
Mead.....10 10 10 11 10—6
Woods.....01 11 00 11 01—6
Eldridge.....10 10 00 10 11—5
Deaderick.....10 11 00 00 11—5
Ross.....11 00 11 10 00—5
Sparger.....10 00 01 01 11—5
Lusk.....10 10 10 00 10—4
Carter.....11 00 10 10 00—4
Rogers.....10 10 00 00 10—3
Wornham.....01 10 00 00 10—3
Slocum.....00 00 10 10 00—2
Kerin.....01 00 10 01 00—2
Cleveland.....10 00 00 10 06—2

Jordan won first, Jenkins won second, Ross won third.

Match No. 1, second day, purse $150, club added $50; 5 singles and 5 doubles:

Perry	11111 11 11 11 11—15	Hicks	11011 10 11 01 10 01—10
Mills	10111 11 11 10 11—13	Slocum	11010 10 10 10 11 01— 9
Ross	11111 11 10 11 11 01—13	Jenkins	11111 01 11 00 10 00— 9
Wagner	10110 11 10 11 11 11—12	Kerin	10011 10 11 00 11 10— 9
Duncan	11111 10 10 11 11 10—12	Rhea	10101 00 10 11 11 10— 9
Jordan	11111 01 01 11 01 11—12	McClung	00111 01 00 10 11 11— 9
Lusk	11111 10 11 11 10 10—12	Jaques	01001 11 01 10 11 10— 8
Armstrong	01111 10 11 11 10 10—12	Mead	11101 10 00 10 01 10— 8
Deaderick	01101 11 11 01 11 11—12	Woods	11000 01 01 10 01 01— 7
Dow	01011 11 11 01 11 01—11	Townsend	01001 11 00 10 00 10— 6
Eldridge	00110 11 01 11 11 01—10		

Perry first, Mills and Ross divided second, Jordan won third, Dow won fourth.

Match No. 2, second day, purse $120, club added $30; 8 singles at 18yds.:

Lusk	11111111—8	Eldridge	10011110—5
Mills	11011111—7	Ross	01111100—5
Jordan	11110111—7	Perry	01011011—5
Jaques	11011111—7	Campbell	00011111—5
Mead	11110111—7	Kerin	11000111—5
Duncan	11101111—7	Jenkins	00011101—4
Slocum	11101110—6	Dow	10111000—4
Woods	10111011—6	Hicks	00111001—4
Deaderick	00111111—6	McClung	10010001—3
Wagner	11111100—6	Sparger	10001000—2
Townsend	11100111—6	Rhea	00110000—2
Armstrong	01011101—5		

Lusk won first, Mills and Duncan divided second, Deaderick and Townsend divided third.

Match No. 1, third day, team match, two men on a team, purse $100, club added $20; 4 doubles and 7 singles, at 18 and 21yds. rise:

Lusk	11 10 11 10—6	1111111—7—13
Jordan	11 11 11 11—8	1101110—5—13—26
Perry	01 11 11 11—7	1111110—6—13
Duncan	11 11 11 11—8	0110110—4—12—25
Wagner	11 11 10 00—5	1011111—6—11
Mills	11 01 11 01—6	1111111—7—13—24
Eldridge	11 10 11 10—6	0010111—4—10
Mead	01 11 01 10—5	1010111—5—10—20
Deaderick	01 10 11 11—6	1010000—2— 8
Ross	11 11 00 00—6	1110110—5—11—19
McClung	01 01 00 01—3	1101001—4— 7
Jenkins	01 01 01 10—4	1101011—5— 9—16
Nicholson	01 11 10 00—4	0000000—0— 4
Campbell	00 00 10 01—2	1110011—5— 7—11

Match No. 2, third day, miss and out, purse $75, club added $25: Hebbard 5, Mills 5, Wagner 5, Jenkins 5, Ross 4, Jordan 3, Eldridge 3, Perry 2, Deaderick 2, McClung 1, Rhea 1, Duncan 1, Lusk 1, Mead 0, Campbell 0. Hebbard, Mills, Wagner and Jenkins divided the purse.

Match No. 3, third day, purse $75, club added $25; 10 doubles at 15yds. rise:

Jordan	11 11 11 11 10 11 11 11 11 11—19
Perry	10 10 11 11 11 11 11 11 11 01—17
Mills	11 10 10 11 10 10 11 11 11 11—16
Wagner	11 11 11 01 10 01 01 10 11 11—16
Jenkins	00 11 11 11 11 11 01 01 11 01—14
Duncan	00 11 10 01 11 10 10 11 01 11—13
Ross	00 00 10 11 11 10 10 10 11 11—12
Deaderick	11 00 11 10 10 11 01 10 11 00—12
Lusk	11 10 10 00 11 10 10 10 10 11—12
McClung	11 00 11 10 11 10 00 01 10 10—11
Mead	11 10 00 10 10 00 10 10 01 10— 9
Eldridge	02 01 01 00 00 01 10 11 10 10— 9

C. C. H.

MASSACHUSETTS STATE TOURNAMENT.—Wellington, June 17.—The fifth annual summer tournament of the Massachusetts State Glass Ball Association was held at Wellington to day, and the participants represented every club in the State. The result of the shooting was as follows:

First event, 7 balls, 25 entries—Webber, Moses, Ball, Rowe and Carson divided first, Plympton, Barrett, Bragg, Keith and Hall divided second, Barney, Lander, Griffin, Hatch and Davis divided third, Spofford, Braley, Plympton, Nichols and Field divided fourth.

Second event, 7 birds, 25 entries—Keith, Davis, Bagg, Moses and Frost divided first, Rowell, Noyes, Barrett and Webster divided second, Spofford, Allen, Hall, Webber, Mayott and Hatch divided third, Reneaud and Adams divided fourth.

Third event, 5 birds, 33 entries—Perry and Davis divided first, Bartlett, Law, Ricker, Reneaud, Souther, Stanton and Smith divided second, Bancroft, Rowe and Nichols divided third, Evans, Merrill and Griffin divided fourth.

Fourth event, 5 birds, 3 traps, 21 entries—Holden and Keith divided first, Evans, Davis, Smith and Rowell divided second, Jones third.

Fifth event, individual subscription match, 10 single balls, 5 prizes, 64 entries—Moses, Bagg, Schaeffer, Hall and Landler divided first, Barrett, Whittier, Tidsbury, Rice, Evans and Barney divided second, Russell third, Webster, Rowell, Smith, Moore and Holden divided fourth, Kensard, and Howard divided fifth.

Sixth event, grand champion contest for the individual gold badge of the Association, 15 single balls, 63 entries—Clark first, Howard, Gilman, Hall, Law, Packard and Plympton divided second, Bagg, Schaeffer and Webber divided third, Davis and Frost divided fourth, Jones and Bartlett divided fifth.

Seventh event, individual subscription match, 7 single clay-pigeons, 5 prizes, 65 entries—Clark, Francis, Davis and Rowell divided first, Reneaud, Holden, Jones, Bartlett and Field divided second, Eager and DeRochmont divided third, Gilman, Barret and Robinson divided fourth, Russell, Evans and Arnold divided fifth.

Eighth event, three-man team match, 5 single clay pigeons per man, 4 prizes, 16 teams entering—Worcester team, Smith, Houghton and Clark first; Worcester team No. 2, Perry, Eager and Holden second; Springfield team, Moses, Bagg and Keith, third; Massachusetts team, Evans, Robinson and Sawyer fourth.

Ninth event, championship contest for the team gold badge of the association, open to one team of five men from each club belonging to the association, 10 balls per man, 8 entries. The two leading teams were as follows, the Worcesters winning the badge for the year.

Worcesters.		Springfields.	
Eager	1111111111—10	Moses	1100110110— 6
Davis	1111111011—10	Barrett	1110111111— 9
Webber	1111111001— 9	Bull	1111111011— 9
Whitter	1111111101— 9	Bagg	1110111111— 9
Clark	1111111111—10—48	Keith	1111111101— 9—42

Tenth event, individual subscription match, 5 pairs clay-pigeons, 5 prizes, 42 entries—Eager, Dickey, Clark, Smith, Holden and Sawyer divided first, Hart and White divided second, Schaeffer third, Wilbur and Law fourth, Spofford and Rice divided fifth.

On the 18th the regular Wellington matches were held and liberally patronized.

THE DISPUTE ADJUSTED.—It is said of the late Senator Nye of Nevada, that he would demolish a two hours' speech of an opponent with a two minutes' story which could not be met with facts nor argument. This was well illustrated at the Exeter, N. H., Club, June 12. A dispute arose whether a bird was scored or lost, and opinions flowed in thick and fast. The judge was evidently lost, if the bird was not, and things looked a little squally, when P. of the Worcester, Mass., Club, who never gave much attention to the classics, but who is fond of using big words, and withal, is a right good fellow and splendid shot, rose from his seat where he was chatting with J. of the Exeter Club, concerning their recent shoot at Chicago, and raising his voice above the din of words exclaimed, "Say, you fellers, don't disintegrate that judge there!" This was too much, and while the rain came down in torrents, and the "boys" roared, the judge found his bearings, and, thanks to P., everything was again lovely.—CLAY-BIRD.

BOSTON June 17.—The Independent Gun Club held a shoot on their grounds at Cliftondale to-day. The winners are named in their order; First event—7 balls, rotary trap: Chaffin, Hedenberg, Willis, Hatch. Second event—Miss and out: Hedenberg. Third event—5 balls, straightaway: Blinn, Chaffin, Hatch. Fourth event—7 balls, rotary trap: Gray, Willis, Blinn. Fifth event—5 balls, incomers: Hedenberg, Chaffin, Willis. Sixth event—Team match, 5 balls: Gray, Chaffin, Blinn, Kelley, McKay, first; Hedenberg, Willis, Gates, Hatch, Tuttle, second. Seventh event—5 balls, rotary trap: Blinn, Gray, Hedenberg. Eighth event—Miss and out: Gates. Ninth event—Match for club badge: Gray. Tenth event—Challenge match: Chaffin defeated Gates. The next regular shoot occurs July 4.—NIXEY.

NEW ORLEANS, June 18.—This evening a number of sportsmen assembled on the prairie near Marengo street, for the purpose of taking part in the bat shoot for the "Scooler Trophy." The attendance would have been much larger but for the rain and wet condition of the ground; however, there was an abundance of fresh breeze, and all participating in this cheap amusement found it a delightful pastime and one worth taking advantage of. A great deal of skill was required to kill the birds, and the shooters with good scores had reason to be proud of their prowess. The bat contest first took place. Twenty bats were shot at in doubles at 25yds. rise. The scores made were as follows:

Bickham	00	01	00	01	10	00	11	01	11	01—	9
Scott	01	00	00	00	10	10	10	00	00	00—	4
Febiger	01	11	00	10	00	10	10	10	10	10—	9
Cucullu	00	01	01	11	10	00	00	11	10	11—10	
Eustis	01	01	00	11	10	00	00	11	00	99—	7
E Druet	01	00	11	00	10	11	11	10	11	10—12	
Dupre	00	00	00	10	10	10	00	11	10	10—	7
Carleton	00	00	00	10	11	01	00	10	00	00—	5
Landry	01	01	00	10	10	11	10	00	00	00—	7
Renaud	01	01	10	11	10	11	10	10	11	10—13	
Brodnax	01	01	00	11	00	10	10	10	11	10—10	
A Druet	01	01	10	10	11	11	10	11	11	11—15	
Davis	00	00	11	10	00	10	00	11	00	10—	7
Born	11	00	00	00	00	11	11	10	10	10—	9
Geneste	11	00	00	00	10	11	11	11	10	10—12	
Moret	01	10	11	10	00	10	11	10	00	00—	9
Louis	10	00	11	10	10	10	11	00	01	11—11	
Buckly	10	00	00	00	10	00	00	00	10	10—	4
Alvord	00	11	10	10	11	10	11	10	10	00—11	
Scooler	11	10	11	10	00	11	10	00	10	00—10	
Troy	10	10	10	10	11	10	00	10	00	00—	8
Cardona	00	00	00	01	01	00	—	—	—	—	2

A sweepstakes was then indulged in, as follows:

Troy	10 10 10 10 10—5	Scooler	10 10 00 00 00—2
E Druet	11 10 10 10 10—6	A Druet	11 10 00 10 11—6
Buckley	10 00 10 10 11—5	Cordona	10 11 10 11 10—7
Febiger	10 11 10 11 10—7	Smith	00 00 10 01 00—2
Cucullu	11 10 10 11 10—7	Carver	10 10 11 10 01—6
Carleton	11 11 11 01 11—9	H Renaud	00 01 10 00 00—2
Stevens	10 00 10 10 10—4	Davis	00 11 00 10 00—3
Burton	00 11 00 10 11—5	Brodnax	10 11 11 10 11—8
Lewis	01 11 00 10 11—6	Moret	10 10 00 10 10—4
Geneste	11 00 11 10 00—5	Villars	00 11 10 10 10—5
Landry	11 10 10 10 00—5	Dupre	00 00 10 00 10—2
Bickham	10 10 11 11 00—6	Born	10 11 00 11 00—5

PORTLAND, Me., June 18.—The fifth competitive shoot for the Ligowsky medal came off at Topsham yesterday, between the Riverside Club, of that place, and the Willard Club, of Portland, resulting in a victory for the Portland team by a score of 76 to 70. The day was very warm. Directly after the match terminated the Willard Club received and accepted a challenge from the Androscoggin Club, of Lewiston, which will be contested on the ground of the Willards. Below is the official score:

Riverside Club.	Singles.	Doubles.
A Q Goud	0111201011— 6½	1010011111—7—13½
C Keyes	0021100010— 3½	0011110010—5— 8½
G H Goud	1022011111— 7	1111011000—6—13
M C Hall	1101111110— 8	1011111111—9—17
A S Alexander	1111111111—10	1111001111—8—18 —70
Willard Club.		
George H McKenney	1111211111— 9½	1111111010—8—17½
R G Hall	1111110111— 9	1011010111—7—16
W F Todd	1211211111— 9	1101111110—8—17
George H Pierce	0001111011— 6	0100100000—2— 8
E C Farrington	1111111112— 9½	1011101111—8—17½—76

EMERALD GUN CLUB.—Match at 8 birds per man; W. Glaccum 30yds., H. Otten and J. Glaccum 25yds.; the rest 21yds.:

M W Murphy	11110111—7	L H Veimeister	01100001—3
W Glaccum	11111110—8	J Howard	11011001—5
H Veidt	01100111—5	Counselor Cody	11111111—8
J Measel	01111111—7	J P Conner	01110111—6
H Otten	11111011—7	J Mackin	11000011—4
H Mackin	11000101—4	N Measel	11111011—7
Dr Hudson	1 001101—4	J Fisher	11111100—6
P Keenan	00010 1 1—4	J W Godfrey	11111111—8
J Glaccum	11101111—7	W Turner	01101111—6
B Lynch	01111101—6	C Measel	11101000—4
C M Grainger	11011111—7		

Ties on 8, miss and out: Cody 2, Godfrey 1. Ties of 7: Measel, Murphy and J. Glaccum 0, Ottten 11100—3. Grainger 11101—4. Ties on 6: W. Glaccum 0, Lynch 4, Conner 2, Fisher 3, Turner 3. Counseller Cody won the gold medal or first prize. C. M. Grainger won second prize or $10 in gold. Bart. Lynch won silver medal or third prize. The officers of the club are Dr. George V. Hudson, Pres.; John Glaccum, 1st Vice-Pres.; John Measel, 2d Vice-Pres.; M. W. Murphy, Treas.; John Guilfoyle, Sec.

WINCHENDON, Mass., June 18.—The Winchendon G. C. had a clay-pigeon and glass-ball shoot at their grounds to-day, resulting as follows:

Clay-pigeons.		Glass-balls.	
F F Hopgood	8	J Southerland	7
F E Monn	8	F S Davis	6
J Southerland	7	L F Martin	4
L F Martin	7	G S Loud	3
F S Davis	6	F F Hopgood	1
F M Brown	5		

The new Holden trap was used for the first time, and the balls being thrown with so much force will account for the small score.

BOSTON, Mass., June 19.—Yesterday was the regular fortnightly shotgun day of the Massachusetts Rifle Association, and a liberal number of members and their friends from neighboring clubs, who were not ambitious to compete for honors at the State Association tournament being held at Wellington, assembled at Walnut Hill and participated in one of the most enjoyable day's sport of the season. Many and varied were the events indulged in, several of which, especially the "walk up" matches, affording the contestants ample delight and satisfaction. Another especially pleasing and agreeable feature of the occasion was the delightful and refreshing breeze that made outdoor sport at Walnut Hill—which, by the way, is one of the most wholesome, charmingly rustic and picturesque playgrounds in New England—particularly enjoyable to those who had the good fortune to be there yesterday while their less fortunate fellows were sweltering in the sultry, stifling air of the city. Following are the day's records:

First event, five clay-birds—Tinker won first prize, Lewis and Messenger divided second, and Tice won third.

Second event, five clay-birds—Tinker won first prize, Lewis second Tice and Nichols divided third.

Third event, three Paris clay-birds—Tinker won first, Messenger, Eddy and Little divided second, Lewis and Thompson divided third.

Fourth event, five clay-birds—Tinker and Knowles divided first, Lovejoy and Little divided second, Thompson won third and Lewis won fourth.

Fifth event, five clay-birds—Knowles and Thompson divided first, Tinker won second, Nichols third and Messenger fourth.

Sixth event, three Paris balls—Nichols first, Lovejoy and Knowles second, Messenger and Thompson third,

Seventh event, five glass balls—Eddy won first, Nichols second, Little and Lovejoy divided third.

Eighth event, three Paris clay-birds—Thompson won first, Lewis and Tinker divided second, Knowles and Lovejoy divided third.

Ninth event, five clay-birds, five traps.—Tinker won first, Nichols and Lovejoy divided second, Tice, Elwell and Little divided third, Messenger and Eddy divided fourth.

Tenth event, five clay-birds, five traps—Tinker and Howe divided first, Eddy won second, Hilliard and Nichols divided third and Knowles won fourth.

Eleventh event, three Paris glass balls—Tinker and Knowles divided first, Nichols and Little second, Hilliard and Scribner divided third.

Twelfth event, three Paris clay-birds—Nichols first, Messenger and Howe second, Tinker third, Hilliard fourth.

Thirteenth event, five clay-birds—Tinker first, Eddy and Lovejoy second, Nichols third, Howard fourth.

Fourteenth event, five clay-birds—Howe won first, Knowles second, Scribner third,

Fifteenth event, three Paris clay-birds—Nichols first, Howe second, Knowles and Little third.

Sixteenth event, glass balls, miss and out—Nichols and Little divided.

Seventeenth event, three Paris clay-birds—Knowles first, Howe second, Little third.

Eighteenth event, five clay-birds, walk up match—Lovejoy first, Hilliard second, Little third.

Nineteenth event, five clay-birds, walk up match—Little first, Hilliard second, Knowles third.

P. S.—In your issue of the 12th inst, you make us say in our remarks regarding shoot of the 4th inst. that, "with the exception of about half an hour, the entire day was spent eating baked beans," which, while we frankly acknowledge to a free indulgence in that luxury, was a trifle overdrawn, it being our intention to have said that with the exception of about half an hour devoted to the agreeable entertainment of bean eating, the remainder of the day was spent in clay-bird shooting.—F.

PICTON, Ontario, June 19.—A sweepstake match was held by the Picton Gun Club at clay-pigeons to-day, 10 birds each, 16yds. rise, resulting as follows: Soby 7, Jellett 6, Gilbert 6, Reynolds 6, Beaford 6, Gillespie 3, Wright 2, Miller 2. Orchard retired at his second bird. In shooting off the ties for second and third places Bedford and Reynolds divided.

MERIDIAN, Miss., Jan. 19.—The great shooting tournament here of the past three days brought together a large number of the finest shots in the South. The tournament opened on Tuesday; the day was rainy and the matches had to be shot between the showers. There were 45 present.

The first match, 24yds. rise, at 5 live pigeons, resulted as follows: Mobile shooters—W. G. Vass 5, Ladd 5, George 3, Ward 4, Nicholas 1, Drey 1 and Tunstall 4. New Orleans shooters—Cousin 5, Chaudet 4, Mayronne 4, Fuentes 3. Birmingham shooters—F. W. Dunham 2, A. E. Dunham 2. Selma shooters—Ernest Field 3. Asheville, N. C., shooters—Jordan 4. Crawford, Miss., shooters—S. S. Scales 1, Crisler 3, Carr 3. Starkville shooters—W. W. Scales 4. Meridian shooters—Dabney 4, Gallup 1, Cameron 3, Dobsen 3, Stroup 3, Kone 4. Brooksville shooters—N. Scales 3. Macon shooters—Sargent 4, Irion 3. Vass and Cousin divide first money, Tunstall second, Stroup third.

The second match at 10 clay-pigeons, 8yds., rise, 25 entries, except addition of Taylor, of West Point, and Hamilton, of Meridian. Vass won first money, breaking 10; Ladd second, on 9, Cousin, Foot and Chaudet tied for third money.

Chaudet won the third match at 5 live birds, same conditions as the first match. There were 30 entries, about the same as entered in the first match. Tunstall, Vass, Claudet, Jordan, Dabney, W. W. Scales and N. Carr, tied for first money, each killing 5 birds. Chaudet won on the tie shoot. Nine shooters killed 4 birds each, tying for second money, Richard and Ward led the score in the shoot off and divided the money, and Cameron and Stroup divided third money.

OLD SQUIRE JACKSON got his gun ready, took his target, bullets, powder, etc., and walked five miles to a shooting match, and then discovered that he had left his gun at home.—KANSAS FARMER.

WEBSTER, Mass., June 19.—A challenge from the club at Southbridge has been accepted by the Webster Rod and Gun Club, and it will take place at Southbridge July 4. The Webster Club are contesting among themselves for a gold badge. It is to be the property of the man that has the largest score at the end of the season. The first contest was yesterday, the largest score out of a possible 20 was 13, that of Eugene Smith.

Yachting.

FIXTURES.

Secretaries of yacht clubs will please send early notice of pro posed matches and meetings.

June 26.—Salem Bay Y. C., First Championship Match.
June 27.—Eastern Y. C., Annual Matches.
June 28.—Boston Y. C., Ladies' Day.
June 30.—Manhattan Y. C., Annual Cruise.
June 30.—Quincy Y. C., Second Match.
July 4.—Larchmont Y. C., Annual Open Matches.
July 4, 5, 6.—Quaker City Y. C., Corinthian Cruise.
July 4.—Hull Y. C., Review and Annual Cruise, five days.
July 4.—Boston, open matches, City Point.
July 9.—Beverly Y. C., Marblehead, First Championship.
July 12.—Boston Y. C., Second Club Match.
July 12.—Hull Y. C., First Club Match.
July 19.—Hull Y. C., Ladies' Day.
July 24.—Eastern Y. C., Annual Cruise.
July 26.—Beverly Y. C., Nahant, Second Championship Match.
July 30.—Quincy Y. C., Third Match.
Aug. 2.—Hull Y. C., First Championship.
Aug. 4.—Quaker City Y. C., Review and Harbor Cruise.
Aug. 9.—Boston Y. C., Annual Matches.
Aug. 11–25.—Quaker City Y. C., Annual Cruise in Chesapeake and Delaware Bays.
Aug. 16.—Salem Bay Y. C., Open Matches.
Aug. 16.—Hull Y. C., Open Matches.
Aug. 23.—Boston Y. C., Third Club Match.
Aug. 23.—Beverly Y. C., Open Match.
Aug. 26.—Beverly Y. C., Special, Marblehead.
Aug. 28.—Quincy Y. C., Fourth Match.
Aug. 30.—Hull Y. C., Second Championship Match.
Sept. 3.—Hull Y. C., Third Championship Match.
Sept. 4.—Salem Bay Y. C., Second Championship Match.
Sept. 6.—Beverly Y. C., Marblehead, Special Match.
Sept. 11.—Quincy Y. C., Last Race.
Sept. 11.—Brenton's Reef Challenge Cup.
Sept. 13.—Boston Y. C., Ladies' Day.
Sept. 13.—Boston Y. C., Fall Matches.
Sept. 14.—Quaker City Y. C., Review and Cup Race.
Sept. 28.—Quaker City Y. C., Review and Harbor Cruise.
Oct. 5.—Quaker City Y. C., Closing Review and Cruise.

NEW JERSEY Y. C.

THE New Jersey Y. C., although their fleet numbers only small boats, have taken a stand on the questions of shifting ballast and limited crews that puts them in the rank of yachtsmen and Corinthians, and the club offers greater inducements to the lovers of small yachts than any similar organization about New York. While their boats are still, of necessity, of the small type of centerboard craft used here so long, they are so rigged and fitted as to be easily handled by a small crew, and safe in case of a capsize, and should the club continue in its present course, we may hope to see some day a numerous fleet of safe and wholesome boats under its flag.

Their 19th annual matches took place on the river and bay on Thursday, June 19, the course being for Classes A and B, from a line off the club house, Hoboken, down past Robbins Reef buoy, and around Buoy 13 on the West Bank and home, finishing off the Communipaw coal dock. Jersey City, the smaller class only going around Robbins Reef buoy, while Class C rounded Fort Lafayette. The boats starting, all of which were sailed by their owners, were:

CLASS B—OPEN SLOOPS.

Name.	Owner.	Ft.	In.
Charm	E. W. Ketcham	28	06
Meteor	A. Jeanneret	28	04½
Eagle Wing	J. & C. Burlton	27	10½
Lily R	Theo. H. Rogers	27	05
Dare Devil	W. H. Dilworth	27	04

CLASS C—OPEN SLOOPS.

Lottie M	W. C. Morris	25	05
Rambler	J. H. Thorn	25	00½
Corinne	Louis Kayser	23	01½
Sophia Emma	Charles E. Korff	21	09
Coquette	Lucien Aices	21	04

CLASS D—OPEN SLOOPS.

Katie	Frederick Baar	20	10½
Senator	John Von Drathen	20	00
Skip	W. Ortriel	18	06
Fanny	William Turner	18	00
Kitty S	H. S. Stilling	17	10

The propeller John Lenox having on board the judges, Messrs. T. P. Rogers, T. Bretts and Geo. E. Garland, besides members and guests, was ready at the line by 10:30 A. M., there being then but little wind, with a warm, clear day.

The first whistle sounded at 10:55 and the second at 11 A. M. The ebb tide drifted the boats down on the line in a most laughable fashion, some going over crabways, others stern first, none with enough wind to give steerage way, and most of them using sweeps above the line. Katie was over first at 11:01, Senator, Eagle Wing, Lottie M. following.

They went down under the Jersey shore in a long line, booms to port or starboard, what wind there was being north. Lily R. leading the way. As she passed the coal docks she caught a new breeze from the south, and stood down and across on port tack, each boat as it reached the same point catching the breeze and following her until all were strung in line across the river, beating down.

At noon the Bay above the Narrows was hidden by a thick smoke or haze, in which the yachts were shrouded, but it soon cleared away, leaving it hotter than before. Lily R. was still leading in the beat down. The times at Robbin's Reef were:

Lily R	12 25 40	Skip	12 39 40
Dare Devil	12 30 13	Fanny	12 41 21
Meteor	12 30 40	Lottie M	12 41 42
Rambler	12 30 42	Corinne	12 45 16
Sophia Emma	12 32 43	Coquette	12 46 31
Charm	12 32 45	Kitty S	12 47 41
Senator	12 37 36		

Dare Devil, Meteor and Rambler rounded together and were soon after the Lily, all on starboard tack, soon working short tacks down the middle in a fresh breeze. At the forts it fell calm and continued so for some time. Lily R. went off into Gravesend Bay, and after a time found a breeze there that brought her up well ahead to Buoy 13 at 2:32:25. Dare Devil also followed the same course, though well astern.

Now came the most exciting part of the race, as Meteor came down

from Dix Island on the starboard tack, while Dare Devil came out of the bay on port, the former having the best of it, and turning at 2:54:00.

In Class C, Senator was first around Fort Lafayette, Fanny second, Kate third. Senator's luck forsook her when she gybed off the Reef buoy, as she capsized, but no harm was done.

The wind was light from south, and all hurried home with jibs boomed out, but Lily was still far ahead, crossing the line off the Communipaw coal dock at 3:47:25.

CLASS B—OPEN SLOOPS.

Name.	Start.	Finish.	Elapsed.	Corrected.
Charm	11 01 25	4 21 29	5 17 04	5 17 04
Meteor	11 07 35	4 18 09	5 05 34	5 05 19
Eagle Wing	11 03 35	Not timed.		
Lily R.	11 09 05	3 47 25	4 38 20	4 36 10
Dare Devil	11 08 54	4 12 07	5 03 13	5 00 53

CLASS C—OPEN SLOOPS.

Lottie M.	11 03 35	Not timed.		
Rambler	11 05 55	4 26 10	5 20 15	5 19 30
Corinne	11 08 06	Turned back in Narrows.		
Sophia Emma	11 08 43	4 28 18	5 19 35	5 12 15
Coquette	11 08 54	Did not go the course.		

CLASS D—OPEN SLOOPS.

Katie	11 02 00	4 03 31	5 01 31	5 01 31
Senator	11 02 10	Capsized off Robbins Reef.		
Skip	11 02 30	4 01 41	4 59 11	4 54 26
Fanny	11 07 17	3 47 46	4 40 29	4 34 44
Kitty S.	11 06 12	4 07 28	5 01 16	4 55 11

In the evening the club gave a supper to their friends.

NEW YACHTS ABROAD.

THE English yacht fleet has been increased by the addition of three new vessels in the larger classes, besides a number of smaller ones, the largest of the three being Irex, lately described in our columns. She is 83ft. on loadline, 15.1ft. beam, 14ft. draft, keel 7½ tons, composite build, steel frames and wooden skin, and was built for Mr. John Jameson by Fay, of Southampton.

The next in size is Genesta, 81ft. on loadline, 14.6ft. beam, 11.75ft. depth of hold, 13ft. draft, with 60 tons on keel and but 4 tons inside; racing tonnage, 80 tons. Her owner is Sir Richard Sutton, and she was built by Messrs. Henderson, at Partick-on-the Clyde. In her first race, New Thames Y. C., May 31, she won by three minutes even time from Vanduara, the latter also allowing her time. Erycina and Marjorie also being in. On the following Monday she gained but third place, Tara and Marjorie being ahead of her, but on the next day, in the Channel match, she won easily from Marjorie and Erycina, Vanduara losing her bowsprit. On the 4th, in the Royal Thames matches, she was beaten by Marjorie, which performance was repeated on the next day in the New Thames match, Marjorie being again ahead and Genesta second, Vanduara, Erycina and Miranda also being in. In the Nore to Dover match, June 7, Genesta won again, with Lorna second, Marjorie third and Vanduara, Tara, Erycina and Miranda also in. On June 9, at Dover, Royal Cinque Ports Y. C., she was beaten by Lorna, an 85-ton yawl, and met the same fate again on the following day.

The last and smallest of the trio is Marguerite, a 60-tonner, 74ft. loadline, 13.5ft. beam, 12.5ft. draft, keel 51 tons, lead inside 6 tons. She is composite build, steel frames, pitch pine bottom plank, teak topsides.

THE RACE AROUND LONG ISLAND.

LIKE the preceding races, that of last week around Long Island has done little to settle the questions in dispute, the wind being so variable, and flukes so numerous that the result is of little value.

The victory remains with the sloops, and, of the schooners, with the Grayling, but the most that their advocates can claim is that under their most favorable conditions, light winds and perfectly still water, the pick of our light weather fleet have beaten the deeper boats less than three hours in a race of 240 miles. Grayling defeats the deep Fortuna by 2h. 57m., while Fortuna in turn leads Montauk 22m., and with the sloops, Fanny beats Ileen by 2h. 37m., Gracie beats her by 2h. 4m., while Hildegarde has but 21m. lead of her; and in the second class, Vixen beats Oriva by 1h. 2m.

After leaving the Bay, as told in FOREST AND STREAM last week, the fleet stood on with spinnakers to starboard before the wind, the order at 7 P. M. was, Fanny, Hildegarde, Ileen, Fortuna, Grayling, Gracie, Athlon, Montauk, Oriva, Vixen, Ruth, Wenonah, Estelle, Fleetwing. Light winds were found with occasional calms all Monday night, Fire Island being passed at 10 P. M., and Shinnecock shortly after 3 A. M., the wind being mostly from the west and north. At daybreak the order of the leaders was Montauk, Fortuna, Fanny, Grayling.

At 5 A. M. a calm ensued, the three leaders drifting close together, but a breeze from the north started them off again, Montauk ahead, and at 7 A. M. Montauk Light was sighted. Here a long calm ensued and it seemed as though the point would never be rounded, but at 9:30 A. M. Montauk passed it. Fanny being second and Fortuna third.

All through the morning there was a succession of light winds and calms, provoking the yachtsmen and shifting the positions of the boats from time to time. At noon Fanny started through Plum Gut, passing out at 2 P. M. with Fortuna half an hour behind, while Montauk, having taken the Race, was becalmed there. Calms ensued for several hours, but at 4 P. M. a breeze from the southwest started the fleet again, gaining strength as the afternoon advanced, until kites came in, and there seemed some prospect of a sail at the end of the race. At 6 P. M. the order was Fanny, Fortuna, Grayling, Hildegarde, Athlon, Vixen, Montauk.

Off Port Jefferson at 9 P. M. the wind died down, and a little later all was calm again, continuing so all night, the yachts merely drifting. At daybreak the fleet was well scattered, Grayling being ahead and Ileen up in second place. The morning was unpleasant in every way, an ebb tide carrying the boats back, no wind and a thick haze covering the entire Sound, but in the forenoon a light southwest wind woke all up again, Fanny leading. For the rest of the way the wind was light, but it brought Fanny up to the line at 11:44:08, with Grayling close astern of her. Half an hour elapsed before Gracie came in to claim third place, then a couple of hours more before Hildegarde, Vixen and Ileen made their appearance, Ruth carried away her jibboom off Montauk and put into New Bedford, being unable to continue. The times of the competing yachts were as follows:

SCHOONERS.

	Start.	Finish.	Elapsed.
2. Grayling	4 06 58	11 44 44	43 37 46
8. Fortuna	4 06 58	2 40 53	46 33 55
9. Montauk	4 06 58	3 02 40	46 55 52
11. Estelle	4 06 58	3 52 40	47 45 42
13. Fleetwing	4 06 58	Not timed.	
— Ruth	4 06 58	Disabled.	

FIRST CLASS SLOOPS.

1. Fanny	4 06 58	11 44 08	43 37 10
3. Gracie	4 06 58	12 17 45	44 10 47
4. Hildegarde	4 06 58	2 00 57	45 53 59
6. Ileen	4 06 58	2 21 23	46 14 25
12. Wenonah	4 06 58	4 03 00	47 56 02

SECOND CLASS SLOOPS.

5. Vixen	4 06 58	2 11 57	46 04 59
7. Athlon	4 06 58	2 35 25	46 28 27
10. Oriva	4 06 58	3 13 30	47 06 32

At the finishing line, between Execution and Sands Point, was a tug that had been there since the preceding day, on which were Com. Monroe and Messrs. Stewart, Brown, Jenkins and Adams, of the Larchmont Y. C., who had offered to time the finish. After their arrival the yachts anchored in Larchmont Harbor, their crews being entertained by the Larchmont Y. C.

NEW HAVEN Y. C. ANNUAL MATCHES.

THE yachtsmen of New Haven have been busier this spring than ever before, preparing for the third annual matches, which were sailed on June 24 on the Sound. Their fleet numbers 33 yachts, steamers, sloops and cats, there being three of the former: Sophia, 125ft., C. H. Osgood owner; Venture, 100ft., J. J. Phelps, and Beatrice, C. R. Palmer. The second division of the fleet, sloop yachts, is divided into four classes, B, C, D and E, according to length over all, Class B being 45ft. and over; Class C, 35 to 45ft.; Class D, 25 to 35ft.; and Class E, 15 to 25ft. The time allowance is based, however, on waterline plus one-third overhang.

The wind through the entire day was very light. The steamer John H. Starin accompanied the yachts over the course, carrying the members and their friends, while Mr. R. B. Rathbone's steam yacht Pastime carried the judges. At 11:12 A. M. all were ready, and a gun was fired from the Pastime as a signal for classes E, sloops of 15 to 25ft., and G, catboats of 15 to 25ft., the Wild Bird being the first over the line and Trio second, no boats starting in Class G. At 11:18 Class D was started with Acme, Ceres, Defiance, Lorelei, Louise, Endeavor, Vixen and Stranger in the above order; then followed Starlight, Flora, Happy Thought, Rajah, Viking, Wayward, Marguerite, Rival, Wild Duck of Class C, with Wild Pigeon and Viola, Class B behind them.

All went over on starboard tack, and most of them held on for some time, the wind, however nearly dying out. Stranger took the lead after a time, with Ceres next, then Louise, and at the turning mark, Charles Island Buoy, she had a good lead, luffing around it in fine style, and running up balloon jibtopsail.

Ceres was next around, then Vixen, Flora, Louise, Rival, Wild Duck, Viking, Wild Pigeon, no others being timed, as the steamers ran on to overtake the leaders, now well ahead. Stranger still led on the run home, and was first in of all the fleet, followed closely by Flora and Ceres, who had stuck to her all the way home. In Class E, Trio came in just 5m. before the Stranger's arrival.

The times were as follows:

CLASS B.

Yacht.	Owner.	Actual.	Corrected.
Viola	C. N. Wayland	5 08 00	5 16 00
Wild Pigeon	Vice C. Wheeler	5 10 43	5 06 43

CLASS C.

Wild Duck	Fleet Capt. Lutz	5 02 58	
Wayward	C. B. Warner	5 18 38	5 17 23
Rival	W. W. Converse	5 00 56	4 58 58
Starlight	M. White	5 23 35	5 20 45
Mascott	Weld & Jacobs	5 16 14	5 15 10
Happy Thought	Geo. M. Graves	5 26 21	5 20 10
Flora	A. C. Perkins	5 05 04	4 54 11
Marguerite	Charles M. Peck	5 17 43	5 11 42
Viking	F. C. Swan	5 13 48	5 05 28

CLASS D.

Endeavor	H. D. Billard	5 20 31	
Ceres	Parish & Rawson	5 08 38	5 07 29
Louise	Thomas H. Hall	5 33 08	5 30 35
Vixen	Allen Seaman	5 09 53	5 03 49
Stranger	J. N. Macauley	5 03 31	4 58 13

CLASS E.

Trio	W. L. Cheney	5 04 30	

HULL Y. C. PENNANT MATCH.

THE first pennant match of the Hull Y. C. was sailed on Saturday, June 21. Six classes entered, but only four started, as the wind was light throughout. The courses were as follows:

Second Class—From judges' line to black brush buoy No. 1, half a mile south, leaving it on the starboard, to yellow barrel marked H. Y. C., off Pettick's Island, leaving it on starboard; through Hull Gut to buoy on Wilson's Rock, off Rainsford Island, leaving it on starboard; thence, leaving Hunt's ledge and Point Allerton buoys on starboard, to bell boat on Harding ledge, leaving same on port. Returning, leaving Point Allerton and Hunt's ledge buoys on port, to judges' boat, passing between it and flag boat—a distance of eleven nautical miles.

Third Class—From judges' line to West Gut, leaving Pettick's Island on starboard; thence, northeast by north three-quarters of a mile to black buoy on Wilson's Rock, leaving it on the starboard; thence to striped buoy on Hunt's ledge, leaving it on starboard; through Hull Gut to the judges' boat, passing between it and a red flag—a distance of seven nautical miles.

Fourth and fifth classes—From judges' line to steamboat barrel off Seal Rocks, leaving it on starboard, to buoy off Prince's Head, leaving it on port, to No. 1 brush buoy (one mile south of starting point), leaving it on starboard, to yellow barrel buoy marked H. Y. C., off Strawberry Hill, leaving it on port, to steamboat barrel off Seal Rock, leaving it on starboard, to barrel buoy off Pettick's (Cleverley's), leaving it on starboard, to judges' line—a distance of seven miles.

The race was started at 3 P. M., at high water, with the following boats:

Second class, sloops, 25ft. and under 30—Transit, E. H. Ingalls; Banneret, J. F. Brown.

Third class, sloops, 21ft. and under 25—Seabird, Geo. S. Forbush; Kitty, E. H. Tarbel.

Fourth class, cats, 20ft. and under 25—Joker, Geo. Coffin; Niobe, F. L. Dunn.

Fifth class, cats 18ft. and under 20—Imogene, B. T. Wendell; Myrtle, C. H. & R. C. Poor; Spray, H. M. Faxon; Mirage, L. M. Clark; Wildfire, H. M. Keith; Kismutch, H. H. Curtis; Samaria, L. G. King. The prizes in each class were champion pennants, to be retained by the winners.

Transit was away, ahead of Banneret, who was in trouble with her jib, but righting matters, started in chase, making a good race but in second at the line.

Seabird and Joker came in first in their respective classes, and Imogene in the fifth class, with Spray second. The times were:

SECOND CLASS.

	Length.	Actual.	Corrected.
Transit, c. b., F. H. Ingalls	27.01	2 25 36	1 52 41½
Banneret, c. b., J. F. Brown	25.01	2 30 15	1 55 05

THIRD CLASS.

Seabird, c. b., George S. Forbush	23 01	1 23 18	0 59 18
Kitty, k., E. H. Tarbel	23.09	1 27 00	1 03 33

FOURTH CLASS.

Joker, c. b., George Coffin	20.08	1 49 50	1 23 44
Niobe, c. b., F. L. Dunn	20.06	1 57 15	1 30 52

FIFTH CLASS.

Imogene, c. b., B. T. Wendell	18.10	2 00 08	1 31 59
Myrtle, c. b., C. H. & R. C. Poor	19.06	2 01 43	1 34 18
Spray, c. b., H. M. Faxon	18.10	2 06 28	1 38 19
Mirage, c. b., L. M. Clark	18.10	2 15 38	1 46 20
Wildfire, c. b., H. M. Keith	18.01	Not taken.	
Kismutch, c. b., H. H. Curtis	18 11	Not taken.	
Samaria, c. b., S. G. King	19.01	Not taken.	

In the evening Vice-Commodore Crane presented to the club a full-rigged model of an English cutter yacht. The following races have been arranged for the balance of the season: July 5, club cruise, general orders yet to be announced; July 12, forty-second regatta, beginning at 3 P. M.; July 19, ladies' day, particulars to be announced; Aug. 2, first championship regatta, 3 P. M.; Aug. 16, open matches, particulars to be announced; Aug. 30, second championship regatta; Sept. 6, third championship race. In all the above regattas cash prizes are to be awarded, as follows:

First class sloops—First prize, $25; second prize, $15. Special class schooners—First prize, $15; second prize, $10. Second class keels—First prize, $20; second prize, $15. Second class centerboards—First prize, $20; second prize, $15. Third class keels. Regular—First prize, $15; second prize, $10. Corinthian—First prize, $2; second prize, $1. Third class centerboards. Regular—First prize, $15; second prize, $10. Corinthian—First prize, $2; second prize, $1. Fourth class catrigs. Regular—First prize, $15; second prize, $10; third prize, $5. Corinthian—First prize, $2; second prize, $1. Fifth class catrigs. Regular—First prize, $15; second prize, $10; third prize, $5. Corinthian—First prize, $2; second prize, $1. Sixth class catrigs. Regular—First prize, $10; second prize, $5. Corinthian—First prize, $2; second prize, $1.

At least two yachts must sail in a class to insure one prize being given, three to insure two prizes, and four yachts to insure three prizes.

The regatta committee of the club are: M. J. Kiley, chairman, J. A. Osgood, W. K. Miller, H. N. Curtis, F. M. Griffin, E. A. Dow, P. M. Bond.

DORCHESTER Y. C.—80th MATCH.

THE 80th match of the Dorchester Y. C., open, in the first class, to yachts of any club, and all other classes to yachts of clubs enrolled in the New England Y. R. A., was sailed off Nahant yesterday, and was in every respect a complete success. Up to the time of closing the entries for the race about 50 boats had been enrolled, and of these more than 40 put in an appearance and crossed the line in their various classes. The first and second classes started in good order at 12:30, followed 10 minutes later by the third class, all the boats making good time in crossing the line. The course for the first and second classes was No. 3 from starting line, leaving Graves whistling buoy on starboard, Davis' ledge buoy on the port, Graves whistling buoy on port, to starting line, 22 miles; limit of time six hours. The course for the third class was No. 6, from starting line, leaving Graves whistling buoy on starboard, Winthrop bar buoy on starboard, to starting line, 10 miles; limit of time 3½ hours.

The wind, which early in the day had been light from the southwest, shifted at about noon to the eastward and blew an excellent breeze, which continued throughout the day, giving the yachtsmen a rare opportunity to show their crafts to the best advantage. The prizes awarded were as follows: First class—First prize, $60. Second class—First prize, $30; second, $20; third, $15; fourth, $10. Third class—First prize, $20; second, $15; third, 10; fourth, $5. In the second and third classes, the prizes were awarded to the first two keel and first two centerboard yachts of each class. The captain of the Una entered a protest against the David Crockett for shifting ballast, and, although this does not affect her as regards yesterday's race, as she was among the last boats to come in, it will, if proved against her, debar her from racing in any regatta of any club belonging to the New England Yacht Racing Association, under whose rules the regatta was being sailed. The Echo carried away her topsail, and thus greatly impeded her progress, and perhaps lost her a prize, as she was well to the lead of many of the boats at the time of the accident; and the Bannerett disabled her topmast early in the race. The new steam tug, Wesley A. Gove, Capt. W. H. Jenkins, was used as a judge's boat, and every courtesy was extended the members of the press to witness the regatta, Capt. Jenkins ordered the boat run over the course while dinner was being served. Capt. C. H. Whiting of the Dorchester Y. C. piloted the craft throughout the day. The judges were C. H. Whiting, chairman; L. M. Clark, Erastus Willard, S. G. King, H. B. Callender.

The prize winners were as follows: In the first class the Huron, in the second class the Shadow, Nimbus, Lapwing and Percey H., in the order named, and in the third class the Kitty, Transit, Niobe and Black Cloud, respectively. Below is the summary:

FIRST CLASS.

	Length.	Actual.	Corrected.
Huron, William Gray, Jr	53.03	4 05 48	3 38 26
Maggie, G. H. Warren	46.01	4 21 01	3 43 46
Adrienne, Jacob Pfaff	55 00	4 13 58	3 46 58
Hesper, W. H. Forbes	47.06	4 24 25	3 48 38
Nirvana, S. P. Freeman	42.09	4 30 39	3 49 42

SECOND CLASS.

Shadow, Dr. John Bryant	34.06	4 30 28	3 38 18
Nimbus, B. Jenney, Jr.	33.11	4 35 42	3 43 37
Lapwing, J. Malcom Forbes	37.02	4 35 34	3 47 24
Magic, E. C. Neal	31.02	4 45 27	3 47 42
Percy H., H. Hall	33.00	4 59 40	4 02 18
Lillie, J. P. Gale	36.08	4 54 57	4 06 05
Ægir, N. McCormick	35.02	4 59 40	4 08 34

THIRD CLASS.

Kitty, Tarbell & Adams	23.04	2 09 50	2 03 05
Transit, E. H. Ingalls	26.08	2 08 40	2 05 34
Niobe, F. L. Dunn	21.00	2 25 38	2 15 53
Black Cloud, E. C. Cunningham	22.11	2 26 29	2 17 58
Greta, J. W. & W. S. Hill	23.01	2 29 40	2 22 37
Saracen, W. F. & J. R. Fowle	23.00	2 30 38	2 23 29
Lizzie Warner, E. Lutted	25.01	2 28 30	2 23 46
Una, John Marno	30.01	3 34 06	2 24 21
Banneret, J. F. Brown	24 07	2 29 45	2 24 27
Gem, W. H. Hammond and others	26.01	2 27 22	2 24 41
David Crockett, H. Putnam	21.04	2 34 04	2 24 46
Pet, J. McFarlane	21.00	2 37 46	2 26 01
Echo, Putnam & Hudson	25.04	2 30 36	2 26 08

Boston Herald, June 18.

"THE AMERICAN YACHT LIST."

THE growth of yachting in America is well shown by the increased size of its index, Olsen's American Yacht List, a copy of which for 1884 has just come to us. The book is now an established institution among yachtsmen, and has a place in every club room and cabin in the country. The main portion of the book, the list of yachts, is larger and more complete than ever before, although some errors are still present, due to the carelessness of yachtsmen who neglect to send corrections and notices of alterations in their craft.

The labor of compiling a correct list is immense, and accuracy can only be obtained by the co-operation of yachtsmen. A printed blank is inserted in each copy, and if every yachtsman who finds an error in the dimensions of his boat will only fill out the blank and mail it, such errors will soon disappear. Besides the tables of signals and list of yachts there are many useful details—calendars, tide tables, code list of the U. S. Navy, lists of coast survey, lighthouse and revenue vessels, the old and new deeds of gift of the America Cup, the International Code, day and night signals, lists of secretaries, times of meetings, dues, etc., of the various clubs, a list of owners, and a list of American yacht clubs, with the fixtures for the year. The list of yachts contains nearly 1,600 names, while sixty clubs are given Copies of the book can be had of FOREST AND STREAM, the price being $3.

SIGNALS OF RACING YACHTS.—*Editor Forest and Stream:* I have witnessed the New York Y. C. regatta for several years, and find strangers unable to make out the different yachts by their flags at the peak. They are not large enough, and when the wind is light hang lazily down the leach, the most powerful glasses failing to make them out. As many members of yacht clubs in different parts of the country annually come to witness these races, would it not be well to introduce a more distinct mark either of number or flag? The races of last week in New York have demonstrated that the American type of boat revolutionized, is the boat for our waters, and while we acknowledge the splendid sailing of the cutter Ileen in a "nose ender" covering less than one-fifth of the course, yet it will not do as a favorable result of the five-fifths. Still, the agitation of the subject in FOREST AND STREAM has had a good effect. Our sloops have been improved in rig and ballast, and builders taking the hint have curtailed in width and have gone deeper. The medium boat will be the boat for all-around sailing and for our waters. FOREST AND STREAM can take the credit for all this; we preach up extremes, and feel satisfied to have the "lay backs" come half way. Even "Delaware River Cninamen" have learned the value of the instructions laid down in your paper, and next year a class of honest seaworthy boats will make their appearance on our waters. "Planks on edge" and "dish" boats will gradually disappear; they will have to make room for the coming boat.—R. G. W. [Our correspondent is right in regard to the signals usually displayed, as they are practically useless. The yachts of the Atlantic Y. C. this season in their races carried numbers in the throat of their mainsails of such a size as to be visible at a long distance, enabling the spectators to distinguish the yachts throughout the race. We noticed in the New Jersey Y. C. races that some of the boats displayed their numbers, which were too small in any case to be of use, under their flags at the peak, where they could not be read even when near by. We do not agree with our correspondent in his conclusions from the late races, and while we are with him in the fight for honest boats, we see no reason yet to believe that the mean has been found in the late compromise type.]

AFTER THE CUTTER MADGE.—There is a growing impression that if the English built cutters which have been thought to be invincible can be beaten by American bottoms, the craft to beat her must be sent to New York from Boston, and appearances indicate that an effort in that direction will be made this season. Dr. John Bryant's Shadow, and Mr. Charles G. Weld's sloop Hera, and American cutter King Philip will probably be the vessels from which a choice will be made. Orders have already been given to put the Hera in perfect racing trim, and no expense will be spared to make her as fast as possible. Arthur Dean, one of the best sailing masters of pleasure craft in Eastern waters, is to command the Hera, which will have a picked crew. The King Philip will be in readiness for racing very shortly. She will be sailed by Capt. Rickerson, another good skipper, and will also have a picked crew of eight men. It is not improbable that the King Philip, Shadow and Hera will be prepared for a friendly trial, and will sail a series of races in order that their relative qualities may be properly tested. The winner in the races will be the chosen boat to sail against the Madge. The three pleasure and racing ships will start in the Eastern Yacht Club regatta next Friday.—*Boston Herald.*

YACHT RACING IN FRANCE.—A series of matches, open to yachts of all nations, will be sailed off Havre on July 12, under the auspices of the Société des Regates du Havre. The first match will be started at 10 A. M., over a course of 30 miles, and will be open to three classes, the first, 70 tons and over, Havre measurement. First prize, 1,500 francs and a telescope offered by the Admiralty; second prize, 500 francs and a binocular, also offered by the Admiralty. Class 2, for yachts of 40 to 70 tons. Prizes: 1,200 francs and medal, 400 francs and medal. Class 3, for yachts of 15 to 40 tons, 1,000 francs and a medal, 300 francs and a medal. The "prize of honor," a work of art, presented by the Yacht Club of France, will be competed for by the three winning yachts, while a special prize, also a work of art, is offered by the President of the Republic for French yachts. After the above, a race for French pilot boats will be started, and at 10:30 the small-decked and open yachts from 5 to 15 tons, will start over a 20 mile course for three prizes of 500, 200 and 100 francs. The entrance fees are 50 francs for yachts not belonging to the society, and 25 francs for members' yachts. Sailing and rowing races will also take place on the 11th, 12th and 13th, and the Regatta Ball will be held on the 12th.

GREENWICH HARBOR.—We have received from Mr. H. F. Winslow a chart and sailing directions for entering this harbor. The following marks and lights are now in position and will remain until Sept. 15: A spindle on Old Ledge Rock, with a red light at night. A spindle on Jones's Stones, on the west side of the channel and N.W. of Great Captain's Island, with red light at night. A green light on S.W. corner of Indiad Harbor Hotel. Entering the harbor from the east when the spindle on Old Ledge bears W. by N. run for it until Great Captain's Island Lighthouse bears W.S.W., then sheer N.W., and when the green light on the hotel bears N.E. ¾ N., anchor. Entering the harbor from the west, leave the light on Jones's Stones close on the port hand and steer N.E. ¾ N. until within ¼ mile of the green light on the hotel, and then anchor. The anchorage is good in any part of the harbor, the bottom being sticky and the holding-ground good. There is a small ledge with 4ft. of water on it, bearing about W. ⅜ S., ⅝ of a mile from the west end of Great Captain's Island, on the port hand in entering. Yachts can obtain water and provisions at the hotel.

YACHTING IN SAN FRANCISCO.—Eight yachts started for a cruise to Antioch on Decoration Day, six of them reaching there in the afternoon, beating down on Saturday, Whitewing being first with Eva, Emerald, Frolic, and Ripple following, Fleur de Lis being hung up on a sandbank for some time. On the following day all started at 9:35 A. M. for a race home, Aggie coming in first at 1:28, Chispa second, 1:36 and Fleur de Lis at 1:41. On June 7 a reception was given by the San Francisco Y. C. at their club house. The Aggie, Annie, Nellie, Frolic, Lurline, Emerald, Rambler, Lolita, Dawn, Chispa were at anchor at Saucelito, all decked with flags. The afternoon was spent by the yachtsmen in visiting among the yachts, a lunch under an awning by the club house forming part of the programme. Arrangements are on foot for a regatta on July 4.

ROYAL CANADIAN Y. C.—The annual meeting of this club was held on June 7, at their club house, Toronto. Reports of the financial condition of the club, showing its prosperous condition, were read. It was recommended that a series of yacht maneuvers be arranged for each Friday during the season, and also that a junior membership be established, to include members between eighteen and twenty-five years old, at an annual fee of $5. It was also recommended that the club join the Lake Yacht Racing Association. The proposal for a junior membership was so amended as to take in young men from eighteen to twenty-one, at a fee of $10 per year, admitting them to full membership when twenty-one years old without an entrance fee. It was also moved and carried that the club should join the Lake Ontario Yacht Association, and that it should send delegates, and also a motion was passed changing the number of the sailing committee from five to seven. The following officers were elected: Commodore, John Leys; Vice-Commodore, G. Gooderham; Rear-Commodore, J. Wier Anderson; Committee—W. G. Cassels, R. Cochran, E. H. Duggan, C. L. Ferguson, Bruce Hannan, Beverley Jones, A. B. Lee, H. Pellatt, C. E. Ryerson.

"AHOI!"—We have receive d from the publishers a copy of a new magazine with the above title, devoted to the interests of German water sports of all kinds The prospectus sets forth that *Ahoi* intends to further the interests of the German yachtsman, whether they hoist up the sails on a 100-tonner or on a modest open 20ft. boat, and we wish them success in their endeavor. The following extract from "the programme of the expedition of the *Ahoi*" is worth putting on record: "The *Ahoi* upper ten edition. For princes and other persons of high rank, wealthy people, amateurs, two rare editions, A. O. S. Only about thirty copies of every number of this monthly are printed on the best writing paper and elegantly furnished." This would not do in America.

RACING YACHTS' TONNAGE.—A good racing tonnage rule is certainly a desideratum, and we should think the yachting community will not much longer be without one. No rule can, we think, permanently place comfortable pleasure craft on an equality with racers, but it would be easy to reduce the present wide disparity, and afford room for the development of other and more desirable things than heavy lead keels. There is the further objection to racing yachts of the present type, that the lead keels and its connections necessary, make the vessel very costly, while as things have gone of late years she is only successful till a designer produces a vessel with still more lead, and then the ex-racer is next to useless.—*Nautical Magazine.*

KNICKERBOCKER Y. C.—Yachts intending to start on the summer cruise will rendezvous at Echo Bay, New Rochelle Harbor, on July 3. The flagship, Lara, Commodore Hobby, will leave Port Morris at 4 P. M. on Thursday, and the other yachts are requested to start in company with her. A meeting will be held at 8 P. M. on Thursday, on board the Sara to determine the direction of the cruise. All will return on July 6.

YACHTING ON THE DELAWARE.—Commodore John Hanigan, 1412 Belgrade street, Philadelphia, will match the yacht Richmond, 24 feet long, against any boat of her length in the State (the Pauline excepted) for $200 or $500. Apply to the Commodore or to R. G. Wilkins, Cooper's Point, Camden, N. J.

MEETINGS.—New York Y. C., fourth general meeting, Thursday evening, July 17, 67 Madison avenue; Knickerbocker Y. C., Tuesday evening, July 1, at club house; Atlantic Y. C., Monday evening, July 14, at club house.

EASTERN Y. C.—The matches of this club will be sailed off Marblehead on Friday, June 27. The course and other details were given in FOREST AND STREAM of June 12. Bedouin, Ileen and Wenonah are all entered.

MADGE.—This cutter was hauled up last week in Jersey City for repairs to her copper. Her owner will not race her this season, but will use her for cruising only. She is in charge of one of her old crew.

ROWBOAT WANTED.—We would call attention to an advertisement for a light rowboat in another column. Any one having such a boat to sell may find a purchaser by writing to the address given.

CAPE MAY RACE.—The only entries for this race were Montauk and Ruth, and the latter being still at New Bedford, the race has been dropped for the present.

MAMIE H.—This yacht which was sunk by the catboat Stewart, during the races of the K. Y. C., on May 30, has been raised and is all right again.

TORONTO C. C.—This club will open the season with a series of races for five-tonners, three prizes and a champion flag being offered.

NUBIENNE.—This steam yacht has arrived at Quebec from Havre, and will shortly visit Newport and New York.

Canoeing.

CANOEISTS *are invited to send us notes and full reports of cruises, club meets, information about canoeable waters, and other communications of interest.*

Secretaries of canoe clubs are requested to send to FOREST AND STREAM their addresses, with name, membership, signals, etc., of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to FOREST AND STREAM their addresses, with logs of cruises, maps, and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.

FIXTURES.

July 4, 5, 6.—Rondout C. C., Camp at Esopus Island.
July 9 to 15.—Chicago C. C., Annual Cruise.
July 14.—Allegheny C. C., Cruise at Conneaut Lake.
July 19.—Chicago C. C., First Annual Regatta.
July 24 to 26.—Lake George Meet, Lorna Island.
Aug. 1 to 15.—A. C. A. Meet, Grindstone Island.

MERRIMACK RIVER MEET.

THIS, the first general gathering of Eastern canoeists, duly came off as arranged by the two Lowell members of the A. C. A., and was undeniably a success, notwithstanding the fact that fully ten outside canoeists who had promised to come failed to show up at the time agreed upon; but the canoeing members of the Vesper Boat Club turned out in force, and with others from Lowell, Lawrence, Haverhill, Salem and Boston made up a party which numbered about fifty, with something more than half as many canoes.

Most of the latter were of the open variety commonly used on the river, carrying two persons and propelled by single paddles; but there were also a number of cruisers, including the Everson Nautilus, Chemaun (which last year cruised on the open ocean from Salem to Mt. Desert and appeared with the handsomest set of lateen sails ever seen on a canoe), a Stella Maris and a Birdie Kane (both beauties), Racine Shadow, St. Paul, Princess and decked canvas canoes of the Rob Roy and other models. Comparatively little sailing was done, and there were no regular races, but nobody found time hanging idly on their hands.

Saturday afternoon, the 14th inst., a fleet of seven canoes entered the rapids at Hunt's Falls and ran them successfully, but the water was low and one frail 25-pounder came to grief in midstream, while several of the paddlers got a trifle wet. Then the course lay through four miles of beautiful scenery until Deer Leap was reached and the camp established, with new recruits constantly paddling up. A huge tent sheltered twelve of the Vesper men and another somewhat smaller held those of the Crescent Club, while other tents of various sizes were soon set in a semi-circle around the camp ground, and two canoes were turned into sleeping quarters. Flags were, of course, run up, and a mammoth A. C. A. burgee floated on the breeze.

Upward of thirty canoeists were seated about a grand camp-fire in the evening, and a jolly time they had, some remaining up until midnight. Banjo playing, stories, songs and jokes enlivened the hours, and nobody seemed in a hurry to turn in. But tugs of war and a general frolic at last proved too much for endurance and sleep was in order.

Four o'clock found many up and, breakfast over, a quiet day was spent in paddling or sailing on the river, bathing and exploring the neighboring woods. Late in the forenoon two new canoes paddled up to the landing and everybody gladly welcomed Mr. John Boyle O'Reilly, a canoeist of note, and his friend, Mr. Fred J. Stimson, both bronzed by a cruise on the Charles and Concord rivers. They were at once tendered the hospitalities of the camp, and remained until after dinner, when they were obliged to leave and paddle on to Lawrence, much to the regret of all. New arrivals were reported at intervals, and during the afternoon the camp was graced by lady visitors, while many of the boys came down from the city on bicycles, in carriages and on horseback.

Some amateur photographers were present and views were taken. Toward night most of the Lowell men returned home, and the evening was quietly passed around another camp-fire. Monday, those remaining broke camp and set sail for Lawrence, two canoes, Chemaun and Clytie, cruising down the river to Newburyport and around the coast to Salem, where they arrived early Thursday morning.

Canoeing in the Merrimack Valley differs somewhat from that at points further west, but the sport is steadily growing and the "meet" seemed to stir up quite an enthusiasm, so that the experiment will doubtless be repeated at a later date with even more satisfactory results. CLYTIE.

A. C. A. OFFICIAL PROGRAMME OF RACES.

TUESDAY, Aug. 12, 1884.

PADDLING Race, Class II., 9:30 A. M., distance 1 mile. Length not over 16ft.; beam not under 26in.

Sailing, Novice, any class canoe, 10:30 A. M., distance 1½ miles. Canoeists who have never sailed a canoe before 1884.

Paddling, Class III., 11:30 A. M., distance 1 mile. Length not over 17ft.; beam not under 28in.

Sailing, Class A. and B., 2 P. M., distance 3 miles. No limit as to trim or rig. Start 10 minutes apart. A.—Length not over 16ft.; beam not over 38in. B.—Length not over 17ft., with a limit of 28½in. beam for that length. Beam may increase ¾in. for each 6in. length decreased.

Paddling. Tandem, 4 P. M., distance 1 mile.

Upset, decked canoes, 4:30 P. M., ¼ mile.

WEDNESDAY, Aug. 13, 1884.

Paddling, long distance, 4 P. M., distance 3 miles. Not under 27in. beam and not over 16ft. long.

THURSDAY, Aug. 14, 1884.

Paddling, Class I., 9 A. M., distance 1½ miles. Length not over 18ft.; beam not under 24in.

Paddling, Class IV., 9:30 A. M., distance ½ mile. Length not over 16ft.; beam not under 30in.

Sailing, Class A. and B., cruising, 10:30 A. M., distance 3 miles. Start together. A.—Not more than 50 sq. ft., any ballast. B.—Not more than 50 sq. ft., any ballast.

Paddling and sailing combined 1 mile each way, 2 P. M., distance 2 miles.

Sailing, light race, canoes A. without ballast; canoes B. with heavy board only, 3 P. M., distance 1½ miles.

Hurry Skurry Race, 100yds. dash for choice of boats, distance 220yds.

Canoe gymnastics.

WM. WHITLOCK, Chairman,
E. B. EDWARDS,
L. Q. JONES. } Regatta Committe.

NEW YORK C. C. ANNUAL REGATTA.

THE N. Y. C. C. held their annual regatta on Saturday last on New York Bay, off New Brighton. A tent was erected on the bluff above the beach, under which the friends of the canoeists were seated, with the course in full view, while a number of oarsmen in singles and fours were pulling about the start. Com. Whiting was also on hand on his little gig.

The first race was for Class A, sailing, Class B, sailing, and junior race, the entries being:

CLASS B.

Guenn	Com. Whitlock	N. Y. C. C.
Dot	C. B. Vaux	N. Y. C. C.
Surge	H. O. Bailey	N. Y. C. C.
Freak	C. V. R. Schuyler	N. Y. C. C.

CLASS A.

Siren	R. B. Burchard	N. Y. C. C.
Psyche	Vice Com. Munroe	N. Y. C. C.
Ripple	E. C Delavan, Jr.	N. Y. C. C.
Pathfinder	J. J. Fraser	N. Y. C. C.

JUNIOR CLASS B.

Minx	M. V. Brokaw	N. Y. C. C.
Theresa	F. E. Reade	N. Y. C. C.
Pirate	A. K. McMurray	West Brighton.
Fanny	S. B. Crane	Jersey City.

The course was from the float out to Buoy 17 and return, 2½ miles, the tide running a strong flood, with very light southwest wind. At 3:32:30 the canoes were started, all lying head to wind and hoisting mainsails at the signal. At the start Pirate ran into first place and was soon ahead, wing and wing, Surge was to windward, Freak next. The tide set them all well up, there being too little wind to stem it rapidly.

At Buoy 17 Dot and Guenn rounded together at 3:56, the former having rather the better of it, while Pirate was third and Freak fourth. On the beat home all set well up, Dot coming in ahead, but when near the line being becalmed and lying there. Guenn and Surge now came up, the latter crossing the line first, with Dot second, Guenn third. Times: Surge, 4:35:30; Dot, 4:38:00; Guenn, 4:38:30.

In Class A, the boats were carried far to leeward, Ripple leaking badly and being unmanageable. Siren and Psyche, finding no wind, gave up and paddled home. In the junior class Pirate came in first.

The second race, sailing and paddling, was omitted, as there was no wind at all.

The third, a paddling race for Class III., distance 1 mile, brought out:

Neversink	E. Gould	K. C. C.
Siren	R. B. Burchard	N. Y. C. C.
Psyche	C. K. Munroe	N. Y. C. C.

Psyche and Siren are both of the old Nautilus model, Neversink being a St. Lawrence, both smaller and lighter. Psyche led at first, dropping into second place and finish two lengths behind. Time: Neversink 5:28:15, Psyche 5:29:00, Siren 4:29:15.

The next race for Class IV., paddling, ½ mile, brought out the following men and boats:

Surge	H. O. Bailey	N. Y. C. C.
Guenn	Com. Whitlock	N. Y. C. C.
Dot	C. B. Vaux	N. Y. C. C.
Pirate	R. K. McMurray	West Brighton
Theresa	E. Gould	K. C. C.

Pirate took the lead at start, 5:44:55, with Dot pushing him close, Theresa third, pulling a good race, but stopping short about 50yds. from the line, Dot then being astern of him. Dot came in first, 5:48:06, Neversink 5:48:07, Surge third.

The tandem race, over the same course, had three entries: Freak, Schuyler and Drake; Dot, C. B. Vaux and D. Vaux; Siren, Burchard, and Whitlock. At 6:07:28 all got away well together, Freak, however, soon taking the lead with Dot second. The race was well pulled Freak coming in first at 6:10:20, Dot 6:10:29.

Of course the most amusing race for the spectators was the upset race, for which Lark, C. B. Vaux; Neversink, E. Gould, and Siren, W. Whitlock were entered, the Lark proving the winner. Prizes were awarded to the winners in each race.

TORONTO C. C.

THE Toronto C. C. have had two races for the new cup. We copy from the Toronto *Globe* the following:

"The members of the Toronto C. C. had their first race of the season on Saturday, May 31. It was a sailing contest for the new Running Cup. In sailing for this cup the course is chosen in such a way that there is no close-hauled sailing. Six canoes entered, as follows: John L. Kerr, in Mr. A. H. Mason's new canoe; Frank M. Nicholson, Sadie N; Robert Tyson, Isabel; Hugh Neilson, Boreas; Fred W. Mason, Whimbrel; J. T. R Stinson, Racine Shadow.

"There was a fresh breeze from the eastward, and the course lay from the foot of Lorne street to the yacht Alarm, moored near the Island, and back again twice over, a total distance of about seven miles. The canoes got off in good style, and approached the first turn in the order above given, except Mr. Stinson, who did not start. Mr. Kerr had a splendid lead, and was just rounding the Alarm when his tiller-line gave way and he had to retire from the race. Sadie N. and Isabel were a little slow in rounding the mark, enabling Boreas to cut in neatly and take the lead from them. The little craft went tearing and splashing back through the lumpy water under all the sail they could carry. Boreas had a reefed racing mainsail; Isabel and the new canoe carried full cruising sail; Sadie N. and Whimbrel were under reefed cruising canvas. Arrived at the city front again, the canoes performed safely the ticklish operation of jibing around the northern mark Mr. E. Leigh's canoe—in this order: Boreas, Isabel, Sadie N., Whimbrel. These positions were unchanged to the end. There was not more than ten or fifteen seconds difference in the arrival at the goal of the three leading canoes. Following are the prizes: Heigh Neilson, Running Cup and Atwood centerboard; Robert Tyson, spirit stove; Frank M. Nicholson, pocket knife; Fred W. Mason, prize given by commodore.

"The canoe Mr. Kerr sailed in was built recently for Mr. A. H. Mason by Mr. John Clindinning, and Mr. Kerr is so much pleased by her performance that he at once ordered a similar one from Mr. Clindinning. As soon as she is ready he will challenge Commodore Neilson for the Running Cup."

Boreas has had her after centerboard replaced during the winter, and is much improved. Isabel carried her new fan mainsail.

Another race was sailed on June 7, with the following entries: Isabel, Robert Tyson; Boreas, Hugh Neilson; Whimbrel, Fred W. Mason; ——, A. H. Mason. The course was from the foot of Lorne street to Block-house Bay, twice over, making nine miles. Boreas took the lead and held it throughout, winning by three minutes, with Isabel second, the others withdrawing. The course was a reach out and back, and the passing steamers interfered greatly with the racers. Isabel used her balance lug in this race.

ROYAL C. C.

THE annual race for the challenge cup came off at Hendon on Saturday, May 31, when one of the most interesting contests witnessed for years took place, and, we believe, the fastest time on record scored for the ten miles, viz., three minutes under two hours. This, considering that half the distance was dead to wind ward, is undeniably a creditable performance for such small craft.

Race for first class canoes; course, five times round a triangle marked by buoys, leaving all marks on the port hand, and finishing between the raft and a post on opposite shore. Prize, the challenge cup, value £50, tenable for the year, and a presentation prize, value £5. Entries: Violet, Mr. W. Watney; Merlin, Mr. E. G. Wilkinson; Teaser, Mr. W. Baden-Powell; Imogen, Mr. H. Church; Gladys, Mr. T. F. Knowles; Irene, Mr. Dan Ashton; Pearl, Mr. A. H. Tredwen; Anonyma, Mr. R. H. Harrison.

Mr. E. B. Tredwen, the holder of the cup, being abroad, it was generally expected that his brother would sail the Pearl; he, however, did not put in an appearance, much to the disappointment of the spectators. Anonyma was also an absentee. At the start, 3 P. M., the wind was N.E., making it a close haul in to the N. buoy in the bight, and a run on starboard tack from thence to the lower buoy. All got away pretty much together, with the exception of Gladys, who kept more in the center of the lake for the breeze. Violet, Gladys and Merlin rounded the first buoy in close order, Violet running Gladys a little from thence to the bottom, Teaser setting a spinnaker to starboard and scuttling along at a rare pace in pursuit. Imogen drew away gradually from Mr. Ashton's new boat, which seemed over ballasted and sluggish, and troubled with a mizzen of little or no use to her. In the turn to windward up the lake Gladys and Violet had a hot tussle of it, Violet just getting a start and completing the first round a bare second to the good. Teaser, a diminutive 18-footer of doubtful age, and with a huge balanced lugsail, was being cleverly sailed, and had worked into third place, Imogen, Irene and Merlin following in the order named. In the next round Violet, for some unaccountable reason, fell off all together, and Gladys was timed one and a half minutes ahead of Teaser, who by this time had worked into second place, and looked like wresting the lea from her larger rival ere long. In the third round, however, she got ashore for two or three minutes, and Gladys increased her lead as the rounds were ruled off, as the annexed times will show, Mr. Knowles securing a popular and well-deserved win at 5:57 P. M.

	1st Round	2d Round	3d Round	4th Round	5th Round
	H. M. S.	H. M. S.	H. M. S.	H. M. S.	H. M. S.
Gladys	3 36 01	4 11 00	4 45 30	5 21 00	5 57 00
Teaser	3 37 45	4 12 30	4 50 30	5 28 00	6 03 00
Violet	3 36 00	4 14 15	4 51 00	5 32 00	6 07 00
Imogen	3 40 00	4 16 00	4 55 00	5 37 00	Not timed
Irene	3 42 00	4 16 30	4 57 00	5 40 30	Not timed
Merlin	Retired.				

—London Field.

THE FAN MAINSAIL.

A FELLOW canoeist of mine in Toronto, who is a staunch advocate of the balance lug, as against Mobican sails, fan sails and such like devices, accuses me of incorrectness and exaggeration when I say that my new fan mainsail "is the lug," and he thinks I am attacking the old Chinese favorite.

But I too am an admirer of the balance lug, and as a matter of fact use it for my racing sail. That, however, is no reason why we should not try to get a better sail than even the balance lug—if we can. Every sail to be reefed when running, must have at least a halliard and a reef line. Then in addition to that, a balance lug ought to have two additional ropes—a topping lift and a jackstay.

The published drawings of my sail show also two additional ropes—a hoist and and a guy. But these ropes are unnecessary in the improved form of my sail, and I shall not use them again. Up to the present I have left these two extra lines on the sail, because they have not bothered me, and I have been too busy to take them off. Then, the reefing gear needed for the fan sail contains about half the lines and blocks necessary for a balance lug reef, because no line whatever is necessary at the luff of the sail.

Take the Dot gear, for instance, which is one of the simplest balance lug reef gears. An adaptation of the Dot gear to the fan sail would contain only the double leach line, married under the boom, and carried direct to mastfoot and skipper's hand. My published drawing shows more reef gear than is absolutely necessary.

In writing the paragraph of June 5, I had in my mind the improved form of the sail, which has only halliard and reef line. I submit therefore respectfully, but firmly, that the improved sail has "less gear than the balance lug;" not expressing an opinion as to whether I was justified in using the wicked little adverb "much!" ROBERT TYSON.

ANOTHER REEFING LATEEN.

Editor Forest and Stream:

I have been turning over in my mind for the last few weeks how I could make a lateen sail for my Rice Lake canoe that should be reefable with very little trouble. I matured my plan some little time ago, and have overcome the difficulty of having the center of effort too high by being enabled to use the usual four-foot mast.

I found your correspondent "Long Shanks," has almost anticipated me in your issue of the 12th inst., by publishing his plan. Canoeists will, however, find my plan the easier worked, as it has only one rope to handle besides the sheet.

My chief difficulty was how to get the peak down. This I have overcome. I believe my plan of sail reefing will be of much benefit to canoeists, and I have much pleasure in offering it to them. I think they will coincide with me in believing this to be the easiest plan for reefing published. I am just having a sail for my canoe, which is 15ft. long, fitted up, and it will contain 45ft. of cotton.

The boom and yard are hinged together at their forward ends, the former having, in place of the usual jaw, a steel spring holding it to the mast. A parrel of copper wire 2ft. 3in. long is lashed at both ends to the yard, the lower end being 3ft. from the end of the yard, the upper end, of course, 4ft. 3in. This parrel holds the yard firmly to the mast, and is long enough to allow the yard to move in reefing. A single halliard serves to hoist and lower the yard, the sail being taken in by the usual reef points. C. O. D.

LONDON, Ont., June 16, 1884.

PATCHING CANVAS CANOES.

Editor Forest and Stream:

To patch holes or rents in canvas canoes at once, without waiting to heat pitch or caulking mixture, I have heard of using "porous plasters." Is not this a step from the sublime to the ridiculous? Last summer, while my canvas canoe was on a steamer's deck as freight, a great deckhand deliberately sat down on the deck of the canoe, as he afterward said, "to see if it would bear him." It didn't. Next day I had a new deck beam to put in. As a precaution against this, a simple device is a stick exactly a tight fit in length between top of keelson and under side of deck timber. Hinge one end to deck timber underneath, and when not in use hook up to deck. When freighting canoe, drop stick and jam tight between keelson and deck, and freight fiends may then sit on deck with impunity if owner is absent.

PHILADELPHIA, Pa. F. H. S.

A. C. A. ANNUAL MEET.—The New York, Ontario and Western Railway offer to sell return tickets from New York to the Thousand Islands for $15, and to transport canoes and kits free. There is but one transfer, at Oswego, from the cars to the boat, a short distance. The general passenger agent, Mr. Anderson, writes us that there need be no fear of canoes being handled roughly because carried free, but that they will receive the best possible care. Trains leave New York at 6:50 P. M. and 8:30 A. M., arriving at Oswego at 7:50 A. M. and 9:55 P. M.

BAYONNE C. C.—This club, established in 1881, now has a house at Bayonne on Newark Bay, and some ten canoes, both cedar and canvas, many of them being built by their owners. On Thursday of last week the club gave a dramatic entertainment in the little theatre of the Bayonne Boat Club, the performance including vocal and instrumental music, and a farce "The Little Savage," after which the hall was cleared for dancing. The club will hold their spring regatta on July 4. Mr. E. Smith is commodore, and Louis F. Burke secretary.

RONDOUT C. C.—Will spend July 4, 5 and 6 in camp on Esopus Island. On the afternoon of the 4th they will receive their friends from Rondout and entertain them with impromptu races, open to all comers. A. C. A. men will be welcomed to the camp, and it is hoped that those in the near vicinity will come in force.

ANOTHER NEW CANOE CLUB.—A canoe club was organized in Taunton, Mass., with nineteen members. The officers are: Commodore, T. R. Breed; Vice-Commodore, C. L. Bryant; Purser, Wm. Y. Fox. The burgee is 10x15 inches, a blue field with the white letters T. C. C. in white.

PITTSBURGH C. C.—This club propose to cruise down the Monongahela River from its head, spending several days at Lake Chataqua, several of them going also to the A. C. A. meet.

ALLEGHENY C. C.—This club will visit Conneaut Lake next month, going by rail to Meadville, sailing down French Creek and the Allegheny River to Pittsburgh.

CANOE PHOTOS.—We have received Photos of the Newburgh camp from Messrs. Jones, Seavey and Van Deusen.

OTTAWA C. C.—We have received a copy of the constitution, with sketch of the flag, from Captain Baldwin.

Answers to Correspondents.

W. C. M.—See note from Rice Lake in our fishing columns.

INVALID SPORTSMAN.—There is a letter for you at this office.

J. J. S., New York.—Write to the Secretary of State, Lansing Mich.

CLAY, Solomon City, Ark.—See advertisement of the clay-pigeons elsewhere.

YACHTSMAN, N. Y.—For receipt for whitening see FOREST AND STREAM for Sept. 13, 1883.

L. N. S., St. Louis, Mo.—We understand the word "Shack" to be a Dakota local term for cabin.

H. B.—For information about the Adirondacks see article on page 362, in our issue of June 5, 1884.

D. C. S., Buffalo, N. Y.—See FOREST AND STREAM for NOV. 8, 1883. Will be pleased to hear from you.

C. W. M., South Berwick, Me.—Hallock's "Sportsman's Gazetteer" is the best book for your purpose.

E. C., East Hampton, Ct.—We do not consider it a "good practice" to dock the tails of setters and pointers.

S. D., Mercersburg, Pa.—Can you inform me through your valuable paper where I can procure an army knapsack, such as is now used in the army? Ans. Apply to Hartley & Graham, Maiden Lane, this city.

INQUIRER, Buffalo.—It is explained by the fact that the author wrote "marsh wren," not "marsh hen"—p. 344, 3d col., line 55.

A. H. A., Buffalo, N. Y.—The depth inside from center of deck to garboards at side of keel must not exceed sixteen inches.

L. H. R., Brooklyn, N. Y.—See FOREST AND STREAM for Sept. 27 and Oct. 4, 1884. One sail is not suitable, two, as shown, will be better.

M. S., Falmouth, Mass.—"The American Yacht List" is just ready. We can furnish it and the other book you ask for. The prices are $3 for the former and $4.50 for the other. 2. The expression is not correct, but is in common use.

J. T. B., Ridgewood, L. I.—1. Is there any way of preserving birds without taking the pelt off and then stuffing it? 2. I would like to know what preparation is used to preserve flowers their natural color, or can I get a book that will give me a thorough knowledge of stuffing birds and preserving flowers? Ans. 1. There are various preparations for preserving birds without skinning, but none of them are altogether satisfactory. It is much better to learn how to skin the specimens. Dilute carbolic acid injected into the body will preserve small specimens for a considerable length of time, so will a solution of bi-chloride of mercury (corrosive sublimate), so will the Wickersheimer fluid, the formula for which was given in FOREST AND STREAM for NOV. 4, 1880. 2. We know of no method of permanently and satisfactorily preserving flowers as you wish. We have seen blossoms covered with perfectly dry white sea sand, and allowed to dry, which retained their shape perfectly, and in some cases their color, but the dried blossoms were very fragile. To learn how to stuff birds, get Manton's "Taxidermy Without a Teacher," price, 50 cents, or Batty's "Practical Taxidermy," price, $1.50. We can send both.

F. H. S., Philadelphia, Pa.—The proper position for the centerboard is a little forward of midships, but in a canoe it must sometimes be placed further forward in order to allow room for sleeping. The only difference in this case is that less after sail is needed. 2. You have no right to copy any patented article or process.

W. A. W., New York.—What waters within a short distance of this city is there good fishing in the months of July and August, and are open to the public? Ans. Greenwood, Croton, Wawayanda, Hopatcong and Rockland lakes. The Hudson, Passaic, Hackensack and Shrewsbury rivers, as well as other waters about the harbor.

C. F. K., Ashland, Wis.—Do the laws of Maryland forbid sportsmen shooting duck from sink boats or bushwhacking, between Nov. 1 and April 1? Ans. There are many local laws on this subject. Write to Edwin Schenck, Esq., 243 St. Paul street, Baltimore, for the digest prepared by the Maryland Association for the Protection of Game and Fish, of which he is secretary.

J. R., Battle Creek, Mich.—1. I have invented a rod holder, which is clamped to the gunwale of a boat. It has a socket which allows the rod to be set at any inclination and to revolve about the boat. I drew the model, but have done nothing more. A man has stolen the idea from my drawing and is trying to get ahead of me in the patent. Is there much value in the design? 2. Shall I go to law? Ans. 1. Very little, if any. 2. No.

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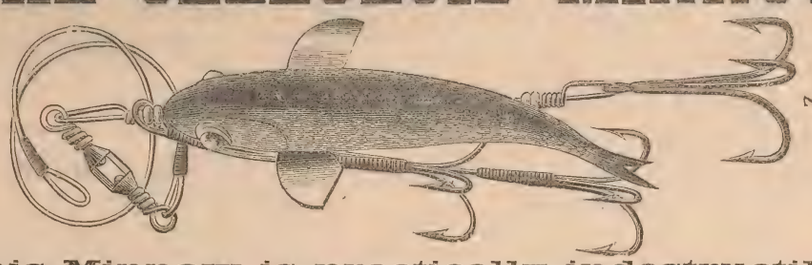
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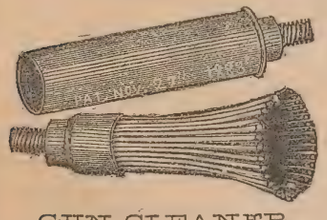
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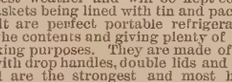
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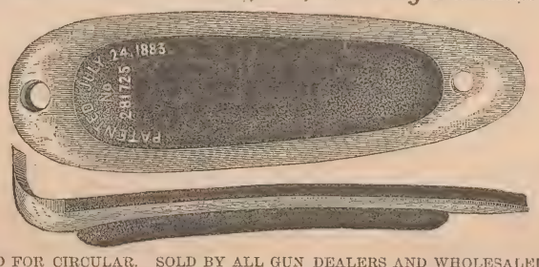
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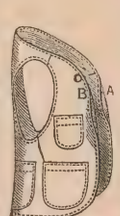
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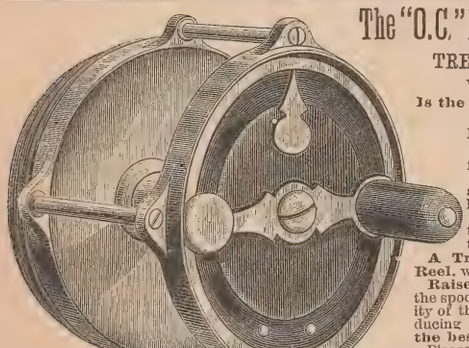
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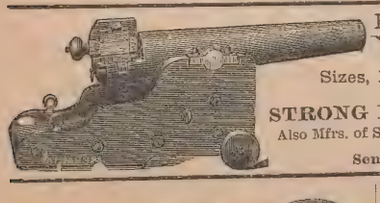
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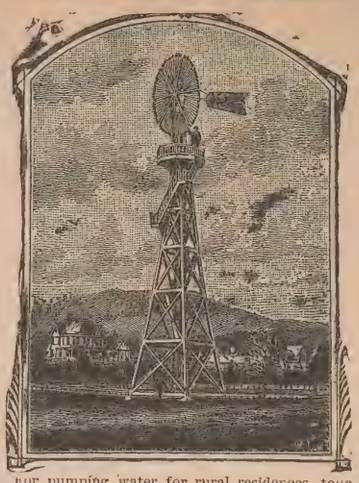
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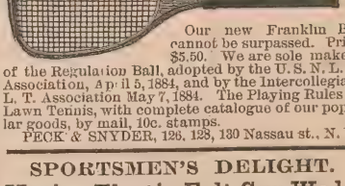
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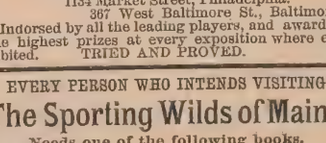
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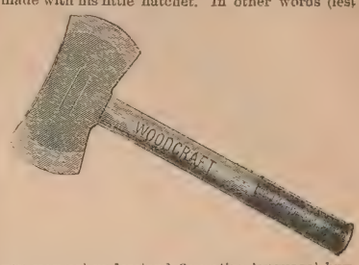
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A USE FOR SAWDUST.

IT is generally easier for a mill owner to dump his sawdust into the stream for the water to wash away than it is to burn it or cart it off. The sawdust kills the fish in the stream, but he would be an idiotic mill owner who would permit such a public loss to interfere with his private gain; and so he dumps the sawdust, kills the fish, puts his hands into his pockets, and asks the public "What are you going to do about it?" The States have enacted laws forbidding this disposition of sawdust and prescribing penalties for the offense, but the offenders usually manage to ignore the law or evade it entirely. Thousands and thousands of streams which once harbored excellent food fish have been ruined by the sawdust. In the last report of the New York Commissioners of Fisheries it is stated that "of all causes there is probably none that has exerted such an influence in expelling both salmon and trout from our spring streams as the presence of sawdust;" and the Commissioners go on to state that although there is a statute governing this, it is practically useless because carelessly worded.

The destruction of fish is not all that the sawdust must answer for. It kills human beings. Waters polluted by decaying sawdust spread malaria, and make miserable the lives of those who dwell on the banks of the plague-bearing stream. This is notably the case with the Raquette River, whose whole lower course is cursed with chills and fever; and Potsdam, where one of the State Normal schools is located, has become a very undesirable place of residence from this cause.

When urged to burn, or in some other way dispose of their sawdust, lumbermen have objected that they could not afford the cost. There is hope that the perplexing problem of dealing with this nuisance may now be solved, for a process has been discovered by which the refuse sawdust may be made to yield a handsome profit. When dry it is carbonized in iron retorts, and in the process there is given off 80 per cent. of volatile products, the remaining 20 per cent. being granulated charcoal, which can be used in making gunpowder, filters, lining refrigerators, and as a disinfectant, and mixed with a little tar it could be pressed into bricks and used for fuel; 22 of the 80 per cent. of the volatile products are in the form of fixed gases, which can be used for heating, lighting, etc.; 47 per cent. is pyroligneous acid, which is crude acetic acid, and after being purified and concentrated is used in white lead, color, print and vinegar manufactories.

There remain 10 per cent. of tar and one of wood alcohol. The tar has the same properties as coal tar, the almost endless uses of which, such as pitching roafs, lining water tanks, covering the bottoms of vessels, protecting iron from rusting, covering the wounds made in pruning trees, and in the form of benzole, naphtha, carbolic and sulphuric acids, and the whole splendid series of aniline dyes, constitute one of the chief glories of modern chemistry. The wood or methylic alcohol is used as a solvent for gums, in varnish making, in the manufacture of aniline colors.

The sawdust from yellow pine and other woods rich in resin, yields also a considerable amount of turpentine, in gathering which so many trees are every year sacrificed.

It is estimated that in sawing inch boards of pine, hemlock, etc., the one-fourth inch saw-kerf uses up one-fifth of the log. When lumber is sawed by the billion feet, one can easily see that the question of disposing of the sawdust in a way to yield a profit, instead of a first-class nuisance, is a very important one.

THE OLD SWAMP.

HOW many years it had been there no one knows. Perhaps it was only one of the minor depressions left in the surface of the earth after the passage of the great glacier, that swept over the land that is now ours when the race was young. Then our ancestors dwelt in caverns—true troglodytes—and slew the reindeer and the hairy mammoth and the horse, and perhaps now and then had fierce conflicts with the huge cave bear, which they conquered by their courage and their numbers, rather than by the excellence of their rude stone weapons.

Or it may have been once a broad valley, down which hurried a sparkling brooklet, which twisted and turned, winding from one side to the other of the level meadow; here rippling in a yellow current over the smooth pebbles of the bottom, there burrowing its way beneath overhanging grassy banks, where its soft murmur alone told of its presence; or again making some sudden crook and digging out for itself a deep, quiet pool, where the trout used to lie in summer, and in which the silent otter was always sure to find a meal. Then, perhaps, a little family of beavers passed that way, and seeing the brook and its possibilites determined that they would make it their home. So they began, by cutting down some of the trees that grew by the brookside, to build their dam. They brought mud and stones from the bottom of the stream and with their chisel-like teeth clipped off the willows and alders, and cut them into lengths, and their patient and unremitting industry finished the dam by the end of summer. Now a good part of the meadow was a wide but shallow pond. Next the houses were built and the winter supply of food laid up, and, not long after this, the pond froze over.

For years, perhaps for centuries, the colony of beavers remained here, always becoming more numerous. Sometimes they moved up or down the stream, and every few years they built new dams, and overflowed more of the low land. Those that they had first deserted had long ago rotted and broken down, and the ground which had first been grassy meadow, and then the bottom of the pond, was now a wet marsh, in which grew young alders and willows and bilberries, soft maples, cypress and tamarack, and a hundred other moisture-loving trees, while the foot of the passing deer sank deep into the spongy sphagnum or crushed the showy yellow lady-slipper and the delicate pink arethusa. As the years went by the forest growth increased in size, while the smaller shrubs beneath formed a tangled mass, impenetrable save to the wild creatures which made their home among the luxuriant vegetation.

However it was formed, such was the old swamp.

Here during the summer, before the berries were ripe, the black bear dug roots, and tore up the rotten logs or turned over great stones, for the ants, worms and bugs on which he lives. The deer browsed on the water grasses and in winter nipped the tender shoots of the willows. The raccoon hunted frogs in the wet places, and at the approach of autumn grew fat on the thick-growing clusters of fox grapes, made sweet by the early frosts. All the other denizens of the forest found here a safe retreat, from which they made excursions out into the surrounding hills.

So it was with the old swamp when our fathers first took possession of the soil. Game was plenty then, and a man, when he needed meat, had to go but a short distance from his own door to kill a deer or a turkey. But as time went by, fire and the axe cleared away the timber from the surrounding hills. The hunter gave place to the husbandman. The sickle supplanted the rifle. Now the game had become less plenty. Birds there were, it is true, but the larger game had disappeared from the land, except in the old swamp. That was as it had always been. The settlers had been busy, and it was the clearing of the land, rather than the actual destruction of animal life, that had driven off the game. Now and then a hunter had penetrated the tangle of the swamp in pursuit of a wounded animal, but its interior was still a mysterious unknown to all.

Within its gloomy recesses there was not much change. Here the bear was still to be found and the deer fed there almost unmolested. The turkey gobbled in spring as of old and the ruffed grouse stalked among the trees with majestic tread. The pigeons still gathered here to roost, and the thunder of their wing beats at morning and at evening was like the rushing of a mighty wind through a ship's rigging.

It was to the old swamp that the hunters resorted now for game, and often the sharp crack of the rifle rang among the trees or the roar of the shotgun awoke its once silent echoes. The angler pushed his way down the course of the stream and caught the trout. One began to find paths in the swamp that were not game trails.

A few more years passed by with rapid changes. The axe had been at work. Now all the timber had been cut away, but there was still left the undergrowth. Deer and bear and turkey and wild pigeons had disappeared, but there were some grouse left, and the quail, when startled from the stubble fields about its borders, still sought safety in the old swamp. The closing change in the old swamp was yet to come. Trenches were dug through the swamp. The brush was cut down and burned. The brook dried up. The plow passed over the land, and the next year a crop of sod corn was grown where once the beaver had their homes. Such is the history of many an old swamp.

All this is progress—the march of improvement. It is also the reason why our streams are drying up, and why the farmer complains that each year there is less rain, and it is a harder matter to grow crops. It explains why our rivers are gradually becoming more and more shallow, why the water-power that turned a hundred mills, now turns none and is replaced by steam. It is something that is taking place all over our country. The clearing up of each swamp like this one is a misfortune to our people, and the aggregate of such misfortunes means a loss of material wealth that can scarcely be computed. This loss is widely distributed, and is not felt as it comes, but it increases year by year. The farmer knows that his land becomes each season a little less productive, but he does not know why. Perhaps he thinks that it is worn out, and strives by the use of fertilizers to renew its old-time luxuriance. Vain remedy. Without water no amount of manure will make crops grow, but water will make fertile the sands of Sahara or the arid sage-brush wastes of our Western deserts. Has not the valley of the Great Salt Lake been made to blossom as the rose?

The story of the old swamp is told of no one locality. Each one of us has seen the work going on in his own neighborhood, has witnessed the disappearance of the native fauna and flora, the drying up of the streams. What will be the end?

SMALL BOAT SAILING.

TO those friends of small boats who have watched the limited entries and generally discouraging condition of the sport in and about New York, it will be gratifying to turn to the programme of races for the coming two weeks, issued by the Beverley Y. C., which we give in another column. The small yacht, as yet, has hardly a place in New York; on the one hand is the sandbagger, with which there is nothing in common; on the other, the large yacht, looking down contemptuously on the little ship, which, between these two, is left to sail alone.

Racing small boats, as formerly carried on here, with shoal boats, unlimited crews, and shifting ballast, is declining year by year, as is shown by the limited number of entries in such races of late, and it is bound to disappear entirely as the value of safety and comfort becomes more appreciated; but as yet there is nothing to take its place. A few clubs have

taken an advanced step and limited ballast and crew, and several races each year are open to such boats; but there is little encouragement given them, and their increase is very slow.

Looking in the East, however, we find a totally different condition of things, doubly encouraging, not only from the number of boats, but from their general good qualities.

The race of the Beverly Y. C. last August brought out 239 entries of all lengths from 60 feet down to 13. Only 21 of the 173 that started were over 30 feet, and most of the remainder were about 20 to 24 feet loadline. Of the 75 starters in the Hull Y. C. open race a week later but 12 were over 30 feet, most of them being nearer 20, and all honest, handsome and able little boats, whether cutters, sloops or cats. It is well worth a journey to South Boston to see the fleet at anchor there—several hundred little ships—small in size but trim and shapely in hull and rig, and each one representing a crew of at least two ardent sailormen; or, it is better yet to go in winter, when all the boats are hauled up, and when one can count the keels, the number increasing faster each year, while the centerboards are growing fewer, many lying ashore from season to season.

Of the general qualities of the boats now so common there, no better evidence is needed than a look over our late files. Vayu, Neva, Caprice, Fad, Carmita and the others there shown are but types of dozens of similar craft, whose names head each list of winners—Hera, Gem, Lily, Beetle, Banneret, Transit. If Boston can boast such a fleet, why is New York so far behind?

There is no lack here of suitable water. A draft of five to seven feet can be carried without difficulty, or if that is the trouble, less can be taken, while good qualities are retained. Certainly our sailormen are no less bold and daring or less skillful than their Eastern brothers, and there are builders who are competent to turn out such boats as would be needed.

Whatever the hindrance may be, the men interested must look only to themselves for its removal, they can expect neither sympathy nor help from the sandbaggers or the larger clubs, but must depend on their own exertions.

Several attempts have been made to form an association of boat owners, but all have failed, and at present almost the only clubs offering any inducements to owners of small fixed ballast craft are the Seawanhaka, Knickerbocker and New Jersey yacht clubs. An association is needed that will make a specialty of boats of thirty feet and under, prohibiting shifting ballast, limiting crews, and enforcing such rules as will encourage a true Corinthian spirit, and make it possible for a man to own a yacht and enjoy real sport, both cruising and racing, with a reasonable outlay of time and money. Such a club once established would never lack support, and its value would soon be appreciated by the larger clubs, whose constant complaint is a lack of amateurs for their Corinthian races.

RIFLE SHOOTING NOT DECLINING.

THERE is a cry going up from those who see only what lies on the surface, that rifle shooting in this country is on the wane, and that the sport of target practice is soon to die out. There is really nothing to justify any such croakings, and he who indulges in them is plainly a very short-sighted person. The only ground upon which such an assertion could be founded is that the newspapers are paying less attention to the subject and are allowing the marksmen to enjoy many a day of exciting rivalry without the accompaniment of notoriety. There was a time when every shot fired on the range at Creedmoor was duly entered in the next morning's journals; now a regiment goes out for its regular practice and may, perhaps, get a two-line notice in some of the papers. Publishing scores and making them are two entirely different matters. Even in the papers more particularly devoted to the sports of the field, there is a recognition of the fact that the score of each weekly practice match of each rifle club in the country may, with profit, give way to articles of general interest, in which topics of more permanent importance are discussed for the benefit of all.

It is, indeed, true that there is a lull in the sport of rifle shooting compared with the excitement which held sway several years ago. This is particularly true in this locality, where the international fever ran very high; but to-day, taking the country through, there is an abundance of rifle shooting, and on many a range scores of marksmen are getting all that delightful combination of work and relaxation which rifle shooting alone can bring. Persons of sedentary occupation still find a rare profit to weary brain and listless fingers in an hour or so spent with friends upon the lawn where the varying fortune of the mimic warfare help to keep the interest sharp and the rivalry brisk. These gentlemen do not seek to have their doings set forth in black and white through the press, but it is absurd to conclude from this that there is nothing going on.

The slovenly control which has been shown in the management of the Creedmoor range has done much to create this impression, erroneous though it be, that rifle shooting is on the decline. The range of the National Association seems destined to show its worst season in that of 1884. That this should be so is not at all surprising. The range has really, by the closing of the railroad which ran to it, been cut off from the metropolis, and is truly nothing more than an abandoned rifle range. There is a roundabout way of getting to the place, but it is so far removed in time and travel from this city that it has ceased to be looked upon as a practicable shooting ground.

What New York really needs is a convenient range for off-hand out-door practice. It should not be of less range than 200 yards, and we think that such a shooting park, properly located and equipped and liberally managed, would be a success as a private speculation. There is a good deal of nonsense, as we have at times taken space to say very emphatically, about the manner of practice pursued by the National Guard of this city and Brooklyn. The thousands of officers and men in the dozen regiments here organized would form a clientele to such a range as we suggest, and there would besides be a large outside patronage.

There are plenty of convenient spots about this city for the establishment of such a system of butts as would be required. We have no real estate scheme to further and therefore mention no localities, though an energetic man or company equal to the occasion would soon find the spot, and a moderate outlay would fit it up safely for the work in hand. Such an open air gallery could be made an attraction to any popular resort, and with it Creedmoor would soon be given over to its ante-range condition of daisies and desolation. It is a magnificent range, but if it cannot be put in use, an hundred instead of a dozen miles may as well separate it from this city.

We only repeat, then, that because Creedmoor has been made the victim of a dog-in-the-manger management is no reason for thinking that all is blue in the rifle shooting horizon. We need civilian marksmen to keep our regular and militia army shooters up to their work, and that need, we think, will always be supplied.

STARVING TO DEATH.

THE brief dispatch in Monday's papers from the Piegan Agency in Northern Montana was probably read by but few of our readers. Even to those who saw it, it did not mean much. Northern Montana is a long way off, and besides that the Piegans are "only Indians." This is what the dispatch says:

HELENA, Mon., June 30.—Major Allen, Piegan Indian Agent for Northern Montana, reports that the Indians are dying fast from starvation, the food supply at the agency being very scant. The carpenter has furnished thirty coffins in the past month, but it is believed that the deaths are fully thrice that number, as the Indians have a great dislike to burying their dead, preferring the old custom of placing the bodies in trees or in stone piles on high hills. The death rate is greatest among children from five to twelve years of age. In another week the supplies will be entirely exhausted, and the 3,000 Indians on the reservation will be left to starve, or subsist on the cattle of the settlers. Trouble is feared.

If now we had heard that in some town down in Mississippi or up in Minnesota, three thousand people were perishing of hunger, we should, probably, feel somewhat interested. The mayors of cities would be telegraphing to each other, consulting what measures had best be taken to relieve those who were in need. The daily press would publish appeals, and call for subscriptions, the Federal Government would place its servants and its supplies at the service of the relief committees. But these Piegans are "only" Indians—let them starve.

It is true that the Indian does not enjoy starvation much more than the white man does, and while he takes little pleasure himself in dying of hunger, he is even less contented to watch his hollow-eyed squaw as she sits beside the robe on which lies his poor little miserably starving child. The little ones go first. They are the weakest of the tribe; if they are without food they must perish. The women are stronger and can endure more, and the men have still greater powers of resistance. So we find, naturally enough, that the mortality is greatest among the children from five to twelve years of age. Poor little things; we can't help feeling a little sorry for them. Not that they are dying—that is rather a subject for congratulation than for pity; but that they should suffer so while they are dying. However, they are "only Indians."

The Piegans have for a long time been in a most miserably destitute condition. The buffalo on which they have always depended have been destroyed and they have now literally no means of support. They are not in any sense an agricultural people, their sole food being meat, with the wild berries, which they gathered and dried. But the game is gone, and with it, unless immediate assistance is given, must go this pitiful remnant of a once powerful nation.

We do not know who it was that in bitter sarcasm first called the Indians the "wards of the nation." They are such wards as Mr. Squeers had in his school, or, to come down to actual and recent facts, such "wards" as Shepherd Cowley had in his "home" in this city, and starved to death there.

We do not profess to be sentimentalists. We know the West and the feeling there as well as we do the East. We have traveled and lived and fought with Indians. We know what they are better than ninety-nine out of every hundred men, be they Eastern or Western. The Indian is a human being like the white man, he loves his wild free life as well as we love our life, his wives and children as well as we do ours. He has his pleasures and sorrows as well as we. The treatment of the Indian by the United States Government has always been shameful, and the disgrace which attaches to us on this account can never be effaced, and is only paralleled by the way in which the British Government treated the East Indians Each year adds to the grievousness of the injustice with which these peoples are being treated. We have fairly conquered them in war, and have driven them on to their reservations, and now we keep them there to starve. What would be thought of a man who drove a lot of steers into his corral or barnyard, and kept them shut up there without food? The law would be invoked to punish him without delay, yet this is what we are doing with the Indians.

What recourse have these people? What hope have they? Surely it is better to break out, to raid the settlements, to have the excitement of war, even if they die in battle, than to perish miserably of starvation on the reservation. If they do break out, at least they will have plenty to eat, for are not the Montana prairies covered with cattle? No wonder trouble is feared. Perhaps some one up there remembers the Cheyenne outbreak a few years ago, when the terrified Indians fled from the reservation in the Indian Territory to which they had been moved, and crossed Kansas and Nebraska, perpetrating atrocities too frightful to be mentioned on the families of the innocent settlers, and killing men, women, children and cattle. Why should not the Piegans in Northern Montana do the same? No wonder "trouble is feared."

Even now it is not too late to avert this imminent danger. The Interior Department should, without delay, telegraph the agent to purchase the supplies necessary to temporarily relieve the suffering of these people, until some measures can be taken for their permanent relief. But the case is pressing, and aid, if to be of use, must be given at once.

SUMMER SHOOTING.

THE first editorial on game in the first number of FOREST AND STREAM, published nearly eleven years ago, protests against the summer shooting of woodcock. Each year since, at the coming of the summer, we have raised our voice in condemnation of the practice, and by "line upon line and precept upon precept" have endeavored to instill into the minds of the public the great importance of protecting our game birds until they were full grown and full fledged. The summer shooting of woodcock is admitted by nearly all who indulge in the practice to be a murderous and destructive business. Not only are the broods exterminated, but in many instances the old birds share the fate of the young; and, unless by chance, the breeding grounds are barren the succeeding year. This is especially the case where the breeding grounds are one side from the regular line of flight, and we have known many such places that remained desolate for years.

There is another very important point in this connection that we do not remember to have seen discussed. Every close observer of the habits of the woodcock is acquainted with their different notes, and has heard the signal with which the occupant of some choice bit of feeding ground calls from the sky the companion whom he hears approaching. We have often, for hours at a time, lingered on the borders of some favorite flight ground, after it had become too dark to shoot, listening to the music of their rustling wings, and have often heard the call of some bird in the covert to all appearances cause the quick-beating pinions to cease their flight and settle near the place. Now who shall say that in this flight from their breeding grounds in the north they do not pass by resorts that were once famous, simply because there is no one at home to let them know that the locality is desirable and to bid them welcome. The point we think worthy of consideration. We believe that with the abolition of summer shooting the fall flight would gradually increase and that in a few years in a large proportion of our once famous "fall coverts" the querulous whistle of gentle *Philohela* would be something more than a tradition.

In some portions of the country woodcock may be legally killed now, although more than one-half of the States that legislate upon the subject have fixed the date at least a month later, and one-half of these put off the evil day still longer. We shall preach no homily upon the enormity of the offense of him who breaks the laws, nor read a lecture to the individual who chooses to broil his brains in the scorching heats of midsummer in the lawful pursuit of so-called sport, nor do we propose to repeat the arguments upon the subject which are familiar to all, but we earnestly appeal to all lovers of woodland sports to heartily join with us in our efforts to rescue from his impending fate this beautiful sprite of "wooded copse and bosky dell." Not alone in behalf of the present generation do we urge the protection and preservation of this royal bird. We plead in behalf of the sportsmen of the future, those who are to come after us, that through the rapacity of those who have charge of their patrimony, they be not cheated out of its enjoyment.

THE EARTH AND THE SUN.—Some of the savants are trying to prove that the earth is older than the sun. We do not care whether it is or not, but we are prepared to show that the joke about the man who shot New Jersey musquitoes for woodcock is much more ancient than our esteemed contemporary the *Sun*, in whose editorial columns it appeared the other day.

NOT THE RANGELEYS.—The name Rangeley Lakes is a mis-nomer for the Androscoggin Lakes. Rangeley is the smaller and upper one of the four great lakes composing the Androscoggin chain, the headwaters of the Androscoggin River.

The Sportsman Tourist.

UNCLE LISHA'S SHOP.

V.

AT the next gathering in Lisha's shop, Antoine was present, and when the old cobbler became aware of him, he gave him a hearty welcome, for though he was always cracking rough jokes upon the Frenchman, he had a real liking for him for his good nature and the kindness he had shown at the time of the memorable bear fight.

"Hello, Ann Twine! Buzzhoo musheer! Cummassy vau! How dy do? Glad t' see ye agin. Oh! you've missed it 't ye hain't ben here t' aour meetin's. Sech stories as the boys has tole, an' Solon Briggs has tole us lots o' things 't we didn't know—nor he nuther."

"Wal naow, onc' Lasha," asked Antoine in a low voice, as he edged onto the corner of the shoe bench, "W'at kan o' langwizh dat wus, M'sieu Brigg he spik it, hein? 'F dat wus Anglish ah can't nevah larn 'em. He broke ma jaw off. Guess he Sous Merican, don't it?"

"Nev' mind, Ann Twine, you c'n onderstand it jes' 's well 's any on us—'n jes' 's well 's he ken, I guess. It don't hurt us none, 'n' it does him lots o' good to let off them 'ere booktionary words. Wal, Ann Twine, it's your turn naow. You got to tell a story or sing a song. Le's hev Pappy no, come. 'Pappee no sa bum pay-raow,'" Lisha sang with a roaring voice the first line of that once popular Canadian revolutionary song. "Tune 'er up!"

"Ba Gosh, onc' Lasha," Antoine said with a sorrowful voice and face, "Ah can' sing, nor tell storec, ah feel so bad!"

"What's the motter, man? Ye inyuns froze, er terbacker gin aout?"

"No sah, onc' Lasha, ah got plenty onion, plenty tabac, plenty, plenty. But ah have sush bad dream las' nat! Oh, ah feel so sorry, me!"

"Tell it, Ann Twine, tell it," Lisha shouted, and all the others joined in the request or demand.

"Ah don' lak tole it, mek you all feel so so bad jes like me, ah fred. Wal, don' you cry. Las' nat w'en ah go bed ah free-git pray. W'en ah git on bed ah tink ov it. Den fus' ting ah say ah shet ma heye, den ah'll beegin. As' de bon Dieu mek me mo' better as ah was—ef he can—an tek care hole hwoman an' all the chillens, 'n' mek it heat not quat so much meat, an more patac* and zhonnerkek dat was cheap. Den ah go sleep. Bambye ah dream ah go to l'enfer, what you call it, hell?"

"Guess 't was 'baout mornin' when you dremp that dream, Ann Twine. Mornin' dreams comes true, they say," Lisha put in.

"W'en ah got dah," continued Antoine, only noticing the interruption by a shrug and a wave of the hand, "de Dev' he come as' me what so good man ah be come dah faw? Ah say ah honly come faw fun, see what goin's on, me. Den he say, 'Se' dawn, se' dawn, M'sieu Bissette, mek it you-se'f to home.' So ah'll sit in ver' warm place an' look all 'raoun'. Bambye one hole man come, he don't got any clo's on it, honly jes shoe mek it tool ond' hees arm. Dev' he say, 'What you want it?' Hold man say, 'Dey a'nt have it me on tudder place, so ah'll come hecar, see 'f ah can git it jawb mek it you some boot.' Dev' he stick it aout bose hees foots, one of it lak man's, one of it lak caow's, den he say, 'You can mezzhy only but one of it for mek bose boot; tek it you choose.' Hole man he say, 'Guess ah tek it de bes' foot,' so he mezzhy de man foot an' go work rat off. Pooty soon rat off, bambye, he have it de boot all do, an' Dev' he try it on, an', by Gosh, de boot fit de caow foot bes', an' he won't go on tudder on 't all, no sah! Den Dev' he mad, an' keek dat poo' hole man aou' door in col'; an' ah feel so sorree for it ah run rat back here an' git it some clo's, an' fus' one ah git hole of 'it was onc' Lasha clo's, an' bah Gosh! you b'lieve it me, dat clo's fit dat hole man jes' if dey been mek it for him, yes sah!"

The laugh which the relation of this dream aroused was made louder by Lisha's roaring "haw, haw, ho," at the end of which he said, glowering at the narrator through his spectacles, "You dremp that wide awake in the daytime, Ann Twine. You ben studyin' on it up ever sin' you was here?"

"No sah, onc' Lasha, ah dream dat in a mawnin'; an' he come true, you say? Wha' you s'pose dat hole man go? Dey won't have it in de good place, dey won't have it in de bad place—wha' you s'pose he goin' go, hein?"

"Guess he'll hafter go t' the 'Hio," Lisha answered, with a laugh that ended in a sigh; "to the 'Hio, where his on'y chick an' child is. Canucks," he continued, "don't never die, 's fur's heard on, 'ceptin' the one 'at I spoke on. When they git old 'nough to die they go to Colchester Pint. Forty, fifty years t'om naow you'll go there, Ann Twine."

"Wal, da's pooty good place to feesh, don't it? Ah rudder go dah as come dead."

"Fish! Yes; fish 'n' inyuns 'n' terbacker 's baout all a Canuck keers for. Ann Twine, you're the furderest Canuck f'om where ye c'n ketch bull-paouts an' eels 't I ever see. Give 'em them an' inyuns an' terbacker, an' an ole hoss, 'n' a wuthless dog, 'n' they're happy."

"You call it ma dog don't good for somet'ing, onc' Lasha? You tole him dat he bit you, den he show he good. He fus' rate dog, sah. He lay in haouse all a time honly w'en he barkin' at folks go 'long on road, 'n' he jes' fat as burrer."

"Good qualities, all on 'em," said Lisha, "p'tic'ly in a Canuck dog, bein' as fat 's butter."

"Those 'ere French," Solon Briggs remarked to Pelatiah, who sat beside him, "is a joc-vial an' a fry-volous race."

"Yus," said Pelatiah, sadly regarding the palms of his mittens, much soiled with handling cord wood since sledding had come, "I s'pose they be pooty smart to run."

Solon, disgusted with his unappreciative listener, raised his voice and addressed the Frenchman. "Antwine, didn't your antsisters come from France?"

"No, M'sieu Brigg, ma aunt seesters an' brudder too, all bawn in Canada. Ma mudder one of it, seester to ma aunt, prob'ly."

"You misconstrowed my inquirement, Antwine," said Solon. "I meant to ast you, wa'nt their prosperity 'at was borned before 'em natyves of of France—reg'lar polly voo Franceys, so to speak?"

"Ah do' know—yas, ah guess so, ah guess yes." Antoine replied at random, having no idea of Solon's meaning.

"Shah! Fur's any conjoogle satisfactualness is consarned, if a man hain't a lingoist he might 's well talk to a sawmill as one o' these furrin Canucks," said Solon, and added, "I b'lieve I'll take my depart an' go hum."

"Ah do' know 'f ah got it rat, zhontemans," said Antoine, as the wooden latch clattered behind the departing wise man, "but ah t'ink wat you call Solum in Anglish was dam hole foolish, ain't it?" There was not a dissenting voice, but Lisha said apologetically, "Oh, wal, Solon means well."

"I'll be darned if I know what he does mean," Sam Lovel said.

"Wal," said Lisha, "I s'pose he 's a well-read man, an'—"

"Dum the wellred men!" Sam broke in, "I wish 't they was all sick 'n' dead, consarn 'em! See haow they'se cuttin' up aout West 'n' in Floridy!"

"Oh, wall," Lisha continued, "we're well red o' him an' them, so le's don't bother."

"Ef I was a Ninjun as I be a white man," cried Pelatiah, rising and smacking his mittens together, "while 't there was a pale face on the face of the U-nited States of Amerikey, I wouldn't never lay daown my bow-arrers, my tommyhock an' my wampum; never, no, never!"

"Guess ye'd nev to lay daown yer wampum 'f I mended yer boots, Peltier," said Lisha, and Sam Lovel advised the budding orator to "save that 'ere fur the spellin' school ex'cises next week."

There was not much further discourse, for Lisha was yawning and his guests took the hint, as broad as his jaws could compass, and went their ways homeward, Antoine singing "Papineau" at the top of his sonorous voice, and all joining in the ringing refrain, "Hurrah, pour Papineau!" till the owls on the further steep of Hog's Back were frightened from their propriety.

*Canuck for potatoes.

Natural History.

"BIRDS IN THEIR HAUNTS."

WE are promised about the end of this month a new book on birds, from the pen of the Rev. J. H. Langille. It is to consist of brief descriptions and full life histories of all the species commonly found east of the Mississippi River, and will give special attention to the songs and nesting habits. The work will contain about 570 pages and will be illustrated by 25 cuts.

The following sketch of the Cooper's and sharp-shinned hawks are from advance sheets of the book:

COOPER'S HAWK.

In the top of a tall beech tree, I discover a hawk's nest, and while I am querying whether it be new or old, the female of Cooper's hawk (*Accipiter cooperi*) alights on a limb near the nest, and presently drops into it. At the same time I see a friend passing along the winter road near by, carrying a fine rifle. He is a good marksman, so I beckon him to my assistance. As I strike on the trunk of the tree the bird leaves her nest, and my friend takes her on the wing. Down she comes, so gradually that she almost appears as if alighting, and skimming along the ground for some distance, finally drops, squealing loudly enough to alarm the whole feathered tribe in the neighborhood. As I approach her, she defends herself with the heroism of a true hawk. The bullet has passed through her thigh, shattering the bone thoroughly, and the two outer pinions of one wing are cut away. But why should this simple shattering of the thigh bring down so strong a bird so readily? The explanation is to be found in the peculiar anatomy of the bird. In 1761, Peter Camper, a distinguished Dutch anatomist, discovered that the cavities in the bones of birds, which Gabbe had already observed to contain no marrow, were in direct communication with the lungs, and so participated in respiration. In 1774, John Hunter, the great English comparative anatomist, verified the same in his marvelous researches into the anatomy of birds. Extending their investigations in the most able manner throughout the entire class of birds, they discovered that "the air-cells and lungs can be inflated from the bones, and Hunter injected the medullary cavities of the bones from the trachea. If the femur"—the thigh bone—"into which the air is admitted be broken, the bird is unable to raise itself in flight. If the trachea be tied and an opening be made into the *humerus*"—the upper wing-bone—"the bird will respire by that opening for a short period, and may be killed by inhaling noxious gases through it. If an air-bone of a living bird, similarly perforated, be held in water, bubbles will rise from it, and a motion of the contained air will be exhibited, synchronous with the motions of inspiration and expiration.

My specimen of Cooper's hawk is one of the largest, some 20 inches long. She is sometimes scarcely more than 18 inches long, while the male is never more than 18, and may not exceed 16 inches in length. This species, which in structure and color is almost precisly like that of the sharp-shinned hawk, being, however, unmistakably larger, makes with it, and it only in this country, a strongly marked genus, the *Accipiter*—the distinctive generic points being: first, that the feathers extend but slightly down the tarsus; second, that the toes are long and very slender, much webbed at the base, and thickly padded; third, that the fourth primary is longest, the "second shorter than the sixth," and the first noticeably short; fourth, the soft and finely blended character of the colors above, in maturity—being a fine ashy-brown, blackish on the head. The under parts of both birds are white, with fine cross streaks of light reddish. They bear about the same relation to each other as that of the hairy to the downy woodpecker. Cooper's hawk is especially a bird of the United States, most common in the Northern States, and extending but slightly into the British Provinces. The sharp-shinned hawk is sometimes found here in winter, but Cooper's hawk goes further south. Early in May is the time for the nidification of the latter in this locality. The nest, in the crotch of a small tree, or where several limbs join the trunk, always very high, is built of sticks and lined with dry grass, or strips of bark, sometimes containing feathers, the depression being but slight. The eggs, three or four, sometimes five, about 1.90x1.50, are white, greenish or grayish tinged, often clear, sometimes slightly blotched with dark drab or brown. Mr. Samuels mentions a pair robbed of their eggs four times in the same season. "They built different nests in the same grove, and laid in the four litters, four, five, and three eggs, respectively. The eggs of the last litter were very small, but little larger than those of the sharp-shinned hawk."

The ordinary flight of this bird is rapid and straightforward, the regular strokes of the wings being frequently relieved by sailing. In the mating season, when it is very noisy, having a note which sounds like *chee-e-e ah*, I have seen it, high in air, above the tops of the tallest trees, shooting toward one of its kind whose voice it heard in the distance, with half-closed and perfectly motionless wings, and with a rocket-like speed and a gracefulness which no language could describe. In pursuit of its prey, which may consist of small quadrupeds, the smaller ducks and waders, grouse, and the larger kinds of the common land birds, it moves with great spirit and adroitness, and seldom misses its quarry. So well known is it in the poultry yard that it is called the "chicken hawk." When reared from the nest it becomes so thoroughly domesticated as to need no confinement.

THE SHARP-SHINNED HAWK.

The sharp-shinned-hawk (*Accipiter fuscus*), in every way so similar to Cooper's hawk, is some twelve inches long; brown or slate-colored above, with a few white spots on the back of the head and on the scapulars; tail also brown or ashy, but considerably lighter, with fine dark bands across it, sometimes tipped with whitish; the white under parts closely and narrowly barred with reddish; throat, narrowly streaked lengthwise with brown. Its nest is similarly placed to that of the former species, only not so high up in the tree, but is occasionally placed on a rock. The eggs, some four, are about 1.40x1.20, roundish, clear white, or perhaps slightly tinged with blue or green, heavily and distinctly marked—patched—with brown.

This hawk reaches Western New York the latter part of April, and its eggs are laid early in May. It is readily distinguished by its short, broad wings, and rather nervous and irregular flight; but it moves rapidly, and sometimes with great impetuosity, so that it has been known to pass through several glass partitions of a green house. Seizing its prey on the wing, in the manner of a true hawk, it dashes after it with the utmost directness, moving high or low, to the right or left, as if by some continuous attraction. With an unerring stroke, it wounds fatally in the very act of capture, and then bears its prey to a tree, to be devoured at leisure. In addition to the small birds thus taken on the wing, it may pounce on one larger and heavier than itself, or it may swoop down upon the small quadrupeds, or, after the manner of the smaller hawks in general, make its repast even on insects. As with birds of prey in general, the surest way of escaping its clutches is by soaring; the thickets, into which the smaller birds generally dive when pursued, affording but little protection to its penetrating flight. Its note, which is but seldom heard, is sharp and shrill. Ranging over all North America, it may be found in New York and Massachusetts during mild winters.

THE USE OF FIELD GLASSES.

REFERRING to the use of field glasses for inspecting and determining the various species of our feathered songsters, let me add, that during nearly three years' study of birds, the field glass has given me more insight into their ways and habits than the close examination of inanimate specimens.

The yellow-breasted chat, one of the birds most solicitous of concealment and difficult of apprehension when pursued, may be brought close to and examined satisfactorily with a pair of glasses, for as soon as this eccentric individual finds that it is not sought, it leaves cover, and may then be seen scratching about in the leaves and brush in company with brown and wood thrushes, fox-sparrows and chewincks, the latter, although not being what may be termed shy birds, still prefer their thickets and groves to the near presence of man. Some of the warblers, Blackburnian, blue yellowback, Nashville and a few others, seek their food among the higher terminal blossoms and twigs of our large shade trees, but the majority may be found lower down, in company with the vireos, thrushes and sparrows. A tub, shallow trough, or better, a small wooden tank, may be used to advantage, as the birds can then be encouraged to bathe and at the same time be brought closer for inspection. In a tank four feet by four and one foot deep, with a platform in middle; during the warm days of July and August, on an average sixty-five birds of different kinds bathed and plumed within one and one half hours. Birds were the wood, brown and tawny thrushes, catbirds, chipping and song sparrows, blackpoll, [??—ED.] summer, yellowrump, black-throated green and Nashville warblers. Baltimore and garden orioles, kingbird, great crested flycatcher, phœbe bird, American gold and pine finches [??—ED.] (the latter not often), red-eyed, warbling and yellow-throated vireos; and robins, catbirds and red-eyed vireos most numerous. The "parasite" (*P. domesticus*) also frequents the tank and much annoys the smaller birds, but as I have a smoothbore Flobert, with a dust shot cartridge, near by (especially for these pests), the rascals rarely escape to tell a tale. This tank is not more than twenty-five feet from the house porch, and if removed further away the number of visitants would undoubtedly enlarge.

Much might be said about the manner of bathing of the birds; how the red-eyed vireo plunges unhesitatingly into deep water, and the others step daintily down the incline, first dipping the bill, presumably to drink, but seemingly to test the temperature of the water. Any one who has seen their peculiar fuzzy appearance, as they stand all wet and dripping, shaking themselves and then go off with a chirp of delight to some bush to plume and arrange their dress, cannot but feel satisfaction in knowing that he has but taken his specimens with a field glass. Three of your readers practice this plan, let more try it. BITTERSWEET.

BAY RIDGE, Long Island.

AN ELECTRIC AMPHIBIAN.

BY GEO. T. ATKINS.

[From a letter to the U. S. Fish Commissioner.]

I GOT in to-day quite a curiosity. An old fisherman on Elm Fork of Trinity caught what seemed to be an eel. He caught hold of it to take it off his hook, and it gave him an electric discharge, powerful enough to affect the muscles of side, shoulder and arm, and cramp the hand sufficient to make him halloo for a companion to come aid him in getting loose.

I have the eel living in my store; it is a queer looking fish, has two feet or legs where the pectoral fins should be, each foot has four fingers to it, about one-eight to three-sixteenths of an inch in length. The mouth is broad, an eel's mouth is pointed. This fellow's head shapes down, more like the catfish; mouth rounder and broader than the ordinary eel. He has the regular opening for gills behind the head, but the lungs sit out on each side, and range off upward from the head a perfect set of brachiæted fern leaves—blood red to the center and pale dirty-tinged at the tips. He is about fifteen to sixteen inches long, one inch in diameter, and about three inches from tip of tail has a natural cut in it on top separating it from the body.

I do not know what it is, nor whether it will live or not.

If it dies I shall put it in alcohol. Did you ever hear of the like?

On the ground uses legs for motion and turning, otherwise appears to act in every way as an eel does, not offering to bite on being handled.

DALLAS, TEX., June 11, 1884.

[May not this be one of the *Sirenidæ*?]

ST. NICHOLAS AGASSIZ ASSOCIATION.—This most excellent little handbook of the *St. Nicholas* Agassiz Association, which we have just received, deserves something more than a mere mention. The conception of the Agassiz Association originated with Mr. H. H. Ballard, the author of this Handbook, and was, as he says, "the outgrowth of a life-long love for nature, and a belief that education is incomplete unless it include some practical knowledge of the common objects that surround us." As its name implies, the Agassiz Association is a natural history society, and one which is intended to be broad enough to include all the youth of this country. The Association is made up of local natural history societies, chiefly organized in schools, by some instructor, or by some pupil who has an especial taste for some department of this study. The purpose of the Association is to foster in the young an interest in, and a love for, nature. A number of more advanced students in various branches of science, have offered their services in behalf of the Association, and such aid will be of the greatest assistance to beginners. The instruction and communication between the members of the different chapters all over the country, is carried on by correspondence, and thus each student may be brought into close connection with some one who is more advanced than he is, in his particular branch. We regard the originator of this plan for a wider diffusion of a knowledge of nature as entitled to the greatest credit for having inaugurated so good a work. By instilling into the heart of the child a love for nature, and a study of those of its forms which are constantly brought before us, inexpressible possibilities for added happiness are brought into the life of that child. And among all the young students, who are already members of this Association, and who will belong to it, there cannot fail to be a number who will, sooner or later, add something to the sum of human knowledge. The Association was started with the aid of the *St. Nicholas* magazine, of which the monthly reports have long been a department.

UNDER WATER.—One afternoon recently, while walking along a stream a short distance from this place, I noticed a small slender bird with a disabled wing running a short distance ahead, which, upon a closer view, I found to be of the wader kind; a little bird well-known about here as "knee-deep," probably so named partly on account of its habits and partly on account of the fancied resemblance of its note to those words. It will be readily recognized from its tilting motions when running or standing. Being somewhat interested and curious to note his movements under such conditions, and keeping at such a distance as not to cause any violent demonstrations of alarm on his part, I found that he made no attempt whatever to hide, although in the midst of abundant opportunities to do so, but after twisting his way through the tall grass bordering the stream for some time, he quietly dropped into the water, and to my surprise, went quite to the bottom. This occurred at a point where the stream was ten or twelve feet wide and as many inches deep, the water being perfectly clear, so that the bird was in plain sight as he deliberately struck out for the opposite bank under nearly or quite a foot of water. Watching him closely as he propelled himself rapidly across, keeping close to the bottom, much after the manner of a frog, I soon saw him "bob up serenely" near the other side, apparently without a wet feather. Then by swimming on the surface like the duck or other web-footed birds, he reached the further shore and resumed his former tactics on land. The under water part of the performance, to say nothing of the surface swimming, is something entirely new to me with reference to this bird, although its regular appearance and ordinary movements and habits have been a familiar sight to me for more than twenty years. I would like very much to know whether or not this was an exceptional case.—W. D. Z. (Lancaster, Pa.). [The bird is the spotted sandpiper (*Tringoides macularius*). It is not unusual for it when wounded to dive and swim some distance under water.]

NATURE'S HEALING ART.—Several years ago, about the first of September, our party was in camp on Follansbee Junior Lake in the Adirondacks. One morning a doe, driven by the hounds, plunged into the water and swam into the middle of the lake. Henry, the guide, jumped into his boat and killing the doe, brought her to camp, and when we arrived the deer was dressed. The doe had but three legs. One of the hindlegs had been so completely severed from the rest, just where the thigh begins to enlarge into the quarter, that the detached part hung by a mere thread of skin. The lower part was in a bad state of mortification, but the living part was nearly healed up and the flesh was to all appearance in as good condition as any. The general appearance of the deer was also good and there was nothing to indicate a diseased condition. The deer in all probability had been shot at by some night-hunter, as the wound looked like one made with buck shot. Does it not seem incredible that a deer wounded so badly could stop the bleeding and apparently so doctor the wound? Can any of the readers of the FOREST AND STREAM explain it?—AMPERSAND. [We have occasionally seen deer, elk and antelope that had recovered from severe and disabling wounds, but never anything that quite parallels the case mentioned by our correspondent. Several times we have seen antelope killed whose feet had been shot off not far above the hoof, and in all such cases the animal had made use of the legs and a hard horny pad of skin had formed on that portion of the leg which touched the ground in walking.]

ROSE-BREASTED GROSBEAKS ABUNDANT.—There seems to have been a flight of rose-breasted grosbeaks at this place during the past week. On Monday morning I collected a beautiful male of this species, and the next day secured a male and female that betrayed their presence to me by the powerful rich voice of the male. Thursday morning I heard another of these elegant songsters, and looking carefully up saw him in the top of a large chestnut tree throwing out his beautiful music on the cool still morning air. In a few moments he flew off and I heard his voice in a thick swamp a short distance off. As I turned to leave another male struck up his beautiful song until it seemed as if the woods was alive with the music. I have not noted any of these birds in this locality before this season.—J. C. CAHOON (Taunton, Mass., June 7).

YOUNG GORILLA IN CAPTIVITY.—The first living specimen of the gorilla ever brought to France was described by Prof. A. Milne-Edwards in a note to the Paris Academy of Science. It has since unfortunately died. The following abstract of the description is published in *Nature:* "It had been imported from the Gaboon, and it was the first living specimen of this great anthropomorphic ape which had been brought to France. Its study would have presented many points of interest, not alone from the natural history point of view, but also from the opportunity it would have afforded of studying the developments of its intellectual faculties. This young specimen is about three years of age; he had already his full complement of milk teeth, and the long and sharp canines were decidedly longer than the molars. In disposition he appeared to be very different from either the orang-outang or chimpanzee. While these in a state of captivity are mostly gentle and sociable, this young gorilla, on the other hand, was savage, morose and brutal; he never gave his keeper the least mark of affection; he never allowed himself to be touched without evidencing the greatest aversion, and for the most part he returned caresses by snappings. He never took the least part in the games of the other apes, and he most reluctantly tolerated having them near him. He was but little active, and most generally kept himself crouched up in a corner of the cage, or sitting on a branch with his back up against the wall, and scarcely ever moved but to look about for something to eat. He used his hands with much readiness, and they were extremely well developed. His lips were less mobile than in the chimpanzee, especially the lower lip, which was never pouted out when drinking into a spoonshaped form. His eyes were extremely mobile, and were crowned with immense superciliary ridges; his nose was flat, with excessively large nostrils, giving him a quite peculiar physiognomy."

ORIOLES IN MASSACHUSETTS.—Boston, June 9.—*Editor Forest and Stream:* My attention has been called to an article in your paper of May 15, headed "Decrease of Song Birds." I think if "Reignolds" will take the trouble to read my advertisement he will find that it called for live birds, and not for specimens for stuffing. The birds were wanted for an aviary, and the few that would have been used could make no difference. There seems to be the impression that if a man is by profession a taxidermist he must be a contemptible fellow, whose only ambition is to destroy every bird and bird's nest that he can find. Now, I can assure you that this is not so in my case; nor do I think that any respectable taxidermist would kill birds for millinery purposes, nor take bird eggs to sell to boys at five or six cents each. I have been in my present store about fifteen years, and during that time have taken one bird's nest, viz., humming bird, and I think that I can safely say I have not killed fifty birds per year. I have always done what I could to protect game birds and have imported from other States, and turned out in this several hundred quail within the last ten years. I do not think "Reignolds" can be much of an ornithologist or he would be able to distinguish the South American from our native oriole. Had the writer, who laments the absence of the oriole, waited a few days, he would have been better posted and found that Lord Baltimore is in fuller force than usual this year.—C. I. GOODALE.

BIRDS AND TELEGRAPH WIRES.—Mr. Adam Dietz captured a fine eagle yesterday morning. It had strayed into town, and, flying too low, became entangled in the net work of telegraph wires at the corner of Lee and Charles streets. After a sharp struggle it freed itself from the wires, but fell to the pavement. Mr. Dietz ran to seize it, and it eluded him and ran toward Barre street. The small boys of the neighborhood now joined in and ran the eagle down near Barre street. Mr. Dietz caught its wings just as it was attempting to rise, and carried it home. After deliberation the amateur ornithologists of the vicinity announced the prize to be a bald eagle. It appears to be young but well grown. Its wings, when outstretched, measure about six feet from tip to tip. Though languishing in the back yard and tied down by one leg, its spirit is unbroken, and a friendly tender of some food in various dishes last night was rewarded by a smash-up of the china.—*Baltimore Sun, June 23.*

RANGE OF THE BEAVER.—New York, June 26, 1884.—*Editor Forest and Stream:* "Jay" wants some one to corroborate his having seen beaver sign as far south as the Colorado River, in Texas. I have seen beaver and beaver sign at least two or three hundred miles further south than that, and if my memory is not at fault, there was a beaver dam in the Los Moras Creek a few miles below Fort Clark, Texas, in 1869. The blue topknot quail he speaks of are very common along the Devil's River, the Pecos and many other streams in Western Texas; I am not sure that they are identical with the California quail. If "Jay" had lied about the cowboys, as most people do who visit Texas, I would not have helped him out on the beaver business, but it is as he says, Texas people will compare very favorably with those of any other section or country, and a cowboy's friendship is one worth having, because you are sure he will "stay with you."—CIBOLO.

TAME SQUIRRELS.—Mr. F. H. Furness, of Waterloo, N. Y., has made friends with the squirrels at "Fern Lodge," where his summers are spent. A visitor there writes in the *Phrenological Journal:* "But I leave the inventory to say that even the wild birds and squirrels have become tame by constant companionship with the lord of this sylvan manor. I saw him call squirrels by name from out the tall trees and feed them upon his lap. The writer so far succeeded with one of the little athletes as to give him a nut from his hand, which he partially shucked upon his knee, and then deposited his treasure sixty feet high in a tall pine, and returning, chattered his gratitude at a cautious distance."

IN THE ADIRONDACKS.—Keene Valley, Essex County, June 24.—I wrote you hurriedly three weeks since, after returning to New York. This short time has greatly transformed everything here, and at this season of the year there is not a place in the State more picturesque than this very valley. It is but six miles from here to the Ausable Ponds, so well known by camping parties, and the very double of the prettiest lakes of Switzerland. Keene Valley has its complement of efficient guides, and this is a central point to start from for almost any trip. The hotels here are good, and are kept by Beede, Blinn and Egglesfield. In the height of the season the village presents a bright and life-like picture. A number of New York's prominent landscape artists have their summer residences here, among their number I mention A. H. Wyant, John A. Parker, Shurtleffe Robbins and others.—W. L. HOWARD.

Game Bag and Gun.

THE WELCOME HOME.

OF the sportsman's welcome home "Piseco" writes pleasantly, as follows:

Not far from where I have in my lifetime spent a very pleasant year there is a cosy country home that has contributed much to my enjoyment of the period, for there I received always a hearty welcome, and after a fatiguing tramp for quail was sure of a compliment if I had been successful, apparent trust and belief in my excuses if non-successful, and in either case a cup of Old Government Java or soul-stirring apple toddy.

My welcome began a long distance from the house; for rushing with clamor, soon turning from angry to friendly tone, came the dogs, affectionate to an extent that I failed to appreciate, when arrayed in aught but my shooting attire, for the sacred soil is very muddy soil, and dogs' forepaws will pick up and transfer some of it. No common dogs were these; each had its own peculiarity. There was Woodcock, a graceful blue belton. Such a dog as he had been! but now nervous and gun-shy, but a firm barker; and Meadow Lark, a young Irish setter, who no doubt would some day prove a fine bird dog, but now afflicted with a lame leg, and either deafness, a strong will of his own, or want of knowledge of the English language, for he disdained to mind a word; and there was Lucius, who was once "such a beautiful puppy," but who now, after sundry attacks of epilepsy, stood out a monument to the truth of the saying that the most beautiful children grow into the least handsome adults; and Bobtail, whom I think nature intended for a bull-terrier but made some mistake in the plans, and art brought to bear had, by close amputation of ears and tail, produced a rare specimen, but withal a dog who did not depend for reputation upon either the past or future, what he had been and would be he was—a savage-looking creature, whose appearance and bark proved good defense from wandering tramps. Finally came Partridge, a noble blooded English setter, staunch, fleet and faithful, but, alas, destitute of a peculiarity.

A little closer to the house welcome was found in the tameness of the bronze turkeys, with tails so stiffly outspread that one wondered if they ever got limber; fowls of various choice breeds, domestic and muscovy ducks, and splendid creatures, a cross between them; guinea hens and a lonesome rooster, who, because he alone avoided instead of approached a new arrival, was reported as crazy.

Then near the porch, on which, with a smile of welcome, stood the Colonel, some of the younger members of the family came forth to greet. And then the porch, and the Colonel, and the refreshments already mentioned, and a good cigar.

The Colonel makes no professions or claims to be an adept with a fowling piece, but now and then it becomes very evident that he does consider himself well qualified to judge of the skill of others. A case in point. He was one day witness to a very bad shot upon my part, one of those "unaccountable misses." He said little but probably thought much.

As I returned from an unsuccessful tramp for quail, a couple of his big muscovy ducks flew in from the river, circled over our heads, and alighted not thirty feet from the porch, where we stood and admired them. They were half as big as turkeys and very handsome birds.

"Colonel," I remarked, "you had better clip those fellows' wings, or some day when out on the river for ducks I may mistake them for wild ones and let go at them as they fly over."

Fancy my feelings at his answer: "Let go now if you want to, you can't hit them."

PISECO.

THE OLD TAMARACK SWAMP.

OF all the game resorts it has been my privilege to tramp over with dog and gun, I know of none that has in time past afforded such an amount and variety of sport as has the old tamarack swamp and its surroundings, situated in North Bloomfield, O.

Indications are that the swamp, which contains some 2,000 or 2,500 acres, was formed largely, if not wholly, by the beavers, as their works are visible even at this late day.

It was the home of large game—bear, deer and wolves, for many years after they had been killed and driven from most of the surrounding country, owing, no doubt, to the shelter afforded them by the dense growth of alder and huckleberry brush covering the entire tract, and the exceedingly marshy condition of the ground. As a pigeon roost, it was second to none within hundreds of miles, and as all that section of country was well stocked with oak and beech timber, the birds used to visit us frequently or as often as there was a plentiful supply of mast.

Well do I remember in my early years the heavy clouds of pigeons. Many of these flights were miles square in extent. Nightly, for weeks and sometimes months at a time, they used to congregate in and about this old swamp to roost, until every bush was loaded to its utmost capacity, and probably there were as many more in the surrounding timber. People came in from the country for miles around to hunt them, and many were the bags—and by this I mean two-bushel grain bags—that were taken out almost nightly, so long as they remained, amounting in the aggregate to a figure that had better not be mentioned, for to those who have never visited a large roost it might appear improbable.

The sight afforded one from the top of a tall tamarack in early morning, just before or about the time they were leaving their roost, was well worth going a hundred miles to see, and it must be seen in order to be anything like fully realized. One would naturally think the supply could never become exhausted; but how their numbers have been reduced during the past twenty-five years is only too well known. This continual netting for twelve months in every year, together with rather a free use of the shotgun, has not been without its result, and unless there is some protection afforded the pigeons, more than they are now getting the benefit of, I don't think it would require much of a prophet to foretell their future. Why not have a closed season for them of, say, six or eight months in every year, throughout every State and Territory, in addition to the "dead letter" now enacted for them.

During a severe drouth through Northern Ohio some twenty-eight years ago, the glory of the greater portion of this old swamp as a pigeon roost and also as a resort for large game went up in smoke. Deer did not long survive this destruction of their shelter. Wild turkeys, however, in fairly good numbers, for a country so long settled, remained,

and grand was the sport occasionally to be had with them in winter, after the swamp was sufficiently frozen to enable one to follow them in among the wild grass and cat-tails, which soon took the place of the brush, and where they were almost sure to skulk, particularly if the hunter were between them and the timber, and at times they would lie very close. I shall never forget the surprise one old turkey gave me. I think it was the first I ever hunted in this way, and it was before I was altogether acquainted with their habits. The day was windy, and the dry rattling grass of course favorable to a close shot, as my approach could not be heard. I had followed the track some little distance as it crooked about in this nice cover, using the muzzle of my gun to open the grass when necessary, to enable me to see the track, when in separating an unusually thick bunch I actually uncovered the old thing before it got up, which it did without delay, and may be going yet for aught I know to the contrary. I, however, do know that I fired two shots and didn't touch a feather, and that the turkey probably was not twenty feet away when the last shot was fired, and it looked as large as a haycock.

The principal and about the only grain of comfort that came to me that day was a knowledge of the fact that I was out by myself. No one, not even a dog, witnessed my disgust, which, it seemed for a time, would choke me.

Foxes, both red and gray, were quite numerous, also both white and gray rabbits for a number of years after this favorite cover was burned. Ruffed grouse were also to be found in goodly numbers around its borders till within a few years, but with the exception of a few gray rabbits, an occasional red fox, and a few snipe and ducks for a week or so in spring, that section, as a game resort, is in the past.

The land is being drained and farms laid out. The time is not far distant when all that will remain of the old tamerack swamp will be its history.

On what used to be a beautiful little island in the southern portion of the swamp, are three Indian mounds—so called—indicating that it was once the home of a portion of that ancient race, of whom we know so little. E. M. GREEN.

NEW YORK, June, 1884.

TWO-EYED SHOOTING.

Editor Forest and Stream:

Thinking that perhaps it might interest some of those who are agitating the system of two-eyed shooting I send you a few extracts from an old English work on shooting, by John Sherer. He says: "Much has been said on the superior advantages of the use of two eyes over one, in fact some of the advocates of the two-eyed system have spoken very disparingly, and, as we cannot help thinking, with unbecoming severity, of those who support the one-eyed plan, the latter being represented as slow coaches, their practice behind the times, obsolete, etc. But is this the fact? We think not, and if we may be permitted to judge from observation and experience, we should say the one-eyed man is quite as competent to 'fill the bag' as their opponents, simply because we believe each system to have its relative advantages and disadvantages, presuming each party to have guns of similar make and construction, of like setting as to the barrels, and of equal elevation of the rib. But, if guns are badly set, and with insufficient elevation, then it must be readily admitted that the two-eyed man will have a most decided advantage in helping himself to that which the gunmaker has denied him. But with guns constructed and put together on modern improved principles with proper setting, sufficient elevation, and peculiar fitness for the use of one eye, it strikes us that the two-eyed man has not all that superiority over his opponent of which he boasts; for, if the one-eyed man occasionally shoots under a rising bird, the two eyed man must sometimes shoot clean over a bird which is rapidly descending if he shoots in a wild, hilly, and mountainous country. In a flat, level country we are sensible that this latter case would rarely occur, consequently there the two-eyed man would have the advantage.

"Having shot many years over an uneven and mountainous country, where there were as many shots one way as the other, and being in the habit of using sometimes one eye and sometimes both, we must admit having occasionally shot over birds quickly descending when using both eyes, and sometimes having shot under rising birds when only availing ourselves of one eye. Here we allude to snap shots presenting themselves unexpectedly, in the taking of which the most experienced may occasionally be surprised, and reverse the principles on which they generally act. If, therefore, we may be allowed to judge equally from experience and from observation, we should conclude that neither system is perfect, each being liable to occasional failure, and if both parties will dismiss *amour propre*, and be candid, we think they will arrive at the same conclusion. The use of both eyes unquestionably gives extra elevation; in fact, almost indefinitely so, according to the judgment of the sportsman. But is this necessary, and is it always an advantage? We think not, for if a gun be properly put together, we cannot see that this extra elevation is required, except for a small proportion of rising shots at long distances, and we believe that the difficulty presented even by these will be readily overcome by the one-eyed man of experience, who possesses nerve and presence of mind.

"If the two-eyed system be as superior to the one-eyed one as its advocates insist that it is, why require any assistance from the gunmaker in the setting of the barrels? Why have any elevated rib? as it is evident all this is superfluous and unnecessary for the carrying out of the two eyed principle. For, if we judge rightly of it from the statements of its most strenuous advocates, they despise the steady old plan of looking along, or in the direction of the elevated rib in line with the sight, holding their heads above the barrels and taking their own elevation and line of sight, exercising their own judgment on the spur of the occasion, so that in this speculative system much practice and experience are requisite in order to acquire the habit of accuracy and precision. From this we think it may be fairly inferred without illiberality toward the two-eyed men that their system is not infallible; that they sometimes err, and consequently that their practice has not that decided superiority over the one-eyed system which it is presumed to have; as the latter, as far as it goes, is not liable to mistake, and is easily carried out—the precise extent of elevation being already determined and arranged by the gunmaker on unerring principles. The hand will to a very great extent follow and obey the eye.

"We are, therefore, convinced that in snap shots, even at such large birds as blackcocks, when they slip off the high top of a mountain, instantly gliding down below, the two-eyed man would, if he were inexperienced in that sort of shooting, shoot over many more birds than he would ever hit. This result, we think, must strike every one, even if experience were not referred to for its confirmation; but let any one who doubts it test the point by experiment—bring the gun quickly to the shoulder, with both eyes directed to a particular object, and he will find, on immediately closing one eye, that the point of the gun is above the object aimed at. Now, if a similar experiment be tried with one eye, and the gun be brought up quickly to the shoulder, it will be found that the point of the gun will be under the object aimed at, which in snap shots at rapidly descending birds will be an advantage which the one-eyed man will unquestionably have over his opponent." And again in the same work, in reference to the proper charge, he says: "Mr. Greener (the elder), a gentleman of great experience of the gun, says, 'Suppose you begin with two drams, and vary the charge one-eighth of a dram each shot up to three and a half drams, or as may be required, according to the length and bore of the gun, and, for precision, taking three shots for each charge at a sufficient number of sheets of paper, which ever you find strongest, with the least quantity of powder, that is the best charge, as very likely the two additions of powder will shoot equally strong, and yet not stronger, because more of it remains unburnt.'" This is in favor of "Byrne's" theory. The book was published just previously to or soon after the introduction of the B. L. guns. Mr. Greener refers to the M. L. gun. Hoping to see this printed, I remain, J. C. YATES.

MICHIGAN.

IN THE BACK COUNTRY.

HAVING been an invalid for some years, I have not been able to enjoy a tramp in the woods. However, like Goldsmith's old soldier,

> "Who shouldered his gun,
> And showed how fields were won,"

I can recount some experiences of the past.

A few years ago, I had occasion to visit the county of Huron in Ontario, Canada. I took my breechloader, as a good, honest woodsman, at whose home I was to stay, had told me that the "patridgez were mighty plenty." It was in the early part of December, when I left the train at the station about 9 o'clock, P. M. The moon hung like a silver globe in a cloudless heaven; the snow, white and glistening, covered field and forest, and as my friend did not know just what day to expect me, he was not at the station to meet me. I had some three miles to tramp by a narrow, lonely road, that ran for a good distance through a dense swamp; however, the keen, fresh, wintry air, acted as a grand tonic, and what with the glorious moonlight, made one feel just in trim for a tramp. Soon the crisp snow was crunching beneath my feet. Shortly after leaving the station the road entered the swamp, the tall and stately cedars spread out their cumbrous branches over the roadway, casting somber shadows on the virgin snow, but here and there, through the openings in the woods, the moon shining on the snow left pathways of light through aisles of shadow. Not a sound was to be heard save the crunching of the snow beneath my feet, and no sign of life was visible. In spite of the oppressive silence, the glory of the slumbering forest in its snowy covering made the heart beat with delight. After emerging from the woods the road wound through some fields, then struck into a beaver meadow, and just across the meadow on a rising slope I saw what I knew by description given to be the house of my friend. It was a few hundred yards from the meadow—a primitive log dwelling and surrounded by woods. As I neared the house I heard the barking of the watchdog, but fortunately he was within. Stepping to the door I gave a rap, and the good housewife gave me a hearty welcome. The woodsman, with his two daughters, were absent, having gone out to see a neighbor a few miles away, so I sat down by the fire and proceeded to make myself comfortable, while the good woman gave me a minute account of the white calf, the spotted pig and the yellow hen. It was not long before I heard the sound of approaching footsteps and a vigorous stamping, when the door opened and in walked my friend. Spying me as I arose to greet him, he said: "Wall, now, here he be; how hare ye? sit yer down. Mary, Jennie, this be Mr. ———, from N——." That man's grasp of welcome was as hearty as the tones of his voice. Tall and muscular, and honest as the day, he stood one of nature's noblemen. The daughters in due form shook my hand in good pump-handle style, and I at once felt the glow of spirits and the sense of comfort that spring from a hearty welcome.

In merry chat the hours flew by, and the time came for retiring. My good friend informed me that he had just "abuilded this house," but they had not had time to put the "pertitions in yit. Yer mustent mind, however, you sleep in Mary's bed, the fur one; Mary and Jennie can sleep in the next, and the old woman and I'll sleep in the one t'other side the room." You may be sure as a bashful man I was not in a hurry to retire, but all were so polite and easy I felt all the force of the old proverb, "Do in Rome as the Romans do." I took a good survey of the room, and marked the exact locality of my bed, when the old boy pursed up his lips and sent forth a hurricane of wind that blew out the light. "Now," he says, "good night to ye." I remained by the fire with my back to the beds until I was assured by the sounds that Mary and Jenny were safely ensconced in their couch, when, with most cautious tread, I made my way in the darkness to my own retiring place. I reached it without any mishap, and in less time than would seem possible, was safe beneath the blankets. Silence soon reigned supreme; through the cracks in the logs I could see the white moonlight on the snow without. Soon I heard a dull, strange sound like a frog's bass. It was the brave man of the woods snoring. His wife soon joined in musical rivalry; then a thin piping sound arose not far from me, and then another; all rising and falling in the clear frosty air, and as "music hath charms etc.," I was soon lulled to slumber, and probably sent forth sonorous sounds from my own aristocratic bugle.

I had determined to be up with old Sol and have a tramp through the woods in search of the "patridgez." But, alas! when I did awake he was casting his beams through the curtainless windows. I quickly thought of the surroundings of the previous night, and cautiously took a survey of the room. Imagine my consternation when I saw that my friend and his family were all up and dressed. He was seated at the fire with his back to me, smoking away at his pipe. The good wife, with a large spoon, was stirring the contents of an iron pot; the two maidens were spreading the table. Cæsar Augustus! Here was a fix. Not knowing what to do, I gave a barely audible sneeze, but with no effect on the company; then another louder, then another more emphatic. No go. Then I entered upon a violent fit of coughing, though, by the way, my lungs were as sound as a bell. This at last attracted the old man's attention, when he turned and said, "Yer got a purty bad cold, mister, beant yer?" I gestured wildly to him. He took the hint and gave me a sly wink and a smile, and said, "Mary, go and get a pail of fresh water from the spring, the gentleman's thirsty. Jinny, go and see if yes ken find him a fresh egg." When the girls disappeared he whispered in the old lady's ear, and she beat a retreat. Now was the time for action. Out of bed in a jiffy and into my unmentionables. But, alas! they were drawn on hind before, and the sound of approaching footsteps warned me there was no time for a reversal of the garment; so, hitching them up behind as well as I could, and donning my vest and the coat, which had comfortably long tails, I joined the party at the table. As soon as possible after breakfast I went to the barn to look at the white calf, the spotted pig and the yellow hen, and up in the hay those pants swung around to the wind. Returning to the house I joined my honest friend, who had a queer twinkle in his eye.

We then made for the beaver meadow. He went in among the thickets of cranberry and other bushes that skirted its edge, while I kept out on the sloping ground among the beech, birch and oak trees. Here and there we passed a dense clump of hemlock. Having no dog, my friend undertook to search the dense thickets, while I kept in the open woods. Soon I heard him shout, "Look out!" then the rush of wings, and to my left, just above a clump of low trees, went a cock grouse at a rattling pace. However, I was on alert; the gun went instinctively to the shoulder, the clear, frosty air rang with the sharp report, the blue smoke curled among the trees, and a cloud of feathers floated in the air. Soon soft and warm it lay in the game bag; and so shot after shot rang through the woods, some missing the swift birds, but the most of them sent the feathers floating, and soon filled out the game bag.

Passing through a clump of beeches I heard a grouse take flight from the treetops; looking up I saw another poised erect upon the top of a beech, and as it was moving for flight I fired and down it came and lay almost buried in the fine snow. It was placed in the bag. About half an hour after, as we were trudging along side by side, I felt a movement in the bag, and away went this grouse out of the bag, gathering speed as it flew through the trees, but my gun went to the shoulder, and before it got out of range I brought it down. Hurrah! That was the best shot made that day. The man of the woods stood open-mouthed with wonder and said, "Wall now, that were a shot." Eight grouse fell to the gun that day.

Those were grand old times. I bade farewell that evening to my kind friend and his family. He walked with me to the station. As I left the house the old lady waved the soup ladle, the bashful "darters" flattened their noses against the window panes, the white calf bellowed and waved its tail, the spotted pig grunted, and the yellow hen ran off and laid an egg, so anxious were they all to do something to make the farewell affecting. OLD RAMROD.

CANADA.

MORE SMOKE MEMORIES.

OLD SQUIRE N. was a character. He had held the office of Justice of the Peace, when governors were not very particular as to whom they gave the office if well recommended. He used to read the Declaration of Independence and other Fourth of July documents, together with effusions, on the great and glorious day in his native town.

In his later and less prosperous days he was easily coaxed by the boys to go through with the same performance for a few drinks when the day of all days came around. He was harmless and well liked by all. It was well known to the local gunners that he was partial to loons, so all the loons shot in his neighborhood were reserved for him, and on the return of the gunners, if one of these birds was in their bag, he soon had it.

One time, two parties of four each had been for shore birds on the bay shore, and happening to meet on their way home, it was found that one of the party had a loon among the results of the day's sport. The fowl was being carried home expressly for the Squire. He had said at the village post-office a few nights before that it was all nonsense about a loon being so hard to kill as some of the young men had stated then and there, so it was proposed that the loon should be put up and each of the eight gunners give it both barrels. No sooner said than done, and a worse looking wild fowl never was seen, although good distance was given on the shots.

In due time the loon was presented and shortly heard from, as one of the boys asked the old gentleman how he liked that fat loon, his reply was "Pretty good, pretty good, but badly shotted. You didn't give him a chance to dive, did you? Sunk him, I reckon, 'fore he gathered."

The old gentleman could catch more pickerel and larger ones with a piece of salt pork, than any of us could with all the Buell, spoons, or any of the "new-fangled notions," as he called them; so we wise ones watched when the old gentleman went out, and happened on him with a small bottle of something good after he had secured a prize. He could not resist a good drink, and never gave us away as not being the real capturer of the fresh-water leviathan. Peace to his ashes: he is gone, and we now have to capture our own big fellows or go without. REIGNOLDS.

MOOSE IN MANITOBA.

Editor Forest and Stream:

I can tell your inquiring correspondent, "W. D. W.," where he can find moose. Six miles from the railway station at Carberry, Manitoba, is a tract of woods covering twelve townships, extending from the Canadian Pacific Railway track south across the Assinaboine River, a distance of twenty-five or thirty miles, to the Tiger Hills on the Louris River, which shelters more of the deer family probably than any other portion of the Northwest of equal extent. Outside of the wooded district is a great extent of waste land, sand hills, lakes and ponds, and oak parks, extending east and west along both sides of the Assinaboine from Burnside station to Chater, about sixty miles.

This region, not being suited to farming, has been left as wild as when the Hudson's Bay Company alone ruled these fertile prairies, and is only invaded by white men at rare intervals, when some ambitious sportsman from the East starts out for big game. In the whole distance I have named there are not more than a dozen settlers visible from the railway, who have picked out some favored spot to make their home. One, a sturdy pioneer named Oswald, near Austin station, tells me has seen thirteen elk in his stable yard when he got up in the morning after the first snow last fall, and the sight of single animals or two or three at a time is not at all unusual. My team went to the woods

every working day last winter from the 1st of November, and the driver said he seldom got to where he cut his load of wood without having seen the tracks of from one to five large deer, moose or elk crossing the road, and frequently saw them moving leisurely along. I have the Indian trade at this point, and last winter the hunters in one camp, four Indians, sold me at one time the hindquarters of eight moose. I bought none from them after Jan. 1, but they told me in the spring that they had killed twenty-nine during the winter, moose and elk.

I can promise "W. D. W." that there is plenty of his favorite game here, but about the chances of success I can't say certainly. They will be small unless he is a skillful hunter, for a green hand has no business with moose. I am very fond of sport, and have spent the last five years of my wandering existence between the Red River and the Rocky range, but have never killed a moose yet, and can amuse myself quite well with jumping deer, geese, ducks and chickens, of which there is no end. Nothing would please me better than to welcome "W. D. W." up here, but our laws will not permit him killing any of the deer family before October. Carberry is 105 miles west of Winnipeg. There are good hotels and livery stables, and a horse and buckboard can be driven to the haunts of the game, making the trip an easy one to take. NORTHWEST.

CARBERRY, Manitoba.

PROPOSED MICHIGAN PRESERVE.

WE have received from Mr. Frank N. Beebe, of Columbus, O., the following extract from a letter addressed to him by a resident of Michigan: "Could a company be gotten up to buy from ten to thirty thousand acres of forest land lying on the shore of Lake Huron for a hunting and fishing park? The land could be now bought cheap, and the location I have in mind is as good hunting ground as there is in Michigan, and I think I would be safe in saying that the deer on 10,000 acres of this tract would not count less than 600 at present, and I am sure that as many as 200 have been killed there during last season, for they were hunted all summer, and even up to the present time. The deer have been steadily increasing here for the past ten years to my own knowledge, but now that Cheboygan is growing and hunters from other places are flocking in here in greater numbers, there is danger of the deer being exterminated. Now, I have an idea that a company could be gotten up to buy anywhere from 10,000 to 30,000 acres of this land, and fence it in with a high wire fence on three sides, with Lake Huron on the fourth. A great portion of this land is good soil and contains a large amount of timber (young pine), and would, I think, prove a paying investment if it could be bought up at $3.00 per acre or less. There are two or three trout streams and several small lakes or marshes, where great numbers of ducks could be killed in the spring and fall. This tract would begin at a line joining my place, and running east on the lake shore." Mr. Beebe says: "I know Mr. Elliott to be a practical and enterprising man. He has positively demonstrated this in his successfully pushing through to completion an enterprise in the nature of a stock stream and hatchery for brook trout, which he is now giving his attention to. Mr. Elliott is thoroughly reliable, and any undertaking he may assume will be carried through to completion to the best of his ability."

THE PERFORMANCE OF SHOTGUNS.

Editor Forest and Stream:

I suggest the loading of shells with nothing else but wads and let some of those who have so much faith in wadding try how their guns will shoot with that style of loading. Every one that owns a gun is not supposed to own a wad factory also. I do not think a gun is much force that will not shoot decently with two good wads on powder and one on shot, if the man behind the gun is up to the mark. We are having fine rains and the prairie is in fine condition, and the prospects are good for a fine crop of birds in the fall.

GEORGE ARMSTRONG.

CARTRIDGE LOADING.—The Chamberlin Cartridge Company was recently organized in Cleveland, O., with a capital stock of $250,000. The device was invented by F. L. Chamberlain, of the Variety Iron Works. The preliminary work has already been done by having patents issued in the United States, Canada, England, France and Germany, in which thirty-five different patent claims have been allowed. The patent is a machine for loading shells to be used in breechloading shotguns. The machine has a capacity of 1,500 shells per hour, and will, as soon as the works are started, be put to work turning out if necessary 225,000 shells per day. By this invention the shells will be filled in a much more uniform way than any heretofore used. Through a very ingenious device in the patent the pressure on the wads is adjustable up to 100 pounds. The company that has been organized for the manufacture of the shells under this patent intend to start a factory, making use of the latest apparatus and appliance necessary to the successful and rapid manufacture of this important article. The company expects to start with fifteen machines, and intends to be able to turn out twenty millions of shells this coming year. The men who have hold of this scheme and who constitute the company and directors are all prominent manufacturers. —*Cleveland Herald.*

WILDFOWL IN PENNSYLVANIA AND NEW JERSEY.—The passage of the act relating to webfooted fowl by our Pennsylvania State Legislature, which forbids the killing of ducks excepting on every other day of the week, and the sailing on them with any sort of craft, gives great satisfaction to Harrisburg sportsmen, as duck shooting on the Susquehannah River in the section of the State near our capital had become a thing of the past owing to the continued harrassing of the birds. Now, I am told they will come up the river from the lower ducking grounds when it becomes "too hot" for them and will frequent the old resorts. If the law could be extended so as to effect the Delaware River it would be a benefit, but we cannot expect this to be done until the State of New Jersey passes a similar act and both State shores be protected. A law limiting duck shooting to every other day in the week in the Delaware on the Pennsylvania side of the stream while New Jersey allowed every-day shooting on her shore would not work, and would result in endless dispute and allow many loopholes for escape to the violator.—HOMO.

TAKE PARTICULAR NOTICE of this extract from a market report in the New York *Evening Post* of late date: "The efforts of our chief dealers are to be used shortly to gain permission to refrigerate game in its season and sell it at all seasons. As it is, all refrigerated game goes direct to Europe, where it is to be had the year round."

A CARD FROM MAJOR VERITY.—Adironda, June 28.—*Editor Forest and Stream:* I notice that one of your correspondents, in writing of the performance of shotguns, says, "but few persons know what they are writing about" (further on giving the proof that he is not one of the few), and that "*General* Verity is as quotable for facts as any of them." And why should not General Verity (I presume he means me) be "as quotable for facts" as any one who makes a plain statement of actual experience I would like to know. If he intends to imply that any and all of my statements will not bear the most rigid scrutiny, he is as little acquainted with my character as he is with my proper title. In the corps to which I have the honor to belong, and which, I trust, has never been dishonored by word or deed of mine, there is no such rank as general. If there is any rank above that of major, it is hardly probable that after so many years' service I should now be obliged to sign myself, very truly yours, *Major* JOSEPH VERITY, United States Horse Marines.

IOWA GAME.—Morning Sun, Iowa, June 24.—Farmers living to the west and south of us report plenty of young prairie chickens, and I have no doubt their report is correct. The weather has been all that an old prairie hen could wish, and by this time there are many bevies that are large enough to stand quite a heavy rain. Our rains have been so far slight showers, just enough to make glad the heart of the farmer, consequently crops never looked better in this section than now. Small grain is in abundance and, of course, there will be plenty of stubble. Then the corn is just immense; so look out for snap-shooting. Quail can be heard whistling at all times and in all directions during the day; in fact, I never saw the game outlook better. The fishing has not been as good as heretofore so they say; but "they say" is such a liar that I won't believe until I try it myself, so look out for some fishing notes before long.—MARK.

NEW JERSEY WOODCOCK.—If the dry weather which we have lately had should have continued until the opening of the woodcock season, many birds would have been killed on the first day of the shooting, as they could have been located in the few wet places that would have remained for feeding grounds; but the deluge which visited us on the 26th thoroughly saturated the ground, and will have the tendency of dispersing the birds, a fact your correspondent is glad of, for they will be more difficult to find and more will be left for autumn shooting, when they should only be bagged.—HOMO.

GROUSE IN SULLIVAN COUNTY.—Monticello, N. Y., June 27.—*Editor Forest and Stream:* I meant to have written in my former note that we have woodcock shooting here in August and ruffed grouse in September. Our law is strictly enforced here.—C. F. KENT.

FLORIDA QUAIL.—Denning's Post Office, Hamilton County, Florida, June 14.—The quail supply promises to be very good next season in this vicinity.—D. M. S.

Camp Fire Flickerings.

"That reminds me."

123.

PERHAPS you never heard of old man Lewis. If you ever go to Lewis Center, in the southern part of the great State of Ohio, quail shooting, as I did a few years ago, you may run on to him. I wish I could photograph him, with his old, black, two-inch stemmed pipe, which he would puff energetically and parenthetically to enhance the interest of his narratives; his hair, which had never been combed since the day he was born; and his shirt, which apparently had never been washed since a long time before that.

"Talking about turkeys," said he one day, "we used to have lots of them. Jonas Leach lives about a mile from here. We used to hunt them together. Jonas was a pretty fair rifle shot—used a small-bore—about 180 to the pound. In October, just eight years ago, there was a light fall of snow. Jonas and I started out about 10 o'clock in the morning, I was on horseback; we struck a track over east. Jonas cut across about two miles to the runway, for you must know turkeys have their runways just as deer have. I followed slowly upon the track. When I got pretty near where Jonas was stationed, I heard the sharp, whip-like crack of his rifle, and hurrying up found him composedly driving down another bullet, while about fourteen rods from him the turkey was executing a very complicated series of ground and lofty tumblings. I went over to the bird, and after careful examination, much to my surprise could not find where he was hit. Jonas came up. Says he, 'Open his eyelids.' I did open them, and found the bullet had gone in one eye and out of the other, not touching the lids at all. Jonas said he came along broadside and running like a quarter horse." ALIQUIS.

124.

Some fourteen miles from this place are two notable mounds about a half mile apart. In an early day, some forty or fifty years ago, Uncle —— settled upon the summit of one. Uncle —— is a staid and venerable patriarch, highly respected, but not given to telling stories, and particularly averse to sensational yarns. Not long since quite a crowd was gathered in a certain store, and the young bloods were telling of their great exploits and how they could "lametuem" at one hundred yards with the modern B. L. and No. 10 shot, when Uncle —— cleared his throat—which caused all eyes to be turned upon him, for it was well known that any incident in his long and varied experience must certainly interest the present generation—and began: "About forty years ago, when I lived on the top of the knob, I got up one frosty morning and went out on the porch to wash, when I happened to look over to the opposite knob, and there stood a very large buck on the very top of the knob, his broadside to the sun, and at least a half a mile from where I stood. I concluded to try him anyway, so I went into the house and got down my old Kentucky flintlock, which had seen a good deal of service, but which had always proved reliable, and taking a dead rest from the railing of the porch, I drew a bead on the top of his shoulder and fired." Uncle ——, resting his chin upon the top of his cane, stopped short, and seemed to be in a deep study, and from the gravity of his countenance it was not unreasonable to suppose that some sad reminiscence of the long ago was flitting before him, when the reverie was disturbed by the modern B. L. champion calling out, "Well, Uncle ——, did you kill him?" The reply was short and sharp: "No, sir." OCCIDENT.

SEDALIA, Mo.

Sea and River Fishing.

CAMPS OF THE KINGFISHERS.

Black Lake, Michigan.—VIII.

THE other boys came to camp a half hour or so after us, with a string of fish tied to each boat that made Dick and I feel like the tail end of a streak of bad luck, but we consoled ourselves with anticipations of better sport next day, nor did we fail to hold up our end at the table when Frank served up three or four of the choicest of the day's catch, crisp and brown and piping hot for supper.

Jim and Knots had a fish story to tell us, about something that happened as they came down the lake that evening after they had quit fishing, illustrating the boldness of the maskalonge when pressed by hunger, and that went far to confirm neigbor Merrill's assertion that "there's some big ones in this lake," a story which we would have given a wide margin to, had we known them other than as old and tried friends of unquestioned veracity. "Sid," a lad of seventeen, the oldest of Merrill's boys, was rowing for them, and as they passed the mouth of Rocky Creek he cried out excitedly, "Lord what a fish!" and turning as quickly as they could, they saw the broad tail of a great maskalonge as he disappeared from sight near the stern of the boat with a swirl that made the water foam. He had actually made a dash at their fish which were towing alongside the boat near the stern, but had missed them and his supper at the same time. Jim said, in relating the story, that "it was the sublimest exhibition of colossal cheek that had ever come under his editorial eye," and it certainly was a bad showing for the fish when the fact is borne in mind that Jim runs a weekly newspaper largely given to politics.

Sid was the only one in the boat that got a good view of the fish, as Jim and the Scribe were facing the bow, and only turned in time to see his caudal as he gave it a mighty flirt and dashed out of sight. I asked Sid how long the fish was, and he replied with simple candor, "He was about as long as I am; I tell you he was an awful big fish;" and we could well believe it, for Sid was near five and a half feet in height.

Old Ben sat off to himself smoking and addressing a quaint remark now and then to the mosquitoes, apparently absorbed in his own reflections, but after a while he hitched his stool nearer the fire and said in his deliberate way, "Tell ye, boys, if there's many o' them kind o' fish in the lake, I 'low Ben better do his fishin' from the shore, where a feller kin hev a chance to dodge"—two or three puffs at his pipe, which had gone out—"but I hev my doubts about that bein' a fish. I seen a musrat this mornin' swimmin' 'long nigh the mouth o' that crick; wonder now"—reflecting—"if it wasn't that musrat that was after them fish?" Here he swapped legs and winked violently at Dick.

"Guess I know a musrat from a muskalunge," said Sid quickly, and the laugh that went round effectually squelched Ben and his doubts about the maskalunge, and left Sid master of the field.

Ben made a pretense of being floored by scraping a match on his breeches, lighting the brier-root and taking refuge behind a cloud of smoke, through which we occasionally caught a word of a desultory conversation he was holding with the skeeters, but a suppressed chuckle now and then indicated that the shot he had fired at Jim and the Scribe was giving him vastly more satisfaction than his controversy with the insects. But the fire was getting low, and the experience of the day having all been gone over, the conversation flagged, pipes went out, the circle broke up and the Kingfishers went to roost, a tired but happy family. I will not attempt to tell about the delicious sleep I enjoyed that night on the fragrant bed of balsam boughs that Frank had made in our little tent during the day, but will just leave it to be guessed at by any unfortunate brother who has missed the luxury of stretching his tired frame on a bed of "balsam feathers" after fishing all day without a nibble.

Next morning, after an early breakfast, we decided to fish the lower end of the lake around the mouth of Little Black and Sturgeon bay; Dick and the Deacon preferring, however, to try at the rocks again for bass, and also to fish the water carefully where the big maskalonge had been seen the evening before.

Dan and I left camp some time after the others had gone, and had barely cleared the streak of grass in front of camp when the old Pelican looked up, and said quietly, as a dozen yards of line ran slowly from the reel, "Hold on, Hickory! There he goes. Pickerel or masky, from the symptoms."

A long, sweeping "wipe" fastened the fish, and two strokes of the oars sent the boat out into the lake, away from the grass, where neither could get an unfair advantage over the other in the coming fight. The fish made a dash for the weeds, but old Dan being up to about all the tricks of the pike family from a careful study of their habits, soon had him headed out into the lake, and then the fun began, for it is fun to handle a powerful pickerel, boiling full of fight, which this fellow proved to be. Shortening the line as he came on, Dan was prepared for the usual plunge under the boat; but a sudden and unlooked-for dive for the bottom by the fish took three feet of the top of the arched rod under water and nearly tilted the old Pelican into the lake, a calamity I averted by jerking the stern of the boat sharply to starboard, which restored his perpendicular and gave him time to whip the rod around clear of the boat and save his line from parting.

"Did you ever see such an obstinate devil as that?" said the veteran, as he braced himself and tested the full temper of his rod in a desperate struggle to turn the fish, which had again started with a headstrong rush for the grass. For a half minute the issue was doubtful, but grit, grunts, and a thoroughly trusty rod, prevailed, and he once more swung out into the lake still full of fight, while I kept the boat in just the right position to make the rod do most of the work, for it must be remembered that old Dan has only his left hand and arm with which to fight his battles. Another dash under the boat as he came around, and another last effort to reach the grass played the fish out, and he was brought alongside, when I jerked a gaff into him and yanked him into "the middle o' next week," without giving him time to move a fin in remonstrance. He was a handsomely marked pickerel of seven or eight pounds, and one of the gamest fighters Dan had ever forced to yield to his skill, and he was highly pleased over his victory. First blood for old Dan. But my turn came soon after, and I had begun to think it high time.

From here nearly down to the point a couple of miles below, we took half a dozen more pickerel, but the bass were not pleased with our bait, and we took none. We had lost

the streak of grass running parallel to the shore, and while hunting for it found another narrow grass and weed-grown reef a quarter of a mile or more from shore, that led nearly straight out across the lake; and along this for three or four hundred feet we had some rare sport with the pickerel, when it, too, came to an end in the deep water. We pulled back along the north side to where we had first struck it and then fished along the south side again back to the deep water, and during the time I don't believe five minutes passed in which we were not handling a pickerel, several times both busy at the same time. At the end of the reef we had enough of it, and as this was the day we expected the Assistant P. M., we concluded to pull across the lake to the "sand bank" and intercept him on the road we had passed along a few days before, and save him the long drive around the head of the lake. First, however, we selected a landmark on each side of the lake, by which we could readily find pickerel reef—as we named it—again, should we want to pay it another visit, and Old Dan would be sure to do this, for he is "powerful fond o' pickerel fishin'."

When a hundred feet or so from the last weeds growing up from the end of the reef, our blood was started into quicker flow by a sight that I am certain neither of us will ever forget as long as we remain "on the face o' this livin' earth." We were watching our lines trailing astern when suddenly we saw an enormous maskalonge leap three feet into the air directly athwart our course and fall back into the water with a great splash ten or twelve feet from where he left it, and disappear with a sweep of his tail that made the spray fly in a small shower. He was not more than sixty feet from the stern of the boat, and we had a fair and full broadside view of him while he was in the air. I am now almost afraid to write down our estimate of the size of that monster maskalonge lest the brethren braud Dan and I as a pair of lying old loons that have a fish story to tell, yet we are both willing to make solemn oath before any magistrate in the land that this fish was six feet or more in length. He looked as large around at the ventrals as a common wooden bucket, and I am as sure as I can be without actual measurement that his tail was a foot and a half broad from lobe to lobe, while his long, powerful jaws, slightly apart and armed, as they must have been, with rows of murderous teeth, looked like they could easily crush a man's arm.

Merrill had said to us, "Boys, there's muskylunge in this lake six foot long, sure's yer born, for I've seen 'em!" and we had simply marked it down to him as one of his whoppers, but now, here, with our own eyes Dan and I had seen one out of water at close distance that was even larger, and we could not dispute the evidence of our eyesight. I would not have believed maskalonge attained to such great size had not Dr. Sterling (I write this with nothing to refer to and will stand corrected if my memory is at fault) put one on record, killed some years ago somewhere near the head of Lake Huron, that weighed eighty pounds, but I believe old Dan and I would have been little more astonished than we were at sight at this one, had we seen another the same day that would have measured twelve feet. The fish that tried to rob Knots and Jim off the mouth of Rocky Creek was no longer to be poked at them as a "mus'rat," and we mentally took back a good many things we had been thinking about neighbor Merrill, we could even believe the very biggest bear story he could frame. When we told him next day what we had seen, he said, "I told ye so; mebbe you'll b'lieve some o' the old man's lies yet before you go home."

When the great fish struck the water after his leap old Dan glanced over his shoulder at me, and exclaimed, with more excitement than I had known him to display for years, "Great guns, Hickory! did you ever see such a fish as that?" or words to that effect. I don't remember just now the exact reply I made, but it strikes me at this late date it was something more forcible than elegant, for I was like Major Lacey's "coon" during the war when the whiskey gave out on a hard march—"all to'e up in my mine"; but instantly dropping the oars into the water, a vigorous back stroke sent the little boat five yards astern, and reeling up quickly I made a long cast and dropped the frog several yards ahead of where old mossy was last seen, with a faint hope that he would take a notion that a speckled frog was just what his teeth were aching for, instead of the pickerel he had probably made a dash at when he left the water. The cast availed nothing, and turning the boat quietly we fished for half an hour over twenty acres of water in a dozen directions from where we saw him, but frogs and spoon victuals would not tempt his appetite, he was too "facetious," as Dick would have said, and we were forced to abandon our designs on him and take our way across the lake with heavy hearts.

Had we stopped to give the matter a serious thought, we might have had sense enough to know that the tackle we were using that day would have been just about as effective in stopping that fish as a mosquito net would a stampede of Texas steers; but our blood was up, and we never thought once about the frailty of our lines and rods until we had cooled off, and not until we had settled it in our minds that he would weigh not under eighty or ninety pounds did we realize what immense strength this fish must have been possessed of, and how utterly futile our efforts to capture him would have proved with the means at hand. We determined, however, to contrive a rig on the morrow from material in my "calamity box" that would bring to grief this mighty warrior or any other fish that would attempt to fool with it, for once hooked, the victim would have to lose his jaw, be turned inside out or jerk the bow stem out of the boat, and failing in any of these possibilities, be towed ashore and scientifically knocked on the head with a club, made and provided for that purpose.

We pulled across to the sand bank, a spot bare of trees which the lumbermen had at some former time used as a place to get logs into the lake, where I left Dan to chuckle over the scheme we had devised to capture the great maskalonge, and pick huckleberries along the strip of low land between the beach and the foot of the hill, while I took my way up the steep, sandy log road leading out onto the plains to the main road, some twenty rods back, where Miller would have to pass along. At the forks of the road I left my "totem" in the shape of a couple of good-sized dead pickerel brought with me from the boat, and hung to the fork of a small bush which I cut, trimmed and drove into the sand two or three feet from the roadside.

These would be sure to scare the horses when they came along and attract the driver's attention if he were not too full of huckleberry juice. To make it all clear, I tacked a leaf from my note book to a blackened stump a few feet further along, on which I penciled a notice to follow the right hand road to the lake, where we would be waiting at the beach or in sight.

Back in the boat again, we fished and waited around within half a mile up and down shore till 3 o'clock in the afternoon, without seeing or hearing anything of Brother M., when, becoming impatient to know what the boys were doing, we pulled across down to the mouth of little Black, with our minds made up that should he come to the sand bank that day it would take the tallest kind of smoke signals to induce us to go back after him.

On the way down, after crossing the lake, we passed the little side-wheel steamer City of Cheboygan lying at anchor near the shore, a short distance above the mouth of the river, one of the line that formerly carried passengers by the inland route—Crooked, Burt and Mullett lakes—between Conway Springs, at the head of Crooked Lake, and Cheboygan, but now kept here on Black Lake in the more humble service of towing logs to the outlet for their start down Big Black River to Cheboygan.

To get this boat up the river and into the lake was a task that no one but a Michigan lumberman perhaps would have undertaken, as there are some bad rapids about three miles from the foot of the lake that no steamer or rowboat can surmount with any ordinary means of propulsion; but the difficulty was overcome, we were told, when the water was up in the spring by "warping" her over the rapids and into the easier current above.

But these Michigan lumbermen are a hearty class of men; quick to think and fertile of resource in emergencies that require prompt action and a cool head in solving on the spot a knotty (pine) problem, and no undertaking is too great for them when it comes to a matter of getting logs to a market. Their education is not considered finished until they have learned how to "float a four-foot log on a foot o' water," and, indeed, water appears to do almost anything for them required of it except to run up stream.

We found the boys surfeited with pickerel fishing and about ready to start back to camp, but Old Dan, as before mentioned, being powerful fond o' pickerel fishin', we concluded to hang around Sturgeon Bay till near sundown, and while fishing mainly for long snouts would not forget to "feel fur a bass" between times, as we had not taken one that day.

I may say, too, that this matter of being fond of fishing is not to be all loaded on to Old Dan, for I don't remember the time, in all the pleasant years we have been angling together, when one was anxious to quit before the other, in sun or rain, or wind or snow. We tied the boat to a small raft of squared timbers, firmly pinned and bolted together, anchored fifty or sixty yards off the mouth of the river, and got out on it to rest a while and fish. This raft was a puzzle to us, and is yet, as we failed to ask any one its particular use, but we figured it out to be some kind of contrivance connected with the booming of logs, as near one end was a rude capstan, and to the shore end were chained two lines of boom logs running out to shore and up the river several yards, one on either side. Into this boom the logs are confined as they come down the river, and the capstan and coil of inch-and-a-half rope near it were used, we had a notion, to warp them into compact shape for towing to the head of Big Black River.

If we are wrong, the lumbermen may laugh at us, and we will take a back seat until we have better learned their ways. One writer in FOREST AND STREAM has called it a "head works," but Old Ben christened it "the stem-windin' raft," and by this name we knew it.

We spent a half hour on the raft without taking a fish, and getting back into the boat we pulled around into the little bay to the head and back, taking on the way a few long-snouts that hardly paid for the time wasted on them. We soon tired of this sport, and as the bass were not in a biting humor, we said we had enough, and started for camp, which we reached a little before dark, tired, hungry and happy, but a trifle disappointed over our poor luck with the bass.

No smoke signal at the sand bank and no brother Muller that day.

I don't remember now the number of pickerel brought to camp that day by all of us, but they certainly would have filled a flour barrel. No bass were taken, however, except three or four by Dick and the Deacon up at the Rocks, and these were kept for our own table, while the long-snouts were turned over to neighbor Merrill, who had said to us, "Boys, don't throw away a single pickerel; bring 'em to camp for me an' I'll clean 'em an' salt 'em down."

We kept no count of the number brought in and given to him during our stay, but Ben said, "Ef old Merrill lives long enough to eat all o' them pickerel an' stops to sort out the bones, he'll be creepin' up to old Methuseler that you read about in the Scripters, an' he won't hev no more hair on his head'n a base ball."

KINGFISHER.

[TO BE CONTINUED.]

A DAY AT MINNETONKA.

MAT and I have just returned from our long-expected trip to our most beautiful lake, and we return loaded with fish and pleasant recollections. On arriving at Excelsior we were met by Bill Corbett, the best of the Minnetonka boatmen, and our genial host, De Groot. "Well, gentlemen, said Bill, "it's 5 o'clock sharp to-morrow morning, for we must make a good day of it." Five o'clock found us on our way to the bass grounds in Bill's comfortable boat. After an hour's pull the fun commenced. We wanted a few croppies for lunch, so we stopped on a croppie bed the first thing; this resulted in a dozen fine croppies and one bass of over four pounds' weight. After a short row we reached our favorite bass grounds and prepared for business.

Considering the weather, which was not favorable, we had very good luck, and were more than satisfied. At noon, we had twenty-five bass. Bill cooked some croppies for lunch, and we enjoyed them exceedingly. After lunch we were up and at it again, and when we started for home we had thirty-five bass, a dozen pickerel and twenty croppies and red-eye, or rock bass; the entire catch weighing over ninety pounds. We used 12-ounce rods, with both frogs and minnows for bait. The most successful way to fish here is to cast with frogs. Bill rows the boat slowly just far enough from the rushes so we can cast into the "pockets," as he calls them. When one strikes a three or four pound bass there is plenty of business for him to attend to. We were fortunate in not losing many, and our string of bass were all very good size. We had one pickerel that weighed seven and one-half pounds, and several others of fair size.

The Minnetonka bass are very satisfactory fish to catch. They are very stubborn fighters and are above the average in size. We brought home eleven that weighed thirty pounds. It was a very pretty string of fish, and the fun we had catching them is beyond description. The pickerel and other fish we left with Corbett.

If any of the readers of FOREST AND STREAM should be in this part of the country and wish a good day's fishing I would advise them to try Minnetonka. It is conveniently reached from either Minneapolis or St. Paul, and the hotel accommodations are first-class. It is necessary to get a guide to insure good sport, and Corbett is the man to get. He is a sober, honest fellow, and knows the lake from A to Z. His boat and general outfit are the best on the lake, and as an oarsman he is without a peer in this section of the country; his early training in rowing the ferry at Staten Island shows itself in every stroke. He is also an artist with the frying pan, and cooks fish to a turn. His address is Excelsior, Minn., and visitors will always find him ready and obliging. At present the fishing is at its best, and large strings of bass and pickerel are caught daily. One prominent Minneapolis insurance man caught 150 pounds of pickerel in one day last week. We shall try it again soon, and if all things are favorable we hope to set a high mark for the rest of the boys. If luck is with us you shall know of it. JUDGE.

MINNEAPOLIS, Minn., June 14.

TROUTING WITH A WORM.

TO one who is prevented by business cares and unkind fate from enjoying the sports of forest and stream in the wilds and byways where civilization has not yet encroached, the weekly perusal in your columns of the exploits and delights of those more fortunate is ever a source of pleasure. While reading many a wonderful tale of luck with rod and reel, where vigorous trout or gamy bass were secured with scarcely an effort, it occurs to me that while repining at fate for the denial of such luxury, there may still be a redeeming feature, and that even the scarcity of the sport may give an added zest, and while to those of your readers who are accustomed to roam at will, wherever their fancy may direct them in search of sport, this article may be uninteresting; there may be those who, like the writer, must fain be content with humbler sport in whatever locality fortune has placed them. Among these then I may find sympathizing readers.

From boyhood's days, when my mornings and noonings while at school, during the season, were spent by the side of some favorite stream, have I been an ardent devotee of the rod and—I was about to say reel, but now I remember the reel was not considered then a necessary adjunct to the sport, nor have I ever with rod or reel experienced more pleasure than in those boyhood days when with birch or alder "pole" I drew from beneath some sunken log or overhanging bank an unusually fine trout. With what pride did I exhibit my catch to a circle of admiring school fellows who usually accompanied me to see the sport and carry the fish (usually strung on a willow "string"), and with what eager zest did I ply the rod under the banks and down the ripples of that willow-bordered stream, and seldom was I unrewarded.

Many a happy hour since that day have I spent with rod and reel, and although not always with success numerically speaking, yet a day spent adown a mountain stream or through the grassy meadows, following the intricacies of the willow-lined banks, I count always a successful day; for it is a quiet day, where one is sure to escape the worry and wear and tear of business life, and Father Time with his relentless scythe is cheated into many an hour of extra waiting. For the past few years circumstances have placed me within easy access to the streams of Berkshire and Hampden counties, Mass. Berkshire is called the Switzerland of America in point of scenery, and you will find among its glorious mountains many a secluded stream that would delight the eye of any angler. Hampden county is not behind, and I can recall many a delightful trip to its enticing streams.

It was in the early part of June, one glorious morning, I found myself at the headwaters of a stream I had intended to visit several preceding seasons, but had been prevented for various reasons. I was alone, with miles of the glorious stream before me; one glance down its rocky course, its deep, dark pools and silent eddies was enough to put me in an ecstasy of delight, and before I cast a line in its enticing waters I had drank one deep draught of unalloyed perfect happiness. For those whose cultured tastes will allow them to use nothing but the fly in capturing their trout, this narrative will have no further interest, for candor compels me to say my bait consisted of worms, nothing but worms for bait. Although the fly is perhaps the neater way of capturing fish, yet I have been "trouting" with your expert fly-fisherman, who boasted of sixteen trout weighing sixteen pounds caught in Adirondack waters one morning before breakfast, and at the end of the day's sport have given him my handsome "mess" of trout to fill up his empty creel, so that his reputation at home might not suffer. Somehow I then got the notion that perhaps there might be required some small degree of skill to entice little brook trout even with a worm.

The day was auspicious; just warm enough, with moist-looking clouds that now and then obscured the sun and now and then a little spatter of rain.

With cautious movement I cast my hook where experience taught me trout should lurk; into many a dark pool beneath some sunken log, or in the shallow ripple, but in vain. Although the stream was a picture that was ever a source of delight, still the trout were not there or would not bite.

Still, not to be disheartened, on I went, ever casting with painstaking into most favorable localities, but ever without success. Once, while poising upon a boulder in midstream, I was nearly frightened out of my senses by an old partridge, the mother of a brood, which, with head depressed and wings extended, darted suddenly at me from the bank with a hissing noise, and leaping into the stream beat across the surface with her wings.

Then I went on down stream where the water lay quiet in long, silent pools with alder banks, and still without success. There must be trout in the stream and they must be made to bite; but how?

There was perhaps a mile of still water and then the stream once more babbled away in its rocky bed. Fed by one or two small tributaries it had increased considerably in volume. Now stop! Is it a snag? No, a bite, the very first! Now he has it; with a quick turn of the wrist I secure him and lift him gently out—a little beauty. There was no whirr of the reel, no dexterity of handling and still, as I looked upon his plump symmetrical form with its spots of color, it was with no small degree of satisfaction. The first trout; and pulling a bunch of cowslips to line the bottom of the creel, I place him tenderly on them.

Now I go on with renewed zest. I feel that the luck has changed and my slightly waning courage is again revived. Lengthening my line, I made a cast across the stream to an enticing-looking ripple under an overhanging bank. No

sooner cast than seized, and in a trice I land him, a plump "quarter pounder."

With care I continue, omitting no ripple or pool, and increasing the weight of my creel materially. Now I approach a long, shelving rock, down which the water glides silently and swiftly, pausing and swirling occasionally in little rifts and hollows, then on some sixty feet to a long, deep pool below. Will trout take the bait in such swiftly running water? Although but a few inches deep, it nearly takes me off my feet as I wade out for a more favorable cast, which proves immediately successful, and jumping its length out of the water, down darts a trout to the pool below. Without changing my locality I reel him in. Then I caught them all the way down the incline, and at the foot added four more to my already pretty solid basket.

Half a mile further down, by its "rush and its roar," I know I am approaching a fall of unusual height, and on reaching it I find myself on a cliff above the falls that drop perpendicularly twenty feet. My basket has grown heavy, and by the size of the pool I see it is good for a half hour's work. So off comes the basket, and just then I am reminded of a lunch box in my pocket and I resolve to refresh and recruit before commencing operations below. But first I must take a peep at the beauties snugly tucked away in the basket, and they are beauties, looking so fresh among the green cowslips and brook mint upon which they rest so sweetly. I have been more than busy the last half hour, taking one from a ripple and another from under the bank wherever a hiding place was found. I turn them out on the broad, flat rock, and placing them side by side, the largest at the head, and count them. Forty as handsome trout as fisherman ever beheld; there were no "pounders," neither were there any fingerlings; all fair fish of from three ounces to six or eight ounces.

Taking great care with my bait, I drop it down into the pool, but the water is so rapid that it sails away on the surface. Again I try, a little out of the current, but with no success, and I am beginning to think it the biggest kind of a fraud, and with some indifference I swing the bait up into the white foam. It drifts behind the fall and remains stationary. Is it backwater or a trout? A gentle feeler convinces me that it is the latter, and that he is no mean fish. I rise from my sitting posture and cautiously try his weight, when, smarting from the prick, he rushes out and I catch a glimpse of his glistening side in the white foam. A beauty, and if I don't save him I will swear he is better than a pound. In all probability he is the largest fish I will hook to-day and he must be mine, and with all the skill I possess I play him from the rock to the pebbly beach below and land him, the crowning triumph of the day, and fully justifying my expectations as to size and weight.

Oh, the witching of that fair stream! How it enticed me on and on; never monotonous, ever changing, some new beauty constantly arising—

> "Advancing and prancing and glancing and dancing,
> Recoiling, turmoiling, and toiling and boiling,
> And so never ending, but always descending."

If those who delight in capturing with the fly the trout in Maine or Adirondack lakes are inclined to look down upon the commoner sport of catching trout with bait in mountain streams, let them one season try some of the streams in either Berkshire or Hampden counties, and, if they are lovers of nature as well as anglers, they can but admit that even this, too, has its charms. TUNXIS II.

ANSONIA, Conn.

BOW RIVER TROUT.

HERE I am this early A. M. seated on the stump of what was once a huge cottonwood, just a quarter of a mile from the business center of the infant city of Calgary, on the Bow River, not merely to watch

> "The rippling, joyous waters as they playfully flow,
> And upon the pebbly beach their passing kiss bestow,"

but to throw the tempting gray fly to the speckled inhabitants of those clear, deep, blue waters. Calgary, the future capital of the proposed new province of Alberta, is a one-year-old infant, yet it has a population of 800, and it is destined to grow in a short time to the dimensions of a city. It is beautifully situated in a circular valley, a basin the rims of which almost surround it, leaving an open space along the trend of the river by which the Canadian Pacific Railway enters and pushes its way beyond to the great Canadian Alps. It is a lovely morning, and the Devil's Head (a peculiarly dark-looking, dome shaped mountain) can be seen to great advantage. The eternal snow-clad peaks show above the rim of the basin, their tops and sides looking like huge sugar cones, cubes and pyramids, or like great circus tents, far beyond anything that Barnum has ever attempted.

I am casting my line into one of the best and largest trout streams in North America. The Bow is a large stream, but it is unnavigable on account of the swift current and rapids to be met along its course. Where I am fishing it is less than one hundred yards across, but the waters are deep and so clear that the bottom is visible at a great depth. The Bow is mountain fed, and it abounds with mountain and brook trout. They are both numerous. The former grow to a very large size, but the average weight of those caught in this vicinity is from two to two and a half pounds. They originate in the numerous lakes which find a bed in the many ridges which comprise the rocky chain.

The brook trout here is in all respects similar to that toothsome fish found in eastern waters. It averages about a pound, and it is as wild as the rugged scenery which meets the gaze of the angler as he casts his eyes toward the surrounding horizon. I have fished all over the eastern provinces in the trout lakes and streams, but the sport there is tame and discouraging compared with this. I have already landed thirty-one, of which several are mountain, averaging from one pound to three and a half. They take the fly more readily than the bait, as there is a kind of river fly which at this season is their natural prey. It is a dark gray, and the nearest approach to it I have is the common stone fly. The bustle and activity of a new town, however, are scaring the fish, so much so, indeed, that it will soon be necessary to fish two or three miles away from the town, far from the noise of hammer and cart. How the Eastern angler, who swelters all day in the heat, covered with mud and bored with flies, would like to throw a line into this stream if for only half an hour! He need not fear that the sport would surfeit. It is not a case of "fish murder" at all here, for, although the fish are plentiful, it takes work to hook and land each fish, because they are the shyest of the shy, unused, of course, to be disturbed; however, there is plenty of sport. I have unearthed two or three real Waltons in Calgary. One of them, Mr. Wm. Bannerman, the postmaster, was formerly a member of Parliament at Ottawa for the County South Renfrew. He wears his casting line around his hat during business hours, and he is a most enthusiastic trouter. The other day he went up the river three miles and came home with eighty-six fish, or one hundred and twenty pounds of trout! An enterprising German has opened a sportsman's supply depot on Stephen avenue, supplying a want that sportsmen will appreciate, though it is to be regretted that he is not a practical hand. Were such a one to come hither and open out he would certainly secure a most remunerative trade.

There is not sufficient hotel accommodation yet at Calgary. Moulton's hotel, which has assumed the imperial title of "Royal," is one of those portable shells which was manufactured in Ottawa and shipped here and then put together. Tourists coming hither for information and sport should provide themselves with tents and the necessary camp equipage. They will enjoy the life much better besides avoiding imposition. Were it possible to send FOREST AND STREAM a sample or two of Bow River trout they would be forwarded in haste, but at present there is no way. During the summer I may have an opportunity of sending a preserved specimen.

All the little streams which empty into the Bow are laden with the speckled tribe. The Elbow River, a smaller stream, which joins the Bow at this point, is a good trout stream, especially as you ascend it. My catch to-day has been forty-three, sixty-eight pounds. Think of it, and all this in less than three hours, and with the store fly, no vulgar bait, but the genuine casting line. I have seen sportsmen East who have traveled all day and never got even a bite. It is no greater undertaking to travel eighteen hundred or two thousand miles and strike a rentable trout mine than to wander all day without even a nibble. There is no poaching. The angler may come and go as he will, and even if he should get surfeited with trout he is not likely to become weary of the sport, for there is nothing artificial in it. It is the real thing itself. Bow.

CALGARY, Alberta, N. W. T., Canada, April, 1884.

THE ROD AND REEL ASSOCIATION.

A MEETING of the Committee of Arrangements was held at the Metropolitan Hotel on June 24, Hon. H. P. McGown in the chair. Mr. Van Brunt moved that the tournament be held on Harlem Mere, the same as last year. Carried. The secretary read the following letter:

CYNTHIANA, Ky., June 11, 1884.

Hon. Henry P. McGown, Chairman Committee of Arrangements of Tournament of 1884 of the N. R. and R. A.:

DEAR SIR—I respectfully submit the following for the consideration of the committee of which you are the honored chairman, and myself a member.

I sincerely trust that at the Tournament of the National Rod and Reel Association, to be held in New York on Oct. 7 and 8, 1884, there will be given an opportunity for the black bass bait-fisher to compete in a special class for "casting the minnow for black bass." This mode of angling has now become so universal, and the number of its practitioners so great that it cannot in justice be longer ignored.

Before the first tournament of the Association I urged the inclusion of such a contest in the programme, but was met with the argument that there were so few anglers in the Eastern States who practiced that mode of angling that such a class would not fill, and that striped bass anglers outnumbered black bass anglers more than a hundred to one.

Previous to the second tournament I again advised the admission of such a contest, but it was then stated that the conditions of such a class were virtually fulfilled by the contest for "light striped bass casting," as the same weight of sinker, one and a half ounces, was used.

Now, I have reason to think that the number of black bass minnow casters, even in the Eastern States, is not so small in comparison with striped bass casters, as has been stated, while in the country at large the reverse of the statement is more nearly correct. I am of the opinion, therefore, that a special contest for their benefit would fill as readily as the stripped bass classes, for it may be remembered that in both tournaments the number of such contestants was not remarkable. Certainly, a black bass class could do no worse.

Moreover, if the Association is designed to be "national" in its scope and influence, it seems to me that the programme of contests should be so arranged as not to favor, particularly, the anglers of any one section. All legitimate modes of rod-casting should be given a place in the programme, so that all anglers, of whatever section of the country, might have a chance to compete in the various classes and contests.

I must respectfully dissent from the statement that the contest for "light striped bass casting," with a sinker of one and a half ounces, virtually covers the ground of black bass minnow casting. In the first place, there is a wide difference in the tools and tackle of the two modes of angling. In the second place, the methods themselves are essentially different. Thus, casting for striped bass is practiced by using both hands, and an overhand cast, while in black bass casting but one hand, and an underhand cast, is used. In the striped bass contest for light casting a sinker of one and a half ounces is allowed, while in a black bass class the sinker should not exceed a half ounce in weight; personally, I would prefer one of a quarter of an ounce.

Should the committee having the matter in charge decide to try the experiment of presenting a contest for black bass minnow casting at the next tournament, I will be pleased to give my views on the rules and regulations to govern such a contest; and, also, will use my best endeavors to procure some of the prizes for the same, and strive to be present in person at said tournament. Yours, very respectfully,

J. A. HENSHALL.

The chairman stated that he favored the idea of Dr. Henshall, and had so replied to him. The Doctor had again written the following:

CYNTHIANA, Ky., June 20, 1884.

Mr. Henry P. McGown, Chairman, etc., N. Y.:

DEAR SIR—Your favor of the 17th inst. to hand. I am pleased to know that you think well of my suggestion, and will advocate a black bass bait-casting contest at next tournament. I wrote you that I thought I could procure some of the prizes for same. To-day I received a letter from Thos. H. Chubb, who says he will donate a "Henshall rod" and a "Henshall reel," and from Mr. B. C. Milam, who will donate a Frankfort black bass reel, latest pattern: Others will, I am sure, respond at my request.

Yours very truly,

J. A. HENSHALL.

Mr. Endicott thought the plan of Dr. Henshall was judicious. Two years ago the Doctor thought that a one-ounce sinker would represent the minnow, and that was the weight used in light striped bass casting, and, therefore, there would be a sameness between the two styles. Now that Dr. Henshall has changed his views as to the weight of the minnow, or its representative, he favored a black bass class, and moved that at the proper time a committee be appointed to draw rules for this class. Carried.

Mr. Van Cleef asked what was the actual weight of the minnow used for casting for black bass. Mr. Mather replied that in his experience such minnows would vary from thirty to fifty to the pound.

The Chairman then appointed the following sub-committees:

Grounds—M. B. Brown, J. L. Vallotton, J. Geddes, T. Magoun.

Reception—Hon. R. B. Roosevelt, Isaac Townsend, L. W. Winchester, L. Wright, Rev. H. L. Ziegenfuss.

Trout Casting—J. Benkard, C. Van Brunt, J. S. Van Cleef, H. Weston, C. H. Mallory, W. B. Lord.

Heavy Bass Casting—J. L. Vallotton, S. M. Blatchford, H. P. McGown, F. Endicott.

Light Bass Casting—E. G. Blackford, Dr. J. C. Kenworthy, Prof. A. M. Mayer, F. Endicott.

Salmon Casting—J. C. McAndrew, C. Van Brunt, C. B. Evarts, D. W. Cross.

Black Bass Casting—Dr. J. A. Henshall, Dr. E. Bradley, W. C. Harris, Dr. J. C. Kenworthy.

Prizes—F. Endicott, F. Mather, H. P. McGown.

Programme—E. G. Blackford, F. Mather, M. B. Brown.

It was decided to adopt Rules 1 to 10 of last year's programme and leave the others to the special committees. The meeting then adjourned to meet on Aug. 4, when it is expected that the sub committees will report.

PHILADELPHIA NOTES.

SOFT shell crabs have never been more plentiful than at present. Quantities of them are being sent to our market from the near New Jersey bays, and are attracting a more than usual number of weakfish into these waters. This, as well as an absence of bluefish thus far, has made angling for weakfish excellent.

White catfish have begun to run from the Delaware River up into the tributaries of this stream. Just now is about the ending of their spawning season and their flesh is not in as good order for the table as it will be next month. At Betterton white perch have begun to bite, but the fish are running small. It is not until the middle of August or first of September that the large perch at this famous fishing ground are taken.

Some large black bass have been caught in the Susquehanna River this month, a short distance above the bridge which crosses the stream from Perryville to Havre de Grace. I believe Charley Vogel, of Philadelphia, was the first to discover that the black bass congregated in any great numbers at this section of the Susquehanna. He at once began fishing for them and being very successful in taking large fish, has followed it up every year since. But few black bass have been caught in the Schuylkill near this city this season. Sawmont Dam, about the nearest ground where any success could be had, bids fair hereafter to be the center of sculling interest, as the river at this point offers a grand course for racing and was selected as a better site for the late Collegiate controversy, than the old one on the Schuylkill at Rockland and Laurel Hill. So it may be expected that the patient bass fishermen after this will move up the river further if he does not wish to be disturbed.

Perkiomen Creek, where it empties into the Schuylkill, will now be more frequently visited than formerly by bass fishermen, and I believe it to be the most likely ground near Philadelphia that can be reached and returned from in one day and find a day's fishing.

The Schuylkill is very muddy since the rain of the 26th, the accumulated dust of over a fortnight has been washed into the stream, rendering all attempts at bass fishing, for some time to come, useless. HOMO.

JUNE 28.

GONE TO THE BASS ELYSIUM.

AN "elysium of perennial bass" is good. The time was when to the editorial fancy the seeker for that land of the blessed had for his incentive houris, promised, in prophecy and song, dwellers in cloud land, where the dancers were never weary and the harp was never silent. Later, the dream of the sanctum sought its realization and looked for the locus of the myth in the vicinity of Hoboken. But now a revelation has come to the man of the pen; he has found a new elysium, its reward is "perennial bass," and straightway, with all the liberality of the craft, he proceeds to give it away; it is in Canada, "somewhere in the woods up there." Truthful James says

> —— "that it is not a proper plan
> For any editorial gent to whale his brother man,
> And if a fellow don't agree with his peculiar whim,
> To lay for that same feller for to put a head on him."

Now that the thing is out, we drop our traps for a moment and closing our ears to the wail of *M. "perennial" dolomieu*, crying to us from far off Frontenac to come and take them in out of the wet, turn to say good-bye to FOREST AND STREAM. You "hope we will have good luck," thanks! Yes, "Truthful James," and "Wawayanda" and the "Reformer"—the latter so called by reason of his bearing the name of Luther—"are going." No, "the choice of hunting rifles" and "the performance of shotguns" don't interest us and probably won't, unless the persistence of the Reformer in using worms for bait may induce us to take some stock in the latter. "Shall you send us that?"—No, thanks, the Reformer raises an objection, something about "duty" or "custom," which he don't just get hold of, although Truthful James observes that "custom cannot stale its infinite variety;" perhaps we can get hold of it easier in Canada—the objection we mean—when the Reformer has had the time to explain.

Oh yes, certainly we shall "keep an eye out for 'babbling spring brooks' and 'clear cool spring water,'" for we are informed that in these Canada surpasses Michigan, at least that portion of the State which lies along the fiery path of the Kingfishers. There, Truthful James says:

> "The wells are empty and choked with sand,
> And the springs have perished from the land."

It is this wanton destruction by sportsmen that has so prejudiced the rural resident against us as a class.

No such things ever happened on the Bigosh; that beautiful stream rolls its burden, as of old, undiminished to the lake, and yet a tired angler camped and gazed for weeks on

its waters with never a temptation to impair in the least its facilities for navigation.

But we must be off. Cross hands with Truthful James and us, lay the same with your blessing on the head of the Reformer, and be assured that whatever flotsam may drift under our canvas or beach itself on the borders of our camp-fire, whether the same be catch, strike or bite; that whatever of inspiration may come from the pines, the balsams or the hemlocks, these the lone campers will send you with their greeting—*Auf Wiedersehen.*

WAWAYANDA.

BASS IN LAKE MADISON.

ON Monday last, E. L. Healy of this place caught at Lake Madison a black bass that weighed seven and one-half pounds. On the same day, Mrs. Geo. A. Clark, of Mankato, took one "in out of the wet" that "kicked the beam" at exactly seven pounds. This is no "fisherman's guess" as to the weight of the fish, but the true weight as indicated by a pocket scale carried by one of our party. I think I am justified in calling them a couple of fine fish.

Lake Madison is located in Blue Earth county, Minn., and is about ten miles from the city of Mankato. It is reached by way of the Chicago & Northwestern Railroad to Eagle Lake station, and from thence overland four miles. It is one of the most attractive sheets of water in the Northwest, having about thirty miles of shore line, with high banks heavily timbered down to the water's edge, and a number of high points projecting into the lake. On one of these is situated the Point Pleasant House, kept by Capt. John Foster, an old Mississippi steamboat captain, well-known to a large portion of the traveling public of the Northwest, who spares no pains to make it pleasant for visitors at the lake.

As a fishing ground for bass it has few equals in Minnesota. Thirty bass, weighing one hundred and sixteen pounds, were the best afternoon's catch of two of our party, during our recent visit. If your readers in the Northwest want a few days' splendid sport in a delightful locality, let them make a trip to Lake Madison. C. B. T.

MARSHALL, Minn., June 25, 1884.

PROTECTION OF COAST FISHERIES.

THE following is a summary of the amended bill, entitled "A Bill for the Protection of Fisheries on the Atlantic Coast," reported by Hon. E. G. Lapham, of New York, in the Senate of the United States:

Be it enacted by the Senate and House of Representatives of the United States in Congress assembled:

Section 1. That it shall not be lawful for any person or persons, by day or night, to put, place, haul, draw, or in any manner use any purse net, pound, fyke, weir or other appliance for the capture of menhaden or mackerel upon the high seas within three miles of the Atlantic coast, or in any arm of the sea, river, etc., prior to the 1st of June, south of a line drawn easterly from the southern cape of Chesapeake Bay, and prior to the 1st of July north of said line.

Sec. 2 prohibits the capture of any fish prior to those dates, and in the places described, for the manufacture of oil or fertilizing material.

Sec. 3 makes persons convicted liable to a penalty of not less than ten nor more than one thousand dollars, which shall go to the U. S. Commissioner of Fish and Fisheries.

Sec. 4. Any boat, nets, or apparatus used, hired or loaned, to violate this act, shall be forfeited, confiscated, and sold.

Sec. 5 provides that such boats, nets, etc., shall be liable for the penalty imposed by Section 3.

Sec. 6. All nets in menhaden or mackerel fisheries shall have meshes not less than one and a half inches, bar measure, under penalty of not less than ten nor more than one hundred dollars for each offense.

THEY FISHED FOR THE POT.—*Editor Forest and Stream:* I had the novel experience last week of fishing a pool that had never been fished, bringing home a basket of four dozen as the result of a little over an hour's work with the rod. The largest trout weighed a pound and a quarter and the smallest six ounces. I was at the Lake House in Point de Bute, New Brunswick, and a friend offering me a seat in his boat we proceeded down the Portage Lake to Beach Point, when by dint of dragging and pushing the boat for nearly a mile through a channel almost grown up with alders and "hard-hacks," we reached Duck Lake run, at the point sought. Our tackle consisted of a couple of mackerel hooks suspended from alder poles by coarse linen lines, with sheet lead for sinkers and angle worms as thick as one's little finger for bait. Being a guest, I refrained from criticising the outfit, and I was glad afterward, for my companion knew his business, and we had no more than got the boat steadied after dropping anchor, before he gave a seventeen-ounce trout what he called the "parliamentary yank," and landed him in the boat unaided by gaff or landing net, with the mackerel hook imbedded in a hold strong enough to lift a shad. The trout were very unsophisticated and unused to worm diet, and each time the hook was lowered it seemed to be a race among them to see who would get on first, with the odds in favor of the largest. I am free to admit it was not very scientific work, but then I never took much stock in fishing as a fine art, and the weight of the "pot" was a great satisfaction. The supply seemed to be unlimited.—B.

LARGE LAKE TROUT.—The Montreal *Witness* says: "Lately Capt. W. H. McLeod, who is running one of the fishing boats belonging to Mr. D. McLeod, an extensive fish dealer in Southampton, caught an immense salmon trout, weighing 80 pounds, measuring from the point of its nose to the end of its tail 5 feet 2 inches, and around the thickest part of its body 34 inches. The head was 10 inches in length, and the width of the tail, from point to point, was 12 inches. This is the largest fish of that species ever caught in that section. The monster was packed in ice and consigned to Mr. Furey, of Woodstock, where it is now held for exhibition.

LARGE TROUT.—New London, Conn., June 21.—Strolling through the town, where I am a stranger, I noticed in the store of W. S. Chappell two platters, each containing a large trout. On entering, I learned that they were three pounders, and were caught by Mr. F. H. Chappell, who also had a larger one of eight and three-quarter pounds on another platter, which he was showing to some friends. The fish was twenty-seven inches long, and was caught by Mr. Chappell off Metallic Point, lower Richardson Lake, Me., with a fly. The fish was very shapely for one so large.—POKE-O-MOONSHINE.

BASS IN LAKE ONTARIO.—Oswego, N. Y., June 27.—Now that the season is fairly open—for in this country we don't count May 20, but wait until the ice breaks up—I may be permitted to tell you of our bass catches in Lake Ontario within ten miles of the mouth of the famed Oswego. For at least three weeks, at Lake View, Pleasant Point, Mexico Point, Texas and Ford's Shoals, points both east and west from the city along the lake shore, the bass fishing has been perfect; and by perfect I mean this, that two fishermen with a boat, from 3 P. M. until dark, could catch from ten to thirty small-mouth black bass, none of them less than a pound in weight and some of them tipping the beam at from two and a half to three pounds, with an occasional big-mouth thrown in that might go even four pounds. Catches have ranged from eight fish weighing thirteen pounds, to thirty-seven fish weighing over eighty pounds, in an afternoon. This, too, when ten or twelve parties were fishing, each with a large basketful at night, and there are more left. We do our fishing in the lake at this season with trolling, minnow and fly. Later in the season fly alone. Night before last a bass that weighed four pounds was caught in the river within twenty rods of the heart of the city.—LEX.

A TRIP POSTPONED.—Our well-known correspondent, "Piseco" (Capt. L. A. Beardslee, of the Navy), had a trout fishing trip to Maine planned for June. Messrs. Cheney, Wells, and others had given him directions just where to go, and if we are not mistaken were going with him. Routes were studied up, tackle prepared, all was ready, and "Piseco" impatiently waited for his expected leave of absence. A document finally came from the Secretary of the Navy, but instead of a leave of absence it was an assignment to the command of the U. S. S. Powhatan, and instead of taking in some of those big Maine trout, "Piseco" is now on his way to the European squadron.

STATE FOREST PRESERVATION.—Albany, N. Y., June 28.—Comptroller Chapin has appointed, to investigate and report upon the system of forest preservation, Prof. Charles S. Sargent, of Harvard University; William A. Poucher, of Oswego; D. Willis James, of New York, and Edward M. Shepard, of Brooklyn. The appointees are to serve without compensation, as their expenses are likely to consume nearly all of the appropriation.

MARYLAND.—Brady's, Md., June 23.—The open season for bass on the Upper Potomac began June 1, but the catch is very light, owing, I believe, to the negligence and delay of the State Fish Commissioners in erecting ladders on Dams Nos. 5, 6 and 7. Very few fish over one pound are taken above No. 7, at Cumberland. Woodcock are scarce, but there is a splendid prospect for quail this fall.—4-11-44.

PITTSFIELD, Mass., June 30.—The Rod and Gun Club held a meeting Saturday evening and appointed committees to see about their encampment at Onota Lake. They expect to be in camp some weeks. They will have notices printed and sent about the county notifying the people that they must not fish for trout after Sept. 1 this year, which is a month earlier than in previous years.

NOVEL BILL OF FARE.—The Lake View House, Elk Rapids, Mich., prints on its bill of fare a record of the fish caught in the vicinity. The bill for June 22 sums up the season's catch to date as 778 trout and 166 bass. They were not all taken by hook and line; some were netted.

Fishculture.

BLACK BASS IN MAINE.

[A paper read before the American Fishcultural Association.]

BY GEO. SHEPARD PAGE.

IT is often difficult to determine the exact date, or obtain reliable information as to the original introduction of a new species of food fish into a river or lake, and particularly to ascertain the facts relative to the stocking of the water of a State for the first time. This is important, not only that the agents in the work shall be placed on record, but chiefly that we may know definitely the time required to disseminate fish over a large territory in such numbers that the people can rely upon them for food and sport. Experience with the black bass in Maine is one of the most pertinent and effective illustrations of the value of such labor.

In August, 1869, accompanied by four friends, I left New York by Hudson River afternoon steamer for Newburgh. Arriving there about 7 P. M., my transportation box was conveyed to the small private pond of Mr. Walter Brown. At daylight the next morning we literally surrounded the pond and began casting the fly. In an hour, thirty-five small-mouthed bass were placed in the box, and at 7 A. M. the steamer Mary Powell started with us for the metropolis. Arriving there at 11 A. M., the box containing forty gallons of water and thirty-five bass from one-quarter pound to a pound weight, was taken to the dock of the Fall River line, and a stream of Croton water turned on until 5 P. M. Arrangements were made with the night watchman to work the air pump at intervals. Arriving in Boston an express wagon conveyed the box to the Eastern Railroad, and during the journey at intervals of fifteen minutes I aerated the water by the use of the air pump. At 3 P. M. the train reached Monmouth in Maine, about fifty miles northeast of Portland. Very near the railroad station is Cochnewagn Pond. I selected twelve bass and quickly transferred them to the pond. The train moved on and a few minutes later arrived at Winthrop. A wagon was hired and the box taken to East Winthrop, four miles distant, and twenty-one bass were liberated at the head water of the famous Cobosseecontee Pond, the largest of a chain of lakes thirty miles in length. Placing the remaining pair of bass in a three-gallon pail, I started by team for Phillips, Franklin county, forty miles away. On the route one of them died. The remarkable vitality of the bass is exhibited in a strong light in view of the mode of capture, long and difficult transportation and mid-summer temperature.

The following October Mr. Charles G. Atkins, then Commissioner of Fisheries of Maine, procuring my transportation box, took thirty-nine bass from Mr. Brown's pond, which he placed in Duck Pond, near Portland, Me. So far as I know these seventy-four were the first and only black bass deposited in Maine waters. Fourteen years have elapsed, mark the gratifying results: The report of Hon. Henry O. Stanley, Commissioner of Fisheries for Maine for 1881, contains the following: "The black bass, owing to its very game qualities, continues to be a favorite fish with anglers, and applications for introduction are received beyond the power of the Commissioners to gratify. It should never be introduced into any waters where there are trout, or from whence it can gain access to trout streams. For ponds, whose stock of trout has been exhausted by poachers, who murder the fish in their spawning beds, and where only yellow perch, bream, and pickerel are left, it is invaluable. Trip Pond, in Minot, Gardiner's Pond, in Wiscasset; Gun Point Ice Company Pond, in Harpswell; Hosmer Pond, in Rockport, Keazer's Heald, and Cushman ponds in Lovell, and Little Pushaw, in Corinth, have all been stocked with bass this past year."

Messrs. E. M. Stillwell and Hon. H. O. Stanley, in the report for 1883, report as follows: "The black bass is still growing in popular favor. We have had more orders this year for stocking ponds than in our power to fill. The great success met with at Pushaw Lake; the number and size of the fish taken, some turning the scales at four and one-half pounds, tend to popularize fish protection and fish planting; the increase in the product of fish, the result of the suppression of netting, all tended to produce a great and beneficial change in the public mind, giving firm and even enthusiastic support where hitherto we have been met by active opposition. Newport and Glenborn can now boast of two of the most beautiful and productive lakes in the State, destined in the future to become popular places of summer resort for devotees of boating and angling, and where pretty cottage residences may be built for family homes at but trifling cost, and where easy access to telegraph and railroad would render their occupants scarcely conscious of absence from city comforts. Cobosseecontee, Snow and Belgrade lakes are places of marked beauty and healthfulness, easy of access and where facilities for boating and angling are unsurpassed. Homes for hundreds whose lives are dependent upon country air and exercise can be made in cottage and tent, while the expense of the more fashionable places of resort bars them from all but those of large means. We often wonder that our city residents do not appreciate at how small a cost a pretty summer cottage can be built upon the shore of any of these beautiful lakes, abounding in fish, with health and exercise, and freedom from all the cares of city life."

In a letter dated Dixfield, Me., April 27, 1884, Mr. Stanley writes: "Yours of the 24th received. With regard to black bass, I know we have them here in great abundance, the number of ponds we have stocked (all pickerel ponds) I think will reach to the hundreds. Wherever you put half a dozen, they are sure to take and will be heard from in two or three years. I have taken bass of two and one-half pounds in a pond that had only been stocked two years, and with young fry, so they could not be over two and one-half years old. There has been a great demand for them in our State, and in many pond there is good bass fishing where there was none whatever before. I think they are a fish that cannot be thinned out by fishing with hook and line. I have met with the best success with the fly from dusk till 10 P. M. at night, fishing close in shore in very shoal water, have caught large fish when it was so dark I could not tell, casting from a boat, whether my fly struck on shore or in the water, and only knew I struck a fish by feeling the tug or hearing the splash. The Winthrop Ponds, Cobosseecontee, one of the ponds you stocked, Lake Maranocook and in all that chain of lakes, is good. I have taken in one afternoon in Cobosseecontee, sixty pounds of from two to three and a half pounds each. There is also fine fishing in Belgrade ponds, Pushaw Pond, Bangor, and in scores of others. I mention these as they are easy of access by rail, and good accommodation can be had at hotels and farm houses, and at low rates. Also pleasant places to camp. The inhabitants are always glad to welcome sportsmen and visitors, and accommodate them with boats and information at low rates. I think the black bass are a great benefit to Maine."

LOBSTER PROTECTION.

AT last a strong step has been taken in the right direction toward enforcing what is known as the ten-inch lobster law here. The statutes of Massachusetts provide that "Whoever sells or offers for sale, or has in his possession with intent to sell, either directly or indirectly, a lobster less than ten and a half inches in length, measuring from one extreme of the body extended to the other, exclusive of claws or feelers, shall forfeit five dollars for every such lobster, and in all prosecutions under this section the possession of any lobster not of the required length shall be *prima facie* evidence to convict." Notwithstanding the fact that the law would appear to be strong enough, yet it has been constantly broken, and it has been extremely difficult to secure the conviction of guilty parties. The lobsters under size have generally been left out of sight, however, and used to supply other retail markets.

But the lobster trade itself has at last become alarmed at the general destruction of this valuable crustacean. Commissioner E. M. Stillwell, of Maine, when here a year ago, tried to induce some concert of action with his State toward protection of the lobster, but did not succeed in any marked degree. Messrs. John Fottler, Walter M. Brackett, F. R. Shattuck, and several other members of the Fish and Game Protective Association here have taken great interest in the subject and tried to see that the law was enforced, but their efforts have been sustained by no State force until now.

An informal meeting of the association was called on Wednesday evening, when several men from the lobster trade were present and pledged both money and influence to aid in enforcing the lobster law. Commissioner of Internal Fisheries E. A. Brackett, has also obtained promise from State authorities of all the aid he may require in the way of detectives and officers to enforce the law. It is now believed by the friends of lobster protection that matters are in a fair way to make those who have been in the habit of supply other markets with lobsters under size sick of the business. They hope that the day has gone by when a barrel of under-sized lobsters can easily be hustled out of sight before an officer can be obtained. Much of the work will probably be done by detectives.

SPECIAL.

BOSTON, June 20.

SALMON FOR THE ANDROSCOGGINS.

THE Fish Commissioners of New Hampshire have awarded 10,000 salmon fry to Umbagog Lake, the lowest of the Androscoggin chain, and a part of which is in Maine and a part in the first-mentioned State. Last Monday, Fish Commissioner E. B. Hodge left Plymouth in the morning with the 10,000 young fry in cans. At Groveton Junction he missed the Grand Trunk train, necessitating a delay of three hours, in consequence of which he did not reach North Stratford till 10:40 o'clock. Here he was met by Capt. Charles A. J. Farrar, of steamboat fame on the Androscoggin lakes. The Captain had a team ready, and after procuring a supply of ice to regulate the temperature of the water in the cans, they started with the precious freight of 10,000 living fish for the long drive of nearly twenty miles to Errol Dam, at the foot of the Umbagog.

Errol was reached without accident at about 5 o'clock A. M., and it was found that the fish had stood the journey remarkably well. Only a few were dead, which were at once removed from the cans. By little steamer the living fry were taken up to Sunday Cove at the head of the lake, and thence three miles by buckboard up the Rapid River, which flows five miles from the Middle Dam, Richardson Lake, to Umbagog. Into a little stream, which flows into the river near the camps of the Oxford Club, a part of the fish were put, and the balance into the river itself. Within ten minutes after the fish were liberated from the cans they might be seen feeding and moving about as quietly as though they had not been hatched and planted for the future delectation of the angler. The planting of these fish is regarded as successful, since out of the whole 10,000 not more than 500 died from transportation.

To Prof. Hodge much credit is due. He has taken great pains with his charge, and in his efforts for successful transportation he was seconded by Capt. Farrar. Both gentlemen are pleased at being able to plant nearly 10,000 young salmon in the headwaters of this, once one of the most famous trout

lakes of the Androscoggin chain. But the wise foolishness which hung about fishculture twenty-five or thirty years ago put pickerel into this lake. Their shark-like propensities for destroying other fish long ago completely used up the small trout, leaving only the "old settlers," too big to be eaten. But, as is usually the case with pickerel, they long ago began to prey upon the young of their own species, and are believed to be fast disappearing from the lake.

Under such circumstances it has been deemed expedient to try landlocked salmon in those waters. It is believed by the Maine and New Hampshire Commissioners, and others who have made the subject a study, that the salmon small fry remain in the streams where they are planted till they are large enough to take care of themselves as against pickerel and other enemies found in the lake below. When old enough, they descend to the lake, as do the sea salmon to the sea, always returning at the breeding season to deposit their eggs out of danger in the very waters where the present fish themselves grew up. If such be the true theory, and all the discoveries of the past dozen years point that way, and fish planting is kept up, we, good readers of the FOREST AND STREAM, may yet find noble sport with the landlockers in the Umbagog.

SPECIAL.

BOSTON.

HATCHING SHAD IN SPRING WATER.—It has always been thought by fishculturists that river water is necessary to the development of shad eggs, but experiment at Cold Spring Harbor has proved that this is not only not the case, but that spring water is best. Mr. Mather, the Superintendent of the hatchery there, asked the United States Fish Commissioners for a few hundred eggs to test in spring water. Eighty thousand shad eggs from the Potomac River were forwarded to him and they were placed in the McDonald hatching jars, and hatched with not only a slight percentage of loss but without the development of fungus on the dead eggs. The fry, some 78,000, were placed in the Nissequogue River, at Smithtown, Long Island. The advantage that may be derived from this experiment is, that in future the distribution of shad eggs will probably be from the central hatchery at Washington to all points where there are hatcheries, instead of sending the fish after hatching and paying charges on the water that they require, an item of importance when it is considered that an entire car with 2,000,000 shad fry is often sent to States as distant as California and Texas.—*Long Islander.*

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

W. D. W.—See our game columns for moose hunting grounds.

C. W. C., Woodside, N. Y.—The New York law permits the collection of song birds for scientific purposes.

A READER.—Do shad take the fly, and if so at what season of year and where are they caught? Ans. Shad are taken with the fly at Holyoke, Mass., from July 1 to August.

NOVICE, New York.—1. What hook and size is best for worm fishing for brook trout in streams where the fish seldom attain one pound weight? 2. When split shot has been applied to the gut and it is not necessary to have it on any more, how can the same be removed best without injury to the gut? Ans. 1. Try a Sproat hook, No. 1 or 2, the latter is the smaller. 2. Open the shot gently with a pocket knife. If the gut is injured, cut it and wet the ends and tie it.

C. C. W., Warren County, N. Y.—I wish to ask you some questions concerning the black bass in Brant Lake, this county. I say you cannot catch bass while they are spawning. The bass have beds within ten feet of my shore. Can I not protect, for some distance, the waters around my land? Hounds from below and other places, come here and troll with live bait, over the beds, and bass will always take the minnow. Can I only prosecute for trespass, if I can protect waters about my own land, or will I have the only remedy of informing on these fishermen (God save the mark!) to the game constable? Some people here say the law is up June 1; I say not. The bass are now, at this writing, spawning all around my shore. I am sure one old rascal hooked a bass within twenty feet of my shore from the beds. Last year I was away at this time of the year, and so was not able to locate the beds, and only last week have I been able to do so this year, there having been so many storms of wind and rain this season. Ans. The law of New York allows black bass fishing from June 1 to Jan. 1, except in the following waters: Lake Mahopac or Dutchess county, July 1: Lake George, July 20; Schroon Lake or river, Paradox Lake, in the counties of Essex or Warren, July 1. You can forbid persons to enter your premises, and bring action for trespass, unless it could be proven that Brant Lake is part of the Schroon River, into which it empties.

New Publications.

A BOOKE OF FISHING WITH HOOKE AND LINE.—This rare old work, by Leonard Mascall, 1590, has been reprinted, with a preface, by Thomas Satchell, 19 Tavistock street, London. It is a very curious work, and contains much of interest to anglers as well as fishculturists. We find so many quaint things in it that we propose to make a few extracts from the book in a future number. It is well printed, and the illustrations are *fac-similes* of the original.

BOOKS RECEIVED.

PLATO'S REPUBLIC.—A critique of pure unreason. By Paul Pastnor. Burlington, Vt.: Paul Pastnor, 1883.

THE DIET QUESTION, giving the reason why. By Susanna W. Dodds, M. D. New York: Fowler & Wells Co., 1884.

TO MEXICO BY PALACE CAR. By Jas. W. Steele. Chicago: Jansen, McClurg & Co., 1884. Price twenty-five cents.

HANDBOOK OF THE ST. NICHOLAS AGASSIZ ASSOCIATION. By Harlan H. Ballard. Lenox, Mass.: Published by the author.

RUSTLINGS IN THE ROCKIES; hunting and fishing by mountain and stream. By G. O. Shields (Coquina). Chicago: Belford, Clarke & Co., 1883.

THE COUNTESS OF MONTE-CRISTO. Being the companion to Alexander Dumas's "Count of Monte-Cristo." Philadelphia: F. B. Peterson & Bros., 1884.

WHAT THEY SAY OF "WOODCRAFT."

A DELIGHTFUL little work has just been issued by the Forest and Stream Publishing Company, of this city. It is entitled "Woodcraft," and is written by one who assumes the pseudonym "Nessmuk." In just less than 150 pages the author inducts us into many of the secrets of a "craft" which is certainly as wonderful in its way as many that are practiced among the city's brick and stone. He reveals to us all that can be done with knapsack, hatchet, knives, tin ware, rods, fishing tackle and ditty-bag. He emphasizes the difference between roughing it and smoothing it, and tells how to make both camps and camp-fires. He explains the tactics of fishing, either with or without flies, and devotes two full chapters to the very important subject of cooking. The book is written seriously and with a purpose, yet there is nothing heavy in the manner in which the themes are handled. It is the peculiarity of an author who is full of his subject that he remains full after having exhausted himself without exhausting the reader. This is eminently true of "Nessmuk."—*New York Evening Telegram.*

$290,000 was paid last year for claims under the life policies of the Travelers, of Hartford, Conn., and $1,154,000 to life and accident claimants together.—*Adv.*

The Kennel.

FIXTURES.

BENCH SHOWS.

Sept. 16, 17 and 18.—Collie Bench Show and Field Trials of the Ontario Collie Club, Toronto, Ont. Mr. H. J. Hill, Secretary, Toronto.

Sept. —.Bench Show of the Philadelphia Kennel Club. Mr. Benj. C. Satterthwaite, Secretary.

Oct. 8, 9, 10 and 11.—Third Annual Bench Show of the Danbury Agricultural Society, Danbury, Conn. E. S. Davis, Superintendent, Danbury, Conn.

Oct. 21, 22, 23 and 24.—Non-sporting Bench Show of the Westminster Kennel Club, Madison Square Garden, New York. Mr. Charles Lincoln, Superintendent.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1319.** Volume I., bound in cloth, sent postpaid, $1.50.

POINTERS AT THE NEW YORK SHOW.

Editor Forest and Stream:

Now that the numerous members of the W.K.C. have so gracefully retired from the controversy, I will be brief in my reply to them. Let me first ask you to correct two slight errors in my last letter. You credit me with saying Sensation won second prize at a little Saturday afternoon show held at Oswestry, England. The dog won third prize on that occasion and therefore took the prize money—half a crown (sixty cents). The letter from an English breeder relating to Bang Bang should read as follows: "Bang Bang did win first prize, but the class was a wretchedly bad one. The opinion here is that the American who paid £50 for him got his fingers well bitten. The dog has another fault besides those named by you." Mr. Cornell states that "every insinuation" and "direct accusation" conveyed in my "intemperate" letter are false. In the first place, there were no insinuations in that letter, and in the second, every statement contained therein is as true as steel, and I am prepared to prove such to be the case. My letter contained nothing but hard facts—the truth, mere denial of which is no argument, and only proves the inability of Mr. Cornell and his club to reply. There is still a chance for Mr. Cornell to redeem himself. I hold proof that the W.K.C. desired to purchase Beaufort for $500. Mr. Nixon refused to let him go at the money, and I suppose it is only human nature that Mr. Cornell and his club should feel disappointed and grieved when they saw the dog in the hands of a pointer breeder within a few miles from their own kennels. If the attempt has been to use Beaufort up, let Mr. Cornell admit it like a man. The dog still lives, and he never stood so high in the opinion of breeders as he stands to-day. It is not sufficient reason to bury in oblivion the grandest dog of his day, simply because his owner is not popular with a few inexperienced grumblers, and has the misfortune to be one of Her Britannic Majesty's humble subjects. Our aim should be to improve the beautiful pointer, and not to sacrifice his good looks on account of petty jealousy or envy.

I have little to say to Messrs. Ingersoll and Grant, both members of the W.K.C. One says something about my character and temper, but has omitted to allude to my appetite or the cut of my clothes. The other alludes to turkeys, pigeons and circuses. Really, Mr. Editor, I thought the discussion was of the merits and demerits of certain dogs, and if so I do not propose to discuss either poultry or anything else. Too many fouls have already been introduced into the controversy.

Mr. Elliott Smith overrates the performances of Bang Bang. The dog was first in England in a very poor class, and second at Cleveland. I pass over the prize won at New York. Mr. Smith must advance some substantial argument to show the advisability of breeding to a little dog of Bang Bang's type, that gets black and white puppies; so far, he has failed to do it. This gentleman wishes it understood that when he and Mr. Cornell offered $350 for Beaufort, they had not made a thorough examination of the dog. Two gentlemen, therefore, who consider themselves judges, offered $350 for a dog without examining him. That is funny. A little later they desired to pay $500 (without any further examination), which seems ridiculous. Who examined Bang Bang before he was purchased, I beg respectfully to ask? Come, Mr. Smith, be frank. You and Mr. Cornell took a great fancy for Beaufort, and pronounced him the best pointer you had ever seen. You did not care to buy a dog on your own judgment, and so you called in the assistance of a gentleman well known in connection with pointers, a man of undisputed integrity. He told you to buy Beaufort, because in his opinion he was the grandest dog ever seen—would be a credit to you, and raise the standard of your kennel. Is this not the truth and nothing but the truth? Mr. Nixon stopped the sale of the dog and refused to sell at any price. This is why you made no further advance, and it is only since I became the lucky owner of the dog that you discovered that "his hindlegs are crooked." These are undeniable facts, and the public should know them. Further allusion to the matter is unnecessary.

Mr. Aldrich (who admits he is employed by the W.K.C.) considers Beaufort a "good-looking big dog," but not quite what he wants. I cannot stop to argue with Mr. Aldrich, for one of his best friends tells me he knows nothing about the points of a dog. One thing I will say, that is, Mr. Tallman, I believe, has pronounced Beaufort the best dog ever seen. Mr. Martin, manager for Mr. Goodsell, told me the same thing some time ago, and Mr. Mitchell wrote a gentleman in New York City, to call on me, as I could show him the grandest pointer that ever stood on four legs. These gentlemen are not interested, and it is quite probable any one of them is as good a judge as Mr. T. Aldrich.

It is a little late in the day for Mr. Tracy to come forward as a judge of dogs, and his advent was by no means a brilliant one, nevertheless I will give him a short reply, but I wish it distinctly understood that I do not intend to discuss dogs with this gentleman, not at least until he has shown that he has owned and bred good ones. Mr. Tracy says that I seem to assume that the judges of public events have hitherto been on the average a lot of dolts. What has this got to do with my criticism of the "Pointers at New York." I assume nothing of the kind, but on the contrary I have a great personal regard for some judges, one of whom is Major Taylor. I freely admit that I have seen dolts in the judging ring, and it is about time they found the modesty, or regard for the feelings of others to stand out. Mr. Tracy next states that I have denounced Croxteth, Sensation, and the setter Thunder, and continues, "all these have been publicly shown to be very superior field dogs." By your courtesy, Mr. Editor, I will reply, but are we not getting a little wide of the question under discussion? Croxteth I pass over, my opinion of him is well known, but he is a much better dog than Meteor. I do not say, neither did I ever say that Sensation was not a fairly good field dog. I do say he was never a show dog, and I repeat that no judge would pay $75 for him when he was for sale at that price. I did not consider him a good-looking dog the first time I saw him and I do not consider him a good-looking dog now. I claim to have a conscience. I deny that Thunder was ever a "superior field dog," or indeed a field dog at all. His record (divided stakes at Pennsylvania Field Trials with four or five others—no birds) is the only proof of his superior public field form. No dog formed as Thunder is, ever was, or ever will be, a field dog. I had the pleasure of meeting the breeder of Thunder not long ago, and in justice to myself and for Mr. Tracy's edification, I wish to say right here that he not only indorsed what I wrote in the public papers twelve months ago, but added that "Thunder is an idiot in the field." Rest assured, Mr. Tracy, that when I write anything in a public paper about dogs, I am prepared, sooner or later, to verify my statements. Even our new judge could not see that Thunder's legs are crooked, and so he painted them straight. I quite agree with Mr. Tracy that the qualities of some of these dogs have been "privately tested" by so many persons as to have become "notorious." ("Experience and fact say they must be well formed for their work, else they could not have performed it.") I once owned a black and tan terrier bitch that would find birds and point them, a fact which never made her able to win a prize in a class for pointers. A black setter distinguished himself at some recent field trial. That is no reason why he should win on the bench. I have seen a Dalmatian do good work in the field, which does not say that any "qualified judge" would give him a prize in a pointer class. No, no, Mr. Tracy, what we want are good-looking good dogs; such as Hamlet, Rap, Wagg, Bang, Bow Bells, my own dog Don II. and many others. Such dogs are not bred every day. Neither are they the results of breeding at random from inferior sires crossed on the most unsuitable dams.

If Mr. Tracy judged the dogs at New York, as he says he did, regardless of bench show standards, every exhibitor who showed under him (I did not and never will) can legally claim his entrance money, for one of the rules stated that the dogs were to be judged by the standard laid down by Stonehenge in "Dogs of the British Islands." I am glad it is now admitted the dogs were not judged after any recognized standard. Who ever thought that they were?

Mr. Tracy alludes to an avalanche of personalities. The only personal remarks so far have come from the W. K. C. through Messrs. Cornell and Ingersoll; Mr. Tracy contents himself with insinuations. I hate personal allusions in a discussion of this kind, but I do like facts—hard as granite—and those who cannot face the music had better not enter into a discussion of the relative merits of dogs with your humble servant.

CHAS. H. MASON.

TOMPKINSVILLE, S. I., June 28, 1884.

Editor Forest and Stream:

I was very much surprised to find a protest in your issue of June 19, signed by forty, said to be exhibitors, a number of which I fail to find in the catalogue, and also that of T. B. Dorsey, as he declared in your issue of June 5 that he had never seen Meteor and would not pretend to say whether Mr. Sterling was wrong or not. It looks rather hard when men like this, who claim they were not there, lend their name to protest the judgment.

T. M. ALDRICH.

A FOX HUNT ON THE ROANOKE.

I HAD on the 17th of March just passed one of the most laborious yet electrifying day's sport in the field that huntsman ever had. The morning was well suited for a fox chase, and after an early breakfast I moved up the Roanoke, but keeping some two miles north of that stream, on the ridge between it and the Maherrin River, to a point designated as a meet by Basset Rawlings, Major Mason and William Valentine, of Virginia. We all were in proper time, meeting exactly at the appointed hour. I had all my young Byron bitches, and only four old trained ones. Betty was not carried out, she having enough to do at home in caring for her four puppies. By the by, they are double Byron and a very fine sample of the stock, and were sold long in advance of their whelping to gentlemen at the North. Rawlings had his pack (mostly Byron), old, true and well trained, with two black and tan puppies added. The usual salutation of men and hounds then took place, for on the meeting of two packs the ceremony of recognition invariably follows before they move off to hunt. Every huntsman knows this, and usually awaits its termination before he attempts to encourage them onward. So did we on this occasion.

When the horn was sounded for a forward move, off dashed Rawlings's Stonewall, a fine black tan, and as full of hunt and music as hound ever was, followed in close proximity by his Juno, Bill, Dixie and Screamer, the full litter sister of Tom Wilkins, and by the by the pride of his pack. My Byron puppies were fully alive to the occasion, and in beautiful style would earnestly come forward, smelling every stump in the line of our route. Screamer soon struck a trail and Rawlings's pack flew to her summons, evincing an eagerness which a true hound invariably excites. Rawlings's hounds heed and hark better than most hounds. In a very short while the cry was swollen to great dimensions, for my pack too had participated in the rush to Screamer. The trail went due west for two miles or more, and over fields and through thick briered branches. Beyond these, in a small pine thicket, a place not at all inviting as a retreat for security, the fox dashed off, followed by a thundering sound of earnest pursuers. The run was due west and well contested for an hour, when a flock of sheep interrupted it. The break continued for twenty minutes. It was in a pasture clear of shrubs and briers, and the proper place to witness the sagacity of the packs. This we enjoyed to its full extent, we remaining still all the while, with hearts thumping with unpleasant violence and eyes dancing in every way, directed by the rapid dashing around of the hounds. The circling was by the entire pack at first, sweeping around in a small circle, which was gradually and systematically enlarged.

Some three of these circles were made and no false summons given. One of my Byron pups was first to quit the column. She was fortunate in her move, and gave a loud and excited cry for aid. That is Sally; she is perfectly reliable. Hark! I hallowed; but that was not necessary. Screamer, Stonewall and Ringwood (all Rawlings's) were with her in a second—the pack tumbling in from every point. The run was resumed, but its character had changed. From a ranting and driving run it had tamed down to a running drag. The fox availed himself of the opportunity to widen the space between himself and his pursuers. He understood his business and passed over the most difficult places for scent—sometimes in roads, then open field just plowed, then among stock—never once stopping to ascertain if he was pursued. These tactics soon placed it out of our power to follow his track; but he tarried to give the dogs full opportunity to mark his direction if nothing more.

When every effort to work it out had failed, and there seemed to be no chance to mend matters, it then became necessary for the huntsmen to interfere. A circle was determined upon, each huntsman making one with his own pack, one within the other. I took the outside or widest circle. This move was a success. We stumbled up the fox and interrupted his slumber. In his confusion he dashed right back toward the packs, and they frantically took back track and could not be recalled or sighted for some time; while one of my Byron puppies (Brevity) and Rawlings's Hudson (full brother of Tom Wilkins) had run him out of hearing. Ah! how exasperating! But such mishaps have their pleasure. When we corrected the error of the pack, we went in the direction of the last notes of Hudson and Brevity. The pack followed the track over which they had run with hesitating earnestness, but finally came up to them at fault in an open wheat field. Here we waited the work of the pack, and after a while scent was regained, and with pretty regular stride old reynard was pursued again. But the old fellow knew the odds against him, and worked hard and cunningly to overcome them. But the run increased in vim and the space every

moment grew less and less between him and the pack. But the run was not yet over. The game and speed of the fox was equal to his strategy, and all were wonderful. "Hands off, boys; no interference," I exclaimed as the excited huntsmen would dash by me. The order was obeyed, and the race was a fair one. Two hours this state of things lasted and might have continued longer but for the fox's unfortunate turn in the mouths, as it were, of Stonewall and four Byron puppies (who, by the by, run and trail in a group) Bluebell, Bawdy, Fairman and Famous.

This ended a most spirited and gamelike hunt, in which the Byron puppies (including Rawlings's two black and tans) exhibited marked endurance. We rested a few minutes to eat a pocket snack that each had provided for the occasion. It was now far advanced in the evening and we were some distance from our homes. Our way there was as we came, and by our morning's route.

The fun had not yet terminated, though all of us had had the forepart of the day as much as a reasonable ambition could covet. Just as we arrived at the place of our morning's meet Stonewall struck a traveling fox. He, with several of Rawlings's pack, took the back track. We held a conference and determined to have a second run. We stood still until Stonewall and company had corrected their error and had returned to try the right end. We then joined in with the whole pack in a most enjoyable warm trail, resulting, after an hour's continuance, in a run which, for dash and vigor, was never excelled. The fox ran back to our morning's grounds and spent his time in repeated rounds over the same ground. He, like the other, was game to the end, and a much gamer fellow. He stood a press from the very beginning and never once gave signs of distress. Nor did the hounds.

The March wind had lulled, the evening dew had begun to fall. All this in favor of scent. The younger huntsmen did not follow Rawlings and myself in the exhilarating trail, but waited for us to rouse the game. After this was done they came in like charging cavalry and hung on to the end. My day was spent before the race closed, and to the credit of the hounds let it be recorded that no flagging, no change was exhibited from beginning to its end. T. G. T.

GASTON, N. C.

THE PROPER SIZE OF BEAGLES.

Editor Forest and Stream:

Being a great admirer of the beagle, and having bred them for a number of years for my own use, once having as many as twenty-four and at no time since I became interested in them less than five, I was much interested in recent communications from "Flat" and "Rusticus" concerning their proper size, and would like to give the measurements of my largest, smallest and an average size dog of my pack, the result of many experiments and trials, and which, for this northern country, I consider the right size.

My largest is 16 inches at the shoulder, girth of chest 24 inches, girth of loin 19¼ inches, from tip of nose to set on of tail 32 inches, length of tail 11¼ inches, girth of forearm 6 inches, tip to tip of ear 17¾ inches. My smallest is 14½ inches at shoulder, girth of chest 20½ inches, girth of loin 17½ inches, nose to set on of tail 29½ inches, tail 10 inches, girth of forearm 5½ inches, tip to tip of ears 16½ inches; and my average-sized dog is 15½ inches at shoulder, girth of chest 21¼ inches, loin 18½ inches, nose to set on of tail 28½ inches, length of tail 10 inches, girth of forearm 5½ inches, tip to tip of ears 17 inches.

The dog of 11 or 12 inches favored by "Rusticus" may be all right for some sections, but here in the North, where we have long cold winters, the snow is too deep for them to run well. I think we are all agreed that in a beagle we must have keen scent, good voice and lots of hang-on. I want more. I want a dog that at all times is ready and can run, and that means strength and height. Mine, I think, hunted on an average three days a week from October to March, and were never laid up a day. I use them after rabbits, foxes and deer, of which a number were killed in front of them last fall, all on runways, and they didn't drive out of the country those that were not killed either. I have bred them, not for bench shows, but for my own enjoyment and use, and from experience and numerous trials I claim that for a useful hound for the North 15½ inches is none too small. SIZE.

PORT HENRY, N. Y.

ENGLISH KENNEL NOTES.

I WAS afraid the York committee would feel the loss of royal patronage. The doggy part of their show was a success and I sincerely hope the meagre attendance won't spoil the look of their balance sheet. Local shows are beginning to recognize the fact that to make success a certainty they must hitch the dog show on to some other local gathering, a flower show or agricultural meeting. The rustic magnates, their "aunts and their cousins," might not think it worth while to drive into the town to see the dogs only, but they are sure to visit the show after doing the flowers or cattle. No type of society is more guided by "what is the proper thing to do" than that composed of English provincials.

There are many things to be thought of when getting up a country show. The most important position to be filled is honorary secretary. Everything depends upon this official. It is advisable to secure some doggy gentleman of the neighborhood who has plenty of time on his hands and knows everybody. Of course he is honorary secretary, and his labors should afterward be rewarded with a present in proportion to results. He must be a mild-mannered man, for "rustical severity banishes all urbanity;" he should contrive to have his own way with the committee in seeming to yield. His first duty is to call upon the lord of the manor, who is usually a nobleman, his name as patron is of value and he is also good for a subscription. When the minor notabilities of the neighborhood see his name on the list they will also contribute donations toward the prize fund according to their means or social pretensions. The doctor and lawyer, and also the parson can be counted upon for this purpose. The inn-keepers of the town will give a prize for the best bulldog, the brewers for the best mastiff, etc. Some honorary secretaries are clever enough to get in this way most of their prize money, and will avert failure by instituting among the committee a guarantee fund. The committee must be practical men and ready to their share of the work.

Catalogues of big shows should be distributed among them and each man should take so many letters of the alphabet, say A to F, G to M, in the list of exhibitors' names and write to them for entries. This is a great catch, and as the receiver of this special letter feels pleased with the attention, it generally succeeds. The printing of schedules and catalogues should be given to the local stationer, who in return, will be expected to do the stationery cheap and also give an advertisement. The large biscuit firms and disinfectant companies will also take page advertisements; publishers and authors of works on dogs can also be counted upon in this direction. During the show the committee should employ themselves as ring and bench stewards. A banquet should be held on the evening of the first day of the show, to which the judges should be invited, and the tickets should be cheap to allow all exhibitors to attend. A few speeches can be made, everybody's health drunk, and the whole company is made happy. The successful fancier will naturally show again and the disappointed exhibitor forgets his wrongs and hopes for better luck next time. Prompt payment of the prize money is all that is needed to complete the popularity of the show.

At York they had a little difficulty with some classes that did not fill, and where a certain number of entries were not received those who had sent had their money returned. This was unfortunate and showed some lack of judgment, because the effect was naturally irritating.

One of the celebrities of the dog world has gone over to the majority—Bill George, of Canine Castle, Kensal Town. He was personally better known to our sporting parents than to the present generation. No man's name was more familiar in English-speaking doggy circles all over the world than Bill George's. His kennel was one of the show places to take foreign sportsmen to. Many an instructive afternoon have I passed in the veteran's company as I sat in his yard pulling at a partagas and listening to the old boy's reminiscences of mastiff and bulldog lore. Pedigrees he knew by the yard, and strains by generations. He grew intolerant in that good old-fashioned manner of modern dogs and men, and was naturally kind to the "fanciers of dogs in my time, sir." He had executed orders in dog flesh to all parts of the globe, and his trade brought him into connection with the highest and the lowest in the land.

Now he is gone, I dare say many will recollect anecdotes and sayings about him. One I heard is very funny. A letter directed to "Bill George, London," was, during the Postmaster-Generalship of Lord Manners, returned to its sender for insufficient direction, and stamped outside "Not known." The writer of the letter soon after went to London and called on George and related the incident. George heard him with an affected surprise and indignation, and looking round at some other visitors he had there, remarked: "Well, all I can say is, if Manners don't know Bill George, then Bill George don't know Manners." He was not half satisfied with the laugh that greeted his innocent *bon mot*.

Some of our papers are commencing an unwise attack upon M. Pasteur for the dogs' lives the learned professor has had to sacrifice in his great search for the antidote to hydrophobia. Could anything be more unreasonable? The infliction of pain upon dumb animals, however necessary, is deplorable; but is it to be condemned right out and prevented when the sought-for results are of such immeasurable importance to humanity and dogs themselves? It always has been and always will be the fate of the few to suffer for the many.

The continuation of the Lochinvar correspondence has brought a fresh combatant into the field in the person of Mr. G. Krehl, well known as an exhibitor of Irish terriers. This gentleman complains that Mr. Murchison has accused him in strong terms of abusing the manager of the show. Mr. Krehl is well known among the inner social circle of doggydom, and will no doubt amply refute the charges brought against him. He has written a very quiet letter asking for evidence. Danger is discernible in this quiet reserve, for the writer is an old hand at controversy. What must astonish most people, though, is that a man whose "public form" is so much "exposed" as Mr. Murchison's, should be allowed to write the violent letters that have appeared on the subject. His coarse attacks upon well-known gentlemen would disgust, if they did not also amuse a little, those who get sick of seeing "nothing in the papers." The battle is proceeding in the *Stock-Keeper*, having been stopped in the *Field*.

From Murchison to Carter is an easy digression, and I am sorry to see an undignified attack on the latter in the current number of the *Kennel Gazette*, which is the official organ of the Kennel Club. The friends of this body must see with regret their powerful position used to kick a man when he is down. I once met Mr. Carter during one of our northern shows, and it was the opinion of several of us that he had been made the victim of powerful foes. I have heard that he has sold his paper, the *Kennel Review*, given up dogs and gone abroad.

I observe that you, also, have your doggy quarrels in America, but a much better tone pervades your correspondence than we can boast of over here.

I read with amusement a letter on dachshunde in your paper of May 29, signed "Aufwiedersehen" (whatever does it mean; if we were to adopt such *noms de plume* our editors would tear their hair). Your correspondent has added another puzzle to my already confused notions of a dachshund. I have one myself—a sweet little, queer, old lady—she is a glossy black and tan, not very long in the back, powerful forelegs very much bent. I was going to show her, but before risking the entry fee I consulted an authority on the breed. "Not worth the tax," was his disheartening criticism. "Why, she's the German terrier type; look at her broad skull between the ears and short muzzle." "Well?" I querried. "Well!" he replied, "it isn't well; the hound type is the thing, long thin face, weasel body; but mind you, my lad, I daresay she'll go to ground for you, kill rats, fight cats and all that sort of thing, but she won't do for showing." At the mention of rats Dinah raised her ears and looked at his calves. Terrier or hound seems a vexed question, as I understand German authorities go for the former. But what is the "Hanoverian type" and what is a "spielhund" spoken of by your correspondent with the name of many consonants? LILLIBULERO.

JUNE 17, 1884.

THE KENNEL HOSPITAL.

WOUNDS.

THERE are various kinds of wounds. Incised or clean-cut wounds are the simplest and most easily treated, because the parts are not bruised, and no tissue is removed or destroyed. Such wounds may gape considerably, especially when they are made across the fibers of a muscle, but they admit of being drawn together, and then we obtain exact co-aptation of the sides of the wound. Clean cuts are usually accompanied by a good deal of bleeding.

Punctured wounds are those made by pointed instruments, are usually deep, and show but a small opening on the skin. They are dangerous, because they may penetrate deeply, and injure important organs. They require careful examination, because their extent is not visible, and some agent may be left in them, such as a splinter of wood, which is certain to gravely interfere with the healing. Even when no foreign substance is left in them, blood from the injured tissues is apt to collect and form a clot, which causes inflammation.

Lacerated wounds are those caused by tearing. They seldom present much bleeding, because the blood vessels being stretched and twisted contract at their extremities. They do not heal so well as incised wounds, owing to the damage done to the tissues by bruising and stretching. Not unfrequently, too, some portion of skin or other tissue may be altogether removed, and thus prevent our being able to bring the edges of the wound exactly together.

Contused wounds result from blows with blunt instruments. When the skin is not broken they are simply bruises, varying in severity according to the amount of damage inflicted upon the tissues beneath. This may be slight or of such a degree as to destroy the structures entirely. When the skin is broken a contused wound resembles a lacerated one, and its gravity depends upon the amount of damage done to the vitality of the injured parts. The proper treatment for wounds will be best understood if we first very shortly consider the mode of healing found to take place under different circumstances.

Practically all wounds heal by one of two methods—by adhesion or by granulation. Healing by adhesion takes place in wounds which, when bleeding has ceased are brought closely and evenly together and retained in position. No matter is formed in such a process, as inflammation does not reach the stage at which suppuration is set up. The only exudation that occurs is a thin layer of lymph on the cut surfaces, and this becoming organized re-connects or, so to speak, glues together the divided tissues. This method of healing cannot take place if any foreign substance intervene between the surfaces of a wound, nor even if a clot of blood be allowed to collect. It is prevented by splinters of wood, hair, or dirt being left in a wound. It is equally impossible if the tissues are destroyed by bruising or by the application of caustics, and it is rendered ineffective by the too common practice of applying tinctures and ointments to a cut surface. When healing by adhesion does not take place a wound gapes, matter is formed as the result of inflammation, and in a short time the surface is seen covered with reddish fleshy growths, commonly termed "proud flesh," or by the surgeon granulations. These growths continue until the whole wound is filled up, and then contract gradually, causing the edges of the original wound to approach each other. By the contraction comparatively large gaping wounds are healed with a wonderfully small scar. The scar or cicatrix marks the place where true skin is replaced by fibrous tissue, skin itself not being reproduced.

Just as the surfaces of a fresh wound may unite by adhesion so may two surfaces covered by granulations adhere together if retained in apposition. In some positions this is to be guarded against, as, for instance, when granulated sores exist between the thighs. In some large wounds this union of granulations may be taken advantage of and the healing of a wound much facilitated by bringing in contact the two surfaces. Healing by granulation is always a long process, accompanied by discharge of matter and a good deal of pain. It should be our object, then, always to attempt healing by adhesion, unless the nature of the wound renders that method clearly impossible.

Bearing in mind what we have just said, the treatment of wounds becomes a very simple matter. Nature will effect the repair if only we put the parts in the most favorable position. The method of repair will depend upon the condition of the parts, and our assistance to be of any value must be directed to facilitate the method adopted by nature. Incised or clean cut wounds are most likely to be troublesome on account of bleeding. Our first endeavor, then, is to stop this. When a large blood vessel is cut its extremity must be tied—an operation few amateurs could manage. Pressure directly upon the bleeding part is the next best remedy, and can be applied by means of a pledget of tow or wool held in position by a bandage. Wounds of the legs in which large vessels are divided may often have the bleeding stopped by a ligature tied tightly around the limb above the wound. This acts by checking the passage of blood from the heart, and is therefore only applicable to wounds of arteries. When veins are cut pressure on the cut spot or below is requisite. To know what kind of vessel is cut we must remember that arterial blood is bright red, and escapes in jets, while venous blood is dark red, and flows in a steady stream. The ordinary bleeding from a wound does not come from large blood vessels, and may be stopped by cold and pressure combined. The cold is applied by a constant flow of water from a sponge, and the pressure may be applied either by a bandage or by the fingers. It may be necessary to firmly bind up a wound to stop the bleeding, but if healing by adhesion is wished, it must be opened out again when bleeding has ceased and any clots of blood removed. When an incised wound has ceased bleeding, and before the cut surfaces are dry, a little clear colored fluid exudes; this is the time to bring the wound together and firmly retain it in position. Of course before doing this all foreign matter is carefully removed. Pieces of glass are not so easily seen in the depths of a wound, but are easily felt if an examination is made with a metal probe. Wounds of dogs' feet are often made by glass, and should be carefully examined before being closed. To hold the lips of a wound together, either stitches may be employed or pins. Stitches, surgically called sutures, may consist of catgut, wire, silk, or thread. The two latter absorb fluid and may cause suppuration. Wire does not adapt itself easily unless very thin, and then is apt to cut before healing is complete. I prefer pins, which are easily used and very effective. The two lips of the wound are transfixed by the pin, and round the pin is twisted a piece of thread. By this means the wound is firmly closed, and there is not much direct pressure on the pin. Steel pins are sold for the purpose by surgical instrument makers, but they are objectionable as being liable to rust and not easily cut or broken. The ordinary draper's pins are best; they are tinned and never rust, and their points after insertion are easily removed with a pair of pliers. The old dread of pins "cankering" a wound is a fallacy which might possibly have had some basis when pins were made of untinned brass wire. The pins in a moderate-sized wound should be about half an inch apart, and should be inserted about a quarter of an inch from the edge of the wound, so as to have a firm hold. When the thread has been twisted round them, push the head of the pin close up to the thread, and cut off the points. About the fifth day every other pin may be withdrawn, and the remainder when healing is complete. Wounds may be closed and held together by means of strips of adhesive plaster. To render them effective the hair must be shaved or clipped very closely from the edges of the wound, so that they may stick to the skin. To obtain healing by adhesion, a wound after being closed must be kept dry and cool. Nothing spoils the process so certainly as heat and moisture. To prevent a dog from tearing out the sutures, it is sometimes necessary to apply a dry bandage over the wound, but it is better to tie up the animal's head, or muzzle him, leaving the wound uncovered and cool.

Lacerated wounds require more judgment to treat properly than clean incised ones. They often result from dogs being partially run over, from bites while fighting with other dogs, and by tears from projecting nails. In such cases sand and dirt may be imbedded in the wound, portions of tissue may be crushed and completely disorganized, or portions may be so torn as to be left hanging in shreds. Careful washing and cleaning is the first thing to do, and as such wounds seldom bleed much, warm instead of cold water may be used to facilitate the removal of dirt. All portions of positively crushed tissue must be removed, and shreds of flesh hanging by such small connections as to suggest their being hopelessly cut off from the circulation may also be cut off. It is a good rule never to cut off any shreds of skin from a fresh wound. They offer a hold for sutures, and thus assist in bringing the parts together and helping to retain them in position; they protect the parts beneath, and can be easily removed when in time it is found impossible to save them. A badly lacerated wound will seldom heal by adhesion, yet we treat it at first as though it would by carefully adapting all the parts and firmly closing it. By so doing some parts will generally adhere, and if in three days it be found that no union has occurred, or sooner if pus be formed, we remove some or all of the sutures. In wounds so formed as to cause a flap of skin or other tissues to hang down, and which may probably not heal without suppuration, we must remember that by closing them a sort of pocket is formed in which fluids may collect, prevent healing, and do much harm. In all wounds that do not heal by adhesion, we want free escape of fluids secreted. Naturally fluids find their way to the lowest part of a wound, and that is the position we must try to effect their escape from. In closing wounds, then, in which adhesion is not expected, we should leave the lowest part without any sutures.

Sometimes a wound is not detected till long after it has been caused, when the lips of the wound are swollen, and the surfaces dried. In such cases it is often impossible to bring the edges of the wound in apposition, and it must be treated solely with a view to healing by granulation. So also must all wounds where there is great loss of skin and all superficial sores in which suppuration has commenced. Heat and moisture favor the growth of granulations, and in these cases these may be employed in the form of warm fomentations to a moderate extent. Heat and moisture, however, favor suppuration, and that we do not want. After the first day warm water is not required, except to clean a wound. We can stimulate the growth of granulations by other means at the same time that we limit suppuration and prevent deleterious changes. For this purpose we use carbolic acid and oil, compound tincture of myrrh, etc.

When a wound is filled up by granulations, and they begin to rise above the surface, they must be kept down by astringents, or even by caustics, and by pressure applied by means of a bandage. Solid sulphate of copper or bluestone may be rubbed on the surface of too exuberant granulations. Nitrate of silver or lunar caustic is also useful.

Punctured wounds must be probed so that no foreign body is left in them. The probing must, however, be judiciously done lest damage be inflicted by the probe on some important structures. In the neighborhood of joints only the most careful use of a probe is permissible. The direction of a punctured wound bears very directly on the course of treatment to be adopted, one on the upper part of the body being likely to heal less kindly than one on the lower part—this simply because the latter has a dependent orifice from which any fluid can drain. The wound inflicted by large canine teeth is often a punctured one, and therefore these wounds are liable to be complicated by the introduction of poisonous matter, about which we shall have more to say.

Contused are to be treated in the same manner as lacerated wounds, special attention being given to the amount of bruising inflicted on the tissues. If this be out of proportion to the wound we treat as a bruise, and leave the divided tissues as a secondary manner. If, however, the wound be of more importance than the bruise we follow the principles already discussed, using, perhaps, a little more heat and moisture at first to allay pain and promote absorption of swelling than if less contusion existed.

FRACTURES.

In dogs the most frequently broken bones are those of the legs, but we occasionlly meet with fractures of the spine, jaw, and ribs. Whenever a fracture occurs, the general principles of treatment to be applied are the same, the practical details differing chiefly according to the manner and degree in which other tissues are involved. A bone may be simply broken across or it may be splintered into a number of fragments, whence we distinguish simple and comminuted fractures. When a wound exists over the seat of fracture and penetrates to the bone, we have what is called a compound fracture.

In all animals bone is one of the tissues most easily reproduced, and in dogs the repair of injured bones is especially active. Even when a bone is left to nature, union is usually effected, although at the expense of some deformity. What we have to do in rendering surgical assistance is to prevent this deformity by replacing the injured parts in their proper positions, and retaining them there until nature has effected the repair.

The repair of bone follows a regular course just as the repair of other tissues. It is interfered with by the inflammatory process, and facilitated by the perfect adjustment of the damaged parts. The union of a broken bone is effected by the production of new bone between and around the broken ends, but this is the last stage of the process. What first happens after a fracture is swelling at the part, due to the exudation of lymph. This exudation becomes gradually consolidated. Ossific matter is deposited within it, and while it is slowly converted into bone, it becomes smaller by absorption. The conversion of the soft swelling into bone causes a bony enlargement at the seat of fracture, and as this is not desirable, it should be remembered that the earlier a fracture is reduced and all movement of the broken ends of the bone prevented the less will be the amount of surrounding swelling. The soft swelling surrounding a fracture is called the temporary callus; the bony enlargement which replaces it is termed the permanent callus. Other swelling as the result of fracture we too often have, but it is not connected with the process of repair. It is a complication and an evil resulting from the damage done to the soft tissues by the injury which causes the fracture, or it may be by the broken ends of the bones cutting and tearing the parts, causing the escape of blood into and among the tissues.

The symptoms of fracture are lameness, swelling from effusion of blood, distortion of the limb or change of shape of the neighboring parts, twitching of the muscles, due to their being irritated by the sharp ends of the bone, unnatural mobility when the parts are moved into different directions, and crepitus, or a grating sensation when the fractured surfaces come in contact with each other.

The treatment of fracture, especially of the limbs of dogs, requires provision to be made for the impossibility of keeping the animal quiet. In all cases, then, in which a fracture is attended to immediately after the injury, and before much swelling has occurred, we advise the use of an immoveable apparatus. Where, however, great swelling has taken place, a temporary arrangement must be applied which can be easily removed in a few days when the swelling has subsided. In cases, for instance, of fractures of the fore-arm due to great violence, considerable swelling occurs very rapidly. A permanent bandage applied to the swollen limb becomes in a few days useless, as, when the swelling subsides, it no longer fits the part, and, from its nature, is most difficult to remove without causing great pain, and probably interference with the fractured ends of the bone. It is still more injurious if applied to a limb in which swelling is still going on, as, being unyielding, it causes great pressure and pain. It is necessary, then, to consider the state of a fractured part before anything is done, and to decide whether a temporary or a permanent bandage is likely to be most suitable.

In the case of a simple fracture with much swelling we first approximate, as nearly as possible, the ends of the bone. When the ends of the bone override each other, the limb must be gently, but firmly, extended, so as to overcome the effects of muscular contraction. The use of chloroform facilitates this, and keeps the dog quiet while an apparatus to retain the position of the limb is being applied. Bandages and splints are our chief requisites, but they vary considerably in form and application. Their limited application to the mere site of injury is worse than useless, as they then not only cause pain by pressure on the part, but do not prevent movement of the ends of the bone. No fractured bone can be kept in position and movement prevented unless it be surrounded by an apparatus extending beyond the joints at each end of it. In other words, you must fix the joint above and below the seat of fracture if you wish to effectually prevent motion. In bandaging a limb it must be remembered that the pressure should be firm and even, always extending to the toes. By leaving the foot unbandaged the circulation below the bandage is interfered with, and swelling is certain. This is always accompanied by pain, and in some cases followed by mortification.

When bones are fractured in such a position as to render it impossible to apply a bandage which will fix the joint above, no bandage should be used, as it and the accompanying splints are only so much extra weight on the injured limb. Fractures of the thigh and shoulder come under this remark, and can only be assisted by attempts to limit motion. This is effected by tying the dog up short, and putting him in a cage or other confined space; and by applying to the affected part strips of adhesive plaster so arranged as to limit motion as much as possible. Adhesive plaster is quite useless unless the hair be first removed from the skin.

Splints for broken limbs may be made of cardboard, wood, leather, tin, or gutta-percha. They should be long enough to reach from the toes to the joint above the fracture. Two are required, and may be placed either on each side of the limb, or at the front and back of it. Bandages should be about 4 feet long, and from 1½ inches to 2 inches wide. The material should be soft and strong. Cheap new calico does not adapt itself nicely to the limb, and nothing is better than a portion of an old linen sheet.

After a fracture is reduced, and while the limb is kept extended, a soft, dry bandage is applied to its whole extent; portions of cotton wool being placed in the cavity behind the toes, over the prominences of joints, and also over the most prominent end of the broken bone. Thus we get a fairly level surface, allowing firm pressure by the bandage. Over this are laid the splints, which are then retained in position by another bandage. The ends of the bandages should be sewn, and to prevent the dog tearing it off, some adhesive matter should be applied to the extremities and free edges. Glue will do, or what I have found very handy, Prout's elastic glue—a substance sold by oilmen and leather dealers. Such an apparatus is easily removed, and is therefore most valuable when only required for a short time, as when much swelling exists. When we have a fracture with no accompanying wound and not much swelling, a less easily moved arrangement is desirable. This may be formed by using gutta-percha softened in hot water and applied over the first bandage, moulding it with the fingers to the form of the limb and closing it firmly at its edges by a few touches with a hot knife. The most perfect form of immoveable apparatus is the starched bandage. This is simply an ordinary bandage, unrolled, saturated in starch prepared as for laundry purposes, rolled up again, and applied over the first bandage already referred to. Until it becomes dry the position of the limb must be retained by two narrow splints placed over it and tied together by two or three pieces of tape. These are removed when the starch has "set," and the dog may be allowed to run about at once without fear of displacing the bones.—*Wm. Hunting in Land and Water.*

CURRENT DOG STORIES.

XXXII.

The dog which so gloriously distinguished himself by giving warning of the fire at the Hoffman has again been heard from; but this time in a matter not so heroic as the first attempt. Evidently the praises won by his intelligent act mentioned have so turned his head that the habits of the canine mob and common herd are distasteful to him. As a Columbus avenue car was turning into Tremont street in its up-town trip the other day, it made the usual halt, and a medium-sized dog stepped aboard. Escaping the notice of the conductor, he jumped upon the cushion and gravely seated himself with the other passengers. After the car started the conductor noticed his fare, and stepping to the gentleman who sat next to the dog, informed him that the dog could not ride. The reply was given that the dog was a stranger to him, and the conductor proceeded to eject his four-footed passenger. The dog put on the amiable look that follows the command to "move up on the left there" so naturally, and resisted the attempt to dislodge him so doggedly, that a lady who recognized the animal as he came into the car recited his history to some of the passengers, and at their earnest request he was allowed his seat, while further developments were watched. His dogship rode in stately dignity, only needing a pair of glasses and a journal to enable him to fraternize with his fellow-passengers, until the car stopped at Berkeley street, when all eyes were turned upon him; but no signs of alighting. The lady commenced to think it was a case of mistaken identity, but as the car started the dog coolly stepped to the floor, and, waiting till the platform was opposite the main entrance of the Hoffman, which is perhaps two hundred feet from where the car stopped, wagged his tail to the conductor, with a "tra la, old man, don't stop on my account," sprang off and ran up the steps. Inquiry of the elevator boy at the Hoffman reveals the fact that for some time the dog has refused to walk up stairs, but has waited for the elevator or has signalled for it by whining or crying. Theories are left to logicians and metaphysicians. The facts can be substantiated by a number of witnesses.—*Boston Journal.*

XXXIII.

There was great rejoicing in a South street household this morning over the restoration of a pet dog. Three weeks ago this day Dot was missed, and even a three-line advertisement in the best advertising medium in the county—the *Advertiser*—failed to disclose his whereabouts. The owner was plunged in grief at the unaccountable disappearance of the pet, and was nearly prepared to suspect the neighbors of foul play. It also worried the almost life-long employe of the family, and last night his sleep was troubled by dreams in which he constantly saw the missing dog in an old unused well, partially filled up with dirt and ashes, beneath the side piazza. He was so deeply impressed with the dream that he was unable to sleep after midnight, and at 6 o'clock this morning the family was startled by the sound of loud hammering on the side piazza. The man was removing the flooring, and sure enough, when the well was exposed to view, there was the missing dog, alive and well, and overjoyed at the prospect of liberation. Although confined three weeks in this narrow prison, without food or water and air not of the purest, Dot seemed as lively as ever, with no appearance of emaciation.—*Auburn (N. Y.) Advertiser.*

XXXIV.

A Newfoundland dog, jumping from its owner's garden in England over a wall three feet high, fell upon the neck and back of a laborer who, in a bent position, was digging a hole in an adjoining garden, and injured him severely. The owner of the dog gave a couple of sovereigns to the injured man, who, not satisfied with this *solatium*, brought an action for damages in the County Court, but was non-suited. He appealed to the Court of Queen's Bench. Lord Coleridge called his claim "preposterous," but gave it a grave consideration, and affirmed the decision of the County Court Judge.

JOHNNY'S ESSAY ON DOGS.—The Dogs is a great Sourse of national wealth but the Buffalows is nearly extincted. The Dog is a domestic animal like the Wolf and Fox but most dogs wont stand it if you tramp on their tale—he is knockternal in his habits but he dont squeel like the Mule & pig. We have three dogs and Uncle Ben says all 3 aint worth a damp plug of tobacco to hiss. If you dont give dogs enough to eat he becomes so avaricious he will attact Human people and on account of his great Fidelity to Man he is called the King of Beasts. The dogs are a ruminating animal and if he had borns he would chaw his quid. You can know he is dreaming when he wants to Bark and cant git his mouth open, but if something makes our dogs awake at night Uncle Ben says they make sich a Racket like if all the Hail was broke loose. Dogs is a sourse of great Pleasure as the Faithful Companion of the lonely traveller and when our Watch sees a peddler or somebody going apast our house he lays low till he gets past then he sneaks up behind and bites his legs—Every dog has his day—Bill Thompson says that's the Law and you cant git over it and he says the Dog Days was made so every dog could have their days all at once, our Teacher she says the dog belongs to the Wolf Family but Uncle Ben laughed, he said he knowed better than that with his one eye shut, for he said he bets a wolf would be a doggoned niee Family Man. This Faithful Animal Guards the house at night while all the house is Rapped in Peace full Slumber and Bill Thompson he says if a dog has wool in his teeth the next morning its a sign he teared sheep that night. And a dog aint no Beast of Pray, but our Teacher she says that don't mean that he's worse than other people for she says it don't mean that kind of Pray—but the New Found Land dog is the gayriest of the whole Lot who can swim more than a week before he Ascends to the surface to Breathe, he is therefore called the Ship of the Desert. And a Inglish bulldog is awful onery to look at—Uncle Ben says if a Inglish bulldog looks like that he would like to see a Dutch one. Bill Thompson he says they are called Inglish Bulldogs because he says in Ingland the people use them for bait when they want to ketch bulls and that kind of ketching fish is called Bull baiting, and Bill Thompson, he says if a full bloody Inglish Bulldog ketches a Holt of a Steer's nose he is so sagacious that he wont let go even if you cut off one of your Hine legs. Dogs is like other creatures and can't talk, but Bill Thompson he says in Old Times before the war Dogs could talk Latin but now nobody can talk any more Dog Latin except the professors in the Collidges. The dog is Up on the hole the Caninest animals that ever was and when Prof. Daisyhead made a address in our school he said if he had knowed as much about Scientif Animal as us Boys he would a had a show to be President too but he said in them Dark Ages where he was born boys had no show to be President but Jo Simmings said he would sooner run a Engine than be President because Garfield killed him, but Bill Thompson says Jo hasn't got Back Bones enough. Our teacher she learnt to talk french at Miss Krautschwanger's Boarded School and she says if you want to make a dog stand on his Hine legs in french and make a Bough, you just say O Reservoir Mon Chair.—*The Judge.*

MISTAKE IN PEDIGREE.—Hudson, N. Y., June 28.—*Editor Forest and Stream:* Regarding Mr. Dilley's assertion that the pedigree of my pointer bitch Fancy was not correct, would say that I purchased her from Mr. Callender (Rory O'More Kennels) last February, and I inclose to you the pedigree for inspection and publication that Mr. C. gave me at time of purchase, and which he said was correct; he also stated that she was about three years old. No one is more interested in the matter than I am, and if said pedigree is proven to be incorrect I should be most happy to get all the information possible on the subject.—H. C. MILLER. [We have received from Mr. Miller what purports to be the pedigree of Fancy, the bitch in question. There are errors enough in the pedigree to condemn it as spurious, aside from the fact that Mr. Dilley states that she cannot be as represented, as there was only one bitch of the litter sold, Cara C., who is registered in the first number of the *American Kennel Register.*]

FOX HUNTING.—The following which we clip from the Toronto *Mail*, of June 23, is respectfully submitted to our cousins across the water who so freely criticise the Yankee method of sport with *Vulpes:* "The first meet of the Toronto Fox Hunt Club, took place on the lake shore of the island, on Saturday afternoon, quite a number of city sports participating. Two foxes were taken out, and each, when released, got five minutes start of the dogs. Cooper and Donnelly's bull-terrier Oscar, caught both foxes after a hard run. All breeds of dogs were entered. Greyhounds, Bedlingtons, pointers, collies, setters, terriers, etc. A large number of people, including many ladies, were present to witness the sport. It is the intention of the club to have another meet at an early day.

BEAGLE LOST.—Mr. A. McDonald, of Rockland, Me., has lost his beagle dog. He stands about 15 in. at shoulder, and has more black than white, with dark tan markings on head. It was thought that he was taken away on a schooner. Any one learning of his whereabouts will confer a favor by notifying his owner.

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, of breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Hush Money, Hard Times, Highland Boy, Hard Cash, Harefoot, Hawthorn Bell, Hawkeye and Harmony. By Mr. H. W. Huntington, Brooklyn, N. Y., for one black, one blue, one fawn and two black and white dogs, and three black and white greyhound bitches, whelped June 11, 1884, by his Doubleshot (A.K.R. 73) out of his Cho (Badger—Fan).

Burr. By Mr. C. Frank Gram, Washington, D. C., for beagle dog, whelped Feb. 21, 1884, by Joy out of Nelly.

Snip. By Mr. Fred. McDewell, Boston, Mass., for black cocker spaniel dog, whelped April 29, 1884, by Obo II. (A.K.R. 432) out of Smut II. (A.K.R. 858).

Editor Forest and Stream: Surrey Sam, for whom name was claimed in your last issue, is a dog, not a bitch, as printed. Please make correction, and oblige SURREY KENNELS.

NAMES CHANGED.

☞ *See instructions at head of this column.*

Rosa F. to Dashing Blue Belle. English setter bitch, 1 year old (Dashing Monarch—Leah II.), owned by Mr. John G. Heckscher, New York.

BRED.

☞ *See instructions at head of this column.*

Vic—Glencho. Mr. C. H. Dayton's (Peekskill, N. Y.) red Irish setter bitch Vic (Elcho—Lady Helen) to Mr. W. H. Pierce's champion Glencho, May 5.

Daphne II.—Cæsar. The Essex Kennel's (Andover, Mass.) St. Bernard bitch Daphne II. (A.K.R. 489) to the Forest City Kennel's Cæsar (A.K.R. 22), May 25.

Judy—Young Toby. Mr. W. Jordan's (Portland, Me.) pug bitch Judy (A.K.R. 406) to the Chequasset Kennel's Young Toby (A.K.R. 473), June 20.

WHELPS.

☞ *See instructions at head of this column.*

Sibil. The Forest City Kennel's (Portland, Me.) St. Bernard bitch Sibil (A.K.R. 757), June 21, thirteen (seven dogs), by their imported Cæsar (A.K.R. 22).

Juno, The Forest City Kennel's (Portland, Me.) pug bitch Juno (A.K.R. 406), May 18, five (two dogs), by Young Toby (A.K.R. 473).

Rita Croxteth. Mr. Geo. S. Tucker's (Peterborough, N. H.) pointer bitch Rita Croxteth (A.K.R. 108), June 10, ten, by champion Meteor; two since dead.

Dashing Belle. Mr. E. W. Jester's (St. George's, Del.) English setter bitch Dashing Belle (A.K.R. 814), June 26, four (three dogs), by his Zanzibar (A.K.R. 1182).

SALES.

☞ *See instructions at head of this column.*

Breda Girl. Irish water spaniel bitch, whelped Sept. 30, 1883 (Wallace—Duck), by Mr. Wm. Graham, Newtownbreda, Belfast, Ireland, to Milwaukee Kennel Club, Milwaukee, Wis.

Noblesse. Smooth-coated St. Bernard dog (A.K.R. 803), by the Chequasset Kennel, Lancaster, Mass., to Mr. J. Burk Wolfe, New York.

Hugo. Orange tawny, with white markings, rough-coated St. Bernard dog, whelped March 6, 1884 (Cæsar, A.K.R. 22—Nun, A.K.R. 24), by the Chequasset Kennel, Lancaster, Mass., to Mr. C. P. Head, Prescott, Ariz.

Count Herod. Liver and white cocker spaniel bitch, whelped March 6, 1884 (Teddy Barr—Vic), by Mr. Archibald Gordon, Middletown, N. Y., to Mr. W. B. Allen, Indianapolis, Ind.

Blossom. Liver and white cocker spaniel bitch, whelped March 6, 1884 (Teddy Barr—Vic), by Mr. Archibald Gordon, Middletown, N. Y., to Mr. W. B. Allen, Indianapolis, Ind.

Humboldt. Orange tawny and white rough-coated St. Bernard dog, whelped March 18, 1884 (Cæsar, A.K.R. 22—Nun, A.K.R. 24), by the Chequasset Kennel, Lancaster, Mass., to Mr. H. W. Weidman, Cleveland, O.

Grimsel. St. Bernard dog (formerly Nestor) (A.K.R. 802), by the Chequasset Kennel, Lancaster, Mass., to Mrs. E. S. Crowninshield, Boston, Mass.

Isar. Orange brindle and white smooth-coated St. Bernard dog, whelped March 19, 1884 (Cæsar, A.K.R. 22—Brunhild, A.K.R. 23), by the Chequasset Kennel, Lancaster, Mass., to Mr. R. H. White, Boston, Mass.

Snip. Black cocker spaniel dog, whelped April 29, 1884 (Obo II.—Smut), by Mr. H. C. Bronsdon, Boston, Mass., to Mr. Fred. McDewell, same place.

Obo II.—Smut whelp. Black cocker spaniel bitch, whelped April 29, 1884, by Mr. H. C. Bronsdon, Boston, Mass., to Mr. Robert Walker, Franklin, N. Y.

Eckhardt. St. Bernard dog (A.K.R 413), by the Mill Brook Kennel, New York, to Mr. N. S. Hay, Boston, Mass.

DEATHS.

☞ *See instructions at head of this column.*

Anne Boleyn. Red Irish setter bitch (A.K.R. 611), owned by Mr. Theo. L. Riddle, Custer City, Pa., June 22.

Rifle and Trap Shooting.

RANGE AND GALLERY.

BOSTON, June 28.—There was a good attendance at Walnut Hill to-day, and considerable shooting done in the different matches. The fact that the present matches, which have been running since Fast day, are to close on July 4, served to bring out a good company of shooters who found good shooting conditions. In addition to the regular matches a team shoot was had by telegraph with the Manchester Rifle Club. In this match the Massachusetts "steer" team was beaten by eight points. Mr. Francis made an elegant score of 48 on a paper target, which would have counted 85 decimal, and Mr. Fellows closed with a 45, the best possible. Mr. Perkins proved his quality as a shooter by holding off for a 47 in both the practice and Creedmoor matches. On Wednesday next the shotgun men will try conclusions. The best scores made were as follows:

Creedmoor Practice Match.

J Francis	5555555544—48	W H Morton	4544444445—42
F W Perkins	4544555555—47	D B Farwell	4444544441—41
C E Berry	5455454545—46	J E Darmody (mil.)	5454344435—41
C B Edwards	4555454544—45	D E James (mil.)	3444545534—41
A Keach	5544445444—43	C Challet	3443433544—37

Creedmoor Prize Match.

J B Fellows	4555555555—49	W Fisher	4445545551—44
F W Perkins	5545544555—47	J A Cobb	4455454544—44
B F Jones	5545455455—47	A J Look	4444454554—43
J P Bates	5554555445—47	W H Kemp	4544444543—42
C E Berry	4445555545—46	A S Sampson	2445514455—42
C B Edwards	5554455445—46		

Combination Match—Rest Target.

W Charles	8 10 10 10 10 10 10 9 10 10—97
A J Look	10 10 9 9 9 10 10 9 10 10—96
J B Fellows	8 10 8 7 9 8 9 10 10 7—86
E B Souther	10 6 8 10 7 10 8 6 4 10—79

Combination Match—Creedmoor Target.

E B Souther	5 4 5 4 4 5 4 5 4 5—45
W Gardner	5 4 4 5 5 5 4 4 4 5—45
A J Look	5 5 4 4 5 4 5 4 5 4—45
W H Kemp	4 5 4 5 5 4 4 4 4 5—44
A S Sampson	4 4 4 4 5 5 5 5 4 4—44

Combination Match—Decimal Target.

E B Souther	7 9 8 9 9 6 8 9 6 5—76
A J Look	6 6 10 7 7 8 5 9 3 7—68

Rest Match.

C H Brown	10 10 10 10 10 10 9 9 9 10—97
A J Look	8 10 9 9 10 9 10 7 10 10—92
B A Lappen	5 10 9 9 9 10 10 9 9 9—89
W H Kemp	10 7 9 5 10 8 9 10 9 8—85
D E James	6 10 9 4 9 7 8 10 9 10—82

Manchester Rifle Club.		Massachusetts Rifle Association.	
C D Palmer	49	W Fisher	46
H Gray	47	H Severence	45
J A Barker	45	G Warren	45
F G Drake	43	C E Berry	45
E R Angell	43	E B Souther	41
B Cline	43—270	W H Oler	40—262

SAN FRANCISCO, June 20.—Four members of the Fifth Infantry shot a match at Shell Mound to-day, and endeavored to beat Lieut. Kuhnie's record of 457 out of a possible 500 points. They each fired 100 shots at the 200yd. target. Lieut. Kellogg's score was:

First	5444544554—45	Sixth	4444544554—43
Second	4455s4544—45	Seventh	5445545445—45
Third	4554454454—44	Eighth	5495544535—46
Fourth	5545455454—46	Ninth	5555545554—48
Fifth	4544555554—46	Tenth	4544555545—46—454

The scores of his competitors were as follows: Kellogg 454, Moore 424, Hovey 443, Waltham 438.

A regular match between four staff officers and four members of Company A, all of the Fifth Infantry, will take place at Shell Mound next Sunday, and the names of the marksmen are a sufficient guaranty of an exciting contest. The officers are: Lieut. Kellogg, Lieut. Kuhnie, Sergt. Williams and Sergt. Hovey, and their opponents are: Sergt. McDonald, Priv. Waltham, Priv. Burrell and Priv. Pierce. Col. Ranlett offer a handsome medal to any one in this match who beats the record of 457. Next Sunday there will be other interesting matches by members of the Fifth. Waltham No. 17 challenges Moore No. 4, Williams No. 11 challenges Carroll No. 9, and Pierce No. 8 challenges Kellogg No. 1.

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

PROPOSED TOURNAMENT.

To the Gun Clubs:

It is our opinion that gun club contests, if properly presented to the public, can be made sufficiently interesting to eventually place this sport on a broad national footing, similar to base ball. Therefore, with this end in view, it is our intention to organize clay-pigeon tournaments in the principal cities, provided you give us your co-operation. The general plan we desire to pursue is outlined in the following; if the offer is accepted, we guarantee to spend at least $250 in organizing and advertising same, etc., etc.; if this proves a success we will follow same very shortly with a tournament at Boston, Philadelphia, Washington, Pittsburgh, Bradford, Buffalo, Cleveland, St. Louis, Cincinnati, Nashville, etc.:

A two days' programme will be held at New York city, Aug. 1 and 2, 1884, provided at least 10 teams of 3 from organized clubs will enter for the principal contests by July 9, by remitting $10, part of entrance fee, to the undersigned. The principal contest will be: Entrance fee, $25; teams of 3 from any duly organized gun club, 10 single clay-pigeons, 18yds. rise; 5 doubles, 15yds. rise; Ligowsky rules (June, 1881) to govern; the singles to be shot the first day, doubles the second day (to be followed daily by sweepstakes). The purse will be divided as follows: To the winning team the whole of the entrance fee if only 10 teams are entered; if more than 10, then to the winning team $250, and the residue to be divided into 50, 30 and 20 per cent. (if the entries be 30 or less), as second, third and fourth prizes; if over 20 entries, the residue to be divided into four prizes, viz., 40, 30, 20 and 10 per cent. If less than 30 clubs are represented, then any club may enter as many teams of 3 as it sees fit; clubs and members of teams must be of at least 30 days' standing as such. Gate money (if any) to go to management. If the gate money exceeds the expenses, we guarantee to donate said excess as special prizes at the next tournament given under our auspices. Initial entrance money will be returned unless 10 teams enter before July 9; if they do so enter, the undersigned will at once secure grounds, advertise the shoot, etc. An early reply will oblige,

J. E. BLOOM,
For the Ligowsky C. P. Co., 59 Murray street, New York City.

THE MERIDIAN GUN CLUB.

AT the tournament of the Meridian (Miss.) Gun Club, shooters were present from North Carolina, Georgia, Alabama, Louisiana and Tennessee. As will be seen by the subjoined scores, the average shooting was good. Weather fine. Affair passed off happily. Another tournament is proposed for the fall.

First Day.—First Match—5 pigeons, 20yds.: F. W. Dunham 2, W. T. Vass 5, A. E. Dunham, 2, L. P. Chaudet 4, F. A. Cousin 5, Wm. Mayronne 4, M. Daly 1, W. W. Scales 4, N. Scales 3, S. S. Scales 1, J. F. Jordan 4, J. R. DeFuents 3, J. C. George 3, F. S. Ward 4, B. Nichols 1, Jno. M. Ladd, Jr. 5, G. W. Bookout 4, H. L. Foot 3, B. Crisler 3, G. W. Tunstall 4, E. Field 3, S. M. Irion 3, N. S. Carr 3, W. H. Dobson 3, B. H. Gallup 1, B. F. Cameron 3, W. W. Stroup 3, J. T. Sargent 4, J. J. Kane 4, W. T. Dabney 4. Ties for first: Ladd missed his fourth bird. Money divided between Vass and Cousin. Ten ties for second, won by Tunstall. Eleven ties for third, won by Stroup.

Second Match—10 clay-pigeons, 18yds.: F. W. Dunham 7, B. H. Gallup 5, E. Field 6, J. F. Jordan 7, W. Mayronne 6, W. T. Dabney 6, J. M. T. Hamilton 6, W. T. Vass 10, B. Nicholas 5, W. Taylor 2, G. W. Tunstall 5, W. W. Scales 3, M. Drey 5, N. Carr 4, J. M. Ladd, Jr., 9, W. W. Stroup 5, F. A. Cousin 8, B. L. Foote 8, G. W. Brookout 5, L. P. Chaudet 8, B. Crisler 1, Sargent 5, Cameron 6, S. M. Irion 0, A. E. Dunham 7. W. T. Vass wins first and J. M. Ladd second. Ties for third won by Chaudet breaking 3, Cousin 2 and Foote 0.

Third Match—5 pigeons, 20yds.: Fields 1, Rich 4, A. E. Dunham 1, Tunstall 5, F. W. Dunham 2, T. P. Brown 2, Sargent 3, Mayronne 1, S. S. Scales 4, N. Scales 4, Foote 2, Bookout 4, Vass 5, Taylor 4, De Fuents 4, Chaudet 5, Ladd 2, Cousin 4, Jordan 5, Drey 2, Cameron 3 Dabney 5, Stroup 3, Kane 3, Ward 4, Dobson 2, Gallup 4, W. W. Scales 5, N. Carr 5, Hamilton 2. Seven ties for first won by Chaudet on third bird, the others all missing. Nine ties for second divided between Rich and Ward, they being tie after killing 9 birds on the tie shoot and proposing to divide. Four ties for third divided between Stroup and Cameron.

Second Day.—First Match—3 double pigeons, 21yds.: Cousin 2, Rich 4, De Fuents 4, Mayronne 4, Chaudet 4, A. E. Dunham 1, Gallup 1, Tunstall 1, Field 3, Stroup 6, Bookout 4, Scott 1, Ward 5, Sargent 4, Jordan 6, Vass 5, Foote 5, F. W. Dunham 3, Ladd 4, Dabney 3, George 2. Stroup and Jordan divide first money. Tie for second: Ward and Vass tie on the third pair, Foote missed second pair, Ward and Vass divide. Ties for third won by Rich on seventh pair. Score: Rich 14, De Fuents 13. Ties in double match were shot off by shooting at pairs.

Second Match—15 clay-pigeons, 18yds.: Cameron 5, F. W. Dunham 3, Vass 6, Foote 7, Mayonne 7, Bookout 8, Jordan 7, Gallup 2, Chaudet 9, Cousin 7, Hamilton 6, Dabney 7, Tunstall 7, A. E. Dunham 2, Nicholas 2, Ladd 2, Rich 1, Stroup 7, White 3, Ward 6, Brown 0, Dobson 9, Sargent 7, Kane 5, Scott 4, Drey 5, George 4. Ties on first Chaudet, ties for second Bookout on seventh ball, ties for third Cousin.

Fourth Match—5 pigeons, 26yds.: F. W. Dunham 1, Jordan 4, Bookout 4, Vass 2, Sargent 3, Irion 3, Chaudet 3, De Fuents 3, Scott 3, Tunstall 5, Stroup 3, A. E. Dunham 4, Cousin 3, Rich 3, Mayronne 3, Foote 3, Kane 4, Dobson 2, Dabney 3, Ward 4, Cameron 4, Gates 4, Coburn 2, Ladd 3. Tunstall wins first. Ties for second Cameron on third bird, others all missing. Twelve ties for third, won by Chaudet.

Third Day.—First Match—5 pigeons, 26yds.: F. W. Dunham 0, Vass 4, Foote 4, Jordan 3, Bookout 5, Gallup 3, Chaudet 5, Cousin 4, Dabney 4, Tunstall 3, A. E. Dunham 1, Stroup 4, Ward 5, DeFuents 3, Sargent 4, Cameron 3, Gates 4, W. Shackleford 4, White 3, A. McCarty 2, Irion 2, Kane 2. Ties for first won by Chaudet; for second, divided between Foote and Cousin after tieing on fifth bird, others all having missed; six ties for third, won by Tunstall.

Second Match—Pigeons, miss and out, 28yds.: Birds gave out after the third round. Money was divided between all who had killed three each. Chaudet, Scott, Cousin, Cameron, Dunham, F. W. Bookout, Mayronne, Jordan, Stroup and Ladd.

Third Match—5 clay-pigeons, 21yds. and 5 glass balls 18yds.: Cameron won first, breaking 5 clay-pigeons and 5 glass balls. Four ties for second, won by Foote. Four ties for third, won by Vass.

Fourth Match—10 glass balls, 21yds. rise.: First divided between Dabney and Foote, Jordan won second, beating Vass and Bookout on tie, and Dobson won third.

CONNECTICUT.—Match at Wallingford, June 25, for clay-pigeon individual State medal.

Goodrich	1111110111111100011111110011111110111101111111010—41
Nichols	1111111101101011011111010111111101111111111111—42
Tousey	1111000011111110111111111111111110111010100111111—40
Ives	1011111010010110110010111111111111100111 withdrew.
Spencer	1010111111111111111010100101101111010111111111111—40
Bristol	1000111011111010001111111111101110011101C11111011—35
Baker	1000101101100101101110101111111111110011111111—37
Bull	1111111011111001111110101111111111111111101111010111—41
Folsom	0111011110111111111111111111111111111100101011111—43
Brogden	1101110111110101010011111111001111111111101111—40
Penn	1101011111101101110011111001100001010100001 withdrew
Hanson	1101110101000 withdrew.
Nash	0011110111111111111111111111111111111111101111111—41
Hall	1101111111111011011111110111000111111111100111110—40
Talcott	1111110001100111111101111111111111111101101011001111—38
A. Ives	1111110111111111011001110111011111111111001111101—39
D Longden	0111101101111111111111111111111111111111111111111—43
Bindley	1111101011111111111010001110001111110111111111111—40

Folsom and Longden tied and shot at 5 pigeons five times before Longden won. The next State shoot will be in Meriden, July 9, on the grounds of the Parker Gun Club, when two sets of traps will be used.—J. F. I.

BOSTON GUN CLUB.—Shoot at Wellington, June 25.—The final shoot for the gold badge by teams of three men at the grounds of the Boston Gun Club took place yesterday, and was won by the team from the Massachusetts Rifle Association. Following is the result of the other events:

First event, 5 birds, 5 traps:

M W Eager	10111—4	G B Clark	11101—4
W S Perry	11011—4	H L Prescott	01111—4
G A Sampson	11101—4	D Kirkwood	11111—5
C H DeRochmont	10010—2	G G Tidsbury	11010—3
B F Johnson	01111—4	A F Cooper	11010—3
O J Jenkins	11011—4		

Kirkwood first, Perry second, Cooper third, DeRochmont fourth.

Second event, 3 pair doubles:

Sampson	11 11 11—6	DeRochmont	10 01 01—3
Perry	11 11 01—5	Jenkins	10 00 11—3
Kirkwood	11 11 01—5	Cooper	10 11 00—3
Eager	11 01 01—4	Clark	11 10 10—4
Prescott	11 10 11—5	Johnson	10 11 00—3

Sampson first, Kirkwood second, Clark and Eager third.

Third event, 7 single birds:

Perry	1011101—5	Cooper	1111010—5
Jenkins	1111111—7	Tidsbury	0111111—6
Kirkwood	1101011—5	Prescott	1110110—5
Sampson	1110111—6		

Jenkins first, Sampson and Tidsbury second, Perry third.

Fourth event, 3 pair double birds:

Perry	11 10 11—5	H H Francis	11 01 01—4
Eager	11 10 11—5	E W Law	11 11 11—6
Prescott	11 11 10—5	A L Brackett	10 10 01—3
Sampson	10 11 11—5	J S Sawyer	10 11 10—4
Johnson	10 10 11—4	T Curtis	11 11 00—4
Kirkwood	10 11 00—3		

Law first, Perry second, Francis and Johnson third, Brackett and Kirkwood fourth.

Fifth event, 5 single birds, 5 traps:

Jenkins	10010—2	Sawyer	01010—2
DeRochmont	11001—3	Johnson	11101—4
Sampson	10101—3	G F Cutting	10100—2
Eager	01111—4	G W Tinker	10101—3
Clark	11111—5	Cooper	11010—3
Law	11000—2	Tidsbury	10111—4
Perry	01111—4	Francis	00101—2
Brackett	01100—2	Prescott	10010—2

Clark first, Tidsbury second, Tinker third, Francis fourth.

Sixth event, 7 single birds, 5 traps:

Perry	1110111—6	DeRochmont	1001111—5
Jenkins	1011110—5	Law	1101111—6
Prescott	1110101—5	Cooper	0111111—6
Johnson	0011111—5	Francis	1011111—6
Eager	1111001—5	Sawyer	1011111—6
Sampson	1011110—5	Cutting	1011110—5
Tinker	1111101—6	Tidsbury	1111111—7
Clark	1111000—4		

Tidsbury first, Cooper second, DeRochmont and Sampson third, Clark fourth.

Seventh event, 7 birds:

Francis	1110111—6	Jenkins	1011111—6
Sampson	1001101—4	Clark	0111110—5
Perry	1111111—7	Johnson	1110110—5
Eager	1110111—6	Tinker	0101011—4
Law	1100011—4	Tidsbury	1101110—5

Perry first, Eager second, Tidsbury third, Tinker fourth.

Eighth event, 7 birds:

Eager	1111111—7	Law	1011110—5
Jenkins	1110111—6	Kirkwood	0011111—5
Perry	0011110—4	Tinker	1111100—5
Cooper	1000111—4	Francis	1110111—6
Sampson	0011110—4	Tidsbury	1111111—7

Monies divided.

Ninth event, 5 single birds, 5 traps:

Francis	01101—3	Perry	11111—5
Tinker	10110—3	DeRochmont	10101—3
Sampson	10111—4	Jenkins	11011—4
Johnson	11010—3	Prescott	00110—2
Clark	10111—4	Cooper	11100—3
Tidsbury	11011—4	Law	01110—3
Sawyer	11101—4	J Williams	01111—4
Cutting	10100—2	Kirkwood	01011—3
Eager	11111—5		

Eager and Perry first, Sampson and Clark second, Tinker, Law and Cooper third, Cutting and Prescott fourth.

Tenth event, 3 pair doubles:

Francis	10 10 11—4	Tinker	11 11 11—6
Cooper	01 10 11—4	Johnson	01 11 11—5
Jenkins	11 10 10—5	Sampson	11 01 00—3
Eager	11 11 11—6	Law	10 10 01—3
Perry	11 10 01—4	Prescott	10 10 11—4

Eager first, Johnson and Jenkins second, Perry third, Sampson fourth.

Eleventh event, 5 straightaways:

Stanton	01010—2	Francis	11011—4
Nichols	11010—3	Williams	10110—3
DeRochmont	10101—3	Jenkins	01011—3
Tidsbury	01010—2	Eager	10001—2
Sampson	11010—3	Law	11101—4

Francis and Law first, Nichols and DeRochmont second, Tidsbury and Eager third.

Team match for gold badge.—Conditions—Open to any organized club in the New England States. Teams of three men, score to consist of 5 single birds from 5 traps, 3 pair double birds and 10 single birds from single trap, per man:

Boston Gun Club.			
Johnson	11001	11 00 00	0111111111—14
Kirkwood	01010	10 10 11	0101110011—12
Sawyer	10100	11 01 11	1000111110—13—39
Worcester Sportsman's Club.			
Perry	11001	11 01 01	1111100111—15
Eager	10010	01 11 11	1011101111—15
Sampson	01001	10 11 01	1000011111—12—42
Massachusetts Rifle Association.			
DeRochmont	01110	10 10 11	1111101110—15
Law	01111	11 11 10	1011101000—14
Tidsbury	11111	11 11 11	1110111111—20—49
Exeter Sportsmen's Club.			
Prescott	11110	10 11 01	1000111011—14
Cooper	11011	10 10 11	1110101011—15
Jenkins	11111	11 11 11	1111111111—21—50
Independent Team.			
Francis	11010	11 11 10	0111101011—15
C Ellsworth	00100	10 11 11	1101100011—12
Tinker	11011	01 10 11	1100111111—16—43

On July 9, a grand tournament will be held of the above club, when a gold medal will be given free. Conditions—2-men team, 7 singles from one trap, 7 singles from 5 traps and 3 pair doubles, open to all New England. This will be upon the same date that the New England Trap Shooters' Association will meet at Young's Hotel, Boston.

THE FINAL SCORE.—The members of the disbanded Long Branch Gun Club met at the old grounds, Deal Beach, N. J., to shoot for the possession of the Riverton Gun Club cup, won by the club at the Philadelphia meet in 1883. Conditions: Open only to members of the late Long Branch Gun Club; 10 birds each, 5 traps, handicap rise; Long Branch Gun Club rules. Closed with 16 entries:

W D Campbell, 27yds	1111111111—10
J S Hoey, 29yds	1110111111— 9
Gilbert Speir, 30yds	1111110111— 9
C N Skirm, 28yds	1111110111— 9
Raymond, 30yds	1101111111— 9
Walter G Murphy, 29yds	0111101111— 8
Levy, 29yds	0110111111— 8
R G Murphy, 28yds	1011101100— 7
King, 29yds	1010110111— 7
Stone, 28yds	1011110101— 7
W Haven, 29yds	1001010011— 5
Buck, 29yds	1110110w
Brokaw, 28yds	1010110w
Claney, 30yds	1111011110w
Middlington, 28yds	1011100w
Dr Zelner, 30yds	0101Ow

It is reported here that the purchase of the effects of the club, a large club building and almost a mile of high board fence which inclosed the grounds, by Miles L. Johnson was in the interest of several gentlemen members of the old club, who design to form another shooting club immediately.

TORONTO, Ont., June 21.—A clay-pigeon match took place at Woodbine Park yesterday and this afternoon, when a number of valuable prizes were shot for. The first prize was a breechloading shotgun, and was won by Mr. J. R. Humphreys. The shoot was at 15 birds, 18yds. rise, from two screened traps. Mr. George Smith was referee. The following was the score of the winners:

J R Humphreys	101111111111111—14	W McDowal	1011111111111011—13
J Townson	1110111111111111—14	R Harris	1011111111100111—12
J L Rawbone	1101111111111110—13	W Roberts	0110110111111110—11
F Martin	1111110111101111—13	H Humphreys	0101111110011111—11

First Tie—J. E. Humphreys 5, J. Townson 4. Second Tie—W. McDowall 4, J. L. Rawbone 2, F. Martin 2. Third Tie—Rawbone 3, Martin 2.

SAN FRANCISCO, June 15.—To-day has been a very favorable one to the bird and target men. A number of the lovers of pigeon shooting met at Birds Point and shot at twenty-five birds each; the prizes being $50 for the first, $40 for the second, $30 for the third and $10 for the fourth. The entrance fee was $10. The shooting was good, Mr. Brown missing only one bird and the gentleman shooting under the name of Jackson only two. Mr. Lambert killed twenty-one, and four out of the remaining five killed twenty each. On the shooting off for fourth prize, Mr. Pearson won with nine kills without a miss. Appended is the score. Next Sunday there will be another shoot at Birds Point, but it is not decided yet whether it will be at fifteen or twenty-five birds. The entrance will be $10.

Fay	0111101111011111101101111—20
Jackson	0111111111111101111111111—23
Slade	1111111110011101111101111—20
Coffin	1111111001111101010101111—19
Brown	1111111011111111111111111—24
Fisher	0011111011011111011111111—20
Lambert	1111011111111011101111110—21
Pearson	1111111111011011011011110—20

After this, six gentlemen entered for a sweepstake of $2.50 each at six birds, Mr. Slade taking first money, with a clean score, and Messrs. Fisher and Coffin tying for second, with five each.

The Lincoln Gun Club held its monthly shoot at Colon. The following is the score:

First Class.		Second Class.	
Bruns	1111110111111000—11	Cohen	1011101110110111—11
Heine	1101111010101111—11	Schendel	1001101110110111— 9
Edlar	0111111110001111—11	W Norton	0011101110110011— 9
F Venker	1101011010100111— 9	Karney	1111101011111111—13
Potter	1111100101011010—10	H Norton	0000101111111110— 9
Richter	1101010111111011—11	Frisch	1010111111011110—11
Parks	1100101111111011—11	Seyden	1110011111011111—12
H Venker	1101111101010100—10	Ford	0111111010011010—10
Drinkhouse	1011101110001111—10	Jones	1111100100000010— 7
Johnson	1010011111111001—10	Weymer	0010000000011011— 4
Smith	1001110010111010— 9	Christel	1011010110000111— 9
Baker	1111101010100000— 8		

Messrs. Bruns, Heine, Edlar, Richter and Parks tied on eleven birds each, and shot off at 3 pair double birds. Messrs. Bruns, Heine and Edlar again tying, with 5 birds each, and again shot off at 3 pair more double birds, Mr. Edlar taking the medal in the first class and Mr. Karney in the second.

MALDEN GUN CLUB.—The club had a field day at Wellington on the 28th ult., the leading events being the close of the shoot for the class medals. The winners were: Fielding first, Nichols second, Scott third. The other events of the day were as follows:

First event, five birds—Sanborn and Shumway divided first, Snow second, Brown and Field divided third.

Second event, five balls—Snow, Brown and Hopkins divided first, Ellsworth second, Adams third.

Third event, three pair doubles—Hopkins first, Field and Brown divided second, Pratt third, Scott fourth.

Fourth event, five birds—Hopkins first, Snow and Scott divided second, Brown and Pratt divided third, Field fourth.

Fifth event, three pair doubles—Field and Pratt divided first, Snow and Hunter divided second, Scott third.

Sixth event, three pair doubles—Dickey first, Field and Snow divided second, Hunter third.

Seventh event, five birds—Snow first, Dickey second.

Eighth event, five birds straightaway—Hopkins and Field divided first, Short second, Shattuck third.

Ninth event, miss and out—Dickey first, Snow second.

Tenth event, miss and out—Dickey and Pratt divided first, Scott second.

Eleventh event, five birds—Wiswell and Brown divided first, Dickey and Field divided second, Hunter third, Scott fourth.

Twelfth event, miss and out—Snow and Scott divided first, Merrill second.

Thirteenth event, miss and out—Dickey first, Snow second.

Fourteenth event, miss and out—Dickey first, Scott second.

Fifteenth event, miss and out—Dickey first, Pratt second.

Sixteenth event, ten birds—Nichols first, Brown second, Adams third.

Seventeenth event, same—With same winners.

Eighteenth event, five birds—Dickey first, Pratt, Sanborn, Snow and Brown divided second, Hopkins third, Short fourth.

Nineteenth event, five balls—Snow and Dickey divided first, Ellsworth and Field divided second, Shattuck and Adams divided third.

Twentieth event, five balls—Shattuck and Ellsworth divided first, Short and Brown divided second, Field, Edwards and Pratt divided third.

Twenty-first event, five birds, straightaway—Hopkins and Dickey divided first, Short second, Shattuck and Merrill divided third.

The annual shoot of the club will be held Friday, July 4, at 8:30 A. M. There will be a shoot for two medals, one of gold, the other leather, for the best and worst shots. The medals are to be shot for at every regular shoot during the year, and are to become the property of the member winning them the greatest number of times. In addition there will be four events, at which the club will offer special prizes.

CLAY-PIGEON TOURNAMENT.—The Second International Clay-Pigeon Tournament, under the auspices of the Ligowsky Company, will be held at New Orleans, La., during Mardi Gras week, in February 1885.

PORTLAND, Me., June 27.—The sixth contest for the Ligowsky medal, held to-day, terminated in favor of the Willard Club by 4 birds, the score standing 80½ against 76½. These two scores are the highest that have been made in any match since the tournament held here in April last. The singles are thrown at 18yds, rise and doubles at 15yds., all from 5 traps 3yds apart, and direction of each trap changed as it is refilled. A challenge has been received from the Bethel Club and accepted.

Willard Club—Portland.

	Singles.	Doubles.
McKenny	1111132111— 9	10 10 11 01 10—15
Hall	1211111111— 9½	11 01 11 11 11—15½
Todd	1110111111— 9	10 11 10 00 10—14
Randall	1111021211— 8	11 11 00 10 11—15
Chandler	1111111111—10	11 01 11 11 10—18 —80½

Androscoggin Club—Lewiston.

	Singles.	Doubles.
Nason	1111111110— 9	10 11 11 11 01—17
Donovan	1111102121— 8	11 11 11 11 11—18
Pettengill	0011101000— 4	00 10 11 10 11—10
Curtis	2111111211— 9	11 11 10 11 10—17
Shaw	1100110211— 6½	11 10 11 11 10—14½—76½

T. B. DAVIS, Referee.

Canoeing.

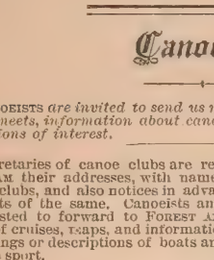
CANOEISTS are invited to send us notes and full reports of cruises, club meets, information about canoeable waters, and other communications of interest.

Secretaries of canoe clubs are requested to send to FOREST AND STREAM their addresses, with name, membership, signals, etc., of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to FOREST AND STREAM their addresses, with logs of cruises, maps, and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.

FIXTURES.

July 4, 5, 6.—Rondout C. C., Camp at Esopus Island.
July 9 to 15.—Chicago C. C., Annual Cruise.
July 14.—Allegheny C. C., Cruise at Conneaut Lake.
July 19.—Chicago C. C., First Annual Regatta.
July 24 to 26.—Lake George Meet, Lorna Island.
Aug. 1 to 15.—A. C. A. Meet, Grindstone Island.

OSHKOSH C. C.



COMMODORE, A. M. Kaas; Vice-Commodore, F. H. Gary: Secretary, W. J. McKoy; Executive Committee, W. Sessions, Otto Schloerb. Organized March 22, 1884. Signal, pointed burgee, blue field with white letters.

RACES AT LOWELL.

THE annual regatta of the Vesper Boat Club, held on the Merrimack River at Lowell, Thursday evening, June 26, included two canoe races, which developed quite as much enthusiasm as the rowing contests. The first was for single canoes, with double-bladed paddle. Course, one-half mile, with turn. Four canoes entered and paddled a pretty race, all keeping well together and finishing as follows: Howard Gray, Stella Maris, first; Paul Butler, open cedar, second; Frank H. Pullen, Birdie Kane, third; Joseph Leatham, Stella Maris, fourth. Time, 5m, 52s.

The second race was for open tandem canoes, using single blades. The club ought to have turned out at least ten canoes in this class, but most of their owners foolishly declined to enter for fear of defeat, and only two crews contested, the leaders having it all their own way and paddling a splendid stroke. Course, one-half mile, with turn. Result as follows: E. S. Sherman and C. P. Nichols, Adirondack, first; J. C. Davis and Howard Gray, Peterborough, second. Time, 5m, 10s. There were no sailing races. After the regatta there was a pleasant reception in the boat house, which was tastefully illuminated. Dancing from 8 till 11.

THE MEET AT GRINDSTONE ISLAND.

IN FOUR weeks more the fifth annual meet of the American Canoe Association will be held at Grindstone Island, in the St. Lawrence River, and it will, without doubt, exceed in size any previous one. The spot is the most beautiful as well as the most central yet selected, near to Canada, a day's ride from New York and the East, and readily accessible by way of the lakes from the West. Those who have attended previous meets are certain to be present this year, if possible, as well as many who have lately joined, but besides these there are a large number to whom the meet offers every opportunity for a cheap and pleasant vacation.

Although firmly established in the Middle and Eastern States, the Canoe Association, as yet, numbers few members in the West, while its aims and objects are but little known to outsiders not interested in canoeing. The former class, considering the distance too great to attend the meet, have heretofore held aloof, declining all invitations to join the Association, and have gone on alone without any union among themselves. Of course, it is impossible, even in these days of fast travel, for them to come to an Eastern meet every year, or for Eastern men to go far West, but they need not keep out of the Association for that reason. We have in the present Canoe Association a well-organized machine for the collection and exchange of such knowledge as is indispensable to all cruisers, whether by canoe or other craft, which machine is willing and able to extend its labors to any locality willing to render help in turn, and if the Western canoeists will but join, the services of the secretary are as much at their disposal as with members nearer to him.

As concerns the meet, a plan has already been decided on of dividing the Association into several sub-divisions of convenient size, each owing allegiance to the general government, but having its own funds, local self-government and officers, and annual meet, the offices going to each division in rotation, while each meet will, in turn, be the main Association meet, at which the officers will be present, and all business transacted.

By this plan all will be equally represented, each locality having a meet of its own, attended by some members from other divisions as well, thus securing an interchange of ideas and a further binding together of the different divisions. Each division would have to contribute its proportion toward such general expenses as the publication of the annual book, beyond which they would manage their own finances and be independent of the other divisions.

This plan can be put into operation at any time, but the proper occasion to introduce it will, of course, be at the business meeting at the camp. All that is needed is for Western canoeists to take the matter up, let them be as fully represented as possible at Grindstone Island, where the entire matter can be discussed and settled. Every club, large or small, no matter where located, should endeavor for its own sake, to have one delegate at the meet, who will go there to represent the club, and who will be prepared, on his return, to report to the club what he has seen; canoes, rigs, fittings, all those numerous details brought out by so large a number camping together, and this is most important to the younger clubs in the smaller cities, who have little opportunity of knowing what is being done by canoeists generally.

Besides active canoeists there is another class to whom the meet is open, but who as yet have availed themselves but slightly of the privilege—those who, though not canoeists, are fond of camping and wish to spend a short vacation in the woods. Every year a few strangers visit the camp by accident in this way, and some of them have become enthusiastic canoeists. All such are heartily welcome; there is room for them, and to them the A. C. A. camp offers peculiar inducements. No guides are necessary, the expenses are but trifling and there is less of the drudgery and hard work of roughing it in a large camp organized as this one is than where a small party go into the woods alone, a very important consideration to amateurs whose experience is confined to a week or two every year, and who are unfitted to bear the hardships attendant on camp life in the wilderness. All such are heartily welcome to the camp. Whether canoeists or not they will meet with a cordial reception, and we hope to see plenty of new faces next August.

A RIVER AND COAST CRUISE.

LEAVING Deer Leap camp at the breaking up of the Merrimack River canoe meet, Monday morning, June 16, canoes Chemaun and Clytie, A. C. A., cruised around to Salem, via Merrimack and Plum Island rivers, Ipswich Bay, Squam River and Canal, Atlantic Ocean and Salem Harbor. The trip occupied three days and proved highly enjoyable, notwithstanding the fact that head winds were encountered all the way after leaving Newburyport, and much of the distance was paddled against adverse tides, while a heavy sea was running along the coast as the result of continued southeast winds. Of the canoes one, an Everson Nautilus of 32-inch beam, was strictly a salt-water boat, having cruised extensively on the open ocean, and carried two large lateen sails of a most beautiful pattern and admirably suited to rough water. The other, a smaller and lighter Birdie Kane of 27-inch beam, was also rigged with two small lateens and proved quite as steady on the open sea as on the calmer waters of the river at home. Like all Racine boats, she was, of course, strong and tight. Both carried canoe tents and afforded very comfortable sleeping quarters at night, while the model cooking outfit of the former and the camera which accompanied the latter also added to the pleasures of the cruise.

The six miles to Lawrence were traversed leisurely under sail, in company with a Stella Maris, which had a loaded open canoe in tow, and a double cruiser bound for Haverhill. Persons familiar with the river below Lowell need not be told of its beauty; wooded bluffs, alternating with open reaches and everywhere abounding in the picturesque to a marked degree. At Lawrence there was a stop of over an hour, to repair damages sustained in running Hunt's Falls, and inspect the fishway at the dam.

The lock at the entrance of the northern canal was entered shortly after noon, and of course the three canoes attracted much attention from persons in and about the mills. Three more locks at the end of the canal lowered the boats a good many feet, and they finally emerged upon the river with a clear course to the sea. The wind now became fickle and squally, but sails were hoisted and occasionally proved of service. Two or three miles were passed, when suddenly a splash was heard, and the two leading canoeists turned to see their Haverhill friends climbing over the side of their canoe with an evident desire to inspect its keel. They had unwisely fastened the sheet of their sail and when struck by a squall capsized. But they were soon towed ashore, wrung out, put together again, and the fleet proceeded under paddle, with a hearty laugh all around.

Running Mitchell's Falls afforded some fine sport—swift water with little danger of striking rocks—and the canoes were soon down to the limit of tide-water. Sails were again hoisted, after a refreshing drink at a cooling spring, and the fleet advanced in good style. Arriving there, good-bye was said to the moistened crew of the Gyp, and the other two canoes sailed on side by side, catamaran fashion, to Groveland Bridge, where milk was procured and a lovely camp ground selected just below at an early hour. A grassy bank, sheltered by stately trees and commanding a fine view of the river up and down, offered an inviting resting place for the canoes, which were quickly hauled out, propped up side by side, and the little canoe tents pitched over them. Supper over, there was time to loll about and chat with a couple of visitors before dark, after which came sound and refreshing sleep in the canoes.

During his brief stay at the canoe meet, Mr. John Boyle O'Reilly, who has done considerable canoeing, in addition to seeing a great deal of the world in other ways, let fall a remark which sounded the keynote to the whole sport of canoeing. "Canoeists," he said, "should never be in a hurry." And to this may be added the advice, camp early. There is always a temptation, when on a cruise, to keep on and add a few more miles to the day's score. But it doesn't pay. Darkness and dampness quickly gather; preparations for the night are hastily made, and the result is neither satisfactory nor enjoyable. Five, or six o'clock at the latest, should find the canoeist settled in camp, with ample time to cook and eat his supper and arrange for turning in. Those who habitually put up at hotels or farm houses may discard this advice, but they are always at the mercy of others, and lose much of the charm of canoeing. Mention has already been made of the model cooking outfit carried by the Chemaun. To this and its skillful manipulation by the skipper was due much of the pleasure of the cruise. The little stove, which everywhere attracted attention, was made of sheet iron, hinged to fold flat and stow away into a small sack. When set up with funnel attached a very little wood served to quickly cook a meal, three holes on top accommodating pot, kettle and frying pan all at the same time. Then the cooking utensils, plates and cups were all of granite ware, which will not rust and is easily kept clean, while the cooking ingredients were held by glass jars, fitting compactly into small boxes—the whole complete, convenient and portable.

Tuesday morning opened fair, with promise of a delightful day. In fact, the weather throughout the trip was all that could be asked by the most fastidious. The camp was photographed, breakfast eaten, and at 7:30 the canoes set out under paddle with a favorable tide. Everywhere the scenery was fine, and the river gradually widened as it proceeded. At Pleasant Valley there was a stop for a swim, and from this point the fleet proceeded under sail. The old chain bridge was photographed from Eagle Island, and shortly after the canoes pulled up at a wharf in Newburyport, while their occupants went ashore. Once more afloat, lunch was eaten in the canoes, while sailing on to the mouth of the river. Arriving there an attempt was made to cross the bar and run down the coast outside of Plum Island, but a strong tide had by this time set in, and although Chemaun succeeded in getting pretty well out, Clytie gave it up after trying vainly for twenty-five minutes, and the two paddled back to the entrance of Plum Island River. The tide was now favorable, but wind dead ahead, so that paddling was hard work, and it was nearly dark when the canoes were finally worked around to their destination on Ipswich Little Neck. The course inside of Plum Island was through a pretty stretch of level marsh on one side, with hills of sand on the other, while nearly all the way the surf could be heard breaking on the beach outside. The last half mile was paddled against the tide at the mouth of Ipswich River, and the paddlers were prepared for a solid sleep in a summer cottage owned by the captain of the Chemaun.

Starting early on the following morning, the canoes were soon out side, past Ipswich light and tossing on a ground swell in the bay. Sails were set, but the light wind was still dead ahead, and a "spruce breeze" became again in order. Coasting along within a half mile of shore, and sighting occasional seals, Cape Ann loomed up in the mist ten miles away at the left, and after crossing the mouth of the Essex River, course was laid for the Squam, where a strong ebb tide lent aid to the wind in opposing progress and frequent shoals were encountered. Squam River is at times a pretty stream, winding a devious course between rocky shores capped by summer cottages, but at low water it dwindles to a mud flat, and the voyager who strikes it when the tide is nearly out is sure to come to grief. So it happened in this instance, and after a hard passage, with frequent grounding, the canoes were at length hauled out on a float at the first bridge and left to await the turning of the tide. A two hours' wait followed, admitting of a walk to Gloucester and dinner in town.

By 2 o'clock the water had risen a little and was steadily deepening by the incoming tide, but it still failed to float the canoes, and they were dragged to the entrance of the canal connecting Squam with Gloucester harbor. Here a tremendous tide rip had to be stemmed, and the passage through was slow and tedious. Following came a pleasant paddle across the harbor, passing Stage Head, Field Rocks and Muscle Point, and going outside of Norman's Woe Rock. When off Eastern Point and fairly out of the harbor the canoes were on the open ocean, and found a heavy sea running, the result of a southeast wind which had been blowing for several days.

This was the Clytie's first experience in rough water and lying in the trough it was necessary to head her up to each roller as it came on. But she rode them buoyantly and shipped less than a pint of water while on the open sea. Chemaun kept well out, with sails set, but both settled down for a hard ten miles' paddle along the coast in a broiling sun. The waves were beating high against the rocks, but outside the rollers only needed attention. Ketule Island and Great Egg Rock were left to starboard and the course continued past Magnolia and Manchester-by-the-Sea, the great Masconomo House forming a striking landmark at the latter place. At last the Clytie, which had kept well in and led thus far, worked in behind House Island, at the mouth of Salem Bay, just as the wind began to freshen, but going outside of Little Misery she got into a stronger wind which kicked up a nasty sea. The skipper was soon wet from the shoulders down and water began to come aboard pretty fast, but a few vigorous strokes put the canoe around a point into calmer water just as the other craft came up inside. The crew of the Chemaun seemed fresh and quite at home, but his companion was tired, wet and a bit discouraged, so both concluded to run around under the shelter of Great Misery Island and camp for the night rather than put in four or five miles more hard paddling up to the city. A quiet harbor was found, when the canoes were beached, hauled up and unloaded. Then the voyagers called at the house of Mr. Daniel Neville, a genial old gentleman who lives on the island, and came away with milk and eggs for which the host generously refused payment. Quite a party, including several fishermen, came down from the house to inspect the boats, in which they took a lively interest, and before supper was over the twin lights flashed out from Baker's Island. It had been proposed to sleep in the canoes but the offer of comfortable beds in the loft of a fish-house was accepted instead and all hands turned in.

Half-past three Thursday morning found preparations under way for an early start, and before 5 o'clock the canoes were headed up the harbor. A few boats were already out. Skirting along the north shore there was opportunity to see and appreciate the beauties of Beverly Farms, located on one of the finest bits of coast in the world. Everywhere the waters dash against ragged rocks on the crests of which stand costly residences amid beautiful grounds and supplied with all the luxuries which wealth can buy. Paddling leisurely on, Beverly light was left behind and one of the canoes crossed over to make a short call at the Willows. Continuing through Beverly Harbor, under the bridge and around into the North River, the canoes were finally landed in the boathouse at 7 o'clock, having completed a combined fresh and salt-water cruise of some seventy-eight miles without accident of any kind and furnished the means for a pleasant outing to both their crews. CLYTIE.

ANOTHER MOHICAN CHAMPION.

SATURDAY afternoon, June 28, at 5 o'clock, the first race was called for the new challenge prize offered by Capt. R. W. Gibson to his club—a silver badge, designed by him and executed by Burgess, of Albany, showing a canoe with a large lateen sail surrounded by a circle, and hung to a bar, with the word "champion" engraved on it, and the monogram M. C. C. A small white streamer goes with it to be carried at peak so long as it can be kept. Considerable interest is shown in the prize and the contests will be very keen, although business engagements prevented several entries in this, the first race. Sail is limited to 75ft., ballast to 75lbs.; course about three miles, triangular or to windward and return; A. C. A. sailing rules; to be sailed in two hours or no race; winner not to be compelled to sail on another challenge in less than a month.

The Snake did not enter, her owner acting as judge on this occasion. The entries were: Thetis, P. M. Wackerhagen; Lasca, George H. Thacher; Uncas, Henry R. Pierson, Jr.; Fior da Lice, B. Fernow. The start was made at 5:09½, with a light south wind, and the first stretch to the north was against the last of the ebb tide. The course selected was up from the upper bridge to the second buoy and return, a little short of three miles. Thetis and Lasca alternately led up, the latter rounding the buoy first by about one minute. Coming to windward, however, Thetis got in front, making long tacks from shore to shore, while Lasca, having found a stream of breeze on the west side kept in it by judicious short tacks and soon came to the fore again. Uncas was close behind until the windward work began, when the greater experience of her antagonists enabled them to make a duel of it. Thetis lost all her advantage about half way back and Lasca came in prettily at 6:32:45, Thetis 6:34; Uncas was a good third and Fior da Lice retired early in the race.

Before the finish eight or ten canoes had got out and the river was gay with white wings. Mr. Van Vechten had his new Rushton afloat, a very fine Ellard, the latest arrival. There was "considerable thinking" over the result, we had all thought that Thetis, the Newburgh winner, had an easy task. Mr. Thacher has been making such a dude boat of the Lasca, with nickle plating where other Mohicans have brass, and screw clamps where we have bits of string, that we had adjudged him the ornamental duties, still he gave us a warning of what was coming the first day he was out with us, with a No. 8 lateen in a squally west wind. The Lasca carried a batten settee like the Snake's, 52ft. and about 14ft. in dandy; Thetis a trifle more. This shape sail is a favorite already, and seems likely to check our hitherto continuous experiments. Another Mohican is ready to carry the turtle to the front and half a dozen are waiting for the next chance to prove him. SNAKE.

A LONG CRUISE IN A SMALL BOAT.

"I BUILT that boat myself in Sanford, Florida, last December, and since then have traveled fully 2,000 miles in it. I have lived and slept in it, and there is the sleeping apartments of myself and crew." As he said this the speaker pointed to two small covered apertures on each side of the centerboard of a cat-rigged batteau lying at Waters's wharf. The batteau was but 19ft. long and 4ft. 10in. beam. "She draws 7in. light, but when we are in she goes down to 11in.," continued the speaker, who was Mr. George Ilis, a builder, of Akron, O., who went to Florida last fall to escape the rigors of a Western winter. He was accompanied by Walter Scott, of Mystic, Conn., who was sailing master of the frail-looking craft, in which Mr. Ilis, Scott and a *Sun* reporter stood yesterday, with barely room to turn around in the stern sheets.

Mr. Iles gave *The Sun* reporter an interesting account of his travels. "In Florida," said he, "transportation lines are few and far between, and specially so if you desire to thoroughly penetrate the interior waterways with which the State abounds. It was because of this that I built this boat. I started from Sanford last December, and followed the St. John's River to Lake Harney. I then had the boat hauled overland a distance of eighteen miles to the Indian River, which runs parallel with the ocean. I struck the Lucia River, and thence through Jupiter Sound to Jupiter Inlet. There I procured the services of a half-breed Indian to pilot me through the Everglades, a distance of twenty-eight miles, to Lake Worth. Progress was slow, for we had to pole all the way. I spent three delightful weeks at Lake Worth in the month of January, where we were daily regaled with ripe tomatoes, cucumbers and other vegetables. I returned by the same route to Rock Ledge, on the Indian River, and again I had the boat carted three miles across the country to Lake Poinsett, the head of navigation on the St. John's River and 105 miles from Lake Harney. The only inhabitants of that station were alligators. Not a person or animal were to be seen in that vicinity. I then returned to Sanford. I again left it on March 14 for Baltimore. The St. John's River was followed to the bar, and after passing through Mud and Nassau sounds I arrived safely at Fernandina. I then skirted the coast to Cape Roman, in South Carolina, and then had 150 miles of the open sea to contend with. Of this stretch we made 76 miles in one day. We crossed heavy breakers at New Topsail Inlet, which was the most dangerous of our whole experience, but were repaid by a good haven inside the mouth of New River. Passing through Pamlico and Albemarle sounds we entered Dismal Swamp Canal and reached Norfolk. On the route we spent several days at a time in various places, sometimes windbound or making investigation of the country."

Mr. Iles will sell his boat here and leave for his home in Akron tomorrow night. He has on board some beautiful specimens of preserved pelicans, water turkeys, cormorants, ivory bills, curlews, pyles and loons, all of which he will have stuffed upon his arrival home. He has besides many curiosities gathered on his long trip.—*Baltimore Sun.*

ROYAL C. C.—The annual long paddling race, from Teddington to Putney, took place on Saturday last. The entries were S. Fulcher and Claud Scott. Scott took the Middlesex shore, and they got off to a very good start. Fulcher was first to show in front, and at Eel Pie Island was about clear. The pace then became very hot, and Scott drew up once or twice, but could not get level, and Fulcher passed Richmond Bridge several lengths to the good. At Isleworth Scott had somewhat improved his position, but it was his last effort, as in Zion Reach Fulcher drew rapidly away, and was about one hundred yards ahead at Kew Bridge. Before reaching Barnes Bridge Scott gave up, and Fulcher paddled to the Thames Boat House alone, reaching there at 5:10 P. M. The wind was ahead in nearly all the reaches, and especially strong in Zion Reach and off Chiswick. On Saturday, the 21st inst., there will be a special race for cruising canoes, when, with a view to bring out the all-round qualities of the craft, one-half of the course will be sailed down wind, and the remainder paddled back to windward. It is hoped that all members having canoes of this class will endeavor to enter for this event.—*London Field, June 14.*

N. Y. C. C.—The race for class A canoes that was not finished for lack of wind on June 21, was sailed on June 28, over the same course. Of the three entries, Mr. Burchard was absent, and the water was too rough for Mr. Fraser's little open canoe, so Mr. Munroe, in the Psyche, had a sail over. About fifteen members will go to the August meet, by way of the Ontario and Western Railway. The new uniforms of the club will soon be ready. They are of a very dark green; Norfolk jacket, knickerbockers, long stockings, and hat of one color. Mr. Burchard, of the Siren, will shortly start on a long cruise with Mr. Stoddard. A series of races are talked of for the summer and fall, both sailing and paddling.

PELICAN C. C.—On June 14, thirteen members of the Pelican C. C. with two visiting men, met at Weirs, N. H., and launched their six canoes in Lake Winnepesaukee. They paddled to Manchester, camping out nights and doing their own cooking. At Manchester all the party went home except two Eastern members, who continued on to Haverhill, Mass., camping one night at Deer Leap Falls, the scene of the Merrimack River meet of the 14th and 15th. The members of the Vesper Boat Club were very kind to the two Eastern members, and received them with a cordiality entirely unexpected among strangers. —WENONAH.

DOWN THE CONNECTICUT.—Messrs. L. R. Ingraham and L. Q. Jones, both of the Hartford C. C., arrived here at 7:45 P. M. Sunday in Mr. Ingraham's canoe, the Rambler. They left Hartford at 4 P. M. Saturday, staying over night at Essex. The canoe is 16ft. long and carries two lateen sails, anp is as trim and pretty a craft as one often sees afloat. They hauled her out and stowed her away at Capt. Kelly's boat house, where she is to remain for a few days while Mr. Ingraham takes a trip inland. Mr. Ingraham is connected with the Gatling Gun Company of Hartford.—*New London Day, June 30.*

NEWTON BOAT CLUB.—At the annual regatta of this club on Saturday, June 28, rowed on the Charles River, at Boston, there were two races for canoes, one for birch barks, in which F. T. Burdett and W. W. Cole paddled against J. M. Jennison and Thos. Cotter, distance one mile. The former crew won after a close race, in 11m. 39s. In the Rob Roy race J. Fanning won, beating E. N. Markham, Fred Hervey and Otto Jost.

PERSONAL.—Capt. S. D. Kendall is building several boats of various kinds at Tarpon Springs, Fla. One of his latest is a sharpie, 33ft. over all, 8ft. 10in. beam, 18in. draft; 900ft. of canvas in lower sails, yawl rig.

CHICAGO C. C.—Two gold badges have been presented to the Chicago C. C. as prizes for their races of July 19. All the boats of the club will be entered.

Yachting.

FIXTURES.

Secretaries of yacht clubs will please send early notice of proposed matches and meetings.

July 4.—Beverly Y. C., Monument Beach, Sweepstakes.
July 4.—Larchmont Y. C., Annual Open Matches.
July 4, 5, 6.—Quaker City Y. C., Corinthian Cruise.
July 4.—Hull Y. C., Review and Annual Cruise, five days.
July 4.—Boston, open matches, City Point.
July 5.—Beverly Y. C., Monument Beach, Championship.
July 9.—Beverly Y. C., Marblehead, First Championship.
July 12.—Boston Y. C., Second Club Match.
July 12.—Hull Y. C., First Club Match.
July 19.—Hull Y. C., Ladies' Day.
July 24.—Eastern Y. C., Annual Cruise.
July 26.—Beverly Y. C., Nahant, Second Championship Match.
July 30.—Quincy Y. C., Third Match.
Aug. 2.—Hull Y. C., First Championship.
Aug. 4.—Quaker City Y. C., Review and Harbor Cruise.
Aug. 9.—Boston Y. C., Annual Matches.
Aug. 11-25.—Quaker City Y. C., Annual Cruise in Chesapeake and Delaware Bays.
Aug. 16.—Salem Bay Y. C., Open Matches.
Aug. 16.—Hull Y. C., Open Matches.
Aug. 23.—Boston Y. C., Third Club Match.
Aug. 23.—Beverly Y. C., Open Match.
Aug. 26.—Beverly Y. C., Special, Marblehead.
Aug. 28.—Quincy Y. C., Fourth Match.
Aug. 30.—Hull Y. C., Second Championship Match.
Sept. 3.—Hull Y. C., Third Championship Match.
Sept. 4.—Salem Bay Y. C., Second Championship Match.
Sept. 6.—Beverly Y. C., Marblehead, Special Match.
Sept. 11.—Quincy Y. C., Last Race.
Sept. 11.—Brenton's Reef Challenge Cup.
Sept. 13.—Boston Y. C., Ladies' Day.
Sept. 13.—Boston Y. C., Fall Matches.
Sept. 14.—Quaker City Y. C., Review and Cup Race.
Sept. 28.—Quaker City Y. C., Review and Harbor Cruise.
Oct. 5.—Quaker City Y. C., Closing Review and Cruise.

BEVERLEY Y. C.

THIS club has arranged the following series of matches for the summer: July 4, Monument Beach, open catboat sweepstakes; July 5, Monument Beach, first race for Buzzards Bay championship; July 9, Marblehead, first championship regatta; July 26, Nahant, second championship regatta; Aug. 16, Swampscott, third championship regatta; Aug. 23, Marblehead, (probably) open matches; Sept. 6, Marblehead, fall matches. The dates of the open regatta at Monument Beach and the last two races for the Buzzards Bay championship are not yet decided upon.

The first of the above—an open sweepstakes for catboats only—will be sailed on Friday, July 4, off Monument Beach, starting at 12 M., under the following conditions: Entrance fee, $5 for each yacht. All entrance fees, after deducting expenses, will be distributed in first and second prizes. Second prizes will only be awarded where more than two yachts start. These prizes will be sailed for with the time allowance, and under the rules of the New England Yacht Racing Association. The start will be flying, yachts crossing a line between the judges' yacht and Tobey Island buoy, No. 2. Four guns will be fired for the start, at intervals of five minutes. The first, a preparatory gun, at 12 o'clock, when club flag will be lowered and hoisted again at second gun. The first class will start between the second and third guns; the second class between the third and fourth guns, and the third class at the fourth gun, also being allowed five minutes for starting. A fog horn may be used instead of a gun. Yachts, on their return, will pass either way between the judges' yacht and Tobey Island buoy No. 2. In case of unfavorable weather, the regatta will be sailed on the following Monday.

Measurement and allowance—The racing measurement shall be length upon the water line, plus one-fifth overhang aft. Yachts to be measured with two persons and no more on board. Time shall be allowed for difference of measurement, according to the tables of allowances of the Beverly Y. C. classes. The first class shall include all cat rigs measuring over 24ft. sailing measurement; the second class shall include all cat rigs measuring over 21 and not over 24ft. sailing measurement, and third class all cat rigs 21ft. and under, sailing measurement. All yachts will be required to sail in their respective classes. Sails—Yachts will carry mainsail only; no means except sails shall be used to propel a yacht. Crews—Yachts to be allowed to carry one man for every five feet, and fractional part thereof. Ballast—No trimming by dead weight or throwing ballast overboard allowed during the race. Entries—Entries may be made by letter addressed to George H. Richards, Tobey Club, Monument Beach, or in person at the Tobey Club, so as to be received not later than 8 P. M. July 3, giving name, name and residence of the owner, and measurement of yacht. Each entry must be accompanied by $5 entrance fee. Yachts can be measured by applying to Mr. Richards, at the Tobey Club, at 9 A. M. on the day of the race. Signals—Racing yachts will be furnished with numbers to be shown at the start and finish, and with pennants to be fastened to the leach of the mainsail, and to be carried throughout the race; blue for first class, red for second class and yellow for third class. Protests—All protests must be made to the judges within half an hour after the race, and all questions will be decided by them in accordance with the rules of the Beverly Y. C. Time of race—Race must be made by one boat in first and second classes at rate of two and three quarter miles an hour, in third class at rate of two and a half miles an hour. Courses will be indicated by white numbered flags, shown from judges' boat.

Courses for the first and second classes.—No. 1. From starting point, leaving Bird Island Buoy No. 13 on port hand; to judges' yacht, eleven miles. No. 2. From starting point, leaving Scraggy Neck Buoy No. 10 on port hand, to judges' yacht, eleven miles. No. 3. From starting point, leaving Scraggy Neck Buoy No. 10 on starboard hand; Bird Island Buoy No. 13 on starboard hand, to judges' yacht, eleven miles.

Course for third class.—No. 3. From starting point, leaving Black Buoy No. 3 on starboard hand; Abial's Ledge Buoy No. 1 on starboard hand, Dry Ledge Buoy No. 12 on starboard hand, to judges' yacht, seven miles. No. 4. From starting point, leaving Dry Ledge Buoy No 12 on port hand; Abial's Ledge Buoy No. 1 on port hand; Black Buoy No. 3 on port hand, to judges' yacht.

The first race for the Buzzard's Bay championship will be sailed on July 5, at 1 P. M. at the same place, and will be open to members' sloops under the following conditions: The first class to include all sloops not over thirty feet water line. The second class to include all cats over twenty-four feet sailing length, and not over thirty feet. The third class to include all cats of twenty-four feet and under. Two prizes will be given in each class, provided more than two yachts start. These prizes will be sailed for with the time allowance of the club. A champion pennant will be awarded in each class to the boat making the best actual time, to be held till the next race, and becomes the property of the yacht winning it the greatest number of times during the season. In case of unfavorable weather, the race will be sailed the following Monday. A one-gun flying start will be used. Yachts crossing a line between judges' yacht and a stakeboat moored off the north side of Tobey Island, in Phinney's harbor.

Starting Signals—At 1 P. M. a preparatory gun will be fired and the club flag lowered. At 1:05, club flag hoisted and a second gun fired, when the first class will start, being timed from the gun. At 1:30, third gun will be fired, second class to start. At 1:15, fourth gun will be fired, third class to start. No yacht to cross the line before the gun is fired. Should any gun be accidentally delayed, the succeeding guns will be fired at intervals of five minutes after that gun. Yachts are requested to carry their private signals at the peak. Yachts on their return will pass between the judges' yacht and the stakeboat. A white flag, with number of the course, will be shown on the judges' yacht. Time of Race—Race must be made by one boat in first and second classes at rate of 2¾ miles an hour; in third class at rate of 2½ miles an hour.

Courses—No. 1. From starting point, leaving Bird Island Buoy No. 13 on port hand; Scraggy Neck Buoy No. 10 on port hand to judges' yacht, 11 miles. No. 2. From starting point, leaving Scraggy Neck Buoy No. 10 on starboard; Bird Island Buoy No. 13 on starboard, to judges' yacht, 11 miles.

The first championship matches will be sailed off Marblehead on Wednesday, July 9, at 12 o'clock, M. Handsome prizes will be awarded in each class. A second prize will be given provided more than two boats start. The championship pennant will also be offered in each class, without time allowance, to be held till the second championship match, and to become the property of the yacht winning the majority of races. A special prize, for first class schooners, will be offered, provided two boats start; should only one schooner start, all first class boats will sail together. Classes—Yachts over 23ft. 6in. sailing length, and not over 30ft. waterline, to form first class; over 19ft. 6in. sailing length, and not over 23ft. 6in. the second class; 19ft. 6in., and under, the third class. In case of unfavorable weather, the regatta will be sailed the following day. A one-gun flying start will be used. Yachts will cross the line between the judges' yacht and a stakeboat moored off the Eastern Y. C. house. Four guns will be fired for the start, at intervals of five minutes. The first, a preparatory gun, at 12 o'clock. The first class will start at the second gun; the second class at the third gun, and the third class at the fourth gun. The club flag will be lowered at the first gun, and hoisted agair at the second gun, and yachts must not cross till gun has been fired. Should any gun be accidentally delayed, the succeeding guns will be fired at intervals of five minutes. Yachts on their return will pass between the judges' yacht and the stakeboat. Yachts are requested to carry their private signals at the peak. As soon as the courses are decided on, white flags, bearing their numbers, will be displayed on the judges' yacht. No change of weight of ballast allowed on the day of the race in any class. Time of race—Race must be made by one boat in first and schooner classes, respectively, at rate of 3¾ miles an hour; in second and third classes at rate of 2½ miles an hour.

Courses for First and Schooner Classes.—No. 1. Leaving Red Buoy No. 6 on starboard; Bowditch's Ledge Beacon on starboard; Red Buoy No. 2 on Gale's Ledge on starboard; stakeboat anchored off SE. Breakers on starboard; Half-way Rock on starboard; Black Buoys Nos. 3 and 5 on port, to judges' yacht. 10½ miles. No. 2. Leaving Black Buoys 5 and 3 on starboard; Halfway Rock, stakeboat anchored off SE. breakers; Red Buoy No. 2 on Gale's Ledge; Bowditch's Ledge Beacon and Red Buoy No. 6 on port, to judges' yacht. 10½ miles. Courses for Second and Third Classes.—No. 3. Leaving Red Buoy No. 6 on starboard; Bowditch's Ledge Beacon on port; stakeboat off Curtis's Point on port; Black Buoys 7, 5 and 3 on starboard; Black Buoy on Selman's Berth on starboard to judges' yacht. 7½ miles. No. 4. Leaving Black Buoy on Selman's Berth on port; Black Buoys No. 5, 7 and 7 on port; stakeboat off Curtis's Point on starboard; Bowditch's Ledge Beacon on starboard; Red Buoy No. 6 on port, to judges' yacht. 7½ miles.

The races will be under the management of the Regatta Committee, Messrs. Geo. H. Richards, John Dane, Geo. B. Inches and W. Lloyd Jeffries.

KNICKERBOCKER Y. C.—LADIES' DAY.

MONDAY last was set apart by the Knickerbocker Y. C. as a Ladies Day, with the novel feature of a race in place of the customary sail, one-half the crew of each boat being composed of ladies. The grounds of the club were decorated with flags, and a large tent was erected in which dinner was served after the race.

The yachts were divided into eight classes, the course for the first two being from a stakeboat off the club house to and around the buoy off Fort Schuyler and return, distance ten miles, that for the others being from the stakeboat to and around College Point buoy, thence around a stakeboat off Fish Point, and home to the starting point. The entries were:

FIRST CLASS CABIN SLOOPS.

Name.	Owner.	Mean Length. Ft.	In.
Undine	M. J. Greeley	30	10½
Flash	C. B. Barker	33	00
Demarest	C. Doughty	—	—
Waconda	Mayer & Doscher	—	—

SECOND CLASS CABIN SLOOPS.

Sea Robin	Pearl & Walters	23	09¾
Gil Blas	Smith & Leger	—	—

OPEN SLOOPS OVER 21FT.

Gracie	W. R. Morse	24	05
Mamie H	L. B. Lange	24	08½
Rosetta A	T. R. Smith	24	00
Nellie Thorp	J. W. Thorp	24	10

OPEN SLOOPS UNDER 21FT.

Maggie	A. Wagner	18	01

CAT-RIGGED, 25FT. AND OVER.

Nettie R	A. M. Fowler	28	06
Lizzie R	Vice-Commodore Onderdonk	31	00
Black Hawk	Alexander Christie	27	00

CAT-RIGGED, 21 TO 25FT.

Gilt Edge	Lefferts & Allred	23	05
Mayotta	J. K. Rosenquest	24	01¼
Adele	George Grieve	24	00
Narrioch	C. W. Voltz	21	05½

CAT-RIGGED, 17 TO 21FT.

Willie	R. Schilling	19	04½
Alert	William Quinn	17	04
Odette	W. D. Reed	19	06
Jean	Frank Thorp	—	—
Nimrod	McCormick & Martin	20	06
Susie B	A. A. French	17	07

CAT-RIGGED, UNDER 17FT.

Vaddie	W. A. Brady	16	06½

The race was started at 3:25 P. M., the wind being from southeast and ide nearly full. The times at the start were:

Rosetta A	3 25 41	Willie	3 31 18
Nettie Thorp	3 25 58	Odette	3 31 18
Demarest	3 26 21	Nimrod	3 31 31
Maggie	3 26 33	Lizzie R	3 31 38
Undine	3 26 57	Mayotta	3 31 41
Mamie H	3 26 59	Nellie R	3 31 50
Gracie	3 27 28	Jean	3 32 08
Sea Robin	3 27 44	Black Hawk	3 32 16
Narrioch	3 30 13	Vaddie	3 32 46
Susie B	3 30 29	Flash	3 32 49
Adele	3 30 44	Waconda	3 34 04
Gilt Edge	3 31 14	Gil Blas	3 41 41

All went down the wind for the buoy with booms to port, the leaders well bunched. At College Point buoy the Alert, running free, struck the Jean amidships, disabling her so that she was compelled to withdraw.

On the beat to the next mark, the gentler portion of the crews stood the showers of spray bravely, taking as great an interest in the race as the others, though the boats were tossed about and heeled under the fresh breeze, but the run home was quieter, the winners being Flash, Sea Robin, Nettie Thorp, Maggie, Lizzie R., Mayotta, Nellie and Vaddie. Gil Blas mistook the course, so was out of the race, and Sea Robin, Maggie and Vaddie had no competitors.

The times of the boats were as follows:

FIRST CLASS CABIN SLOOPS.

	Start.	Finish.	Elapsed.
Flash	3 32 40	5 07 59	1 35 19
Undine	3 26 57	5 04 53	1 37 56
Demarest	3 26 21	5 09 20	1 42 59
Waconda	3 34 04	Did not go course.	

SECOND CLASS SLOOPS.

Sea Robin	3 27 44	5 16 11	1 48 27
Gil Blas	3 41 41	Did not go course.	

OPEN SLOOPS, OVER 21 FEET.

Nettie Thorp	3 25 58	4 23 21	0 57 23
Gracie	3 27 28	4 25 39	0 58 11
Rosetta A	3 25 41	4 25 03	0 50 22
Mamie H	3 26 59	4 28 10	1 01 11

OPEN SLOOPS, UNDER 21 FEET.

Maggie	3 26 33	4 36 45	1 10 12

CAT RIGGED, 25 FEET AND OVER.

Nellie R	3 21 50	4 30 05	0 58 15
Lizzie R	3 31 38	4 27 26	0 55 48
Black Hawk	3 32 18	4 35 08	1 02 50

CAT-RIGGED, 21 TO 25 FEET.

Gilt Edge	3 31 14	4 35 37	1 04 23
Mayotta	3 31 41	4 34 29	1 02 48
Adele	3 30 44	4 34 53	1 04 09
Narrioch	3 30 13	4 40 48	1 10 35

CAT-RIGGED, 17 TO 21 FEET.

Willie	3 31 18	4 40 05	1 08 47
Alert	3 33 58	4 46 19	1 12 21
Odette	3 31 18	4 45 48	1 14 30
Nimrod	3 31 31	4 43 59	1 42 28
Jean	3 32 03	Disabled.	
Susie B	3 30 29	Not timed.	

CAT-RIGGED, UNDER 17 FEET.

Vaddie	3 32 46	4 43 59	1 11 13

Each lady of the winning crew received as a prize a silver bangle with the club flag in enamel on one side. After the race, dinner was served and the evening was spent in dancing, finishing with a display of fireworks. The committee in charge, to whose care and labor the success of the races is due, were Messrs. Morse, Varian, Mouton and Lichtenstein.

NEW JERSEY Y. C.

A MEETING of this club was held at the club house, Hoboken, on June 26. Reports of the Regatta Committee on the races of June 19, and of the Trustees on improvements, were read and accepted.

An open regatta will be held on Oct. 2, for the following classes of yachts:

Class A.—For all catamarans, 30ft. and over, entrance, $5; prize, $30 cash. Course from Communipaw—the lower end of Jersey City—thence to and around buoy No. 8½, Southwest Spit, leaving it on the port hand, and back to place of departure, finishing between the first dock at Communipaw and a stakeboat anchored abreast of it. The buoy on Robbin's Reef and the beacon on Romer Shoals will be kept to the eastward going and coming. Jib and mainsail only allowed. Time allowance will be calculated on the basis of one minute to the foot.

Class B.—All yachts of any size, cabin or open, from 26ft. and upward. Sloops under 30ft. will be restricted to jib and mainsail only; over 30ft. will be allowed working gafftopsails, and cutters may carry mainsail, working topsail, foresail and jib; entrance $3; prize, $30 cash. The course for this class will be the same as that of the catamaran class, excepting that buoy No. 13, off the Lower Hospital Island, will be the outer mark instead of buoy No. 8½ on the spit.

Class C.—All yachts, 21ft. and under 26ft.; allowed to carry jib and mainsail only; entrance, $3; prize, $25 cash. Course same as class B.

Class D.—All yachts under 21ft.; entrance, $2; prize $15 cash. Course, the same as noted for the other classes in the matter of start and finish, but rounding Fort Lafayette in the Narrows, as the outer mark, and keeping to the westward, going and coming, of the buoy on Robbin's Reef.

Instead of starting the yachts up the river at Hoboken, they will start from the Communipaw docks below Jersey City, avoiding the North River ferries. No shifting of ballast will be allowed in the races, and crews are limited to one man for every five feet of mean length. Entries may be made to any of the regatta committee, Messrs. E. W. Ketcham, 55 Liberty street; H. C. Dilworth, 563 Greenwich street; A. S. Barkelew, 19 Park Place. Entries may also be made at the club house, Hoboken. A steamer will accompany the race.

EASTERN Y. C. ANNUAL MATCHES.

FRIDAY morning of last week found a fine fleet of yachts, large and small, assembled in the pretty basin among the rocks, known as Marblehead Harbor. Schooners, cutters large and small, and sloops, with yachts' boats and dories afloat on every hand, the occasion being the annual matches of the Eastern Y. C. The oval bay, with quaint old Marblehead on one hand and the hills on the other, covered with pretty cottages, prominent among which is the club house of the Eastern Y. C., made a beautiful picture under the clear June sky.

The queen of all the fleet in size and dignity was Fortuna, just back from the New York races. Of her smaller sisters the most noticeable was the Harbinger, a new schooner lately completed for Mr. J. M. Forbes, by Lawley & Son, from designs by Mr. A. Cary Smith. Her planking is in two thicknesses, the inner skin being 1in. and the outer 2in., with canvas laid in crude turpentine between. New York was well represented by Bedouin, Ileen and Wenonah, none of the sloops, however, being present, while Huron, Hesper, Maggie and Shadow promised to make sport in the races, besides which were a large number of yachts not entered, but on hand to see the race.

The course decided on was No. 6 of the club courses, starting off Marblehead Rock, thence to Pig Rock Stakes, leaving them on starboard, and thence around stakeboat off Egg Rock, leaving it to port; thence to Half-way Rock, leaving it to port, and to the starting boat, leaving it also to port; then out around Half-way Rock again, and finishing between the stakeboat and Marblehead Rock, a distance of twenty and three-quarter miles. The wind throughout the day kept about E.N.E., and was of constant strength, at no time too much for clubtopsails, while the water was perfectly smooth. As the course lay spinnakers were carried from near the start to Egg Rock, six miles, then a beat to Half-way Rock, seven miles, and free again to the stakeboat, with a final beat of two and a quarter miles out to Half-way Rock again, and a run to the finish. The "racing length" on which the time allowance is computed is found by adding one-quarter of the overhang to the water-line length, two-thirds of which sum is then added to the extreme beam. By a resolution passed this year, however, the Regatta Committee may adopt the present rule of the New York Y. C., at its discretion.

The tug Confidence was ready in the morning at Marblehead Rock with the Regatta Committee, Messrs. Appleton, Jackson, Peabody, Haven and Goddard aboard, the members and guests of the club being on the steamer Twilight, in charge of Messrs. Blake and Thayer, which after calling at Salem for some members, arrived at the Rock at 11:45, by which time all were in position.

The entries were as follows:

FIRST CLASS SCHOONERS.

	Racing Length.	W.L.	Allowance, Allows
Fortuna, Com. H. S. Hovey	89.46	95.00	—

SECOND CLASS SCHOONERS.

Adrienne, J. C. Pfaff	61.67	—.—	10 44
Clio, E. C. Chase	65.26	67.95	9 02
Harbinger, J. M. Forbes	63.11	65.80	9 58
Rebecca, Geo. P. Upham, Jr	69.72	73.32	6 40
Sylph, A. C. Wheelright	50.00	47.42	17 47
Tempest, H. F. Whittier	55.18	54.32	— —

FIRST CLASS SLOOPS AND CUTTERS.

Addie, M. K. Abbott	60.47	59.40	11 31
Bedouin, Arch. Rogers	64.43	70.00	9 32
Hesper, W. H. Forbes	47.47	45.89	19 33
Huron, Wm. Gray, Jr	53.24	53.90	15 31
Ileen, Arthur Paddleford	56.89	66.00	13 27
Wenonah, James Stillman	55.88	60.00	14 01

SECOND CLASS SLOOPS AND CUTTERS.

Clytie, F. Cunningham	35.61	33.64	29 34
Hera, C. G. Weld	37.96	34 92	27 32
Lapwing, J. M. Forbes	36.57	35.60	28 32
Maggie, G. H. Warren	39.64	44.26	25 38
Shadow, John Bryant	37.38	33 71	28 02

At 11:55 the signal for the first class was given, Fortuna going over alone, neither Gitana, or Alice, starting at 11:58:23. At 12 M. the signal for the second class sounded, Harbinger getting away first at 12:02:11, Adrienne second. Tempest, Clio, Sylph and Rebecca all within their line, crossing with booms to starboard. The signal for first class sloops followed at 12:05, the limit being 12:15, but all were handicapped, Hesper leading at 12:11:23, Ileen and Wenonah over together at 12:11:39, Bedouin 12:11:54, Huron 12:12 and Addie at 12:12:51. All the cutters carried club topsails and full lower sail, Bedouin at once starting off through the weather of all for leading position. The second class were also handicapped, their signals being given at 12:15 and 12:20, and the boats crossing with Hera first at 12:16:04, Shadow 12:16:07, Lapwing 12:16:21, Maggie 12:17:06 and Clytie 12:17:12.

By this time the leaders were well down the wind with spinnakers set, Tempest being noticeable through hers, which was of a deep blue tint, contrasting strongly with the white sails; Bedouin, Ileen and Wenonah were all doing well, the first, well in advance, setting her spinnaker at 12:25, the other two following at once, while Huron and Hesper were two minutes later. At 12:30 Bedouin was still further ahead, Ileen and Wenonah slightly on her weather, and Huron, Hesper and Addie in a string behind, the latter evidently with no show against her younger competitors.

Even with so light a wind the run to Egg Rock was quickly made. Fortuna turning first, Clio second, then Harbinger, Adrienne and Rebecca, the judges' boat not arriving soon enough to time them. The rest were timed as follows: Bedouin 12:51:52, Wenonah 12:53:39, Ileen 12:55:20, Huron 12:56:06, Addie 12:57:40, Hesper 12:58:00, Maggie 1:05:16, Hera 1:05:25, Shadow 1:06:28, Lapwing 1:06:43, Clytie 1:08:56.

The beat of 7 miles to the next mark was very tedious in the light wind, the yachts being widely scattered, Bedouin having worked ahead of all but Fortuna, while Wenonah was trying for third place. The first to approach Halfway Rock was Fortuna, coming up with both working topsails set, main club topsail, and maintopmast staysail. Near the rock she was obliged to tack, while Bedouin, coming up with spinnaker boom all ready, made the mark without tacking thus lessening still more the distance between them.

The times at Halfway Rock were:

Fortuna	2 31 55	Shadow	3 09 18
Bedouin	2 35 40	Sylph	3 11 40
Clio	2 44 45	Hera	3 12 08
Harbinger	2 45 10	Clytie	3 15 22
Adrienne	2 48 10	Maggie	3 14 05
Wenonah	2 51 20	Addie	3 22 45
Huron	2 58 55	Lapwing	3 24 08
Ileen	3 01 50	Hesper	3 26 00
Rebecca	3 08 20		

Tempest gave up, not rounding the mark.

Sheets were eased off and spinnakers set for the short run in. Before the tail of the fleet was clear of the rock Bedouin was seen coming up gradually for the second turn, to leeward of Fortuna, but so far ahead that near the rock she stood across the latter's bows on

port tack, then tacked around the mark 2m. 30s. ahead of her, increasing it to 3m. 41s. on the short run home. Wenonah and Huron had, in the meantime, started back, working short tacks further up the bay, the former increasing her lead to the finish.

The times of the finish were as follows:

	Finish.	Elapsed.	Corrected.
FIRST CLASS SCHOONERS.			
Fortuna	3 52 48	3 54 25	3 54 25
SECOND CLASS SCHOONERS.			
Clio	4 09 52	4 06 34	3 57 32
Harbinger	4 12 08	4 09 57	3 59 59
Adrienne	4 18 46	4 16 01	4 05 17
Rebecca	4 45 05	4 41 14	4 34 34
Sylph	4 57 58	4 54 31	4 36 44
FIRST CLASS SLOOPS AND CUTTERS.			
Bedouin	4 49 07	3 39 07	3 29 35
Wenonah	4 07 07	3 57 07	3 43 08
Huron	4 18 21	4 08 21	3 52 50
Ilcen	4 20 25	4 10 25	3 56 58
Hesper	5 01 38	4 51 38	4 32 05
SECOND CLASS SLOOPS AND CUTTERS.			
Shadow	4 34 03	4 19 03	3 51 01
Hera	4 37 49	4 22 49	3 55 17
Maggie	4 43 46	4 28 46	4 03 08
Clytie	4 53 50	4 38 50	4 09 16
Lapwing	5 02 05	4 47 05	4 18 33

Fortuna wins first prize in her class, $250; Clio first in her class, $150, and Harbinger $75; Bedouin $150 and Wenonah $75, Shadow $75 and Hera $85.

MINES AND CUTTERS.

Editor Forest and Stream:

Last batch of papers reached our camp through several feet of snow in safety, and depend upon it they were read with avidity around our sheet-iron stove, with bacon and flapjacks pleasantly sizzling after a hard day's work timbering up 30ft. of shaft, which is to take us down to mineral and wealth, and of course finally evolve a full-fledged cutter. I was glad to find the candid admission quoted from the *Herald* in relation to the changes effected during recent years in model and rig, which promise to lead up to a final type of which all good sailors can be proud for other qualities than speed only. The letter or report signed by Com. W. H. Dilworth and Mr. E. A. Stevens, which you appropriately head "Another Blow at the Sandbaggers," is thoroughly on the right tack, and will not fail to influence for good the small classes about New York, in whose welfare I always felt special interest.

The hills and mountains in this neighborhood for miles around have been stripped so bare of timber for mining work that little or no game is to be met, though there is good trout fishing in Twin Lakes, some twelve miles away to the southward. I look forward with great expectation to the June races, and whatever the result may be, feel certain that the cutters will now receive full credit for their good qualities, whether they win or not. Racing has always a large share of luck in it, and this may go against the cutters as long as they are still in the minority. Leadville is pretty dull just now, recuperating slowly from sundry bank failures, but the future promises to see the mining industry put upon a stable and lasting basis. Success to FOREST AND STREAM, the first paper in America to make a specialty of yachting twelve months in the year.

C. P. KUNHARDT.

FLORENCE MINE, Leadville, Col., June 21.

LYNN CITY MATCHES.

A SERIES of open matches will be given by the city of Lynn on July 4, the races being started at 8 A. M. so as to allow the boats to enter the Boston open matches. The races are in charge of a committee from the city and the Lynn and West Lynn Y. C. The classes and prizes are as follows, the measurement being water-line length:

First class, all yachts 20 and not over 27ft. water-line; second class, all centerboard yachts 17 and not over 20ft. water-line; special class, all keel yachts 17 and not over 20ft. water-line; third class, all yachts 12 and not over 17ft. water-line.

The prizes are: First class—First prize, $25; second prize, $15; third prize, $10, and fourth prize, $5. Second class—First prize, $20; second prize, $15; third prize, $10, and fourth prize, $5. Special class—First prize, $20; second prize, $15; third prize, $5; there is no fourth prize for this class. Third class—First prize, $15; second prize, $10; third prize, $7, and fourth prize, $5.

The first course for first, second and special classes is from judges' line off club house to flagboat off Point of Pines, leaving it on port, thence to Western Lobster Rocks Buoy, leaving it on port, thence to judges' boat, passing between it and the flagboat; distance, five miles.

Second course for third class: From judges' line off club house to flagboat off Point of Pines, leaving it on port, thence to Sand Point Buoy, leaving it on port, thence to judges' boat, passing between it and flagboat; distance, three miles.

The following are the rules and regulations: No restrictions in regard to sails. Measurements shall be the length on waterline. In all other respects the rules of the New England Yacht Racing Association shall govern the race. The decision of the judges shall be final. All yachts intending to sail must be in position before 7:45 o'clock A. M. All yachts will come into line without regard to size as follows: First class between two flags bearing the number 1; second and special classes, between two flags bearing the number 2 and the third class between two flags bearing the number 3. A gun will be fired on the judges' boat at 7:45 o'clock A. M., which will be the signal for all classes to form in line. At 8 o'clock it will be fired again, which will be the signal for the starting of the first class. Five minutes later it will be fired again, which will be the signal for starting the second and special classes. Five minutes later it will be fired again, which will be the signal for starting the third class. The committee will consist of Alderman W. B. Moulton, Councilman F. E. Wright and D. H. Taylor for the city; W. B. Newhall, F. S. Newhall, Walter Hawkes and W. M. Rand for the Lynn Y. C., and B. W. Rowell, Lorenzo Poor, Charles S. Goodridge and William F. Walsh for the West Lynn Y. C. The judges are: For the city, Joshua C. Eldred; for Lynn Y. C., William B. Newhall, and Benjamin W. Rowell for the West Lynn Y. C. The judges' boat will be for the exclusive use of the judges, regatta committee, press and members of the city government.

TORONTO Y. C.—The Toronto Y. C. race for five-tonners on Saturday proved quite a success. A finer day could not have been chosen. A light breeze from the east enabled the yachts to cross the line with a free sheet, the course being from an imaginary line off the club house, out through the western channel, thence to a buoy off Gibraltar Point back again to the Queen's wharf, thence to a buoy off Fisherman's Island at the extreme east end of the bay, and back to the club house. There was a great deal of speculation as to the result of the race, owing to two of the boats entered being very closely matched, and both having new canvas just bent. The entries included the sloops Iris and Mischief, the double bugger Midge and the single bugger Mascot. The start was made at 3 P. M., and they all got off well together, with the wind directly aft, which enabled a large spread of canvas. The buoy at the Queen's wharf was rounded in the following order: Iris, Midge, Mischief and Mascot. After hauling their wind, the Iris gradually drew away from the rest of the fleet, and the Mischief took second place, and the buoy at the point was rounded—Iris, Mischief, Midge and Mascot, which positions were kept to the finish, with the exception of the Mascot, which gave up the race, she being too far behind to hope for a place. The Iris crossed the line a winner at 5:13:30, beating the Mischief by nine minutes and a half. The prize was a very handsome telescope, presented by the Vice-Commodore, Mr. John Cosgrave, and to be won three times before being retained, which will keep up the excitement for some time yet. It is proposed to have a race for standing keel yachts belonging to the club of seven tons and under on next Saturday, July 5, the prize a set of flags, presented by a member of the club.—*Toronto Mail, June 30.*

QUINCY Y. C.—The entries in the second match of the Quincy Y. C. on Monday were very few, but nine boats going over the course. The day was clear, with a light wind. The times were as follows:

	Length.	Owner.	Corrected.
FIRST CLASS.			
Queen Mab	22.08	E. L. Burwell	1 14 40
SECOND CLASS.			
Pet	20.01	J. W. McFarland	1 13 27
Spray	19.04	H. M. Faxon	1 16 55
Joker	20.05	George Coffin	1 17 46
Parole	18.10	H. S. Bowers	1 20 50
THIRD CLASS.			
Mirage	17.10	A. J. Clark	0 59 48
Rocket	16.07	A. F. Bass	1 03 18
Elsie	16 09	C. F. Hardwick	1 12 38

BOSTON Y. C. LADIES' DAY.—Saturday, June 28, was the first "ladies' day" of the Boston Y. C., and nearly three hundred ladies turned out to honor the occasion. A number of the club yachts were on hand in the afternoon, among them the schooners Adrienne, Brenda, Tempest, Princess, Lorelei and Alice, cutters Edna, Vayu and Ella May, sloops Echo and Nimbus, and the steamers Galatea, Annie S., Marianna, Gracie, Juella and Nereta. The ladies were taken on board the yachts and the fleet started down the Bay, with a light southwest wind, returning at 6 P. M. to the club house, where supper was laid, after which the evening was spent in dancing.

EASTERN Y. C. BOOK, 1884.—The club list of the Eastern Y. C. for this year shows a fleet of 92 yachts, composed of 13 steamers, 26 schooners, 26 sloops and 17 cutters, of which 37, or nearly 50 per cent. of the sailing craft are keel boats. Of the new vessels added this year, King Phillip, Rondina and Ileen are keel boats, and the Harbinger is a centerboard. The club numbers 456 active members, the officers being Commodore, Henry S. Hovey, schooner Fortuna; Vice-Commodore, J. Malcolm Forbes, schooner Harbinger; Rear Commodore, Wm. F. Weld, schooner Gitana; Fleet Captain, Jas. Parker; Secretary, Edward Burgess; Treasurer, P. T. Jackson; Measurer, Edward Burgess. Regatta Committee, Geo. A. Goddard, Daniel Appleton, E. B. Haven, Henry B. Jackson, Frank E. Peabody. The book contains a full signal code, rules for colors, signals, etc., and the acts of Congress pertaining to yachts, besides the signals of the club, and table of time allowances. We notice on page 92, under the letters M. and P. of the signal code, an expression that has evidently been overlooked by the compilers of the book.

L. Y. C. CLUB BOOK.—We have received from the Secretary of the Larchmont Y. C. the club book for 1884, a handsomely-printed little book, appropriately bound in white canvas. The list of yachts includes 114 boats, there being 10 steam yachts, 16 schooners, 8 cutters, 1 yawl, 32 cabin sloops, 24 open sloops and 23 catboats, the largest yacht, the Atlanta, being 250ft. long, and the smallest, the Mary, 15ft. 7in. The keels number 22 and the centerboards 82; nearly half the fleet being small jib and mainsail and catboats. The club has now 317 members. The clubhouse and anchorage are at Larchmont Manor, on the Sound, about fifteen miles from New York, the club owning a handsome clubhouse, billiard parlors, bathhouse, etc., while the harbor affords a safe anchorage for large vessels. Good courses are laid out on the Sound for the club races, the longest being twenty-eight miles. A neat map of soundings and courses is given in the book, besides tide tables, sailing regulations, instructions as to registry of yachts, United States rules as to lights and signals, and a colored sheet of the club signals.

THE SEA GULL ABANDONED.—The steamer Richmond, Capt. Crossman, which arrived at this port yesterday from West Point, Va., reports that on Friday morning, at 8 o'clock, off Chincoteague, a small sloop yacht in distress was sighted. The steamer ran close to the vessel, and found that her sails had been blown away and her rudder broken. She proved to be the Sea Gull, owned by Dr. Howell, of Philadelphia, and from that city on a pleasure cruise. A son of the owner and Mr. E. L. Street, both of Philadelphia, were on board. As there was a northeast gale blowing and a heavy sea running at the time the yacht could not be taken in tow by the Richmond, so a boat was lowered, the two men taken off and brought to this port. The yacht, it was Capt. Crossman's opinion, would be picked up by some passing vessel when the weather moderated.—*N. Y. Herald, June 29.* Norfolk, Va., July 1, 1884.—The yacht was picked up near Cape Henry by a pilot boat and towed into Hampton Roads.

BOSTON YACHTING.—Rondina has been hauled up and had 1,200 pounds of lead removed from inside and let in to her deadwoods. Messrs. Lawley & Son have nearly finished a little Mersey canoe for Mr. S. W. Burgess, called the Tomboy. She will be decked with waterways, bulkheads fore and aft, full cutter rig, and carries 850 pounds of lead on her keel. The yawl Fad, building for Mr. Geo. A. Goddard, is in frame and partly planked up. The first of the two launches building for Mr. Bennett, from Beavor Webb's designs, is nearly planked up. Her skin is of mahogany, double, the inner plank being laid diagonally, and the outer, fore and aft, with canvas, set in marine glue between them, all being copper rivetted. The boiler is nearly ready, but her engine has not arrived from England.

SAN FRANCISCO.—Several cruises will be made on the 4th, 5th and 6th. The S. F. Y. C. will go to Napa, leaving San Francisco on the 4th, stopping at Vallejo for the races, and on to Napa in the evening. On the next day they will tow to Vallejo, sailing home from there in the evening. The mosquito fleet of canoes and small boats will also cruise to Napa, while the larger yachts will go to Santa Cruz. Several changes in ballast have been made lately, Aggie has taken out another lot, 2½ tons, leaving but 17 tons, Whitewing has taken out 1 ton, and Casco 5, leaving but 25 tons in place of 50 originally.

CITY OF BOSTON OPEN MATCHES.—These races will be held on July 4, off City Point, there being four classes. Class 1.—Sloops and schooners 38ft. and over, prize, $50 for schooners and same for sloops. Course, 20 miles. Class 2.—Sloops and schooners 25 to 35ft. Course, 14 miles. Prizes for keel sloops $40 and $25, centerboard sloops $40 and $25, schooners $35 and $20. Class 3.—Keels and centerboards, 20 to 26ft. Course, 8 miles. Keels $40, $25, $15, $10, and same amounts for centerboards.

HULL Y. C.—The start for the annual cruise will be made at 9 A. M. on July 4, the fleet, starting at a signal from the flagship, will pass in review, leaving the flagship to starboard, and heading southeast, saluting as they pass, a second gun at 9:15 signaling to get under way for the cruise. The first point will be Marblehead Harbor, leaving there next morning.

YACHTING AT GLOUCESTER.—A yacht race will be sailed off Annisquam in Ipswich Bay on July 4, starting at 1 P. M., for two classes of boats, 20 to 26 and 15 to 20ft. There are now near 100 small yachts on the Annisquam River and Gloucester Harbor, mostly sloop or cat rigged.

SALEM BAY Y. C.—The first championship match of this club will be sailed on July 4, the second on July 25, and the third on Sept. 4, the open matches being on Aug. 14.

ORIENTA.—This steam yacht blew out both cylinder heads last week, off Prudence Island in Narragansett Bay, and was towed into Bristol by the tug Narragansett.

PUBLISHER'S DEPARTMENT.

REPRESENTATIVE LONDON JOURNALISTS.—We have received from R. Hoe & Co., through Root & Tinker, the publishers, a copy of this engraving. The journalists whose portraits are given are: John Walter, *Times;* H. Labouchere, *Truth;* Edmund Yates, *World;* W. H. Mudford, *Standard;* J. R. Robinson, *Daily News;* J. L. Latey, *Illustrated News;* F. C. Barnard, *Punch;* Frederick Greenwood, *St. James Gazette;* William L. Thomas, *Graphic;* G. A. Sala, *Daily Telegraph;* Edw. Lloyd, *Daily Chronicle.*

SAFE RETREAT FOR MAD DOGS.—A terrible scare was created by a mad dog on Main street on Wednesday. He disappeared at ten o'clock on Wednesday morning and though thoroughly sought for, was not found till nine this morning. It seems that the brute, with the cunning of a mad dog, had run into a Main street store, the proprietor of which never advertises, and had lain down directly under the cash drawer. This morning a clerk took in a nickle from a stranger, and on going to put it in the drawer the dog was discovered. The strangest thing was that the dog showed no signs of hydrophobia when found. Physicians all agree that the perfect rest and quiet that he found in this store where they didn't advertise, had entirely cured him. He was allowed to go undisturbed, but his grateful owner has presented the keeper of the store wherein his dog's life was saved, with a brand new pair of buckskin pants, which were highly appreciated, as the seat of the ones he was wearing were worn entirely through.—*Evansville (Ind.) Argus.*

The great pine forests of Michigan, Wisconsin, and Minnesota are beginning to show the signs of exhaustion. There is a shortage of production this year in these States footing up about 600,000,000 feet. The average of "first quality" lumber has run down from 12 per cent. ten years ago to 2 per cent. last year, showing the rapid deterioration of stock which is brought to the mills. The quality of the logs is much poorer than ever before, as many have been put in from land once cut over, and new land has been cleared of everything that will make a cull board. The improvident lumberman, who in the past only cut the choice pine and left the remainder to be devastated by fire, now saws down his trees close to the root to save an axe kerf, scrapes the ground with a fine-tooth rake to get every log that will make passable mill culls, and will discharge a foreman that leaves on the ground a log six inches in diameter.—*Northwestern Lumberman.*

"You know that pond near Chester that Charley Potter stocked with carp in 1878?" "Certainly. The scheme failed and—" "So every one thought," interposed Mr. Benton. "Well, last fall, Charley sold the place to a Dutch gardener. In June the Dutchman drained the pond." "Did he find any carp?" Not a scale. It took five weeks for the mud to dry out. Yesterday she was about right and the Dutchman began to plough. Well, sir, the first furrow the Dutchman ran across the bottom of that pond raised his hair, for the plough turned up four of the biggest, fattest carp you ever saw. The gardener he ploughed another round and got two more fish. Then he carried the news over to the railroad depot and a lot of people went back with him, and sure enough there were the fish flopping around on the ground. One of 'em weighed six pounds. He went on ploughing and turned out two and three-pound carp until a couple of dozen neighbors got a mess apiece."—*Pennsylvania Exchange.*

AMERICAN ANIMALS IN ART.

IN the June number of the *Century* magazine Mr. Julian Hawthorn writes of the wild animal sculptures of Edward Kemeys. A number of excellent illustrations accompany the paper and give a very truthful conception of the admirable work of the artist. We extract from the article the following:

"The events of his life, could they be rehearsed here, would form a tale of adventure and vicissitude more varied and stirring than is often found in fiction. He has spent by himself days and weeks in the vast solitudes of our western prairies and southern morasses. He has been the companion of trappers and frontiersmen, the friend and comrade of Indians, sleeping side by side with them in their wigwams, running the rapids in their canoes, and riding with them in the hunt. He has met and overcome the panther and the grizzly single-handed, and has pursued the flying cimarron to the snowy summits of the Rocky Mountains, and brought back its crescent horns as a trophy. He has fought and slain the gray wolf with no other weapons than his hands and teeth; and at night he has lain concealed by lonely tarns, where the wild coyote came to patter and bark and howl at the midnight moon. His name and achievements are familiar to the dwellers in those savage regions, whose estimate of a man is based, not upon his society and financial advantages, but upon what he is and can do. Yet he is not one who wears his merit outwardly. His appearance, indeed, is striking; tall and athletic, broad-shouldered and stout-limbed, with the long elastic step of the moccasined Indian, and something of the Indian's reticence and simplicity. But he can with difficulty be brought to allude to his adventures, and is reserved almost to the point of ingenuity on all that concerns himself or redounds to his credit. It is only in familiar converse with friends that the humor, the cultivation, the knowledge, and the social charm of the man appear, and his marvelous gift of vivid and picturesque narration discloses itself.

"The studio in which Mr. Kemeys works is a spacious apartment between Forty-sixth and Forty-seventh streets, on Broadway. In appearance it is a cross between a barn-loft and a wigwam. Round the walls are suspended the hides, the heads, and the horns of the animals which the hunter has shot; and below are groups, single figures, and busts, modeled by the artist, in plaster, terra-cotta, or clay. The colossal design of the 'Still Hunt'—an American panther crouching before its spring—is not now here; it has been removed to the foundry at East Twenty-eighth street, where it will be cast in bronze, and will then be placed in its appointed site in Central Park. It will be a monument of which New York and America may be proud; for no such powerful and veracious conception of a wild animal has ever before found artistic embodiment. The great cat crouches with head low, extended throat, and ears erect. The shoulders are drawn far back, the fore paws huddled beneath the jaws. The long lithe back rises in an arch in the middle, sinking thence to the haunches, while the angry tail makes a strong curve along the ground to the right. The whole figure is tense and compact with restrained and waiting power; the expression is stealthy, pitiless, and terrible; it at once fascinates and astounds the beholder. While Mr. Kemeys was modeling this animal, an incident occurred which he has told me in something like the following words. The artist does not encourage the intrusion of idle persons while he is at work, though no one welcomes intelligent inspection and criticism more cordially than he. On this occassion he was alone in the studio with his Irish factotum, Tom, and the outer door, owing to the heat of the weather, had been left ajar. All of a sudden the artist was aware of the presence of a stranger in the room. 'He was a tall, hulking fellow, shabbily dressed, like a tramp, and looked as if he might make trouble if he had a mind to. However, he stood quite still in front of the statue, staring at it, and not saying anything. So I let him alone for awhile; I thought it would be time enough to attend to him when he began to beg or make a row. But after some time, as he still hadn't stirred, Tom came to the conclusion that a hint had better be given him to move on; so he took a broom and began sweeping the floor, and the dust went all over the fellow; but he didn't pay the least attention. I began to think there would probably be a fight; but I thought I'd wait a little longer before doing anything. At last I said to him, ' "Will you move aside, please? You're in my way."' He stepped over to the right, but still didn't open his mouth, and kept his eyes fixed on the panther. Presently I said to Tom, ' "Well, Tom, the cheek of some people passes belief!"' Tom replied with more clouds of dust; but the stranger never made a sign. At last I got tired, so I stepped up to the fellow and said to him: ' "Look here, my friend, when I asked you to move aside, I meant you should move the other side of the door."' He roused up then, and gave himself a shake, and took a last look at the panther, and said he, ' "That's all right, boss; I know all about the door; but—what a spring she's going to make!"' Then,' added Kemeys, self-reproachfully, 'I could have wept!'

"But although this superb figure no longer dominates the studio, there is no lack of models as valuable and as interesting, though not of heroic size. Most interesting of all to the general observer are, perhaps, the two figures of the grizzly bear. These were designed from a grizzly which Mr. Kemeys fought and killed in the autumn of 1881 in the Rocky Mountains, and the mounted head of which grins upon the wall overhead, a grisly trophy indeed. The impression of enormous strength, massive yet elastic, ponderous yet alert, impregnable for defense as irresistible in attack; a strength which knows no obstacles, and which never meets its match—this impression is as fully conveyed in these figures which are not over a foot in height, as if vast the animal were before us in its natural size. You see the limbs, crooked with power, bound about with huge ropes and plates of muscle, and clothed in shaggy depths of fur; the vast breadth of his head, with its thick, low ears, dull, small eyes, and long up-curving snout; the roll and lunge of the gait, like the motion of a vessel plunging forward before the wind; the rounded immensity of the trunk, and the huge bluntness of the posteriors; and all these features are combined with such masterly unity of conception and plastic vigor, that the diminutive model insensibly grows mighty beneath your gaze, until you realize the monster as if he stood stupendous and grim before you. In the first of the figures the bear has paused in his great stride to paw over and snuff at the horned head of a mountain sheep, half buried in the soil. The action of the right arm and shoulder, and the burly slouch of the arrested stride, are of themselves worth a gallery of pseudo-classic Venuses and Roman senators. The other bear is lolling back on his haunches, with all four paws in the air, munching some grapes from a vine which

he has torn from its support. The contrast between the savage character of the beast and his absurdly peaceful employment gives a touch of terrific comedy to this design. After studying these figures, one cannot help thinking what a noble embellishment either of them would be, put in bronze, of colossal size, in the public grounds of one of our great Western cities. And inasmuch as the rich citizens of the West not only know what a grizzly bear is, but are more fearless and independent, and therefore often more correct in their artistic opinions, than the somewhat sophisticated critics of the East, there is some cause for hoping that this thing may be brought to pass.

"Beside the grizzly stands the mountain sheep or cimarron the most difficult to capture of all four-footed animals, whose gigantic curved horns are the best trophy of skill and enterprise that a hunter can bring home with him. The sculptor has here caught him in one of his most characteristic attitudes—just alighted from some dizzy leap on the headlong slope of a rocky mountain side. On such a spot nothing but the cimarron could retain its footing; yet there he stands firm and secure as the rock itself, his fore feet planted close together, the fore legs rigid and straight as the shaft of a lance, while the hind legs pose easily in attendance upon them. 'The cimarron always strikes plumb center, and he never makes a mistake,' is Mr. Kemeys's laconic comment; and we can recognize the truth of the observation in this image. Perfectly at home and comfortable on its almost impossible perch, the cimarron curves its great neck and turns its head upward, gazing aloft toward the height whence it has descended. 'It's the golden eagle he hears,' says the sculptor; 'they give him warning of danger.' It is a magnificent animal, a model of tireless vigor in all its parts; a creature made to hurl itself head-foremost down appalling gulfs of space, and poise itself at the bottom as jauntily as if gravitation were but a bugbear of timid imaginations. I find myself unconsciously speaking about these plaster models as if they were the living animals which they represent; but the more one studies Mr. Kemeys's works, the more instinct with redundant and breathing life do they appear.

"It would be impossible even to catalogue the contents of this studio, the greater part of which are as well worth describing as those which have already been touched upon; nor could a more graphic pen than mine convey an adequate impression of their excellence. But there is here a figure of the 'coon, which, as it is the only one ever modeled, ought not to be passed over in silence. In appearance this animal is a curious medley of the fox, the wolf, and the bear, besides I-know-not-what (as the lady in 'Punch' would say) that belongs to none of those beasts. As may be imagined, therefore, its right portrayal involves peculiar difficulties, and Mr. Kemeys's genius is nowhere better shown than in the manner in which these have been surmounted. Compact, plump, and active in figure, quick and subtle in its movements, the 'coon crouches in a flattened position along the limb of a tree, its broad, shallow head and pointed snout a little lifted, as it gazes alertly outward and downward. It sustains itself by the clutch of its slender-clawed toes on the branch, the fore legs being spread apart, while the left hind leg is withdrawn inward and enters smoothly into the contour of the furred side; the bushy, fox-like tail, ringed with dark and light bands, curving to the left. Thus posed and modeled in high relief on a tile-shaped plaque, Mr. Kemeys's 'coon forms a most desirable ornament for some wise man's sideboard or mantel-piece, where it may one day be pointed out as the only surviving representative of its species.

"The two most elaborate groups here have already attained some measure of publicity; the 'Bison and Wolves' having been exhibited in the Paris Salon in 1878, and the 'Deer and Panther' having been purchased in bronze by Mr. Winans during the sculptor's sojourn in England. Each group represents one of those deadly combats between wild beasts which are among the most terrific and at the same time most natural incidents of animal existence; and they are of especial interest as showing the artist's power of concentrated and graphic composition. A complicated story is told in both these instances with a masterly economy of material and balance of proportion; so that the spectator's eye takes in the whole subject at a glance, and yet finds inexhaustible interest in the examination of details, all of which contribute to the central effect without distracting the attention. A companion piece to the 'Deer and Panther' shows the same animals as they have fallen, locked together in death, after the combat is over. In the former group, the panther, in springing upon the deer, had impaled its neck on the deer's right antler, and had then swung round under the latter's body, burying the claws of its right fore foot in the ruminant's throat. In order truthfully to represent the second stage of the encounter, therefore, it was necessary not merely to model a second group, but to retain the elements and construction of the first group under totally changed conditions. This is a feat of such peculiar difficulty that I think few artists in any branch of art would venture to attempt it; nevertheless, Mr. Kemeys has accomplished it; and the more the two groups are studied in connection with each other the more complete will his success be found to have been. The man who can do this may surely be admitted a master, whose works are open only to affirmative criticism. For his works the most trying of all tests is their comparison with one another; and the result of such comparison is not merely to confirm their merit, but to illustrate and enhance it."

MONTHLY LIST OF PATENTS

For Inventions Relating to Sporting Interests, Bearing Date June 22, 1884. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

299,162. Cartridge.—O. H. Peters, Xenia, Ohio.
299,302. Shell Extractor for Firearms.—N. O. Wayniro, Garfield, Kan.
299,951. Hammock Canoe.—E. H. Brown, New York City.
300,449. Cartridge Shell.—A. F. Dickey, Somerset, Pa.
300,743. Firearm Lock.—Joseph Victor, Duquoin, Ill.

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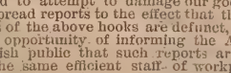
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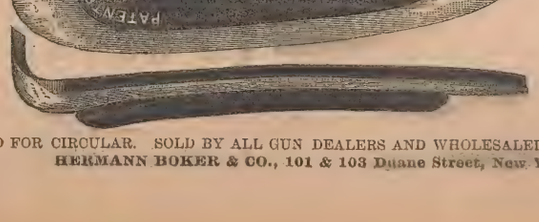
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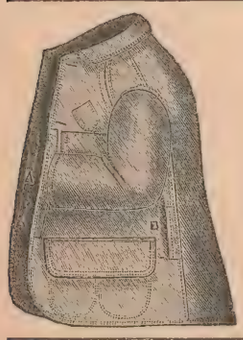
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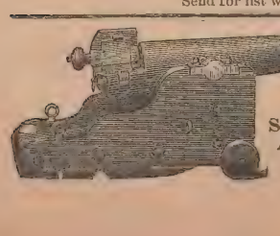
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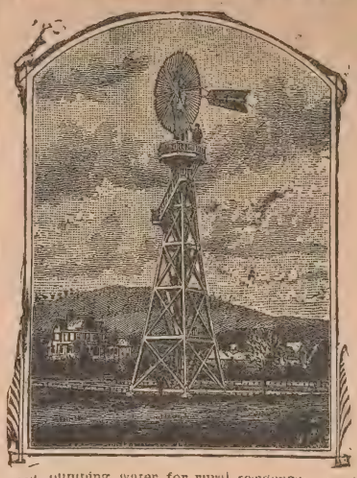
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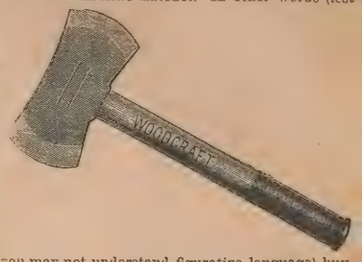
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DESTRUCTION OF SEAFOWL.

THE northeast coast of North America has from time immemorial been a favorite resort of seafowl. There have been found, from earliest times, myriads of birds of all descriptions, from the unwieldy cormorant down to the tiny sea swallow, which make their nests on the rocky islands and stern cliffs of this threatening coast. Their numbers in bygone years have been such as almost to defy computation. They bred there by millions. The accounts given by Audubon and Coues, Bryant and other ornithologists, who years ago visited this coast, must be consulted to gain any adequate idea of the innumerable multitudes of seafowl which formerly made the region their summer home.

The center of abundance of the feathered hordes was, and still is, about the mouth of the St. Lawrence River. Here the fish food, on which most of them subsist, is most abundant, and all the conditions are such as to be favorable to their well-being. But the increase in the number of the settlers, and the almost entire extermination of the large game on which the Indians once depended for food has wrought a mighty change in the bird fauna of this coast. Nowhere now are there the extensive colonies of seafowl that once filled the minds of the observer with wonder.

The adult birds are slaughtered on their nests for food or for fish bait, and the young or eggs are taken. Colonies once estimated to contain a hundred thousand birds are now without inhabitants.

In an interesting paper on a cruise in the Gulf of St. Lawrence, elsewhere referred to, Mr. William Brewster gives a number of facts on this subject, from which we may make some extracts to show the change that has recently taken place here, and the method by which these birds are being exterminated. Of the eider duck he says, "The eider is still common along the north shore [of the Gulf of St. Lawrence], but its numbers are rapidly diminishing there. This is due largely to the depredations of the Indians of the region who, during the summer, subsist largely on the birds and their eggs. Their manner of taking them is peculiar. They skirt the shore in canoes, keeping as close to land as the depth of water will permit. Meanwhile their dogs range about among the trees, quartering the ground like trained setters, and when a nest is discovered announce the fact by loud barking. The nests are usually within a few rods of the water, and the scent of the dogs is so keen that they rarely pass one. If the sitting bird can be caught or shot the opportunity is seldom neglected, for the half starved Indian neither knows nor respects considerations of mercy—or, perhaps, we should call it policy—which restrain more enlightened sportsmen on such occasions. Proceeding thus, two men in a canoe will frequently ransack twenty miles of coast line in a single day, and find, probably, nearly every eider's nest. The result of this systematic persecution cannot be doubtful or long-delayed."

"Our personal experience with the eider was not extensive. We saw them frequently from Mingan Harbor eastward, but the Indians had been before us everywhere, and we could find neither eggs nor young."

This recital certainly needs no extended comment. Every one can see what the result of such systematic pursuit at this season of the year must inevitably be.

Passing on to the gannets, whose rookeries were once so celebrated, we find the following statements: "Although a few gannets are said to breed on Shag Rock, near Grindstone Island, most of those seen at the Magdalens evidently came from Bird Rocks. This famous rookery was visited by our party on July 4. Its wonders have been so well described already by Dr. Bryant and Mr. Maynard, that I shall confine the present narrative to a brief account of the changes which have taken place since their respective visits. In 1860, the number of gannets breeding on the top of Great Bird (then uninhabited) was estimated by Bryant at about fifty thousand pairs, or one hundred thousand birds. In 1872, Maynard found this portion of the colony reduced to about five thousand birds (a lighthouse had been erected on the summit of the rock and several men were living there). When we landed in 1881 the top of the rock was practically abandoned, although there were some fifty nests at the northern end which had been robbed a few days before, and about which the birds still lingered. The shelving places and ledges around the face of the cliff, however, were still densely populated, and the colony on Little Bird was probably as large as the available nesting places there would allow. But the total number of gannets breeding on both islands did not, as nearly as I could estimate it, exceed fifty thousand. This number, although sufficiently astonishing and impressive when the limited area of the islands is considered, is, of course, insignificant, in comparison with that of the legions which Bryant found twenty-one years before. The decrease is easily explained, for the stringent laws framed for the protection of these and other seabirds breeding on the rocks, are—or were in 1881—but loosely enforced, and a day rarely passed when parties did not land on both islands to collect the eggs and shoot the sitting birds. The eggs are eaten and the flesh of the birds is used, in preference to anything else, as bait in the cod-fishery. The negligence on the part of the Canadian Government, which tolerates such open violation of its statutes, cannot be too strongly condemned."

The author mentions visiting other breeding places of the gannets, one of which, owing to its inaccessibility, is rarely despoiled, but the others had been recently robbed by the Indians.

A similar story is told about the breeding places of the gulls and terns; of the latter Mr. Brewster says: "Poor sea swallows! they have nearly as hard a time among the Magdalens as at breeding stations along our own coast. Not that the birds themselves are as often molested, for the islanders are too chary of powder and shot to waste them at useless marks; but the eggs are duly appreciated, and parties of women and children visit the sandhills daily, taking every one that can be found."

The tale is a pitiful one, but it is the same that is being told everywhere on this continent—the relentless destruction of the wild creatures indigenous to the country. The sea fowl on the northeast coast are protected by law, as are our own birds and beasts, but the laws are not enforced, and remain a mere dead letter on the statute books. Each year fewer of these fowl return to their ancient breeding grounds, and each year those that return are harried on every hand, and at length forced to depart without reproducing their kind. Unless something is done, the end, except in a few isolated localities, cannot be far distant.

Will the Canadian Government take the steps necessary to stop this slaughter?

SALT-WATER FISHING.

THE question has often been asked us why we have paid so little attention to salt-water fishing, and we have invariably answered that there are few of the thousands who indulge in that sport who write about it, and but a few more who care to read of it. If we devote more space to salmon, trout and black bass than to sea fishes it is not because we are indifferent to the charms of bluefishing, weakfishing, etc., but because our readers do not seem to be interested in sea-fishing.

There is a wide difference between the salt-water and the fresh-water angler. The former is content to enjoy himself in his own way, and says no more about it. The trout and black bass angler, on the contrary, considers the fishing as merely part of his pleasure; the trip, the scenery, the grand old woods, all inspire him to fight his battles o'er again. There is nothing of this in the salt-water angler, be he a member of a swell bass club or an humble brother of the hand-line committee who takes the Staten Island ferry-boat in the morning and, with the patience of Job, goes to the rocks and oyster beds for weakfish and with crab bait awaits a "tide runner," as the big weakfish are called in his vocabulary. This sitting on a hard seat all alone waiting for something, which may or may not come, develops a reticence that the fresh-water angler seldom acquires. There is no doubt that the surroundings influence the angler to a greater degree than has been suspected, and the depressing effect of the ocean is noticeable on those who angle in it.

New York city has more good fishing near it than any city that we know of, such as it is. By this we mean waters where a man can go and catch enough fish to constitute what may be summed up in that vulgar term "a mess." If that is the end of angling then surely the salt-water angler should be satisfied, for when the neap tides are on then the "school fish" will repay in numbers what the tide-runners make up in avoirdupois.

We have yet to see the salt-water angler who possessed the fire and enthusiasm of the fresh-water fishers. It is possible that there may be men who love salt water as the trout anglers loves mountain streams. If so we do not know them. We do know, however, that angling for trout among the hills with the ever-changing scenery of a mountain trout brook brings out all the latent poetry in a man, which, if it does not break out in verse, leads him to tell his unknown fellow of the pleasures he has had, and of the means he has used to capture his fish, which he usually regards as a mere incident of the trip.

The salt-water angler is seldom inspired by the beauties of nature because there are no such beauties in the surroundings to be inspired by, and no matter how many poems may have been written on life on the ocean wave, every man who has been out of sight of land knows that they were penned more to create a taste for the monotonous sea than because the writers really liked it. Therefore the salt-water angler is a silent man. He likes to catch his fish, but the bald, flat, unpoetic surroundings have never inspired him to write about them.

Take a list of angling works and see what they treat of. Look over the indices of FOREST AND STREAM and see who writes of his fishing and what his fishing is! Salmon, grayling, trout, black bass; these are the themes of American writers, while our cousins across the water add other fresh-water fishes. Where is the salt-water Walton? Except Young, who wrote "Sea Fishing as a Sport," he has not existed and never will; because, while there are salt-water anglers innumerable, the inspiration is lacking in the element in which they fish. With the salt-water angler the capture of his fish is the only charm; there is no scenery to inspire him, therefore he is not inspired, and while he is often above fishing for the pot or for count, his spirit is depressed by what it works in.

Whether this result is brought about by the monotonous sea, the use of heavy bluefish trolling lines or oily chum, or the companionship of the silent clam, which does alternate duty as bait or lunch, we know not, but the fact remains that of all anglers who not only love their art but seek to improve their tackle and teach others to appreciate it, the fly-fisher for trout and grayling stands at the head. Perhaps there is some other reason which we have not named which will account for the fact that fly-fishers love to write and to read of their sport more than the salt-water angler seems to, for with the latter the angler for maskalonge seems to vie in the matter of reticence. Can it be that it is the catching of heavy fish that thus affects the captors, or is it possible that baits and trolling spoons are the real cause?

WOODCOCK are in season in New Jersey, but the bags have been light. In this State the season will open Aug. 1.

A DEPARTED RACE.

PLENTY of men are yet living who remember when buffaloes in countless herds covered all of the vast plains between the Missouri River and the Rocky Mountains, from the borders of Mexico to the Arctic regions. It is not very long since. Only about fifty years ago their slaughter, to supply the demands of commerce, began, and then it was in a small way. The only article then sought was their skins, for conversion into robes. The trade was at first only with the Indians, and along the Missouri River and its tributaries. The Indian, as a rule, is not wasteful nor improvident in the destruction of game. He realizes that it is the mainstay of his life, and if he wastes this year it may cause him to suffer from hunger next year; hence he kills to provide meat for the present; and preserves for the future. The skins from animals so slain, after sufficing for his own wants, find their way to the trader, and thence into the channels of commerce. Thus began the trade in buffalo skins. As the white man became acquainted with the country he saw profit in it, and about 1830 traders began to reach out into the buffalo country, accompanied by professional white hunters, who made a life business of slaughter. However, they were not very destructive, mainly because of their indolence, and partially, perhaps, for the reason that their arms were very imperfect as compared with those of the present day.

First, trading posts were established along the eastern edge of the buffalo range, upon the Missouri River and its larger tributaries. Then the traders crossed the plains and located a similar chain of posts, or forts, along the western edge of the range. These latter were close up to the foot of the great mountain range and at that time, the old employes tell, the great tide of buffalo migration, north and south, with the changing seasons, surged up against the foothills, and diverging columns turned up the larger streams into the mountains and over the passes above the limit of timber growth into the parks and valleys, and even to the sage plains of our present Utah, Nevada and Idaho. Even then the white man's methods in a few years had a marked effect upon the vast herds. The great column narrowed from the sides. The flanking columns were cut off from the mountain passes. The buffalo became rare west of the mountains. The trading posts moved westward from the Missouri and eastward from the mountains. At first the change was slow, then it increased year by year and the dates of the abandonment of old forts and the occupation of new ones, twenty-five or fifty miles further out upon the plains, would show exactly the ratio of decrease in the millions of wild cattle that formerly roamed there. So the destruction went steadily on, but, as it now appears, slowly, until twenty-five years ago, when civilization leaped in one stride from the Missouri River to the Rocky Mountains. Then the tide of travel across the plains by many routes became great and constant. For hundreds of miles the roads led through pastures yet plentifully stocked with buffalo. The writer has within twenty years traveled for six days in succession upon a stage coach without being at any time in daylight out of sight of herds of buffalo. Of course the slaughter increased with the influx of the white man. They were killed for meat, and when that was not wanted they were killed for sport—mere wanton destructiveness, or to brag about. In this epoch, if such the period may be styled, commerce and the world reaped no benefit from the slaughter, except in the little bit of the meat that was eaten by the butchers and their comrades. The skins were not saved. No meat was sent to market.

Then came the railroads; two lines, the Union Pacific and Kansas Pacific, that penetrated the heart of the buffalo country in 1868 and traversed the entire breadth of it before midsummer of 1870. With them, in the hands of the masses, came also the deadly repeating and breechloading rifles, with which any pot-hunter could "pump" lead into a five hundred acre herd of buffalo with deadly effect, whether he could ever find the carcasses or not. That made no difference. If he wanted one animal he might just as well kill ten, or if he wanted ten it would take but little longer to shoot fifty, and in either case he could then pick out the best—provided the best did not go too far away to die. With the advent of the railways the buffalo killing was for a time all done "for meat." Hundreds and hundreds of men went regularly into the slaughter. The only meat they wanted was hams and tongues. The rest was left to rot. Even the hams were taken only from the best animals, judged by inspection after death, determined by a kind of coronor's inquest. Buffalo hams became one of the largest freight items on the railways. Car loads and train loads went to Eastern markets. Hundreds of tons rotted at the stations for want of shipping facilities, other hundreds or thousands of tons rotted before it could be transported from where killed to the railways.

People got tired of "high" buffalo meat, and the next craze was for the skins. While they were being killed for the meat the skins were not saved. The skin of the hams went with them to market; the balance rotted with the meat. Now the meat hunters all went to killing for skins. A "shooter" would employ five, six or seven "skinners;" establish his camp in the buffalo range and go to work to keep his men busy. Thanks to breechloaders and repeaters he could "down" from seventy-five to one hundred buffalo per day on an average. Nothing was saved but the skin, and this was worth on "the range" seventy-five cents or one dollar. This was the campaign that exterminated the buffalo upon the middle plains.

For two or three years after the opening of the railways named, a train seldom crossed the plains without passing in sight of buffalo, and it was not an uncommon thing for a train to have to wait for a moving herd to cross the track. Now buffalo are never seen from the trains, nor have they been for eight or ten years past. But there remained one more harvest to be gathered from the departed native life and grandeur of the great plains; a poor, pitiful, post-mortem harvest of stinking bones. After they had surfeited the East with odorous hams and glutted the markets of the world with "robes" killed in season and out of season, these gallant hunters turned scavengers and gathered the rotting bones and blistering horns of the countless dead. Railway trains that had in former years groaned under loads of meat and bales of hides were now loaded down with bones destined for Eastern manufactories of various kinds. The whole country was gleaned.

At length the work was done. Destruction was complete. No sign was left to show that a buffalo had ever existed in the country, and the vandals who had hounded them to their death and their bones to the sugar refinery, drifted off northward or southward to follow up the remnants of herds, to gather the bones along other railways, or to repeat the slaughter upon the noble elk that so recently peopled all the valleys and parks of the mountains. Such newspaper paragraphs as the following show their tracks:

"It is said in St. Paul that hundreds of teams are now engaged near Bismarck in gathering buffalo bones, for which the sum of $6 a ton is paid by persons who send them to Philadelphia for grinding into fertilizing powders."

"The buffalo herds of Texas have been reduced to one small herd now feeding on the Pecos River, but this is fast being reduced and its days are numbered. This is a remnant of what was known a few years ago as the "great Southern herd."

And yet the country is full of sportsmen who clamor for more deadly repeating rifles.

The Sportsman Tourist.

UNCLE LISHA'S SHOP.

VI.

A SOFT snow having fallen, not too deep for the comfortable traveling of those so used to such footing as are the hill folks of Northern New England, almost all of Lisha's friends who were wont to gather in his shop had gone fox hunting.

Many times that day Lisha had stood in the doorway to listen to the voices of the hounds, now wafted softer to his ears on the heavy air from the snow-muffled woods than in the brighter days of October, when each hound's note was answered by a dozen echoes, all so sharp and clear that one could hardly tell the real voice from the counterfeit. And once when the music tended toward a runway two furlongs down the road, where the points of two ledges flanked the highway on either side, the old man had taken down his long gun and bare-headed, in his shirt-sleeves, and with his apron flopping about his legs, waddled like a hurried duck half way to the crossing place. But the fox then changed his course and drew the clamor tapering into silence beyond the crest of a great ridge, and Lisha, after some shivering waiting had cooled his ardor, went back to his bench. He was impatient for evening to come that he might hear how it had fared with the hunters, but they were too leg-weary that night to leave their own firesides, even for the pleasure of "swapping lies" and comparing notes concerning the day's events. The next night, however, brought most of them to the accustomed meeting place, ready to talk or listen. Lisha missed the blonde-bearded face and tall gaunt form of Sam Lovel, the mightiest hunter of them all.

"Where's Samwill?" he roared as if he was hailing the mountains. "Them 'ere long laegs o' his'n hain't gin aout, hev they?"

"I sh'd think not," Joe Hill answered, "he went trampoosin' off on't the North Hill airly this mornin' arter a fox. We hearn the ole dawg a tootin' on it to him yit as we come along. 'F Sam c'n git him off he 'll be comin' 'long this way hum to rights."

"What a darned critter!" said Lisha, his tone expressing more approval than his words, "up an' at it, every day an' all day!"

"Samwell," said Solon Brigs, "is a reg'lar Ramrod, so to speak; a mighty hunter afore the Lord. He 'll foller a fox from Daniel to Bashaby afore he 'll delinquish the pursooth, or less the nocturnity of night comes on to him, which that periodical of natur has now arriven an' come, an' therefore he will most proberble do likewise soon."

The sounds of heavy boots being rid of snow by stamping and scraping on the doorstep and the impatient whine of a dog were heard, and the predictions of Joe and the wise Solon were speedily fulfilled by the entrance of Sam and his gaunt sad-faced hound, with a whiff of chill outer air, as if the hunter had brought down a bagful of the North Hill's breezy atmosphere to sweeten the shop with. As Lisha shouted his welcome the eyes of every one sought first the capacious pockets of Sam's frock, and saw hanging out of one the fluffy brush of a fine fox.

"Wal, Sam, ye got him, hey?"

"Got one on 'em," he said, in a tone that implied no great satisfaction with his luck, "Started two more, but one on 'em holed in half an hour, an' t'other one dodged me till it got so dark I couldn't see to shoot, 'n' so I called old Drive off an' come along."

Drive, who had stretched his weary length by the stove, raised his head and cast a sorrowful look on his master.

"Wal, dawg, ye didn't wanter hunt all night for nothin', did ye?" Sam asked, and Drive, sighing, laid his head again on its pillow of leather scraps, and wagged a few feeble taps on the floor, so saying that he did not quite understand it, but concluded it was all right.

"Hain't hed a mou'ful t' cat sen mornin', heve ye Samwill?" Lisha asked, and answered, "Course ye hain't! Mother!" roaring to his wife as if she had been in the next township instead of the next room, and then, as Aunt Jerusha opened the door, "can't ye give Samwill a bite?"

"No, don't gim me a bite, Aunt Jerushy; I'd ruther you'd gim me a kiss!" cried the gallant hunter.

"I shan't dew nary one, Samwill," said Aunt Jerushy, "I sh'd hev Huldy Purin'ton arter me, but I'll give ye some rye 'n' Injin bread an' col' pork 'n' beans."

"An' give Drive that 'ere hasty puddin'," said Lisha, as Sam and the hound followed Aunt Jerusha into the kitchen. Then Lisha asked, "Wal, boys, haow d'd ye make it a huntin' yist'd'y. Any on ye kill anything?"

"Yes," Joe Hill answered, "Sam killed a fox;" ["Of course," said Lisha, in parenthesis,] 'an' the' was one or two on us got shots at a fox."

"Which Jozeff P. Hill was one?" said Solon Briggs, "a firin' of his gun one several time at two identickle foxes twicte, which opponent dew declare the heretobeforesaid Jozeff P. did not to no intense an' puppuses tech ary one on 'em!"

"An' Solon Briggs was another," retorted Joe.

"Nor dew I deny the acquisition intire, though my gun discharged an' went off a pintin' to a opposyte direction to what the fox was at them moments of time a occupyin' of, so it can't be said with strict incoherence to the truth, that I shot at him."

"Haow did that happen?" Lisha asked.

"Wal, the circumstances was these an' happened thus: I was a settin' on a lawg a meditatin' on the mutualability of the human life of mankind, pa'tic'ly in fox huntin', for I hed n't hear'd a haoun' in an hour, when my intention was distracted by a leetle noise behind me, an' turnin' my head, there stood a gre't big fox not more 'n three rod off, jes 's if he was an appargotion that had riz aout of the baowels of the airth, which I was flustrated to the extent of my gun a goin' off an' dischargin' with the butt a pintin' at the anymil fur cluster 'an what the muzzle was. It was one of the accidentalist accidents that ever happened to my exper'ence, for I hed fust rate sight on that fox if my gun had only ben pinted."

"An' what hev yeou got to say fur yerself, Jozeff?"

"O, I d' know nothin' what the matter was ailded things," Joe replied, looking up at the low ceiling as if he expected some solution of the cause of his unaccountable misses to come from above. "I guess the ole gun hain't good for nothin'—or I d' know but the gun 's good 'nough, but the paowder; I dont b'lieve the paowder 's wuth a darn! But mebby 't wa'n't the paowder—guess like 's not the shot wa'n't big 'nough, or I spilt some on 'em a loadin' in a hurry or suthin' or nuther—I d' know."

"You're sartain 't wa'n't no fault o' your shootin', hain't ye, Jozeff? You shot stret 'nough: we allus dew, all on us," said Lisha, his eyes twinkling like the gleam of his awl in the candle light.

"Wal, I never hed no better sight on nothin' in my life 'n I did on both them 'ere foxes—"

"Not on thet aowl?" Lisha interrupted.

"Humph! We hain't talkin' 'baout aowls! Come to think on 't, I guess they was too fur off."

"Guess they be naow," from Lisha.

"Wal, anyhaow, I made the fur fly onct!"

"No daoubt on 't, no daoubt on 't, both times, an' jist as fass as four scairt legs could make it fly! O, good airth an' seas! I wish 't I'd got a shot! I'd ha' showed ye! When my old cannon gits pinted at 'em, it fetches 'em, I tell ye!"

"Haow clus does it fetch 'em naow, Uncle Lisha?" asked he who never spoke but to prepound some great question.

"So clus to," Lisha answered impressively, "that gen'ally I can git their skins off on 'em. Peltier," he continued, turning his glasses on the young fellow, "you hain't ben hear'd from yit."

"O, I didn't cal'late to shoot nothin', only went for the fun on 't. Didn't see nothin' nor git nothin', only a pocket full o' gum. Hassome?" he asked, passing about his big palm full of spruce gum, like a rudely molded tray of clay filled with bits of rough amber. Each one took a piece. The smokers laid aside their pipes, the tobacco chewers resigned their quids, and all went into a committee of the whole to ruminate on the resin of the spruce.

After all the reports were in it was found that none had shot at a fox but Sam, Joe and Solon, and of these with any success only the first-named, who, having now strengthened his interior with a goodly lining of Aunt Jerusha's pork and beans and brown bread, returned to the shop. Declining to exercise his jaw on an offered portion of Peletiah's treat, he filled and lighted his pipe, and got himself into a restful position on a roll of sole-leather. "Wal," he said, after getting his pipe in full blast, "I seen suthin' on the North Hill 'at's an oncommon sight now-er-days."

"What was that?" one asked, and others guessed "a painter," "a wolf," "a woolyneeg," or the tracks of the animals named.

"Was it the footprints of some avarocious annymill, or the annymill hisself?" Solon Briggs inquired.

"Nary one," said Sam, and added after a few deliberate puffs, during which the curiosity of his auditors grew almost insupportable, "a deer track."

"Good airth an' seas! Yeou don't say so, Samwill? I hain't seen nor hearn tell o' one a bein' raound in five, I d' know but ten, year. Did ye foller it, Samwill? It's a tol'able good snow fur still-huntin'."

"Foller it? No!" Sam answered emphatically. "What would I foller it for? I wouldn't shoot a deer on these 'ere hills 'f I had a dozen chances at him!"

"I swan I would," said Pelatiah.

"Yas," said Sam, with contemptuous wrath, "yeou would, I ha' no daoubt on't, an' so would three-quarters on 'em shoot the las' deer 'f he come to their stacks an' eat along with their cattle, jest as Joel Bartlett did, consarn his gizzard! I wish 't was State's prison to kill a deer any time o' year, an' hed ben, twenty year ago. Then we might hev some deer in these 'ere woods, wher the' hain't one naow to ten thousand acres, 'n' where forty year ago the' was hundreds on 'em, 'n' might jes' as well be naow, if 't wan't for the dumbed hogs an' fools. I knowed critters 'at went on tew legs an' called 'emselves men, 'at when I was a boy useter go aout in Febwary an' March an' murder the poor creeters in their yards with clubs, twenty on 'em in a day, when they wa'n't wuth skinnin' fer their skins, say nothin' baout the meat, which tho' wa'n't 'nough on tew carcasses to bait a saple trap. An' some o' them things is a livin' yit, an' would dew the same again if they hed the chance. If they wus gone an' a wolf left in the place of each one on 'em, the airth would be better off, a darned sight. Cuss 'em, they 're wus 'n Injius!"

The stillness that followed this outburst of the hunter's righteous indignation was broken by Solon's rasping preliminary "Ahem! That 'ere last remark o' yourn is an on

dutible fact. The abregoines would not perforate sech an act, because in so a dewin they would ampitate their own noses off, deer a bein' their gret mainstayance, both intarnaliy an' out-tarnally, that is to say, both food an' remnants."

"Wal," said Lisha, as he soused a tap in his tub, "the' can't nobody say 't ever I crusted deer, but tho' was 'nough on 'em 't did, twenty, thirty year ago, an' mis'able murderin' business it was, tew. The' was one man, though," he continued, after some vigorous pounding of the tap on his lapstone, "'at got cured o' crustin' for his life time, which it shortened it, tew."

"It ort t' been shortened afore ever he went a crustin'," said the relentless Sam. "Wal, haow was 't, Uncle Lisha?"

"Wal," said Lisha, taking the last peg from between his lips and driving it home, "I guess it's gittin' ruther late t' begin a story t'night, hain't it? 'Baout what time 's it got to be anyway? Peltier, you jes' go t' the kitchen door 'n' ast Jerusha, won't ye?"

"Hol' on; I've got my crow monitor," said Solon, tugging at a leathern thong that hung from his fob, and presently dragging forth what looked like a goodly sized copper porringer, he consulted it for a minute and proclaimed the hour to be "agoin' on tew 9 o'clock."

"I want er know! Wal, bein' it's so late, 'n' some on ye 's got quite a piece to go, I guess I won't tell 'baout it t'night. Nex' time ye come I will 'f ye 'll put me in mind on 't."

"Prawberbly, in consequent of the demoteness of the inhabitations of some here and present, and the a-proachness of the hour for expirin' to bed, it would be more judiciouser to prefer the narrowation of Uncle Lisha's story until another of aour conjovial gatherin's"—which suggestion of Solon's all fell in with, and Sam Lovel, taking his gun from the corner and whistling up his chase-weary hound, all departed, leaving Lisha to snuff out the shop candle and retire to the kitchen, where, smoking the last pipe of the evening with his stockinged feet toasting on the stove hearth, the purring of the cat, the drowsy song of the teakettle, and Aunt Jerusha's monotonous counting of the stitches as she narrowed the thumb of a striped mitten, "one—tew—three, narrer; one—tew—three, narrer," soon set him to nodding.

"Why, father," said the good dame, casting a side glance at him from her knitting when his pipe dropped from his mouth, "why don't ye go to bed, stiddy settin' there a noddin' like a hard's grass head in a July wind?"

"I wa'n't a noddin' nuther, 'n' haint a bit sleepy," he said, opening his eyes as wide as possible. "I was on'y medytatin'." But he went to bed.

REMINISCENCES OF SHANGHAI.

THIRTY years ago the inhabitants of the foreign settlement of Shanghai, China, awoke to the fact that they as well as their neighbors, the Chinese denizens of the walled city a mile away, had some personal as well as business interest in the great movement which, known as the Tai-ping-wang Rebellion, was stirring slow and sedate old China to its very center.

Tai-ping-wang was one of the names of a prophet who had arisen, and proclaiming himself a true Son of God, and thus younger brother of Jesus Christ, was considered a false or true prophet by about an equal number of his countrymen. All government officials, from the emperor himself down to the humblest mandarin, who for income depended upon the process known as "squeezing," remained unbelievers, for, not content with making war on polygamy, joss worship and opium smoking, three of the most important of Chinese institutions, Tai-ping-wang aimed to become emperor as well as spiritual chief, and his progress was thus that of a rebel; and war encompassed his advance.

The principal scenes of his operations were the northern provinces, which included Pekin and Nankin, and but for the interruption of business by the failures of the tea and cotton growers to produce their usual crops, South China would have shown hardly a trace of the effect of the convulsions going on further north. Like the anvil on the breast of the athlete, the solid, stolid mass of the people of China absorb, with little show of injury, blows which would disrupt another nation. It is the soldier's business to fight, not ours, reasons this mass, and until the blows are delivered closer home they do not seem to feel or take interest in them. But the life of the dynasty was at stake, and the hundreds of thousands who joined the army of the rebel chief were confronted with the greater army of the empire.

We who were then at Shanghai and who had not business interests at stake were, if anything, rather benefitted by the war, for our sole occupation was to enjoy life as much as possible, and the rather limited circle of foreign inhabitants was greatly enlarged by the addition of the officers of American, English, French and German vessels of war and commerce, the former detailed to protect the interests and lives of their countrymen, the latter idle through stagnation of commerce; and the long winter had passed merrily. Dinners, prolonged from 7 P. M. till midnight, private theatricals, occasional spasmodic attempts at balls (for to one lady there were a score of men), and rousing games of tenpins—a dozen burly skippers on a side, with drinks bet on the result of every score—at the one hotel, the Astor House, occupied our nights, and the hours of daylight were too short for our field sports, which, in addition to fine pheasant, partridge, duck, goose and snipe shooting, from either of which one need seldom return with unsatisfactory bag, comprised a sport which most thoroughly dissipated the effects of our nightly dyspepsia accumulation. This was rabbit coursing. Ourselves the hounds, twenty or thirty of us, armed only with short hard-wood clubs, to be used as missiles, and accompanied by a couple of beagles to start the game, would surround a great cotton field and run many miles a day for a few rabbits and exercise.

But the war came to us at last. Aling, a bright and intelligent young Chinaman, who occupied the position of "boy" to a member of one of the English houses, heard daily the views expressed at the various dinners to which, as was the custom in China, he had accompanied his master, to wait upon him; and securing a sufficient number of adherents he had started a local rebellion, having taken good care to put himself and followers in commanding positions within the walled city, proclaimed himself its chief; and after cutting off the heads of quite a number of his countrymen, whose politics differed with his, ornamented with them a couple of hundred spikes, which surmounted the city gates and vicinity, and settled down in the ex-Toutai's palace with his troops stationed along the wall, to hold the place until Tai-ping-wang and his armies arrived.

Aling's example was rather extensively followed. Local rebellions began to break out wherever there was a walled town, within whose walls there was sufficient wealth to encourage the braves; and the cause of religion was advanced by unlimited looting of joss houses, the gods, jewels, money, carvings, paintings, and other "curios" thus obtained, making quite a comfortable little perquisite for Aling and his imitators. At first we outsiders were able to buy from Aling first-class gods, richly decorated, at very moderate prices; but it being discovered one day that built into some of these gods, were secret stow holes, in which jewels had been hidden, the supply ceased, and only quite badly mutilated remains were to be obtained.

After a while trade reopened, and as a great favor several of us were permitted to buy a number of very fine josses, apparently sound as a joss need be. Of course, in consideration of the chance of the possible bonanza which we might be also buying, prices ruled much higher; but we went into the speculation with vigor, and kept it up in spite of drawing blanks, until in sawing up a joss the carpenter discovered that the secret cavity had been already probed, opened and reclosed so skillfully that we could see no external sign. The rascals had first, knowing approximately the location in the back, bored with very fine bits, and the josses in which we found these holes plugged up, had in such as struck cavities, been thoroughly deprived of any valuables they may have contained. The "ways that are dark and tricks not in vain" of those Heathen Chinee were too many for us.

So looting exhaustively and living luxuriantly on the proceeds, Aling and Co. had gay times, and were in no hurry for the arrival of Tai-ping-wang with his cohorts, to whom they claimed that they intended to turn over the captured city, and thus secure recognition as legitimate rebels. In anticipation of this event, a few of the more sanguine had adopted the distinguishing badge of the Christians by having their queues cut off, and ceasing to shave the head, but the more astute had modified this policy and contented themselves by coiling the tail neatly, and covering it with a cap and such hair as might grow, prepared thus to resume, with slight difficulty, their allegiance.

They waited in vain though, for in due time, instead of the expected rebel leader, there appeared on the scene an imperial army, some ten or fifteen thousand strong which, having selected an eligible, comfortable and safe location, settled down to besiege the city. I advisedly say safe and settled, for the distance of the spot selected was several gun shots from the walls; and then and thus they too enjoyed life, planting vegetable gardens, setting up shops of all descriptions necessary for repairs of shoes, clothing, etc., and following the example of the ancient Romans in dealing with the Sabines, provided themselves with wives *ad libitum*. Extensive earth works were erected, which inclosed quite a number of the haycock-like mounds which served as lookout stations. These mounds had been erected by an ancient dynasty as burial places, and were the only elevations visible above the flat plains for many miles.

And thus the besieged and besiegers might all have remained until now, left to the full enjoyment of each other's society, for all the interest the foreigners might take in their doings; for trade went on as usual and the surrounding country remained peaceful. It was the soldiers' business to fight, not theirs, argued the peasantry; and Chinamen grow rich by minding their own business. "No belongy my pidgin" in their motto. But the soldiers on both sides became addicted to a bad habit; and started a game in which we found it necessary to take a hand. Pretending a fight, a body of men from one side or the other would retreat into the suburbs of the foreign settlement; and this produced considerable hard feeling, for the fire of the pursuers would be in our direction, and sheltered by our houses, the retreating band would break up into skirmishers, each individual devoting himself to looting and escaping with his booty.

The foreign settlement of Shanghai consisted of a large number of stone houses, the business houses and residences of representatives of American, French, German and English merchants, and were built along the banks of the narrow river, extending perhaps a mile inland. The river front was skirted by a broad, smooth road, with a sea wall, called the Bund, and in the rear of the town there was a large and well-appointed race course. The Bund and the race course were the fashionable resorts for driving, riding and promenades. The walled city, occupied exclusively by natives, was about a mile higher up the river, which it also fronted, and the space between was covered with squalid Chinese suburbs up to the edge of the Yan-kin-pang creek, which was the southern boundary line of the foreign settlement. In the rear of the city and about on line with the race course was the Imperialist camp. The four places, viz., the foreign and Chinese cities, the race course and camp, thus occupied the four corners of a somewhat irregular quadrangle.

About midway between the two cities the rebels had erected an earthwork on the water front, from which there was a very frequent exchange of harmless cannonading with an Imperialist battery across the river; and occasionally a couple of Imperialist war vessels, one a refitted bark named the Sir Herbert Compton, would take position amidstream, and give the rebs a very lively time, most of which was, however, generally spent in getting out of reach of the shots. The Sir Herbert was commanded and partially manned by beach-comber white men and Portuguese. These little combats were plainly visible from our quarterdeck, and served to while away our otherwise dull watches, during which there was otherwise little variation; for even the floating by of dead bodies, at first rather interesting, became so common a sight as to attract but little attention, except when the tide swept them across our hawser and we had to bear them clear. We noticed, by the way, a peculiar thing in regard to these bodies. All those of the men floated face down, of the women face up. This probably was due to the buoying effect of the breasts of the latter. One day the exhibition was quite a good one. Through some unknown cause fire entered the magazine of one of the attacking vessels, the Antelope, I believe, and in an instant she was flying into the air in fragments, some of which descended uncomfortably close to ourselves.

Several events had taken place which led to an affiliation, to a certain extent, between the rebels and ourselves. Among them was first an affair with the Sir Herbert, which one day saw fit to bring to and seize a pilot boat, owned by two American pilots named Ayres and Linklater, haul down the American flag, and make prisoners of some of her crew. An hour after this event the Plymouth had slipped her moorings, dropped down the river, re-anchored between, and with her broadsides bearing on the two Chinese vessels, and the Compton's captain, also the Toutai or imperial governor notified that if in one hour—noon—a salute of twenty-one guns to the American flag was not fired we would sink them both at their anchors; and while this was pending a boarding party under Lieut. Guest had released the prisoners and made others in their place. At noon the salute was fired, and we returned to our moorings. The rebels were, not unnaturally, well pleased with this act.

It so happened one day that a little combat between the two forts resulted in quite a success for the rebels, for some shot was actually landed in the fort across the river, an almost unprecedented event, and as these shots paved the way to a warm friendship between myself and Aling, the rebel chief, which produced among other results this yarn, I refer to them.

Two or three of us on liberty strolled into this fort, and there having been no firing that day owing to its being a holiday of some sort, we were a little careless and mounted the parapets. While looking at the enemies' quarters we were saluted with half a dozen shots in quick succession—all landing in the river considerably short. We were young then and the challenge was not to be treated lightly. We manned the biggest of the rebel guns, and knocking out the quoin, which with Chinese guns takes the place of an elevating screw, but which, being immovable, prevents any change in the elevation, pointed and fired, and after a couple of shots, getting the range, we succeeded in landing some shot in the fort, whose defenders fled, and the thoroughly silenced battery was abandoned. I shall never forget the absurd mixture of pluck and cowardice we displayed at first, for not one of us dared touch the gun off. From our point of view so dilapidated and rusty an old machine was it, with vent like a teacup, the chances were ten to one that we at the breech end would get the worst of the explosion, and it was not till two or three exchanges had warmed us up that we failed, after fitting a long enough piece of slow match, to rush behind a bomb-proof buttress for shelter until the explosion. Although the United States Consul and our Captain endeavored in vain to ascertain who were the officers who thus "gave aid and comfort," etc., Aling knew very well, as did all of his following, and was very grateful and hospitable whenever, as we often did, we paid him a visit.

We were supposed to remain neutral, but were almost forced to take serious steps. To the race course all Shanghai foreigners resorted every afternoon, and during these hours there was safety in numbers; but very few dared visit it at other hours when every one was at business. One forenoon, though, it happened that an invalid English lady, accompanied by an English gentleman named Caldecott Smith, were riding in a palanquin. They were attacked, maltreated and robbed by some bushwhackers from the Imperialist camp, and probably would have fared even worse but for the opportune arrival of a squad of English sailors on liberty and donkeys, who had come out for a scrub race. They soon cleared out the Chinamen and escorted the party home.

Then the music began. As had been arranged, a signal of "assistance wanted" went up to the English Consul's flagstaff, and in less than half an hour, a body of perhaps a hundred men were marching double quick toward the Imperialist camp. Of this body, the Plymouth, United States sloop of war, and the Encounter and Grecian, English war vessels, with some merchant ships in harbor, furnished four-fifths; the remainder were young men, clerks, partners and others, in the various houses. Without much time wasted in parley, the first of the earthworks reached was attacked and carried, nearly all of its garrison having fled incontinently. About twenty got left, and their detention became a permanent one, for the sailors were ugly; they had been spoiling for a fight.

One little incident I remember combined to the most extreme degree the horrible and ludicrous. The captain of our after guard, Berry by name, chased a Chinaman, gained on him, until just able to reach him with his bayonet point, the bayonet being fixed. This he thrust into the poor devil's stern about half an inch. The prick quickened the fellow's speed, and with unearthly yells and contortions of face through fright and pain he did his best. Berry, with his arms and gun stretched out as far as possible, could do no more than just keep up; until at last the fugitive stumbled and in a moment it was all over. It seems heartless to say the sight had in it aught of ludicrousness, but barring that the contortions and grimaces were due to pain, and that it was a struggle for life, the attitudes, gestures and efforts of both men were exceedingly funny.

After demolishing the fort the party returned, word having been sent by Captain Kelley, of our ship, and O'Callahan of the Encounter, to the Imperialist leader that the encampment must be at once broken up, and the army removed to the other side of the walled city. Twenty-four hours were given in which to begin this evacuation.

The next day, April 4, 1854, there occurred the combat known throughout China as "The Great Battle of Muddy Flats." The twenty-four hours grace would be up at 3 P.M.; and at that hour about three hundred Americans and Englishmen, commanded by Captain Kelley, he being the senior officer present, were posted at various commanding points; and we were awaiting the signal, which should start us on the Herculean task of combatting three times as many thousands as there were hundreds of our own men entrenched behind strong earthworks. We were watching anxiously for signs of a movement of evacuation, but none appeared; and at the appointed hour Captain Kelley opened fire. The effect of that first shot was simply wonderful. It was a 12-pounder shell, from a howitzer; and fell a trifle short. In an instant a score of Chinamen sprung over the wall, and rushed toward the spot where it had struck; in another moment there was an explosion, and the crowd was torn to fragments, some escaping with life, seeking shelter again, many without it were lying torn and maugled. They had never seen a shell before, and in attempting to carry out a superstitious belief, that to return the first shot of an enemy insures victory, they had scrambled for its possession. The fuse of the shell had been cut too long, and the delayed explosion cost them dear.

A series of deafening yells was heard, and quickly the rear portions of the wall and soon after the country beyond was yellow with a terror-stricken, stampeding swarm, and as we afterward found, by counting the dead, not more than three hundred ("just one apiece for us," as I heard a sailor remark) remained to fight us. For half an hour we continued firing, then ceased and charged.

During the firing an amusing episode occurred. The loader of a howitzer, which was worked by volunteers from various English and American houses, disappeared after the first fire. He was a popular man and a noted wag, whose grim humor at times was very eccentric. Hearing that he was hit, for some one had seen him running toward a ditch, several there sought him, and found him, not wounded, but sitting up to his waist in the water lighting a cheroot. "My God, Charley, what's the matter?" sung out the first who saw him. "Matter! Why, I found I've made a great mis-

take. It's the business of those navy men to fight; my business is to keep books for Hiram Hogg & Company, and I'm going to stick to it. Here's your rammer."

Our charge was a brilliant success up to a certain point, and that was the edge of a wide and deep ditch, which, surrounding the forts, stopped us when within fifty yards evidently. However good sailors, we were poor engineers. As we stood puzzling, there was a sudden discharge of six or eight guns right in front, and although the greater portion of the missiles went whistling over our heads, yet enough dropped to kill three men and seriously wound several others. No attempt was made to reload the guns, for the fate of three men in succession, who, while vainly endeavoring to fire a large gun, were picked off with rifles through the embrasure, deterred them. When we afterward drew the charge from this gun we found over a peck of gingal balls of iron, an inch in diameter, in a canvas bag, in addition to a round shot.

While thus detained the Englishmen had made a flank movement, torn down a house, and with its timbers bridged or platooned the ditch, and soon their vigorous hurrahs mingled with the Chinese yells. The latter soon ceased, and ascending smoke and flames showed that the battle was over, the forts ours, and fired. Not a living Chinaman remained, and scattered throughout the inclosure were many roasted to a crisp. That night we bivouacked near the field and in the adjacent house of a missionary.

At midnight I was roused up to take charge of a reconnoitering party, and in so doing I got, I think, the worst scare of my life. It was intensely dark, raining heavily and cold. We were plodding along in perfect silence. The path through the clay field was excessively slippery. My foot came in contact with something, and I fell; stretching out my arms to save my face, one of my hands landed on something cold and clammy, and into a cavity of this something two of my fingers entered, scraping on something as they did so. I shall never forget the horrible sensation which thrilled through me as it dawned upon me that my hand was upon the face and my fingers in the mouth of a corpse. Since then, when I have heard the expression "my blood run cold," I have understood the meaning.

The next day a permanent post was established on the Yang-kin-pang Creek, about midway between the contending parties, for the Imperialists accepted the situation and began erecting new works on the location assigned. We took possession of a very large temple or joss house, and here in the midst of barbaric gorgeousness we remained some months, administering occasional thrashings to both parties as they deserved it, and establishing a code known throughout China as "Shanghai neutrality—whip both parties."

About once a week, on a fair day, we would be entertained with a grand battle. Not only ourselves, but the Chinese would gather in tremendous crowds to see the soldiers fight, never a man of them thinking himself called on to lend a hand. From one side or the other would issue first a tremendous din and clatter, gong beating, cracker and gun firing, rockets and yells. This continued long enough to put the enemy on guard. A body of men, perhaps a thousand, would follow, and first rushing, then walking slower and slower, would halt at three or four gunshots distance and begin a series of ridiculous maneuvers undoubtedly intended as challenges. Then agile men, most grotesquely attired, marked with heads of dragons, tigers or devils, would rush almost into danger, shouting and prancing like clowns. One chap, I remember, wore on each arm a large circular shield, placing which close to his side, the edges on the ground, he doubled up, and with one heel for a motive power, resolved himself into an animated vehicle.

The challenge was always accepted and, the opposing force having reached the other side of the danger belt, the firing became furious and dangerous, too, to those of us to the right or left and within distance, and from our position we could see the fall of many men on both sides. At once a lot of others would pick up the corpse and quickly transport it to the rear, drop it, and flee, the corpse at as lively a gait as his bearers. It was against such flights that we had to guard, for before our fight they were frequently into the foreign settlement, where there was both shelter and booty.

Being on rather good terms with the rebs, we would now and then during these fights stroll over into their ranks—quite as safe a place as one could find within hearing distance—and standing there one day I saw for the first time the power of a Minie rifle. An Englishman named Reynolds, commonly known as Pirate Reynolds, had espoused for a consideration the rebel cause. He was out this day and I was talking with him about his rifle, which he showed to me and explained, finishing the exhibition with, "D'ye see that chap with a red shirt, jumping?" he pointed as he spoke. "Yes." "Well, watch him," and in an instant I saw the Chinaman leap into the air higher than usual, fall and lie quiet, and at the same moment heard Reynolds's gun. It was a long shot but a good one, and settled the fight, and almost every battle had been settled in the same way—the Imperialists fled. It was the practice of Reynolds to let the fight go on as long as he felt in the humor, then he would stop it—thus he held the balance of power.

A personal resource was the society and interchange of visits with Aling, the rebel chief, who, since the little battery affair described, had become very friendly. One day, entering the gate of the city, I was struck with the unusual number of freshly-severed heads which ornamented the spikes. Nearly every spike for a hundred yards in both directions bore its ghastly trophy, and they were not more than a yard apart. Evidently there had been a row, and I hurried to Aling's quarters, formerly the palace of Toutai (Chinese Governor). Several days had elapsed since my last visit, and a strange guard at the inner doorway detained me until Aling was communicated with. While thus waiting my attention was drawn to a bamboo cage in the darker part of the court, in which was a prisoner. I strolled toward it, and the crouching figure sprang into life—a woman who, thrusting her arms through the interstices, grasped at my legs and poured forth a torrent of tears and (evidently) prayers. Aling, when I questioned him, gave me explanation both as to the heads and the prisoner. There had been a local insurrection and attempt by certain Toutai men (loyalists) to recapture the city, and a sharp fight had ensued.

"But, Aling," said I, "what fashion that piecy woman down side?"

"He belongy Toutai woman, he makee spy pidgin."

"What thing you makee he; you makee killum?"

"Killum he, no can; sposey he man, my makee killum; sposey he woman, my puttee stone he neck; puttee down side water; bymby he dlown."

I resolved that if it were possible I would save that woman's life, though not for any very romantic notions, for she was neither young nor pretty. Persuasions were, however, in vain, although I did at one time get Aling's acceptance of an offer I made for her life, he offering compromise on "my punish he litty," but this from a Chinese point of view might mean most terrible tortures, to which death were preferable. I had seen one poor devil punished, and I wanted no more of it. At last a happy thought struck me. Not long after our battle with the forts, Aling, impressed with the efficacy of shells, had begged me to teach him how to make them; this I had peremptorily refused to do, for as I told him it would be very wrong in me to give such information, and which (I did not mention) I really didn't know myself; for thirty years ago midshipmen learned how to use guns and shells before learning how they were made. Taking, however, the chances that I could learn from one of the lieutenants, I reopened the negotiations with an offer to teach him the secret; and the price was to be the woman. Eventually he stipulated that I should also furnish a fuse for a model, and permit him to retain the woman as a prisoner, to be comfortably lodged and fed, and I to have right to visit her. She became mine, my property, subject to the conditions, as much as my dog is now. With looted champagne, cheroots and pale ale the bargain was sealed, and Aling said and I said "my can secure."

I repaired on board ship, called the gunner and another midshipman (since become a lunatic) into my counsel, and we devised a plan and made drawings of two hemispheres, on the peripheries of which were to be cut, on one a male, on the other a female screw, provided with which and a fuse, I again visited Aling and my property. Both were delighted to see me.

Ten days after I called again. Aling sat, as usual, at his table where writing materials had always given place to refreshments on my visits. This time there was no move in that direction and Aling's greeting did not seem as cordial as usual. He left the conversation to me, answering in monosyllables. There was a chilly, depressed air about him. I endeavored to cheer him up and this conversation ensued:

SELF (*cheerfully*)—"You have makee that shell, Aling?"

ALING (*curtly*)—"Hab makee."

SELF—"How many piecy hab makee?"

ALING—"Plenty piecy."

SELF—"You hab make fire them?"

ALING—"Hab makee flire one piecy."

SELF—"How you likee he?"

ALING (*excitedly*)—"My hab make flire one piecy; hab killum lum (eleven) man."

SELF (*reassuringly*)—"That very good, Aling, one piecy shell killum eleven men."

ALING (*bursting out*)—"Hab killum lum man, he no belongy Toutai man, hab killum my man."

Whether the gun burst, or the shell prematurely exploded, I never have found out. I called to see my protégé, but she was gone.

PISECO.

ON THE GUAGUS.

I HAD often heard glowing accounts of the trout fishing to be had at "Guagus Cold Springs," on the head-waters of Union River, three miles above Brandy Pond, Me I had visited the place often enough deer hunting in winter, but had never seen it during the trouting season. So early last September a jovial party, consisting of Josi, Jim, Walt, Lou and the writer, well fortified with courage, hardtack and pork, started for that locality, which is by no means easy of access, except in winter. Josi and Jim, like myself, were old hunters and fishermen; Walt and Lou were brothers, sons of the aforesaid Jim. Walt was a good fisherman, but on this occasion his whole soul was wrapped up in a brand new 10-gauge, 10-pound gun, with which he prepared to slaughter partridges innumerable, and he even darkly hinted of bears, which abound throughout that entire region. Lou was not a fisherman, neither was he a hunter; still he was considered the most indispensable man in the party, simply because he would eat anything and everything that could be caught or killed, and all that was cooked that the rest of us could not dispose of; so that with him in a party, culinary matters were brought down to the simplest basis—merely to find something and cook it. At this present writing, he is about receiving his diploma at the medical department of the Vermont University.

An atrocious road, six miles in length, from Greenfield, brought us to the "Extract," said Extract being a huge mill, furnished with an engine and scores of cauldrons and vats, where tens of thousands of cords of hemlock bark were ground and steeped, the liquor poured into barrels, each weighing when full 400 pounds, and representing one cord of bark with only one-seventh of its weight, making a vast saving in hauling and freight; it was then hauled by heavy teams to the station, eighteen miles away, and sent to tanneries all over the country. Two miles of impassable road brought us to the shore of Brandy Pond. A beautiful white sand beach almost surrounds this lovely sheet of water, which is almost perfectly round, with an island gem set in its center. The lake is about two miles in diameter. It is two miles from where the road strikes the pond to the inlet on which are situated the Cold Springs.

While tramping up the beach a shy and solitary lesser yellowlegs—a rare bird in that vicinity—arose from some rushes which grew around the mouth of a little brook, and alighted out of sight around a point a short distance in advance. "Now, Walt, have your gun ready, and when you round the point you will probably get a shot," said Josi, and when Walt, obedient to this advice, walked cautiously around the point, with his much-loved Parker all ready to lift to his face, there stood the yellowlegs, stretched up and motionless, a very long shot off indeed. "Try your new gun," said I. Bang went the beauty, and the yellowlegs bounded two feet into the air and came down on his back, stone dead. Sixty-eight paces, with No. 8 shot; good for the gun. Lou viewed the bird with delight. "We will fry him for dinner," he said, as he quietly poked him into his coat pocket.

On reaching the mouth of the inlet we succeeded in finding a canoe, concealed in a swamp by a hunter, who had kindly given us directions where to look for it; but as the water was too low to float a canoe below the Palmer Dam, which is nearly a mile above the lake, we were obliged to carry it that distance, and then when we launched it on the dead water above the dam we found that the fervent summer sun had melted the pitch off its sides, so that when heavily loaded the water poured in at such a rate that Josi and Lou volunteered to walk. This was no light task, as the entire distance to the Springs was a soft bog, covered with hardhack and labrador three feet high, making the walking horrible. Half way to the Springs we met a young fellow, who had been up the stream after cranberries, who informed us that a crew of cranberry pickers half a dozen strong had camped at the Springs for nearly a week, and had been gone only twenty-four hours. All our visions of silence, solitude and trout vanished instanta; sadness was depicted on all our faces, and even the dip of our paddles took on a subdued and quiet tone. Arriving at the Springs, we found abundant evidence of the truth of our informant's statement. There was a solid beaten path the entire length of the reach of water where the trout were wont to congregate. Tent poles and half consumed sticks of firewood could be seen on the knoll above, and to complete the desecration the ubiquitous, the irrepressible, the soul-harrowing tin can leered maliciously at us from various little hollows, which ought to have been sacred to mosses and ferns. This infernal adjunct of a vicious and effeminate civilization has about the same effect on me when seen in the wilderness that a red rag has on an irritated bull. What lover of nature who, toiling with infinite labor to the top of some rocky chasm, has not been filled with rage and disgust to see painted in enormous letters on the opposite cliffs, "Children cry for Mrs. Soothlow's swindling syrup?" Thus doth the tin can affect me.

The alder and choke cherry poles which lay on the bank were proof that the finer arts of angling had not been brought to bear on the pool, and we still hoped that some of the more aristocratic beauties had scorned such rude wooing, although there's no denying that an alder pole will sometimes do frightful execution in the hands of a rural expert. On jointing up my rod I made the pleasing discovery that in changing my clothes at Greenfield I had left my entire outfit of flies and leaders in my inside vest pocket. This was the last straw! In sheer desperation I quitted the pool altogether and wandered off up the stream, first strapping on a box of worms, with which we were well provided. A short quarter of a mile above the pool I found a rude bridge, which had been thrown over the stream the preceding winter by lumbermen; the two huge pines across which the poles were laid had been swung partially around by the spring freshet, and reached about half way across, with their outer ends under water, their inner ends high and dry, and part of the flooring still remaining. On the opposite shore the bank was steep and shelved over, and altogether the place looked inviting. Carefully baiting with a lively worm, and creeping up behind the flooring, I made a cast just above the end of the lower stringer. An instantaneous tug followed the light plash of the hook. My reel gave out merry music, and I barely succeeded in clearing the end of the upper stringer as the line spun through the water; then a few exciting moments of vigorous fighting and careful playing, and I dropped the luscious beauty into my basket with a sigh of content. Just as I made the cast I caught sight of Walt strolling listlessly up the opposite bank, as if his courage had all evaporated. All his languor disappeared when he saw the bent rod, and before I made a second cast he had spied the overhanging bank with the unerring eye of a true fisherman, and for half an hour our reels alone broke the stillness of the lovely September evening. Twenty trout rewarded our joint efforts at that old bridge, for which I shall always hold it in grateful remembrance. Then we lightly retraced our steps to rejoin our comrades, who had succeeded in coaxing half a dozen fine trout out of the pool.

Preparations were at once made for supper. Our cooking outfit was not extensive, consisting of a frying-pan and coffee pot only, but great possibilities lie dormant in these two simple utensils, and we proposed to tax their capabilities to the utmost. Soon there arose the fragrance of what Theodore Winthrop called "the saline juice of fire-ripened pork." The freshly caught trout, cleansed in the icy waters of the Springs, were dropped into the hissing fat, the fragrant coffee bubbled and sang, and as the soft September twilight deepened into darkness, the plaintive notes of the whippoo-will floated out clear and distinct on the evening air. What language can describe the enjoyment of such a meal, and amid such surroundings? I pause as I write and try to imagine how many brother sportsmen, at home and abroad, as they read this weak and inadequate description, will recall just such scenes in their own experience, and fill in all the details from a loving memory; to all such, "Penobscot" extends his right hand of fellowship.

While sitting around the camp-fire quietly enjoying our evening smoke, a sibilant sound cut sharply through the night air. "What's that!" said Walt, bounding to his feet and feeling around for his gun. "That," said Josi, slowly removing his brier-wood pipe from his mouth and speaking with a deliberation strangely in contrast with Walt's excited exclamation, "is an old buck which smells the smoke from our fire." That's the first one I ever heard," Walt replied. "It sounds something like a fox," for while they were speaking the buck was keeping up a perfect fusilade of snorts, and he continued at intervals for a quarter of an hour. We had brought a camp spread with us, but not a tent, and a heavy shower coming up just before midnight, threatened to drench us; however, we protected our heads by turning the canoe over us, and just as it began to run through the spread in a way reverse of agreeable, it passed over and we slept the sleep of the just.

The next morning we were astir at dawn; the sky showed every indication of rain, but we nevertheless decided to go to Micketowas Lake, four miles distant, at the head of which is Coomb's Brook, one of the best trout streams in the county. A lumbering road, which we knew led to the lake, passed within sight of our camp grounds; but it was a new one, and none of us had ever traveled it, or knew where it struck the lake, and as the latter is nine miles long, it will be seen that this was an important point. But being determined to go, we just hoped that it came out at the head and started off. The road lead away from the stream on which we were encamped for nearly a mile, and then came in sight of it again for a short distance, but the water was only a few inches in depth and their were no signs of trout grounds. After the longest four miles I ever recollect traveling over, we came to the lake, only to find that the road came out at Norway Point, five miles below the head. The traveling on the bank of this lake is as bad as anything can be, and as it began to rain, it was not to be thought of. So we took our back tracks in very bad humor, and the abuse which we heaped on those cranberry pickers relieved our feelings, without injuring them.

When we got back to where the road neared the stream, I proposed that part of us should follow the water down to the old bridge, as there might be some trout holes which would afford us a mess for dinner, but none of them believed there were any trout in that shallow water, so I was obliged to go alone. I wanted some fish—pork, hardtack and coffee having lost their charms for me while in the army. A very short distance down the stream brought me to an abrupt bend, a bit of meadow ground, a tiny rivulet of spring water trickling into the bend, and yes, actually deep water. With active and eager fingers I jointed up my rod and attached my reel. The rain which had fallen very lazily for two hours

now ceased altogether, although the skies still wore their threatening aspect a light breeze just ruffled the surface of the water, a long stretch of which I could see below me favorable for sport, with clean and grassy banks, and nothing to impede casting. A half pound trout rewarded my first cast, two more followed in quick succession, then I noticed a couple of logs lying close to the opposite bank, with a covering of driftwood. An extra long cast planted the seductive worm directly between their ends. Heavens! What a tug followed that cast. A mad rush for the further bank followed the turn of my wrist, and I checked him so suddenly that he sprang a foot out of water, flinging a shower of silvery spray in all directions. Being without any landing net I was obliged to play him till quite motionless, and then lift him carefully by the line. Just a pound and a quarter by the pocket scales; another of the same size was taken from the same place, and so I went, slowly down that reach of water for half a mile, taking the beauties from under the steep, grassy banks, and occasional bunches of overhanging bushes, totally oblivious to time, place and friends. The robin sang from the topmost branch of an old hackmatack, the purple grackle chattered among the spruces, the catbird squalled in the witch hazels, and the metallic notes of the hermit thrush tinkled melodiously from the dripping alders; all these sounds mingled with, and added to, my enjoyment. I remember, as a flock of ducks flew by me, within twenty paces, of vaguely longing, for a single instant, for my gun. Just as I came in sight of the bend, just below which I knew the bridge to be, my basket refused to receive another trout, and my worms were also exhausted. Quite a stretch of good fishing ground still remained between me and the bend, but I could do nothing without bait; besides I was frightfully hungry, as I had not eaten a mouthful since daybreak, and I found on consulting my watch that it was nearly 4 o'clock. I unstrapped my basket, emptied out my trout, and counted them back: forty-two, and six of them each a pound and upward in weight.

Just as I finished, I heard the dip of a paddle, and saw Walt and Lou turning the bend, in the canoe. "Halloo," cried Walt, "what for Heaven's sake have you been doing? Father says it is going to be a rainy night, and has started out the logging road, for the Extract, and we have got to hurry to get round before dark." "All right," I answered, "but just step ashore, and see if you can tell what kind of a fish this is, which I have caught." "Where is the fish?" he said, stepping out of the canoe. "In the basket," I replied. Walt lifted the lid and actually staggered back as he caught sight of the pile of trout. "Oh! What an infernal idiot I am;" he cried, "I wish some one would kick me. Here I have been laughing and cracking jokes at your expense for trying to wade through the wet bushes down this stream, when I might have known you wouldn't have staid all this time, and gone without your dinner, unless you were catching trout. We have brought our rods, but have forgotton the bait. Lou, hurry back and get some, I will never leave this place while there is a trout to be caught."

"Hold on, Walt," I said, "I think I can better that arrangement. I have forty-two trout in that basket, and six of them are all that you and I and Josi can eat for supper and breakfast. The remaining thirty-six will keep Lou off the ragged edge of starvation for two meals, I know. We will come up here at daybreak in the morning, catch what trout we can before breakfast, then they will be fresh to take home, and we shall have the balance of the afternoon to get a pile of wood which we shall need if it rains."

This was satisfactory, and we made haste to carry out the programme. Not a drop of rain fell during the night, and on repairing to the spot at dawn, we caught thirty trout in an hour. Lou immortalized his name, and covered himself with glory, by catching twelve of the largest ones, without stirring from one spot, between two big bunches of bushes. None of us saw him catch them, and I more than half believe that a mink brought them ashore for him; but the number he caught were nothing to what he ate when we got back to camp.

We were soon on our homeward way, Walt having several opportunities to try his gun on partridges. Just before reaching Jim's house, the rain began in earnest, and we arrived there drenched, but happy, enjoying his discomfirture, at having missed the sport. PENOBSCOT.

Natural History.

THE FLYING SQUIRREL.

(*Pteromys volucella.*)

BY DR. MORRIS GIBBS.

THIS interesting species is a resident in the Lower Peninsula of Michigan and, though not to be found abundantly in any locality, is well known to the majority of hunters and collectors. I am unable to say that the flying squirrel is found in the Upper Peninsula, nor can I attest to its distribution throughout the entire Lower Peninsula. From observations in several counties in various parts of the State, however, it is reasonable to conclude that this little squirrel is well distributed south of 45° north latitude.

Prof. A. Sager first mentions this handsome pet in a list of mammals published in a document of the State House of Representatives, 1839, and it has been also embraced in other lists. But little has been written on the habits of the flying squirrel, or, in fact, regarding the habits of any of the smaller Michigan mammals. The lists are merely nominal, and with the exception of a few articles on the larger game very little has been accomplished.

It may be truthfully said that the flying squirrel is nowhere common within our boundaries. Several families are occasionally found within a radius of a half mile in favored localities; again, an enthusiastic collector will search over many square miles without success.

In Southern Michigan (by which term the Lower Peninsula is here indicated) the haunts generally chosen are woods composed principally of white oak, *Quercus alba*. In fact, in my experience in Kalamazoo county, 42° 7′ to 42° 28′ N. lat., I have met with but one instance where the nest was not built in an oak, in this case it was placed in the dead top of a flourishing poplar, *Populus tremuloides*.

At Howard City, Montcalm county, latitude 43° 25′, the species is often found occupying timbered lands, both hard wood and pine, as well as in low tracts, partially covered with hemlock, bass wood, elm and underbrush. The nests are found on high ground in many instances, but as a rule are not far from water. A pond or small lake will generally be found within a few hundred yards of the stub occupied. In those cases where the little fellows occupy low tracts, the locations of the nests are usually near rivers or small streams.

The nest is generally a rude structure and consists mainly of dried grass, leaves and pulverized dried bark. The material is piled into the cavity and, as a rule, nearly fills it, but a free space is invariably left in the direction of the openings in the stub. In the autumn very compact and artistic nests can been seen, quite suggestive of comfort and warmth, but after occupancy for a length of time the materials become mixed into a terrible litter, and by spring have not so neat an appearance.

As to the amount of food that is stored up by this squirrel in the fall, I have but little knowledge, but from a few observations, where only a small quantity of winter supplies was found, I judge that but few squirrels are in any way thrifty in this respect. The flying squirrel is very sensitive to the cold, and when driven from its nest even in early November, acts quite differently from its usual custom in summer. Undoubtedly it curls itself into a ball when the first severe cold snap appears, and remains in a partially dormant state until the warm days of spring produce their stimulating effects, and our downy friend again appears to sail through the air and gladden our hearts with its graceful movements.

The majority of specimens secured by the collector, are taken at times when the presence of the glossy-coated creatures is least suspected. A regular hunt may be instituted, and a number of collectors go out to secure the specimens, but the chances are ten to one that not one will be taken, unless it is known where they are to be found. Again when returning home from a collecting trip in the evening, a shadow flits athwart the weary collector's path and a scrambling on the bark is heard as the graceful rodent ascends the tree to which it has sailed. After reaching a certain height the diminutive aeronaut again launches forth, and spreading its extremities sails to another tree, and continuing in a succession of so-called flights, is soon lost to view in the gathering darkness, or else conceals itself in some neighboring cavity.

With such precision does the animal calculate, that a failure to gain a desired foothold on the tree to which it springs is of very rare occurrence. When failure accompanies the attempt, it is generally a result of the frenzied condition of the terrified jumper, as is sometimes the case with the fox and black squirrels when hard pushed by merciless enemies.

When a black squirrel falls, in a vain attempt to jump from one slender twig to another, it comes lumbering down to the ground, or perhaps catches a twig twenty or thirty feet below the point at which it lost its hold. In some cases I have seen a black squirrel so stunned by a shock as to fall a ready victim to a club or a cruel hunter's boot. But the flying squirrel reaches the ground when necessary in a series of graceful spiral movements interesting in the extreme. When rudely shaken from a limb the little fellow spreads its membrane and with graceful movements of its tail wavers in the air in a series of undulating movements very amusing to the observer, and finely illustrating the principle of the parachute. At once on reaching the ground our little friend strikes out for the nearest trunk, fence or building in order to gain another flight, and unless the dogs are quick or the boys are active with their sticks, *Pteromys* will soon be again out of our reach.

I have a vivid recollection of hunting this squirrel one bright October day, some years ago, when several of us went together with the intention of securing live specimens for pets. Numbers of the animals were seen and many could have been shot, but as we were above shooting the delicate creatures, we only used our insect nets. All in vain. Several picturesque groups enlivened the proceedings, where boys, dogs and underbrush were indiscriminately mixed. It was really surprising to see how the squirrels eluded our attempts, but not one was taken alive. Finally poles were used to knock them off of the trunks, and we went home satisfied that our collection of skins would be enlarged even if we could not fill our carefully prepared cages.

The movements of our friend are very interesting, and he is a dull observer who would not admire the swoop of a flying squirrel. The greatest jump that I have seen made was something over forty feet, *i. e.*, from the base of one tree to another. The further apart the trees are, the straighter down the squirrel has to go. For instance, if the distance to be covered is thirty feet from the base of one tree to the other, the animal must jump from a height of not less than fifty feet, or else it will reach the ground from lack of force. If the jump to be made is only five or six feet, the space is covered almost in a direct horizontal line; whereas if eight or ten feet are to be covered, a downward swoop must be made at an angle of 25 or 30 degrees.

Those who have watched the movements of these airy creatures have observed that the older and stronger ones are much more capable of accomplishing a swoop, which undoubtedly arises from the fact that the animal is stronger, and, therefore, can spring with much more force, and, further, the space covered by the membrane is greater. I have seen a large male spring from the top of a tree, as if to sail to another tree, but only go a few feet from the trunk, perhaps four or five, then drop directly down thirty or forty feet and sail gracefully back to the tree it had left.

Such a move was undoubtedly premeditated. Perchance the animal intended sailing to the next tree, and after launching forth arrived at the conclusion that it had not sufficient force, or the distance was too great. However, it is reasonable to judge that it merely wanted to descend from its perch, and took this means, as it is not a rapid climber.

Always a shy, nervous mammal, it is nevertheless decidedly unwary in many instances, and frequently brings destruction on itself and family. If a place of resort is discovered, it is an easy matter to discover their habits, and when the dead trees are found in which they nest, the chances are all against them if the collectors are on hand. The holes in which they remain during the greater part of the day, if once located, can be relied upon as almost certain to produce specimens, and the collector can secure a series at any time during spring, summer or fall.

A thump at the base of the stub brings out the heads, and bright, piercing eyes are directed toward the disturbers of their repose; another thump, and the shining-coated fellows rustle out on the decayed bark and ascend to the top of the stub or tree.

I have never met with over five squirrels in one tree, and think that this number embraced the two old ones and the three young of the year. Such a series is only met with in the summer, and as two of the specimens were larger than the others and more complete in coat, the conclusion is undoubtedly allowable. In the spring three full grown specimens are occasionally found occupying one hole, but generally, from April to June, only a pair of old ones are found consorting.

In those cases where there is but one opening into a nest there is a better chance of securing the entire family. At the first thump the old male protrudes his nose and takes in the situation. The next thump brings out the male and another member of the family appears at the orifice. The first appearance is now shot as it reaches the top of the stub or after it alights on a neighboring tree. The report of the gun brings out another member, and in regular order all are secured.

If however, as generally occurs, all of the occupants appear at the various holes and sail out in different directions, no more than one or two will be secured, as some will surely be soon concealed in neighboring trees.

This unwary habit of leaving the nest when the tree or stub is struck with a club frequently results in the extermination of a whole family. The flying squirrel, as it is so improperly called, differs in this respect from other members of the family. A hunter would, indeed, be unsuccessful in an endeavor to bring out a black or fox squirrel.

The following dimensions are given of a female specimen taken in Michigan: Total length 12.02 inches, tail to tip 6.15 inches, length of long hair at end of tail 1 inch, length of skull 1.49 inches, breadth of skull at zygoma .84 inch.

If any one can furnish any information concerning the breeding habits of this interesting squirrel let the FOREST AND STREAM hear.

KALAMAZOO, Mich.

BIRDS OF THE GULF OF ST. LAWRENCE.

A PAPER entitled "Notes on the Birds Observed During a Summer Cruise in the Gulf of St. Lawrence," appears in the Proc. Boston Society for October last, from the pen of Mr. William Brewster. Besides being an ornithologist of eminence, this gentleman has also the art of recording his observations in a very charming style, so as to claim for himself considerable audience outside of those who are strictly scientific.

The cruise, during which the observations here recorded were made, took place during the summer of 1881, on the seventeen-ton schooner yacht Arethusa. The party consisted of five gentlemen in the interest of the Boston Society of Natural History, to which institution most of the specimens collected were afterward given. Among the points of interest visited were Cape Breton, the Magdalen Islands, different bays on Anticosti, Gaspé, the Mingan Islands and Percé Rock. As is usually the case on this coast, during the late summer the weather was anything but favorable. Mr. Brewster says, "Our log book records only eighteen moderately fair days out of the total sixty-two, and some of these were more or less interrupted by showers. Besides this, the season was too far advanced for egg collecting, so that, although the summer home of such desirable species as the blackpoll warbler. Lincoln's finch, the fox sparrow and others was reached, neither nests nor eggs could be secured."

The number of species noted is eighty-three, and, as might be imagined from the circumstances of the trip, an unusually large proportion, nearly one-half, are water birds.

Without going into details as to the species observed on this cruise or their habits, we may note an occasional point of unusual interest in the present paper. Testimony collected from Indians and white men along the north shore of the Gulf makes it appear probable that the range of the ruffed grouse extends much further north than has hitherto been supposed. A white man who for several days acted as pilot of the Arethusa informed Mr. Brewster that *Bonasa umbellus* "ranges over the entire region between the Gulf of St. Lawrence and Hudson Straits." The present paper contains a great deal that is interesting relative to the habits of our sea birds. One point which the author had painfully brought before him at every extensive breeding place of sea fowl was the constant persecution to which they are subjected. All species from the little terns up to the largest fowl are constantly robbed of their eggs, and such species as are large enough to be worth a charge of powder and shot are killed and eaten by the Indians or used for fish bait by the whites. There appear to be few places where these birds are free from molestation, Percé Rock being almost the only breeding place seen by Mr. Brewster which was quite inaccessible.

A suggestion in regard to the breeding of Wilson's petrel, *Oceanites oceanicus*, made by Mr. Brewster, is very interesting, and in the light of our present knowledge of the habits of this species seems quite plausibe. It is a well-known fact that this bird is abundant off our coast during the whole summer, yet nothing is known of its eggs or breeding grounds. A number of specimens secured by Mr. Brewster between June 17 and July 25 were dissected, and the sexual organs of all were found to be "at the very lowest stage of erotic development." In the females no signs of recent ovulation were detected. A male taken June 18, however, showed by its plumage and the condition of its bones that it was very recently from the nest. These facts lead Mr. Brewster to suspect that "Wilson's petrel breeds in winter or early spring in tropical or subtropical regions and visits the coast of the Northeastern United States *only in the interim between one breeding season and the next.*"

There are so many interesting points noted in the present paper that we can only allude to some of them, recommending it as a whole to all ornithologists.

WHAT A TOAD CAN DO.—*Editor Forest and Stream:* I made some amusing experiments yesterday regarding the stowage capacity of a toad, an "ordinary, everyday toad," as Thatcher, of the 'Frisco Minstrels, says. I caught flies and, squeezing all but the last kick out of them, dropped them one by one, say about two inches from his nose, and one by one he gobbled 'em, and between 4 and 7 o'clock P. M. he had tucked away 104. Three of us kept score for him. At this stage of the proceedings his little belly was ridiculously plump, and he grew so stupid that I gave it up and let him go. Up to the seventy-fifth he took them greedily, then the intervals were longer, but he did hate to let anything pass, and would stretch himself for all the world like a person after a big dinner. Lord knows what he might have done had his diet been more varied, but as it was straight fly every time you must acknowledge he did yeoman's work. I have known that toads were valuable as insect destroyers, but never put them to such a test as this before.—WILMOT (New York).

A TOUGH TURTLE.—On the 23d of last March I shot a turtle, putting the whole charge of shot in its head, as it was within ten feet of me, secured it, took it home, and cut off the head, intending to dress and cook it. It is what we here call the mossback, which grows, as I have observed, to the weight of twenty pounds, perhaps larger. Neglecting to

dress it for several days and having heard that a decapitated turtle would live nine days, I concluded to demonstrate the truth of the assertion. Strange to say the turtle on April 8 was still alive. I found attached to the turtle many leaches which I removed carefully and put in a glass jar of water. Some of them have brought forth young which are growing rapidly. Think they bring forth their young alive. Have any of the readers of FOREST AND STREAM ever noticed the manner in which the turtles dig the hole on hard ground in which they deposit their eggs? If so let them tell their observations and we will compare notes. I was presented on April 1 with a fine swan (*Cygnus americanus*) that was killed March 31, on Cedar Point Marsh, which I have mounted and added to my collection. Many thanks to the donor, Mr. Theodore Wells.—M. M. BENSCHOTER (Berlin Heights, Ohio).

ALBINO WOODCOCK.—The Baltimore (Md.) *Sun* of July 1 reports that "Mr. Rodman Cole, of thas city, killed a remarkable bird near Tolchester last week. He was after woodcock, and a pure white bird, with the flight and twitter peculiar to these birds, flew up and he brought it down. It was a true albino woodcock, of large size and absolutely spotless. He is having it stuffed and mounted." In the first volume of this journal (FOREST AND STREAM, I., p. 371) was recorded the capture of a snow-white woodcock, at Milton, Mass. In Vol. XII., p. 146, was record of a specimen taken at Augusta, Ga., pure white, save slight brown ring about the neck. Others have been recorded since then.

ROBINS AND FRUIT.—*Editor Forest and Stream:* Cannot some suggestion be made in the columns of your valuable paper by which the killing of so valuable a bird as the robin may be avoided by the farmers who grow small fruits and berries? A bird so useful should be protected (and is by law) from destruction, although but few persons outside of the naturalists fully appreciate the fact. Something of the nature of a "scarecrow" might be used instead of a charge of shot, if farmers would only make the attempt.—MOHICAN.

ALBINO ROBIN.—*Editor Forest and Stream:* I was interested in a recent note on an albino robin, as I have one, nicely put up, that I shot last fall while out partridge shooting. I first saw him flying in company with other robins. I followed them quite a distance and finally succeeded in bringing him down and found him to be surely a robin, but almost entirely white with pink eyes. I had the bird put up and he is a fine specimen.—F. N. M. (Forestville, Conn.).

Game Bag and Gun.

DAYS WITH THE PRAIRIE CHICKENS.

THE prairie chicken season is coming around again, and I take it that you may like to hear something of the fun we had with the birds on the prairie last fall. I was out the three opening days with my old shooting "pardner" and two other gentlemen, and we had a splendid time. We left here with a three-seated wagon and a driver on the afternoon of Aug. 14, and drove to the house of a farmer friend, who lives about twenty-five miles from here. That has been our headquarters for a number of years. We arrived there late in the afternoon, and after breakfast the next morning we got loaded up and pulled out for the prairie. Both rigs took the same general direction and agreed on a place to meet for dinner. I took time by the forelock and put the basket containing the company's dinner in the wagon I was going in (in case of emergency). We had four dogs, two old ones and two puppies who were on their first trip. We divided them up so as to give an old dog to each rig, my friend, R. M. Palmer, with whom I usually shoot, was in the other wagon, as he and I owned the two old dogs, and we had to separate them so that all parties would have an equal show. My partner the first day was Mr. Prentice, of this place. Most of our shooting was done over my old pointer, Don, who did not act a bit good and flushed very many birds before we could get a shot. I felt like excusing some recklessness on the part of the old villain, as it was his first trip of the season, but I made up my mind that if he did not reform I should cut a bean pole and go at him. We did not find as many birds as some previous years, but found enough to have a good time. To make a long story short, when we got to the house at night our bag was twenty-seven birds and the other party led us, having forty-five. After supper we drew the birds and stuffed them with hay and hung them where they would get cool, and the next morning packed them and sent them to a railroad station eight miles away and shipped them home and had them distributed among our friends.

The next day was very hot and we did not do much; the dogs could not do much either, and we all lay in the shade from 10 o'clock until 4 in the afternoon. The total bag for that day was, if I remember right, about thirty-five birds, which were disposed of in the same way as the others. The next day I had a change of partners, and had for my companion Mr. Sunderland, of Freeport, Ill., who was here on a visit, and he was one of the most companionable men I have ever shot with, a rattling good shot (much better than myself) and full of fun. We had a circus of our own all day. It was a model day for chicken shooting—cool and cloudy, with a dash of rain, just enough to moisten things up—so that the dogs could show what was in them. My old dog redeemed his character and worked as well as a man could ask.

We found more birds than on either of the previous days, and we managed to get them down in pretty good shape. One part of the day's picnic was this: the old dog commenced to wriggle himself in a way that showed me he was in the vicinity of chickens, so we got out of the wagon and went over to where he was. By the time we got there he had begun trailing, and from his action I knew the hens were running. In the damp grass we could see a lot of parallel lines, showing that it was a covey. The scent was hot, and the old dog was going along, his belly almost touching the grass, and putting every foot down as if he was walking on something that was going to break with him. He went along this way for some distance and finally began to straighten out, but just before he did so, he turned his head a little to see if we were on deck, and said just as plain as if he had spoke right out, "Here they are, boys. I've done my part of the business; come and do yours." I told him to go on, and he made a few quick steps and the air was full of chickens. "We got our work in" on them and "downed" four. The rest of the covey flew over the prairie; we could see them until they went over a hill, it was a rolling prairie. We saw them go over one swell but did not see them go over the next one, so we decided that they were somewhere between the two. We got into the wagon and drove over there, perhaps a quarter of a mile, and after plugging around for quite a while we found them; and my companion, Mr. S., nearly stepped on one, which caused the bird to get up, and about the time he got up he got down again. We were right among them, and they began to get up all around about as fast as we could attend to to them. We had seven birds down before we picked up one, and after we had got them picked up two more flipped up, where we had been tramping and shooting all this time, and we gathered them in. There were two of the covey left for seed, one getting up out of range, the other while both guns were empty. This gave us nine birds, and the four we got the first raise made thirteen from that covey. You can imagine it was quite rich while it lasted. We did not strike any more bonanzas of that kind, but had a most beautiful day all day, and when we got through at night had forty-four birds.

The other boys did not have as good luck in finding birds that day as we did. They brought in about twenty-five. Our host had brought a big piece of ice back with him when he came from town, so we drew the birds and packed them in ice, and the next morning decided to pull out for home, as the dogs were getting lame and we were somewhat stiff ourselves. The first two days had been very hard on the canine part of the company. It was quite warm, and there had not been any rain for a long time and the grass and stubble were harsh and wore their feet more than hunting twice the length of time usually would. It being their first trip, too, they were not in as good order as later in the season.

The place where we hunted is in the midst of the best chicken country I know of, and where we stopped is a capital place to stay. We of course always pay them, but they have always been very kind and did a great many things that they never got any pay for. I have put in the opening days of the season there for a number of years, and always had a big time.

It was a good thing we decided to go home as we did, as it turned out to be a very hot day, and we could not have done anything if we had tried. We were from 9 o'clock until 3 in the afternoon getting home, and our team were nearly played out before we arrived. We got all of our birds home in good shape and did not lose one.

This was the longest hunt of the season with me. I was out for two days after that and out for a day a number of times, and had varying success, once being completely "skunked." It is becoming so in this part of the country that a man cannot go out for a day and do much. Everybody that can lift a gun shoots, and the game within easy distance from town is soon killed off. I did not shoot any ducks to speak of this fall, although there was the best duck shooting here they have had for a number of years.

E. L. J., JR.

ALBERT LEA, Minn.

THE GAME OF DES ARC.

YEARS ago Arkansas ceased to be spoken of as desirable hunting range, but the renowned "Traveller's" State still offers some attractions to the lovers of gunning and angling, though the "perfect glory" of other days has departed forever. There are but few localities in the South and West of which the same cannot be said.

Large game of the dangerous class is very scarce. I heard last season of but four panthers being killed in this section of country. They had taken refuge from the Cache River overflow in an overhanging oak, and were discovered and killed by a settler named York, after a hard fight with one of them, which followed him through the shallow water and overtook the dugout in spite of York's frantic efforts with the paddle.

Bear are very seldom seen in this region, though they are scattered through the entire lowlands, if one may judge from the numerous tracks found in the vicinity of the tangled canebrakes. Good bear dogs would no doubt stir up their game in a few hours; without dogs it is useless to think of hunting them; and even when brought to bay, it is doubtful if the hunter could reach his dogs, through the matted cane, vines and briers, in time to save them from destruction. Bruin is never found here in the open woods of the uplands.

Deer are still quite plentiful, and I suppose they will remain so for a century to come. It is simply impossible to completely exterminate them, as the vast swamplands to the eastward serve as a perfect reservoir of all kinds of game, from whence we have a new supply as often as the old one is exhausted. Last Sunday I rode down to the bayou to note the stage of the waters, and while seated beneath the shade of a tree, two deer came down to the water's edge near me, and swam calmly across, remaining in rifle range for ten or fifteen minutes. It was truly a tantalizing sight.

The gobbling season for turkeys lasted fully two months this spring. Each morning the "king" of game birds sang his glad welcome to the glorious dawn, and every broken remnant of a firearm was brought into requisition. The slaughter was something simply enormous. Most of those killed were gobblers—old ones—from eighteen to thirty pounds weight. The young gobblers secured immunity from danger by wisely abstaining from the garrulous habits of their elders, together with the hens, rendered by nature incapable of the amount of chin-music generally expected from females as a class.

The favorite sport just now is spearing and shooting fish. Owing to the late and continuous overflow of the spring, the buffalo were unusually late in beginning to "float" and "suck" at saplings and floating straws, and very few were killed until the first of this month. It is splendid sport for a short time, but the fish are so numerous that it gets rather monotonous to me after a while. For choice I prefer to throw the iron into the lazy gars, that lie as straight and inert as a stick on the surface of the bayou, and are apparently transformed into sections of doubled-triggered chain lightning as soon as they feel the stroke. Two weeks ago I saw a choice article of this description. It was fully eight feet in length, and would have weighed probably 150 pounds. He was lying fair twenty feet from the boat, but the youth who was paddling squarely refused to go an inch closer, as he hardly fancied the idea of "fastening on to him." I dipped the boat nearly full of water in a vain attempt to reach the giant with an eight-foot gig-handle and ten feet of cord, and my bad luck probably saved me a nice wetting, for he would certainly have "died game."

Black bass are just begining to raise at bait. I think Bayou Des Arc will fully equal Reelfoot Lake for the game fish of the South.

Of small game we have an abundance. Squirrels are so plentiful that they attract but little notice. Quail, or partridge, as the natives call them, are whistling in every thicket, and follow the furrows in a stone's throw of the plowman. Rabbits and turtle doves are called game in some sections; here we rarely waste a shot on them. Duck shooting is splendid every fall. One of my neighbors killed and sold over one thousand mallards in the months of November and December last.

I might go ahead and say more in praise of this region as a happy hunting ground, but I can better express my opinion by remarking that this point is my choice for a permanent location, after shooting over the best grounds in the pine swamps and on the frontier prairies of the Lone Star State.

S. D. B.

DES ARC, Prairie County, Ark., June 2, 1884.

TWO-EYED SHOOTING.

I SHOOT with a rifle, shotgun or revolver. I raise my gun to my right shoulder, and close my left eye to aim. I hold a pistol in my right hand, close my left eye, and fire the moment my eye catches the sight as I raise the pistol to coincide with the line from my eye to the object. I have shot nickels out of split sticks at thirty steps with my pistol four times out of five repeatedly; have shot the spots out of the five of clubs, and fired my sixth shot into the spot on the ace of clubs at the same distance; have shot glass balls in the air, and killed a deer by shooting it through the heart at fifty yards, measured.

I use an old-style Smith & Wesson in shot, square handle, six-inch barrel, .32-caliber, long cylinder, but for several years have shot nothing but .32 ex. short; rim fire. I believe all other .32-caliber cartridges too heavy for pistols. I use a .38-caliber repeating rifle; have never had a shell stick in the field, nor do I believe any other man ever had if his extractor was right. After repeated loading into and pumping out of the magazine the bullet is often driven further into the shell than it was originally, and if pure lead is flattened at the point, and a very quick motion of the lever will cause either this flattened bullet or the edge of the shell to catch on the upper edge of the barrel, particularly if the gun be held with muzzle down. Scarcely any *ipse dixit* would make me believe that a properly loaded new cartridge ever did stick or could be stuck in a repeater.

I use a Clark & Sneider double gun, 12-gauge hammer gun, have broken eighteen glass balls out of possible twenty, thrown from a rotating trap, double, eighteen feet from me, trap behind a heavy blanket for a curtain. I used No. 10 shot, one ounce, three and a fourth drams "sea-shooting" powder.

In regard to glass balls breaking from one or two pellets: I was shooting last summer at glass balls with a Stevens gallery rifle .22-caliber, balls pitched into the air by a friend. During the shooting I knocked both sides out of each of two amber balls, leaving in each case a circular ring of glass, surmounted by the neck of the ball, I have these balls yet, I preserved them because I deemed the circumstance rather unique.

The first person of whom I ever knew shooting "with both eyes open" was my grandfather, who was born in 1790 and died in 1863. His shooting was done with the flint-locks and the old percussion locks, and the crooked-stocked "five-foot rifles" of the days gone by. Of course you know that in those days two hundred yards was a cruel distance, but I have often heard the circumstance mentioned by others of grandfather's killing a crow when it was 210 steps from where he stood to the foot of the tree on which the crow sat. He was an unerring shot and gave me my first lessons with a rifle. I may add that he shot "cross fire," that is, he raised his gun to his left shoulder, though right-handed, and I have never seen a cross fire shot who was not a marksman. What do your readers say to this?

A friend of mine, a Methodist Episcopal minister, was the next and only other "two-eyed shot" I have ever known. He uses a repeating rifle, and is, perhaps, better known than any other amateur in this section, but he should rather be called an expert. He differs from my grandfather in his explanation of "two-eyed shooting." Grandfather has often told me that it "made no difference to him about the sights on his gun, and he didn't believe he ever saw them." My clerical friend says he "sees the sights," and the rear sight on his gun is a very fine one graduated to 1,000 yards; so fine, that I cannot "catch a quick bead" through it. In proof that he does see the sights, I know that on one occasion he missed twelve consecutive balls pitched by me; he then tried at a stationary target six steps away, and found that the rear sight had been moved. This is strong evidence, but I do not believe any two-eyed shot sees the sights, I believe they shoot, as bowmen do, by instinct.

I would much like to see something from your readers on cross-fired shooting. AMATEUR.

SOMERSET, Pa.

A MAINE DEER CASE.

CONCERNING game protection in some sections of Maine, matters are not just as they should be. Deer have greatly increased under the fostering care of the law. They are frequently seen in the open land where formerly they were very rare, and in the lake region they are getting to be quite abundant. But the vacationist who would be a sportsman is interested. When he goes to the Androscoggin or the Moosehead Lakes to spend his few weeeks from school or business, he takes his rifle or shotgun with him. For what? He knows that there is not a single species of game in that whole State that is not protected by law, and the man who kills it is liable to arrest and punishment. Just such sportsmen are causing the friends of game protection a great deal of trouble. They demoralize the lowest and worst class of the guides with their money. They care nothing for the future of the game; they are not citizens of the State; their only object is to kill a deer or a moose, and come home to be regarded as a great hunter by their friends. Generally their friends understand them, however, and knowing them to be only lazy dudes, mistrust that the game was killed or thrown in their way by some guide.

An actual case in point will best illustrate. A Sunday or two ago a two-year-old buck swam out upon Rangeley Lake in plain sight of the Mountain View House. A vacationist—he don't deserve the name of a sportsman—named Hammond, from Boston or New Haven—the registers disagree, but he is not worthy of either city—ordered a guide to paddle him out after the deer. The guide's muscles soon brought the valiant hunter up with the poor, frightened creature, when, having no gun, the deer's brains were beaten out with a paddle and his throat cut. To the great discredit of all present the miserable law breaker and deer thief was

allowed to box up the carcass out of sight and send it home as a noble trophy of his skill as a hunter.

Well, that deer was killed in close time, and Mr. Hammond—it is to be hoped that these lines will be thrust under his nose, and that all his friends will see them—paid a fine of $50 and costs for the offense. He ought to have been more severely punished, and would have been, had the sentiment of those who knew of it been up to the standard of true sportsmen. As it is, a warden has been put on the watch for him, and if he ever comes into the State again, he will be fined for killing game on Sunday and also for transporting it out of the State. SPECIAL.

BOSTON, July 7, 1884.

THE DEATH OF THE GRIZZLY.

Editor Forest and Stream:

It may not be amiss in these days of crying out for rifles of greater power for the slaughter of big and dangerous game, to tell a little true story of how simple a thing it is to kill the most formidable monster of America.

Many years ago, during the heat of the gold fever, three miners were in camp in British Columbia digging for gold. Just at a time when their stock of provisions was nearly exhausted they took sick with malarial fever, and by the time they were recovering they had nothing to eat, and worse still, no ammunition in camp. One of them, a Scotchman, named Donald McTavish, who had just recovered and felt stronger than the others, saw a large grizzly bear one morning quite near the camp. He told his comrades and said he intended to try to kill the animal. They endeavored to dissuade him from the dangerous act, and represented to him that the bear would tear him in pieces. He replied that he would as soon be killed suddenly as die of starvation. He then cut a heavy green wood bludgeon and started toward the monster. The bear came on to meet him, and when at close quarters, reared on his hindlegs. The bold Highlander swung his heavy club with both hands and by strange good luck it struck him a terrible blow across the nose, and down he went as if stricken by a flash of lightning. The animal was completely stunned, and a few thrusts of a long-bladed knife finished the business. Those skilled in ursine lore are well aware of the fact that the nose is the most vulnerable part of a bear, in consequence of the concentration in that organ of the nerves of sensation from the brain. At close, hand to hand range, with an ounce and a half of No. 3 shot and five drams of good strong powder behind it, I am of opinion that the largest grizzly in America can be killed more suddenly than a 350-grain bullet can do the work even if it passed through the center of the heart. I think no man with a No. 10 bouble breechloader, thus charged, need be one bit afraid of the grizzly, if he only keeps cool and remembers that the nose is the seat of death. I don't mean to advocate the shotgun for grizzly hunting. I only state my belief. ALGONQUIN.

OTTAWA, Canada, June 23, 1884.

FORTY YEARS IN THE FIELD.

Editor Forest and Stream:

I have had the pleasure the past year of perusing the columns of your valuable paper, which have been both amusing and interesting, and having been in the field over forty years I am led to notice the change in style of hunting, which is very great. When I commenced handling the gun in my younger days, a majority of the people would say, "that boy will be a ruined child," and there was so much opposition that I would keep the old flint musket out in the bush to avoid being detected. I recall vividly an incident of my boyhood. A lad about my age was always ready for a little fun. The first opportunity we made tracks for the gun in the bush; we loaded the old musket and very soon spied two gray squirrels on a tree; we were about ready to give them the contents of the gun, having a good rest beside a tree. With much surprise we found the flint gone, which was a great loss to us. We concluded to go to the nearest neighbor and procure a lighted lantern. The boy made a very quick job of it. I had the plan perfected how to fire the old musket off; it was this: To light a hard stick with the candle in the lantern. I put the musket on the rest; the word was "make ready, take aim, fire." Then I quickly put the lighted stick to the pan of the lock. Slambang was the report of the old gun, with a stream of fire at both ends. Down came one squirrel, and the other one was treated likewise.

After a few years had passed, I heard of some one shooting birds when flying. This looked to me a very difficult thing to do with the gun. I resolved the first opportunity, I would see how the wonderful feat was performed. Fortune at last favored me. I had at that time a very cheap gun; however, the old thing would occasionally get a bird down. It looked like a crooked iron bar in comparison with the guns at the present day. My wadding was of tow, paper, and hornet's nest. Thirty-eight years ago I found a very fine little gun, 16-bore, 6½ lbs. This is the gun I use to day. Six years since I had it changed to a breechloader. I soon learned that the penetration was not as good; a little more powder is all right; how is that? I have used many other guns, but no other so reliable.

About thirty years ago I had a call from the Hon. George Ashmun of this State to accompany him for a few days shooting. I accepted, thinking it quite an honor to be in the field with such a noted man. He was very fond of woodcock shooting, so much so that he seldom raised his gun for partridge or quail in those days. As a sportsman he had many peculiarities. His time for shooting was six weeks, commencing October first; he gave me the handling of the dog, as I was a little more expert in the brush, and he was somewhat obliged to make his footsteps easy; yet he was generally found in the right position. When I gave him the word "point;" never mind the footsteps then, he was soon there and spied the dog; he invariably uncovered his head as though he intended to make a speech, then a few words to the faithful dog, very soon giving me the word "ready," I would put the bird to wing in his favor if I could. Mr. A. was a very good shot; if he missed the bird he never was disposed to pursue that bird further. If it was wounded he would make quite an effort to bag the bird. We kept up this old-fashioned way of shooting, down to twenty-two years since. In the meantime we lost our dog, I very soon had the good fortune to find one. Mr. A. bought the dog of S. T. Hammond, of Springfield, Mass., and was very fortunate in the purchase, for he proved to be first-class, and was very highly prized by his master. We shot over this dog five years; he gave us some fine work. At this time Mr. Ashmun was obliged to lay by the gun on account of feeble health; he was always interesting and instructive.

From this time Mr. Hammond and myself took the field, when we continued much the same style, with a little variation, which required us to empty our pockets oftener. It was a pleasure to me to be in the field with such gentlemen, from the fact that everything was smooth and agreeable; they delighted to do, or see, a good act executed with the dog or gun. While I review the past and compare it with the present, I yet find it a little pleasure to take the dog and gun and travel over those grounds where we have been so successful in gone by days, and bag a few birds, verily by the sweat of the brow.

The scarcity of game birds in most of our New England States at the present time is easily accounted for, about six to every town are killing the game birds in various ways, most of them for market. Our laws in Massachusetts are a good example to the States where game is plenty. In Massachusetts, if we could have had them passed twenty years ago, they would have been of great value. In my judgment it makes but little difference when the game is killed, a few days before, or two weeks after the law is off, as the destruction increases every year. We will see on the first of August an army of hunters and sportsmen; the hunters start early and stay late, with the breechloader and spaniel dog, one would think by their speed they were going to fight a fire.

They do not find time to dress in the morning, and almost need self-buttoning garments. If the object of shooting is to kill off the game it is not the swiftest method to employ. It would take but a few days to poison about all of our game in the State of Massachusetts. Now let us all say we have all been engaged more or less, in shooting off our own fingers and enact a law to put them on. DON'T PUTTER.

MASSACHUSETTS.

ADIRONDACK DEER COMPLICATIONS.

Editor Forest and Stream:

Some weeks ago there was published a communication on the subject of enforcement of our game laws. The writer asked some questions, the answer to which would be very hard to give, but in the opinion of the writer the game protectors were not doing their duty. I have been waiting some time for the settlement of some cases in this county that I might be able to show these faultfinders some of the difficulties under which the protectors labor.

Last September several parties were indicted by our Grand Jury, both for killing deer and fishing for trout out of season. All of these cases should have been brought before the December court for trial, but through some chance the district attorney did not furnish the sheriff with the necessary papers till the last day of court, and as none of the parties were nearer than fifteen miles and most of them thirty-five miles away nothing was done. Before the next court (in March) a new district attorney had come in. He started right, gave the papers to the sheriff, who, in some way, got so far behind in his business that they were not served in time for that court. Some subpœnas for one case, which the protector was very anxious to bring before the jury at that time, were put into the mail and did not reach the man who was to serve them till after the grand jury had been discharged. The witnesses went to Malone and could only go home again. At the court just held two of the parties who were indicted last September were fined $15 each, for killing deer last June, two other men were placed under bonds to appear at the September court. The case of one man who is known to have killed at least six deer in the months of June and July, 1883, was brought before the Grand Jury and no bill was found. There were in that jury at least two men who have always had the reputation of killing all the deer and fish they could, at any time during the year. Several of the witnesses who had told of seeing the venison, and eating of it, had also seen the fresh hides, swore before the jury that they had never known of the party being hunting nor having venison nor hides in possession out of season. With such swearing what can the game protector do? Can you or your correspondent help him?

I think our game protector (Mr. John Liberty) has tried to do his duty, but with so many things against him, very little can be done. It has been suggested that these cases be now taken before a justice of the peace, with a good sharp lawyer to examine the witnesses in the regular way. I think it would be the better plan, as a justice can be found within the county so far away from the offenders that he will have no personal interest in them. This seems to me the only way to reach such cases. The witnesses would be more thoroughly questioned than by the foreman of a Grand Jury, who is very rarely posted in the law.

What has been done has in most cases had a good effect, but the failure to indict some of the most notorious offenders has only encouraged others. One of the parties now under bonds to appear at the Sept mber court told me he had always killed deer when he wished to, and always would, and would catch fish when he pleased, law or no law.

In the cases of the two who were fined, both poor men, they say they have had enough and have stopped. One of them was induced to hunt last June by a hotel keeper, who told him he would pay cash for all he would bring, and he got so much venison on hand in July he could not use it, and sent two saddles to another hotel fifteen miles away. I had a long talk with this hotel man, and he says his customers call for venison and he must furnish it. I said to him I had no such trouble, and I am ten miles further in the woods than he is. I will not allow either venison or partridges to be cooked in my house out of season, and the guests of the house think I am right. By so doing, we can have good shooting in season, with venison and partridges in good condition. There is now every indication of fine hunting this season. Deer are seen about the lake every day, and we see many broods of young partridges.

One man from Malone, here last week, tried to hire one of the guides to go night-hunting with him. I did not hear of it till the man had gone home, but was very glad to learn that none of the guides would listen to him. The answer was that the deer would be worth more to them in September. This is what I have tried for ten years to make them understand. They ought to know it by this time. Such sportsmen are the ones who ought to be fined, and I think the guides are disposed to make such men pay a little more respect to the laws.

A party of three young men from Syracuse last year camped at Gull Pond, Herkimer county. They went in about Aug. 1. In six weeks they killed twenty-three deer that they got, and they say they wounded many others that they did not get. They killed five in one night in a strife to see who should kill the most. They could not use much of the meat, and let most of it waste. They were within the law; but what a record to boast of! I think they have much to be ashamed of. The Maine law ought to be put in force in such cases at least.

Our fishing season has been a splendid one; the fly-fishing is now first-class At the mouth of the brook, within eight rods of where I sit while writing, the small trout are jumping by the hundreds. This is the stream into which most of my young fry are turned each year. Those now jumping are evidently about two years old, on their way up to the headwaters of the brook looking for spawning grounds. The guests of the house acknowledge the corn. Stocking pays. A. R. FULLER.

MEACHAM LAKE, N. Y., June 16.

THE CHOICE OF HUNTING RIFLES.

Editor Forest and Stream:

Will you allow a stranger to "dip in an oar" in the controversy going on in your valuable columns in regard to the "choice of hunting rifles." Without attempting to argue the matter in a scientific point of view, I will briefly endeavor to state my views in the selection of a weapon adapted to the wants of the practical hunters. As far as a rifle or shotgun alone is concerned, I think we have nearly reached the ultimatum, but I think that nearly every hunter will concur with me in the assertion that they don't either of them alone "fill the bill" for an "all round" gun for shooting from a gray squirrel up to a grizzly bear. Of course no rifle that is adapted to squirrel shooting would have any more effect on a grizzly than a popgun; still I think we might have a gun suitable for either. Now, my ideal gun is a three-barrel, of which we have already one (the Baker), but I think this gun might be simplified and improved to meet still further requirements. For instance, why not have an independent lock of its own, something on the hammerless plan, for the rifle barrel, instead of having it complicated with the left shot barrel hammer, as they are now made? Now, why don't some of our enterprising gun manufacturers start up a competition in the manufacture of these arms and not let one firm monopolize the entire market as is the case with the Baker three-barrel? I consider that a three-barrel gun, two shot and one rifle, if properly constructed, would be the *par excellence* of shooting irons for the game hunter—say a .40-caliber rifle, and 12 to 16-gauge shot barrel, 28 or 30-inch barrels, and of a weight to suit the individual who uses it. I would regard it as a desirable gun for squirrel, duck, deer and bear, and with this *multum in parvo*, a person would have all the gun he ever would need for practical purposes. W. H. DUB.

Editor Forest and Stream:

I have had some experience in the use of a repeater while traveling on the plains of Kansas and Colorado, also while living on Gypsum Creek, a tributary of the Red River, in the Indian Territory; while in my hands the repeater saw two and a half years of hard service. I have heard many people in the East say that a repeating rifle was liable to break or fail to work when needed, did not shoot hard enough, and a few more complaints of the same kind. Now, for the two and a half years I carried mine, I never had it break or fail me in any way, except to miss occasionally, and that was my fault and not the rifle. At sixty steps I could cut the bottom out of a tomato can in five shots, and one of the boys shut down the air brakes of a grizzly in four shots with it; and yet I guess there are some who will say that because it is only a .44-40-200, it will not shoot hard. To those who want a bigger gun I would commend some special make of rifle, chambered to shoot the one-inch Gatling cartridge; then let them employ some one to carry their cartridges. I think a plain coarse leaf sight and knife blade foresight the best for sporting purposes, as with a coarse sight you can catch aim quicker than with a fine sight. I know of many cowboys who carry carbines in preference to rifles on account of the coarse carbine sight. Those who wish to learn the use of the sporting rifle, should go out in the West and rough it for a spell among the cowboys, who will treat them "white" and initiate them into all the mysteries of the art, while we Eastern theorists dream of trajectory, vernier and wind-gauge sights and many other mysteries of the Moors of Creed. COWBOY.

BALTIMORE, Md.

Editor Forest and Stream:

The pressure of official duties has kept me from sooner noticing the recent articles by "G." and "Skinner," and even now I can give a very brief answer. "G." is welcome to adhere so his singleloader, but he must admit that even with it the man behind the gun has many things to guard against to meet with success. I have seen just as many accidents and failures with singleloaders as with magazine guns, and but little want of care is requisite to have a jammed gun that will be of as little use as a crowbar. C. D.

FORT MCKINNY, Wyoming, June 29.

WAS COWPER A WING SHOT?—Cowper, although a most beautiful writer, evidences in his poem "The Symptoms of Love," that he could not have been—using the hackneyed term—a true sportsman. In the second verse of the poem he says:

> "Let her guess what I muse on when rambling alone,
> I stride o'er the stubble each day with my gun,
> Never ready to shoot till the covey is flown."

Now, did Cowper expect to pot the covey? Could he shoot flying? We think not. What an abominable condition he must have fallen into not to have had his love reveries completely broken up by the whirr of the startled birds. We cannot think he uses a poetic license, and fear the poet was either unacquainted with the habits of the quail he hoped to see "before they had flown," or was very "slow on the trigger." Such lines sound harsh to a wing-shot. Granting the poetic license, does it not detract from the romance in reading such otherwise beautiful verses to suspect for one moment Cowper should be guilty of such a detestable act as he intimates? "The Symptoms of Love" is utterly ruined by this one tell-tale stanza.—HOMO.

A DEER IN A TREE.—While in the mountains hunting a bee tree the other day, Mr. J. A. Devilbiss came across the skeleton of a very large buck which had got hung by its horns in the forks of a pine tree, and being unable to extricate himself had slowly starved to death. What must have been the sufferings of the poor beast thus imprisoned? Mr. Devilbiss says the tree was worn by the horns in the deer's vain efforts to escape, at least an inch and a half in depth, and the ground was pawed up all around the base of the tree. The buck was a large one, as the horns were at least fifteen inches long and hard.—*Winters Express, June 20.*

GAME PROSECUTIONS.—The New York Association for the Protection of Game has for some time past been pushing vigorously in a quiet way a number of important suits. "We have a number of cases on hand at present," said the partner of Mr. Whitehead, secretary of the Association, to a *Herald* reporter the other day, "the most important being the New York Association for the Protection of Game against the Washington Street Warehouse Company (Limited), No. 173 Washington street, this city. The detectives of the Association discovered that the warehouse company had in its possession a very large number of quail. On April 18 a search warrant was procured, it probably being the first one of the kind ever granted. Our men found in the cellar of No. 173 Washington street seven barrels of quail. The birds were marked 'poultry.' Each contained 374 quail, there being 2,618 birds altogether. As the fine is $25 each bird, the penalty would amount to $65,450. It was, however, thought expedient to only sue on 200 quail for the sum of $5,000. The suit comes up in the Supreme Court." The other suits are against sundry dealers in this city. They are brought in the City Court, in this city, in the name of Robert B. Roosevelt, who is the president of the Association. They are as follows: Charles E. Nauss, No. 87 Second avenue, 60 quail; penalty, $1,500. Charles Kolz, No. 1,412 Third avenue, 19 quail and 5 prairie chickens; penalty, $600. Ed. Eckard, No. 37 Bond street, 10 quail, 2 hares and 11 rabbits; penalty, $575. Frederick Pfluger, No. 949 Sixth avenue, 48 partridges; penalty, $1,200. Isaac Steigerwald, No. 199 First avenue, 19 quail; penalty, $450. Henry Steckler, Second avenue and Seventy-third street, 2 partridges; penalty, $50.

MANITOBA.—Ottawa, June 23.—*Editor Forest and Stream:* In your "Answers to Correspondents," in your issue of June 19, I notice that you say "the word Manitoba is pronounced with the accent on the last syllable, Manito-ba, the final a having the same sound of a in father." That is the French mode of pronouncing the word, but it is not the correct one. Indian words are not subject to the rules of either French or English pronunciation. Manitoba is an Indian, not a French word, and according to aboriginal accentuation, the orthodox method of pronouncing it is Manito'ba, with the accent strongly marked on the penultimate. This would seem to be the case also with all Indian words of more than three syllables. For instance, Stadaco'na, Donnaco'na, Mononghahe'la, Hockela'ga, Osceo'la, Caughnawa'ga, Susquehanna, Madawas'ca, Petawa'wa, Powantona'mo, Catara'qui, Ononda'ga, Tuscaro'ra, Winneba'go, and so on, *ad infinitum*. As will be seen, according to this arbitrary rule of American aboriginal accentuation, the home of the Manitoo, or the land of the Great Spirit, ought to be pronounced Manito'ba. As an initiated member of the Algonquin tribe of North American Indians, I have ventured to take exception to what I consider and know to be an error.—WAH-BAH-MI-MI (Anglice, the White Bird).

OREGON GAME ABUNDANT.—Cove, Oregon, June 23.—Prospects for abundance of game and fine shooting were never better than they are for this fall. Innumerable young ducks—mallards and bluewing teals principally—are sporting in the sloughs and river, numerous flocks of a dozen each of young sharptail grouse are met with in the meadows, while young geese not yet able to take wing scurry away to hide themselves in the tall slough grass. Along the foothills and in the mountains, young blue grouse are as abundant as they were ever known to be before. After all they are the game *par excellence*. Large, strong flyers and lying well, also unsurpassed on the table, they afford exquisite pleasure in their pursuit and much joy for the inner man. Last week the railroad was finished into this valley—the Grand Ronde, and doubtlessly sportsmen from abroad will be attracted thither by the large and varied game supplies. Duck shooting commences Sept. 1, and then almost any species may be found excepting wood ducks and canvas-backs. "Boone" is at fault when he says sage hens never eat grain. I have shot them in barley fields and found grain in them upon opening the birds. Of course they subsist principally upon the sage.—J. G. S.

A TROPHY.—I am the happy possessor of the mounted head of a black-tailed deer, which has a set of antlers I think hard to beat. There are twelve prongs on the left horn and thirteen on the right. This buck was killed in Middle Park, Colorado, last fall, and was a Christmas present from my brother.—C. G. FERRY.

FARIBAULT, Minn.—The outlook for chicken shooting is splendid. Large numbers of old chickens left from last year's shoot; and the spring has been very favorable for hatching, every one anticipates good shooting.—R. E. S.

DEER IN CALIFORNIA.—The close season for male deer expired on Monday, June 30. Male deer may be shot in the months of July, August, September, and October. Does and spotted fawns must not be shot at any season of the year.

HIGH POINT, N. C., June 35.—The outlook for quail is excellent. I think we shall have three times as many birds here this year as we had last season.—A. E. S.

MARYLAND QUAIL.—Cecil County, July 4.—The quail wintered well and there is promise of fine shooting when the season opens.—T.

FISH LINES.

Editor Forest and Stream:

I send you herewith twelve rhymes. Will you publish the rhymes and ask your readers to fill in the blank spaces; and send to me, in care of your office. Here they are:

—hole
—pole
—out
—trout
—sky
—fly
—sheen
—green
—flash
—splash
—pool
—fool.

MEAT-HAWK.

Camp Fire Flickerings.

"That reminds me."

125.

In the early days of the Western Reserve, when wolves were more numerous than settlements, a man by the name of Guild, living not a thousand miles from Geauga county, had occasion to go to mill, some four miles distant, —the only road being a trail through the woods—and not being the fortunate owner of a horse, had to pack his own grist. Returning late in the afternoon had got within about half a mile of home when on happening to look back he saw two wolves some twenty rods away, following his track. Off went the grist and up a tree he started, calling for help till he made the woods ring. His father and brother, who were working near the house, hearing the cry, each taking a gun hastened to the rescue. As they came up a little rise of ground near the source of all this noise the sight that met their eyes was one not soon to be forgotten. There the fellow was bare-headed and every hair on end, with arms and legs tight clasped around a tree, sitting flat on the ground, and the wolves squatted on their haunches some ten rods away evidently enjoying the sport. TAMARACK.

EAST BLOOMFIELD, O.

Sea and River Fishing.

A MID-SUMMER LAKE SCENE.

ONE sultry afternoon in July I was fishing in a boat on Lake Onaway, a few rods from the south shore. At about 5 o'clock the heavens became overcast, and for a few moments I was in the midst of a heavy shower. Soon the clouds opened, and the sun, just over the peak of old Bear Stone Mountain in the west, shone out in its full splendor. At the eastward arises the majestic Mt. Benson, covered with a forestry of varied hues, and a gorgeous and resplendent rainbow encompassed its huge form, the reflection of which extended down into the clear and shining lake at its foot, making a perfect circle of the bright and fascinating arch above.

It was without question the most beautiful sight that I ever beheld, and the most indifferent person could not have viewed it without experiencing feelings of awe and reverence for such sublime and wonderful handiwork of nature, suggestive of thought which carries one's mind into an unfathomable realm, bounded by the unknown and the mysterious.

Although the salmon were not abundant on that bright and glorious summer's day, yet the scene to which I have referred made a deep impression upon me, and was the source of more real enjoyment than the best string of fish that I ever caught. And this suggests the idea oft repeated by summer pastime writers that the true angler is not confined to "fisherman's luck" for pleasure and happiness while on his solitary tours. If the fish persistently refuse his proffered artifices and do not recognize his earnest efforts in their behalf, he is ever patient and forbearing, and being a true and faithful worshiper at the shrine of nature, he is always surrounded by that which affords true pleasure, and is ever amid delightful and pleasant objects, ever in an elysium as perfect as can be known to any mortals. If he cannot continually catch the wary and delicate trout for food in his festal forest camp, he can every moment catch food for the best and most ennobling thoughts and gather inspiration from all about him.

J. F. SPRAGUE.

MONSON, Me., Dec. 31, 1883.

PHILADELPHIA NOTES.

IT was a great disappointment to those of our sportsmen who had planned woodcock-shooting trips for the opening day of the season to have had their sport ruined by the late rains. Previous to these storms there had been a lengthy dry period which concentrated many birds, drawing them to the comparatively few feeding grounds that remained. The storm that took place but a few days before the open season so thoroughly scattered the woodcock that but very few were found in places where they had been "spotted." The rain which also visited our section yesterday finished the work, so that we can safely consider July shooting will be of no account hereabouts. During June it was common to hear at the gun stores "I know where there are a dozen birds waiting for me when the season opens," or some such remark. These collected birds in almost every instance were not found, or at least in not such numbers as before the rains. The fall of water was a godsend to Mr. Longbill, for he finds feeding places now where he can be in a measure safe. Very many birds, however, were illegally shot in June. Of this I wrote you at the time.

Throughout our State the quail is everywhere whistling his nesting note, "Bob White," and there is a good prospect of a fair amount of birds for the fall, if the frequent rains do not drown the broods. The fact that the majority of the farmers begin to take an interest in the preservation of the quail during the winter is telling, and no doubt much of this is the result of a word spoken here and there by the sportsman himself, who now begins to find by paying a nominal sum to Mr. Rusticus he can have shooting secured for him. If our game laws and game protective societies do not take care of the birds, each sportsman can accomplish much with the farmer in the manner described. All that is needed is to interest him if need be in a pecuniary way, and a guardian is at once made. I once procured the finest of quail shooting on three or four adjoining farms in a very primitive section of Delaware by sending to each tenant for two successive seasons, blue Kersey army overcoats, which cost me but a trifle. I mention this as an illustration of what can be done, and would add every covey was saved for me, and I did not begin shooting until late in November.

The returning flight of bay birds from the North is looked for this year about the 1st of August. The birds generally show themselves from the 21st to the 25th of July, but this spring they were late in coming, and will be correspondingly tardy in appearing with their increase of family.

Nowadays on the New Jersey coast all the shooting had in the summer is at traveling birds, as they never stop longer than a tide to feed, and one requires to have a good blind and be able to whistle well or have a good whistler with him to have shooting at all. I am now speaking of points north of Atlantic City and south of Long Branch.

There is every appearance that we are going to have a good crop of reeds along our river flats this year. In times past this indicated corresponding good rail shooting, but of late years it scarcely pays one to be pushed over the grounds at either the Lazaretto or Chester, as but few rail are started, twenty to thirty being considered a good bag. At Port Penn or Morris River, however, rail are always numerous, but it takes such a big tide to give successful shooting. These freshets are not often hit when we want them.

PHILADELPHIA, July 5. HOMO.

CAMPS OF THE KINGFISHERS.

Black Lake, Michigan.—IX.

THE next morning it was agreed that I should fish alone that day, and work over to the sandbank in the afternoon, to bring Muller to camp in case he arrived.

The "calamity box" had been searched the evening before, and two immense hooks fished out of its depths, which old Ben "calculated were strong enough to yank the innards out of a thrashin' maskeen," and to each of these formidable-looking "innards agitators" a chain a foot and a half long was attached, made of No. 12 copper wire, also found in a recess of the calamity box. To each of these chains a hundred feet or more of trot line—a hard-twisted cotton cord a quarter of an inch in diameter—was securely fastened, and war was right there declared against the king maskalonge of Black Lake, or any of his tribe. With one of these persuaders the Deacon and one of the other boys took their way up lake to look after the big fellow off the mouth of Rock Creek, while I with the other one and a little white boat started straight for Pickerel Reef, where Dan and I had seen the chief of the tribe the day before.

At the shore end of the reef I took four or five pickerel, and selecting the smallest one of these—a three-pounder—the big hook was passed through both jaws, and he was returned to his native element alive, to be towed fifty or sixty feet astern, a tempting morsel for the monarch of Black Lake. The other end of the line was tied to the painter of the boat and passed over the thwart, where eight or ten yards of it were coiled within reach of my foot in the bottom of the boat, ready to play out the instant the strike was felt.

If that big maskalonge happened to be in that vicinity hunting around for a little morning diversion, all he had to do was to swallow that pickerel and the excitement would begin at once without any preliminary flourishes.

I had studied the points of the prospective battle all over carefully beforehand, and was prepared to come out on top or go to the bottom.

The loaded rifle was laid in easy reach, at half cock, and I had figured it out that if he had got the big hook tangled up in his corporation we would have it nip and tuck over the lake, for five or six hours, or until he was tuckered out, when I would pull warily up to him, snatch up the rifle and send a ball through his head. This, I flattered myself, would be a move he would not be looking for, and I had my chuckle over it in advance, like the Irishman who was going to have "a bit av sphort wid the bull in the pashtur forninst."

It was a brilliant (?) conception, and it looks even better on paper, as I write it, than it did there on the lake; and I may say it would perhaps have been carried out had not the contingency of Burns's line, "The best laid schemes o' mice," etc., wrecked the whole plan of the campaign.

I rowed all around the reef for a mile and for three hours, but the big fish had either changed his quarters or was too smart to be fooled with a common pickerel towing at the end of a quarter-inch cord, and I went back to the reef and plastered up my wounded smartness by yanking out a dozen of the snaky villains that claimed kinship with my bait.

But it was another backset.

The discomfiture of the Irishman when the bull tossed him over the pasture fence wasn't a circumstance to my disappointment in not running across the track of the great maskalonge, and his remark when he picked himself up that "it was a foine thing he had his laugh first," seemed to just about fit my case.

The wind had been rising for the last half hour and was now blowing a topsail breeze from the direction of Lake Huron, causing the little boat to pitch up and down in a way that made it hard to hold her anywhere and fish, and in half an hour more nearly the whole face of the lake was covered with white caps, and the waves were running so high that fishing was out of the question. I reeled up and pulled across the lake to the sandbank, and taking the rifle, went out to the forks of the road to wait for brother Muller. I found the "totem" shriveled and sun-dried so hard that they might have served for "pickerel clubs" to knock their brethren on the head with, but otherwise undisturbed. I listened for the sound of a wagon, but hearing nothing save the whistling wind, I strolled down the road a half mile, and turning off to the right, made a wide circuit through the aspens and patches of low bushes and huckleberries scattered over the plains, and back to the forks of the road again—just in the humor after the morning's experience to fight anything, from a chipmunk up to a 600-pound bear, and I have no doubt that, had a deer jumped up within range, I would have taken a shot at it out of a spirit of pure cussedness. Nothing had, however, appeared in sight on which to vent my spleen, and I stretched out in the shade of a young pine and studied over various schemes to capture the big fish until nearly 3 o'clock in the afternoon, when, concluding that Muller had given up the trip, I went back to the boat and pulled along under the lee of the shore where the water was quiet to the mouth of the little stream near the Hughes camp.

And, lest some readers who always want to know everything that happens may think it has been a long time between drinks, I will record it here that I got out and took a long drink of "clear, cold, sparkling, spring water," and before stepping back into the boat the draught was repeated.

All along this shore for nearly a half mile out the water was comparatively smooth, it being protected from the force of the wind by the woods and hill just back, but outside of this line the whole lake was a sheet of foamy white caps and tumbling waves rolling four and five feet high. From this point the wind blew nearly straight across to our camp. Hooking a dead pickerel onto the big hook I let out the whole length of the trout line and was soon plunging along through the foam at a pace that would have loosened the eye teeth of any maskalonge in the lake had he closed his jaws over that pickerel and the big hook.

The little boat sat low in the water, but she behaved well in the rough seas and I was having a glorious ride, when, happening to glance in the direction of the sandbank I saw a wreath of blue smoke outlined against the hill, and I knew six feet of the Kingfisher club was there wondering how he was to get "across the stormy water," and it did not take long to make it out that he had come just at the wrong time. It would not do to leave him there over night without shel-

ter, to be devoured by skeeters and "croppies," and the only thing to do was to 'bout ship and go after him, and this meant a hard pull of at least five miles, for I was not more than a mile from our camp when I saw the smoke signal. The dead longsnout was pulled in and the boat headed a couple of points above the sandbank to allow for leeway, but after a half hour's pull against the heavy sea and fierce wind that was now on the starboard bow, I was almost ready to give up in despair, as the boat rolled and pitched so badly that it seemed I had not made a rod of progress. But I considered that were I in Muller's place I would not like to be left there over night, and I buckled to the oars again with renewed energy, and at the end of what seemed another hour was abreast of a charred tree that Dan and I had selected as one of our landmarks by which to find a pickerel reef, and this was fully half way to the bank.

The gale had long since driven the other boys into camp, and they were now, as they told us in the evening, anxiously scanning, through the Scribe's marine glass, every visible part of the lake for signs of "Old Hickory." They had seen the smoke, and by aid of the glass could see Muller moving around on the beach, but had failed to get sight of the little white boat, although I was nearly in line with them and the bank, and could see the camp every time I was on top of a wave. They were really alarmed for my safety, but Old Knots comforted them with the remark that "the old sardine is probably asleep somewhere in the 'bresh,'" and Dan said, "It may be he's around in Sturgeon Bay waiting for the wind to go down. He'll turn up all right yet."

When I got into smooth water Old Ben, who was looking through the glass, relieved the anxiety with, "Hooray, boys! there's the old cuss now in that durned white pinted thing, jest a humpin' fur shore like a yaller dog with a tin can to his tail;" and they raised a shout that would have made me feel less tired perhaps could I have heard it. All this was told around the camp-fire that evening after pipes were lighted; and sitting here now, writing this a matter of 500 miles from Black Lake, I take the occasion to thank the boys all for their good will and solicitude for the writer's well being on that not soon to be forgotten day.

Nor must I forget that excellent boy, Sid Merrill, who had soon after discovering the signal, started from camp in a boat on the same errand, and when I reached the beach, "clean bushed," as Jim would have said, and sweating at every pore, he was less than a mile out, pulling a sturdy stroke, as regular as the pulsations of an engine. Had he known I was making for the same point, the trip would not have been undertaken, but the color of my boat was so near that of the foam-covered lake that no one, not even Muller, had made it out until I was in smooth water. He came ashore and we had a good rest before starting back, and as the wind and sea went down as evening drew on, the pull to camp was vastly easier, and brother Muller kindly furnished the motive power for the white boat going back. He had been detained a day on the road by washouts caused by the heavy rains throughout the middle portion of the State, and coming out from Cheboygan they had lost over an hour by an accident to the wagon; hence his late coming. The teamster had left him and his traps at the beach and started back for town, but not before he had pointed out some large bear tracks in the edge of the water, which he assured him, judging by the roily water in them, were not more than ten or fifteen minutes old.

This was not very consolin'; in fact, it was rather calculated to make the average "city feller" feel slightly "tore up in his mind;" but Muller is big enough to whip an average bear in a square fight, "bitin' and gougin' barred," besides, he had his breechloading rifle with him, and he felt that he could introduce himself to Mister B. Ruin in a creditable manner should he take a notion to return to the plains by the same road he came. He admitted to us, however, that the possible return that way of Mr. B. R. before he had time to frame a few remarks for the meeting, had raised a faint ripple on the usually quiet channel of his thoughts, and the moment the teamster was out of sight over the brow of the hill (brother M. is not given to undue precipitation) he unlocked his gripsack and taking out a handful of cartridges, slipped one into the rifle and would have stuffed in a half peck had it been that kind of a gun. Then he paced valiantly up and down the beach right where that bear had passed along, looking every minute for—a boat to appear in sight to take him across to camp.

That evening the smoke of the camp-fire was badly mixed with fish lies and bear stories, not a few of which would have disputed first place with neighbor Merrill's ablest effort in this branch of camp oratory, and it was not until everybody had "run down" that the circle broke up and we went to bed the happiest camp in the North Woods.

KINGFISHER.

[TO BE CONTINUED.]

THE CANADIAN SEA TROUT.

Editor Forest and Stream:

Your issue of June 26 has an article with the above title from "S. C. C.," in which he opens the question of the identity of this fish with the brook trout, and regrets that some one does not settle it. I do not know who he would accept as authority on this subject since he appears to reject all those who have declared the two to be identical. Whom shall we look to for a settlement of the question? Certainly not men who are anglers merely, and who decide by the presence or absence of spots. For myself, I consider the question settled long ago, and that the so-called sea trout is merely a sea-run brook trout.

Let us see who says they are not: Scott, Hallock, Roosevelt and other angling writers. On the contrary is the following list of authorities who are all more or less of ichthyologists, and some of them the first in the world: Gill, Bean, Jordan, Mather, Norris. If "S. C. C." is still in doubt on this question he can make inquiries regarding the standing of the two classes of authorities and decide which of the two he will accept.

The fact is that the case is settled, only some anglers do not seem inclined to accept the settlement. There is no doubt whatever about an angler being able to distinguish a "sea trout" from one that has strayed in the river. The signs are plain enough, just as you can distinguish a book-keeper who has had a vacation in the woods from one who has not, by his browned skin, but he is a book-keeper all the same.

The South Side Club, of Long Island, has obtained eggs from the so-called sea trout, and the young cannot be told from ordinary brook trout. If they are distinct then they should breed true to kind. Let us accept the authority of the trained scientists, who all agree, and smoke the pipe of peace over the trout question. POKE-O-MOONSHINE.

MAINE FISHING.

THE Maine Fish Commissioners have just completed their work of distributing 1,400,000 salmon fry to the different waters of that State, in the order previously announced in the FOREST AND STREAM. They finished by placing 50,000 landlocked salmon in the upper Androscoggin waters. One of them says: "We hope to continue as good a quota yearly until the waters are fully stocked. The most marked feature to me this year was the wonderful fecundity of those waters in trout and the fish food adapted to feed the trout family—no bass, either black or white; no perch; no bream; no eels; no catfish—all the enemies of the *Salmonidæ*, or at least not fit for their food. But the waters are literally crowded with *Cyprinidæ* of all sizes, the natural food of the trout."

Of course the Commissioners went a fishing at the Androscoggin Lakes, and they remark: "We do not believe that there is scarcely a single day in the whole season when an ordinary angler who gave the fish a fair trial could fail to take trout enough for his daily consumption. On the shallows we invariably found an abundance of trout of from one-half to one pound, and even up to two pounds weight, rising readily to the fly. In deeper water, trolling with the minnow, larger fish were taken; but we took none of over four pounds. We are satisfied that the better protection which the increased appropriation of the State has afforded us the means of giving is entitled to the credit for this great increase in trout during the past few years."

To this sentiment should be added that it is only the faithful, earnest work of the Commissioners, which has expended the limited means put in their hands by the State in a manner designed to be of so great and lasting value to the public. SPECIAL.

BOSTON, Mass., July 7.

HOW DELAWARE RIVER FISH ARE DESTROYED.—There was a time when the Delaware River abounded with valuable food fishes from its junction with Delaware Bay to its source in the State of New York. It was once noted for the number, size, and excellence of its shad, perch, rock fish, sturgeon, and other varities of fish suitable for human consumption. If a like abundance now prevailed, instead of paying from fifteen to twenty cents per pound for fresh fish, we would have them direct from that stream at less than half those rates. While the pollution of the waters of this fine river by gas works, coal oil refineries, etc., has had much to do with the marked decline in its fish products, there have been for years and are to-day still more potent and harmful agencies in the form of fish baskets, nets, weirs, etc., in the localities where the shad usually spawn, and where their young are hatched into life. Only those familiar with the injury wrought to the shad-fishing interests of the Delaware by these illicit devices can form a proper conception of its extent. There is good authority for the statement that in a single season as many young shad are destroyed by almost any one of the many well-constructed fish baskets in the upper Delaware as are anuually caught full grown at all the fisheries on the river. Extravagant as such an estimate may appear it is sustained by facts. A member of the Board of Fish Commissioners informed the writer a few years ago that young shad taken and drowned in one of the largest of those fish baskets had been hauled away by the wagon load and used as fertilizers for the adjacent fields. Formerly these fish baskets were constructed with wings of stone, but wire netting, which is much more easily put in position or removed upon intimation of an official raid, is now used, and with more damaging results to the fish. Dynamite and giant powder cartridges are also used in many streams, especially the smaller ones, such as the Pennypack, with equally disastrous effects, as the explosions kill alike the large and the small fish. At other places cocculus indicus, quicklime, and other stupefying and life destroying substances are employed.—*Philadelphia Ledger.*

TENNESSEE.—Savannah, June 30.—The bass season is open here all the year round, but unfortunately the greater number are caught in April or May. The catch this year is reported as above the average in point of numbers, but the size is small. One small-mouth bass four and a quarter pounds and another of three pounds are the largest I have heard of. The Klaw Hammer Angling Association returned from its annual meeting at the Sulphur Spring camp grounds on Horse Creek last week. Business prevented my accompanying the club. They report everything right except the fish, which failed to do their part toward the general good time. However, they caught enough to keep the frying pan at work and all returned in good spirits. We expect to make another expedition early next month, and if we do, I will keep you informed of the result. The fishermen are taking quantities of drum and small catfish on trot lines in the river. The river is too muddy for bass fishing at present, although two or three weeks ago a party visited the island some four miles above town and took several fine bass and a great many large bream and sunfish, fishing on the bar at the head of the island.—WILL.

PRINCE EDWARD ISLAND.—Charlottetown, July 1.—Trout fishing is good in most of the streams here at the present date. The fish are numerous and of good size, and go for most any kind of a fly viciously, and are full of fight when hooked. Another thing which adds greatly to the enjoyment of the sport is that there are no mosquitoes and "no-see-ems" here. The largest *S. fontinalis* taken here was killed in the Morrelle and weighed four and a half pounds, and four of his mates were taken at the same time that weighed four pounds each. In the Guerney River a half-pound trout at one dash scooped up two of my flies, and when landed had them both well down his gullet.—STANSTEAD.

THE WEST ISLAND CLUB.—Some fine striped bass were taken last week by members of the West Island Club. I met one of the club on the train who told me that Messrs. Isaac Townsend, R. L. Cutting, Chas. L. Tiffany, Chas. E. Miller and S. W. Milbank, of New York, and Mr. W. Sellers, of Philadelphia, were down at the club and were having good success. They took six large fish on Monday last, which was the first good day of the season. The largest fish taken this year weighed thirty-two pounds.—POKE-O-MOONSHINE.

BASS GROUNDS IN VERMONT.—Small-mouthed black bass are reported to reward the angler who casts his flies in Lake Champlain, near St. Albans, Vt. Accommodations and boats can be found at the Lake View House, a notice of which is given in our advertising columns.

DEAD FISH IN LAKE ONTARIO.—This dispatch was sent from Ottawa yesterday: "The Marine and Fisheries Department has come to the conclusion that the millions of dead fish now floating on Lake Ontario are young shad hatched at Seth Green's fish-breeding establishment at Rochester, N. Y., and placed in the streams tributary to the lake. It is also believed that the falling off in the catch of whitefish in Lake Ontario is due to the poisoning of the waters by the dead shad. Representations will probably be made to the United States Government respecting the matter." "That's a very singular dispatch," said Mr. Eugene. G. Blackford, "and I am convinced that there is an error somewhere. Mr. Green has not hatched any shad at his breeding establishment in Caledonia, not far from Rochester. He hatches nothing there but whitefish, salmon and brook trout. The shad which he hatched at Castleton, near Catskill Landing, were all turned into the Hudson River. The only shad hatched by the New York Fish Commission beside these were 80,000 at Cold Spring, Long Island, which were turned into the Smithton River. I think the Canadian Fisheries Department are mistaken about the fish. I should not be surprised if they were fresh-water herring, which are indigenous to the great lakes, and somewhat resemble young shad." [The above appeared in the New York *Times* of July 8, and the annual appearance of dead fish in Lake Ontario, supposed to be shad, has been yearly noticed in our columns. Three years ago Dr. Bean pronounced the fish to be alewives, and we do not doubt that those of the present year are the same fish. Just why the papers should blame Mr. Green for introducing these or any other fish into the lake we do not see. He is merely a superintendent, and is, or should be, under the orders of the State Fish Commissioners, who alone are responsible for all plantings of fish, as well as for the acts of their subordinates. The hatchery near Rochester belongs to the New York Fish Commission, a fact that does not seem generally known.]

SHEEPSHEAD AND WEAFISH.—Philadelphia, Pa., July 5.—Our rivers still continue to be very muddy, this condition having been increased by a second deluge of rain yesterday. There is no earthly use trying for bass within twenty miles of Philadelphia while the water is in this state and I fear it will take some days before it is clear. Sheepshead are biting well at both Barnegat Inlet and Little Egg Harbor Inlet. Weakfish and seabass are plentiful at these points, in fact one can always, at this season, be assured of sport at both places. No bluefish have thus far shown themselves at either Barnegat or Little Egg Harbor. Outside the beach scores of menhaden fishing steamers are plying their trade.—HOMO.

MAINE WATERS.—Anglers' Retreat, Middle Dam, June 30.—June has been a splendid fishing month here, and last week Mr. G. H. Wellman, of Lowell, Mass., who was stopping here, had some very nice fly-fishing, taking one three-pounder and one of five pounds, besides numerous others of lighter weight. As the gates at the Middle Dam are now closed, and will remain so for several weeks, there will be good fishing on the river, at the head and foot of the pond, Smooth Ledge, the Hop Yard, Cedar Stump, and other places where the trout congregate when the water in the river is low. Now is the time for anglers who would like to make a mid-summer trip to visit this place.—L. L. S.

BASS IN THE POTOMAC.—Moorefield, W. Va., July 7.—Continued rains and high waters have prevented bass fishing up to this time, but the prospect ahead of us (owing to the unusual numbers of fish brought up by high waters in the spring and the clearing of the streams of all moss and brush by late freshets) is unusually fine. No finer waters can be found for black bass fishing than the water of the south branch of the Potomac at this place, either for fishing from shore, wading or from boat, with fly or live bait. Daily stages and livery connect from Keyser, on B. & O. R. R.—COMMODORE.

FARIBAULT, Minn.—I would inform sportsmen, who contemplate a trip this summmer to the Northwest, that the fishing in the lakes of this State has been and is now unusually good; some very fine large catches have been made.—R. E. S.

SPANISH MACKEREL and sheepshead were taken last week for the first time this season off Bayshore, L. I. They have hitherto been caught no further north thon the southern New Jersey coast.

Fishculture.

AMERICAN FISHCULTURAL ASSOCIATION.

Proceedings of the Thirteenth Annual Meeting.

IN the evening at 8 o'clock an address was delivered by Hon. Theodore Lyman, of Massachusetts. Hon. Elbridge G. Lapham occupied the chair. The hall was well filled by an appreciative audience, of which about one-fourth were ladies. The chairman, in introducing the orator of the evening, spoke as follows:

"LADIES AND GENTLEMEN: I am thankful for the honor of having been selected to preside over the ceremonies of this evening. The subject which has called us together is one of far greater importance than the mass of the public conceive it to be. The question of the propagation and preservation of the food fishes of our streams and along the ocean coasts is second only in importance to the propagation and preservation of animal food. Indeed, the food which is furnished by the fish of our waters is free from many of the difficulties and dangers connected with the subject of animal food. We have in the former no trachinæ, pleuro-pneumonia, foot-rot or mouth disease. Fish are not controlled in their habits by man as animals are. The demand for fish as an article of food has of late years been rapidly increasing. Indeed such demand far exceeds the supply, and every year the interest taken in the subject is increasing, and this is the case not only in this country but in almost every civilized country of the earth. This subject has of late attracted special attention through the international exhibitions held at Berlin in 1880 and at London last year, where I am proud to say the United States bore off the honors for having the best and largest variety and most perfect exhibits which were made. It is a subject, I repeat, of vast and deep importance to everybody. A little more than two years ago the State of New Jersey undertook the passage of a law to regulate the fisheries in the waters of the ocean, over which she supposed she had control. The Attorney General, however, decided that the State had no jurisdiction over the subject beyond low-water mark on the ocean coast. A bill was introduced by Hon. Mr. Sewell, of New Jersey, looking to the passage of a national law regulating this subject. This was referred to the Committee on Foreign Relations, to consider whether such a law would inter-

fere with our treaty obligations under the Treaty of Washington. For two seasons a sub-committee of that committee has been investigating the subject, and has visited many of the principal points along the ocean coast from Fortress Monroe, Virginia, to Portland, Maine. A volume of valuable testimony has been gathered on the subject, and I confess that I had no conception of the importance of this question until I entered upon that investigation. It is almost as fathomless as the ocean itself. We have met this evening to consider this grave and important subject, and I now take great pleasure in introducing to you the Hon. Theodore Lyman, of Massachusetts, who will deliver the annual address of the Association."

SPEECH OF HON. THEODORE LYMAN.

Old Rondelet wrote a great work at the beginning of the sixteenth century on sea fishes. His breadth of view included under the term "Fishes" almost every living thing that he found in salt water. It is in relation not to a fish but to the radiated Medusa-head that he uses these fine words, more familiar, perhaps, to our older naturalists than to those of the rising generation: *Immensa et summe admirabilis poi potentia atque solertia in rebus cœlestibus iisque quæ in aere et terra fiunt, maxime vero in mari, in quo tam variæ et stupendæ rerum formæ conspiciuntur ut quærendi et contemplandi nullus usquam futurus sit finis*—"Vast and highly admirable are the power and skill of God in things heavenly and earthly and in those of the air, but more especially in the sea, where are beheld shapes so various and stupendous that the study and contemplation of them shall never end."

He spoke thus in the spirit of prophecy. Three centuries have passed and we are still contemplating and investigating the things of the sea. We have skimmed its surface with muslin nets in search of its infusoria, and we have let down dredges and scraped its valleys three miles deep, and still the shapes various and stupendous continue to multiply. The more workers there are, the more work remains to be done. Humble clams, worms and urchins take on great importance and become marine Sphinxes, asking riddles that no one can answer. Creatures that once were conveniently dismissed as gelatinous, or gristly, now advance claims to an intricate circulatory system, to muscular fibres and to nervous ganglia. Nay, they proudly look down on the vertebrates, in the matter of reproduction, as they pass gracefully through the varied stages of alternate generation and self-division.

Rondelet lived near a sea whose inhabitants were well calculated to excite his wonder and delight. He was professor of medicine at Montpellier, not many miles from Aigues-Mortes, the port whence St. Louis embarked for his crusade, and whose walls, now surrounded by dry land, were in the middle of the sixteenth century still bathed by the waters of the Mediterranean. The shallows of the bay teemed with the smaller crustacea and shells, while the open sea beyond was then, as now, the home of many fishes, varied in form and brilliant in color—the whiting, the red mullet, and the tunny celebrated by classic writers. There, too, were found the darting squids and the great-eyed octopus, while from its depths came the rosy coral.

In the ancient medical school of Montepellier, still hangs the portrait of Rondelet in his red gown. He has a placid look of a man who was master of his studies, and who stood well with science and with the church. For had he not as a patron, Bishop Pelicier? and was he not the first authority in zoology and medicine, at a time when a good scholar could acquire all that was known of these and many things besides?

Every gain in knowledge has a loss that balances it. As the current of human thought grows wider, it becomes also more shallow, and splits into that infinitude of little channels which now are called specialties. In each of these channels may be seen a diligent investigator urging forward his little skiff, and well contented to be navigating what to him seems the great river of truth.

Learning has grown so great in our day, that the genius of one man can grasp no more than a part of it; so that in proportion as learning becomes larger, generalization, which is the final end of learning, grows more difficult. Worse than this, the mind employed on particular investigations gets unsymmetrical. The side that is used is strengthened; the disused side fails, and there results a scholar who believes in one set of ideas only.

After all then, we must look with a certain envy at the state of mind of old Rondelet. Like most men of his age, he had that richness of thought and expression which comes of many-sided culture, and a strong faith in things both material and immaterial. When he said "Dei potentia," he distinctly meant power of God, and not "potentialities" or "molecular environment" or "power that works for righteousness," or any of those modern euphuisms which taste in the mouth like weak boiled arrow-root. Nevertheless, if we look closely, we can find the beginnings of that skepticism which plays so great a part in one day. For both he and his bishop Pelicier were strongly suspected of favoring the Reformation. As to his colleague, Rabelais, he was noted for his unorthodox opinions, and went so far as to describe the future life as a "great perhaps."

But it is high time to leave Rondelet, and turn our attention to his sea-fishes. Their importance was great then; it is greater now. We might know by analogy, did we not know by actual research, that fishes have ever been of the first importance for men's food. Their natural abundance and the easy capture of shallow species put them within the reach of the primitive savage. The skeleton of the pre-historic chief, found in the cave of Mentone, had a head ornament, a net strung with Trochus shells, showing that he had walked the beaches of the neighboring Mediterranean, whose waters doubtless furnished his food.

The shell heaps of Scandinavia and of America, contain abundant bones of fish. Morton, of Merry Mount (1623), gives us a good idea how these shell heaps were formed, when he tells how the Indians came each year to the shore near Quincy, in Massachusetts, and there camped for a long time, feasting on the plentiful clams and lobsters, and alewives and striped bass, whose shells and bones combined with the camp offal to build those deposits that we call shell heaps.

In New England it must have been the fish that furnished the surest support to the native savages. Even in the depths of its Arctic winter there was a chance to get eels, smelts and clams, and at the first approach of mild weather the waters teemed with abundance. "It (Pawtucket Falls) is excellently accommodated with a fishing place," wrote good Mr. Gookin in 1674, "and there is taken a variety of fish in their seasons, such as salmon, shad, lamprey eels, sturgeon, bass, and divers others. And this place being an ancient and capital seat of the Indians, they came to fish; and this good man (Mr. Eliot) takes this opportunity to spread the net of the Gospel to fish for their souls."

That child of Belial, Morton, of Merry Mount, as keen a sportsman as any of our Bohemian backwoodsman, gives enthusiastic accounts of the abundance and excellence of the fish which were in the sea convenient to his house. He is the first author that mentions cod-liver oil, which now plays so beneficent, though nauseous, a part in medicine.

He writes: "The coast aboundeth with such multitude of codd that the inhabitants of New England doe dunge their grounds with codd, and it is a commodity better than the golden mines of the Spanish Indes. * * * Greate store of traine oyle is mayd of the livers of the codd and is a commodity that without question will enrich the inhabitants of New England quickly."

Almost coincident with the establishment of Plymouth colony, we find laws concerning the fisheries, proof positive of the esteem in which they were held.

In 1633 was passed what I take to be the first law for the encouragement of fishculture, in these words: "It is enacted by the Court * * * but if any man desire to improve a place and stocke it with fish of any kind for his private use, it shal bee lawfull for the Court to make any such graunt and for bid all others to make use of it."

In 1637 the same court enacted, with the contrary-mindedness of our Puritan forefathers, that six score and twelve fishes shall be accounted to the hundred of all sorts of fishes.

In 1670, it was set forth with pious teleology that "the providence of God hath made Cape Cod commodious for us, for fishing with seines;" implying that it might not be commodious for less religious persons. The act goes on to state that "careless persons" must not interfere with the said providence, "by leaving the garbage of fish to lie there."

The country had not been settled a half century before there was complaint of the diminution of fish. The act just quoted goes on to speak of the great inconvenience of taking mackerel at unseasonable times, whereby their increase is greatly diminished, and a law was passed prohibiting the catching of fish before they have "spaumed." This shows that our ancestors were not more logical than most of their descendants, who still hold, that to take a fish when ripe for spawning is in some peculiar way destructive to the species. It is almost needless to say that fishes taken at any time of year are killed before they have "spaumed." The only reason that it is more destructive to take fish during the spawning season is because they are then tamer and are crowded together, so that greater numbers are likely to be captured.

The river fisheries, too, called aloud for protection. In 1709, it was enacted "That no weirs, hedges, fish garths, stakes, kiddles or other disturbance or encumbrance shall be set, erected or made on or across any river, to the stopping, obstructing or straitning of the natural or usual course and passage of fish in their seasons * * * without allowance first had and obtained from the General Sessions of the Peace in the same country." This law, especially applied to such fishes as run up the rivers to spawn, salmon, shad and alewives. The Indians, in their day, were wont to construct weirs and the like obstructions to capture these fishes. But the Indians were few and were idle and wandering. They took only what was necessary for their present use. Now, however, had come the white men, who put up permanent abodes and increased in numbers, year by year. They were money makers, who worked every day and all the day. They would catch fish, not for themselves only, but to sell to strangers; and so they have gone on ever since. Patucket Falls, on the Merrimac, where the Apostle Eliot spread his net of the gospel, now furnishes the water power for the great manufacturing city of Lowell. And Merry Mount, to-day the country seat of John Quincy Adams, is a suburb of the metropolis of New England. The inhabitants no longer "dunge their grounds with codd" but are fain to buy that fish in the market at a round price per pound.

The river fish whose protection has cost most law-making in the old commonwealth of Massachusetts is the humble alewife. In contradiction of the proverb "mute as a fish" this one may truly be said to have made a great deal of noise in the world. Like some men they are small and humble, but persistent and numerous. In the spring time the alewives stand in from the sea, and push up the smaller fresh-water streams, seeking ponds wherein to deposit their spawn. They come in great armies and insist on entering those ponds. Nothing less than a vertical wall six feet high will stop them. Amid the clatter of mill wheels, and in the very face of the sweeping scoop net, they force themselves through rapids, over falls, and by long underground drains, regardless of their perishing comrades, who by thousands fall a prey to the fishermen and to hawks and eagles; or who run themselves ashore in their frantic efforts to get on. It may be that only a few reach the spawning ground, and these are enough to keep up the race; for one female will lay a quarter of million of spawn. They are therefore *par excellence* domestic and cultivable fish and have been so regarded in Massachusetts for generations. As early as 1741 there was passed "an act made to prevent the destruction of the fish called alewives," wherein it was provided that any owner of a dam "shall make a sufficient passageway for the fish to pass up such river or stream, through or around such dam."

It is, however, not until 1790 that the alewife fishery of Taunton Great River, first appears on the statute books, whose pages it was destined to encumber. If very few of my hearers know anything of Taunton Great River, the fact proves how miserably our system of popular education fails to instruct people concerning the most remarkable geographical features of the land. Taunton Great River was doubtless named in the spirit of contrary-mindedness already referred to as a characteristic in our Puritan ancestors. The unregenerate would be inclined to call it Taunton Small River, for it is a small stream, which heads in some ponds in the town of Lakeville, and after a short and quiet course empties into the sea at Fall River. But not the mighty Mississippi itself bears on its bosom so great a mass of legislation. The great and general Court of Massachusetts invariably spends a portion of each session in trying to regulate the fisheries of this stream. The fishermen of the upper waters always complain that those of the lower waters get all the alewives, while those of the lower waters maintain that their rivals feloniously conspire to shut the fish off from their spawning grounds. And when by some special providence, both sets of fishermen are at peace with one another, they invariably make a combined attack upon the regulations of the State Fish Commissioners. The riparian inhabitants of other alewife streams, although not so combative, are quite as much interested as those of Taunton Great River. Indeed it was in such waters that a sort of fishculture first grew up. In some cases where a dam owner wished to save his water power by shutting up his fishway, he would agree to catch each year so many thousand alewives at the foot of the dam and to convey them alive to the millpond above, and thus to keep up the crop. And it has been the custom for more than a century to regulate these little streams by special acts which govern the public sale of the fish, the days on which they may be netted and the fishways that are to be kept open for their passage. The law goes often so far into detail as to provide that each widow of the town shall have a barrel full for nothing. I have dwelt thus long on this humble fish because its successful culture gives encouragement to attempt that of others more difficult.

I shall follow briefly the decline of the fisheries in New England, because it is there that an organized system of fishculture first in this country took its origin. That region has two rivers of considerable size—the Connecticut and the Merrimac. Both rise in the cold streams of the White Mountains. The Connecticut, flowing south, empties into Long Island Sound, and the Merrimac, by a southeasterly course, reaches the Atlantic Ocean. A century ago both rivers abounded in shad, salmon and alewives, and would doubtless have continued for many years to give a fair yield, in spite of over fishing, had it not been for the erection of impassable dams, which were intended to give water power to the manufacturers, or to furnish slack water navigation to lumber rafts. As early as 1798 the Connecticut River was thus barred at a point just within the northern limit of Massachusetts, but it was not until 1847 that the Merrimac was in like manner shut off by the great dam at Lawrence. In both cases the salmon, stopped on their passage to the spawning grounds, became extinct after a few years, while the shad and alewives, which could be bred in the lower waters, continued annually to revisit these rivers.

What happened on the Merrimac and Connecticut happened equally on almost every lesser stream in that region. The people of New England, lacking advantages for farming, turned all their attention to manufacturing. Water power was then much cheaper than steam, so that before long there rose a dam wherever there was a fall great enough to turn a millwheel. Except some simple trenches for the passage of alewives, no fishways were then known. The complete ignorance of this subject may be illustrated by the great dam twenty-seven feet high at Lawrence. The charter of the company permitted the building of a dam, provided a pass were furnished for salmon, which should be satisfactory to the County Commissioners. Before the dam was finished a solemn council of the best ichthyological and engineering talent was held to determine what kind of pass would be suitable. The council based its judgment apparently on the cheap woodcut in the primary geographies of half a century ago, which represented a salmon briskly leaping over falls at least fifty feet high. At any rate, the salmon pass finally approved by the learned Commissioners consisted of a simple plank trough, sloping from the crest to the foot of the dam, at an angle somewhat steeper than forty-five degrees. It is needless to say that the salmon declined to exhibit any of the feats of agility portrayed in the woodcut of the primary geography.

There soon came to be a general feeling, and one under the circumstances quite natural, that manufactures and fish mutually excluded each other, and so things were allowed to drift at their pleasure. The streams that emptied into salt water no longer furnished such abundant swarms of small fry as had in former days served to toll the sea fishes toward the land, while the passage of boats and steamers and the increase of population and of fishing tended to destroy or scare away the fish of the small bays and coves. The balance of nature had thus been changed, and one part had reacted against another.

The steady dimunition would have gone uninterruptedly on but for the revival of fishculture.

The discovery of artificial impregnation of eggs is such a simple one that the only wonder is that it was not practiced long ago. Country boys who watch the brooks in autumn, know how trout deposit their eggs; and fishermen, after hauling their seine ashore, are familiar with the spectacle of spawn and milt flowing from the ripe fishes. It is more than likely that many persons have in the past times practiced the artificial fecundation of ova. The process was described in 1420 by Dom Pinchon, a monk of the abbey of Réome. It was rediscovered by Jacobi, of Westphalia, in 1763, and several naturalists availed themselves of this method in their embryological researches. Among others, Louis Agassiz, who, in 1838, hatched the impregnated eggs of Swiss whitefish by tying them in a muslin bag and sinking it on the margin of the lake of Neufchatel.

In 1843, two fishermen of the Vosges, Joseph Rémy and Antoine Géhin, not only hatched a large number of trout, but devised means of feeding them artificially. They succeeded in stocking several water courses in their neighborhood with these trout fry. Seven years later their results had become known to the scientific men in Paris. Napoleon the Third had already begun his elaborate measures for the material aggrandizement of France and he took up fishculture and the acclimatization of new animals among other schemes. He disliked the professors of the Garden of Plants because of their Orleanist sentiments, and he set up a rival under the name of the Garden of Acclimatization, of which fishculture was in some sort a branch. Its apostle was Professor Coste. With large appropriations from the central government he established at Huningue, near the Swiss frontier, a large and elaborate station for fishculture. His enthusiasm was great. He estimated that the yield of fresh-water fishes in France was not worth more than $1,200,000 annually, which he was confident could be raised by artificial fecundation to $180,000,000. Like many another inventor, Prof. Coste was doomed to opposition and disappointment. M. Rimbaud, Secretary of the Fishery Board of Marseilles, ridiculed what he called the unnatural waterculture. He said the machinery and labor for hatching and the artificial food would cost more than the fish would come to. He was not far from right. With plenty of money to work with, it was not difficult to build hatcheries, dig ponds, set up apparatus, and put in turbine wheels for pumping. The working of the establishment was more difficult. The spawn, collected at distant points and sometimes in a careless way, often failed to hatch. The fry, carefully placed in suitable pools, disappeared in a way considered mysterious, until it was discovered that several large pickerel had found their way into the pools. The eminent engineers of the *ponts et chaussées* contended in vain with the waters of the Rhine, which sometimes backed up and flooded the pools and tanks, and anon receded, leaving the turbine wheels high and dry. Years rolled on, and Prof. Coste was still struggling to make fish plenty in France, when the Prussian armies crossed the Rhine and appropriated Huningue to the use of the German Empire.

All these disappointed hopes had not been quite in vain. Many valuale experiments had been tried and precious information published, and, above all, it had been discovered that certain things could not be done. Meanwhile, knowledge of these discoveries had crossed the Atlantic, and in 1853 Dr. Theodatus Garlick hatched the artificially impregnated eggs of trout. Three years later commissioners appointed by Massachusetts published a valuable report on the general subject of fishculture, and attempted unsuccessfully to hatch trout. In the same year an admirable report on fisheries was written by the eminent scholar, George P. Marsh, who had been appointed a Commissioner by the State of New Hampshire.

The true beginning of fishculture, however, under the auspices of State governments, was in July, 1864, when New Hampshire and Vermont passed legislative resolves calling on Massachusetts to re-establish a free passage for migratory sea fish through the dams on the Connecticut and Merrimac rivers. To the late Judge Henry A. Bellows, of New Hampshire, this country owes the successful beginning of the undertaking. He was an advocate learned in the law and full of enthusiasm for the restoration of the former runs of salmon and shad in the cool waters of the Pemigewasset and the broad expanse of Lake Winnipiseogee. He appeared before a committee of the Massachusetts Legislature, and by their recommendation two commissioners were appointed, of whom I had the honor to be one. This was in 1865. Within a year every New England State was represented by Fishery Commissioners. They were accustomed to assemble from time to time for the discussion of their mutual interests. These modest gatherings, whereat the assembled authorities failed not to test the excellence of their own fish, were the prototypes of the national gathering we celebrate this evening.

The opening of the great dams by fishways led to several important results. In the first place the decision in the case of the Massachusetts Commissioners against the Holyoke Water Power Company has settled the law in regard to the rights of migratory fishes in rivers. This decision, which was confirmed by the United States Supreme Court in 1872, sets forth that a river was a public way, and the passage of migratory fish in it a public right. Therefore, whoever builds a dam across a river must furnish a passage to its migratory fish unless expressly exempted by the Legislature.

It thus became easy to open the streams, and hundreds of owners of dams, who by adverse possession had considered themselves safe from intrusion, now found themselves obliged to construct fishways at their own expense.

The second important step was also a legal one. It was the passage in 1869, by Massachusetts, of an act to encourage the cultivation of useful fishes, which was intended to embody in one law all necessary regulations. Before that time the fishery laws of that State, to the number of nearly four hundred, were for the most part special enactments. The new statute substituted general provisions. It established a board of fishery commissioners, and gave them suitable power; gave to the riparian proprietor the control of ponds not exceeding twenty acres in extent, and regulated the times and methods of taking fish.

In attempting to restock the Merrimac and Connecticut, the most difficult problem possible was the one first encountered.

that of building a fishway which would carry salmon, shad and alewives over a vertical dam nearly thirty feet high. In this country we had nothing to go by save the salmon passes of Great Britain, or the little water-steps over the low continental dams. Through successive improvements we have now attained a fishway that will certainly carry salmon, alewives and the common river fishes over the most difficult dams. But the shad, with his love of the broad, gentle stream, and his suspicion of artificial contrivances, still remains rebellious. There is, however, a strong belief that the ingenious Colonel McDonald will irrisistibly inveigle the shad into his mysterious pass. It is indeed a truly Irish pass, in which more water runs in than runs out; and the steeper is the incline, the more rapidly the water runs up hill; so that a shad would think he was swimming toward Fortress Monroe when he was in reality going over the falls of the Potomac. From the outset, the Massachusetts Commissioners had foreseen that the building of fishways on the Merrimac River was but a half remedy. It was further necessary to breed salmon and place them in the upper waters, that they might thence descend to the ocean, and return as marketable fish to their native river. To obtain impregnated eggs of salmon was at the time a work of great difficulty and expense. In the autumn of 1866, Dr. W. W. Fletcher, of New Hampshire, placed 15,000 New Brunswick salmon eggs in the Pemigewasset; but it was not until 1872 that 16,000 young fry were let loose in its waters: and in 1873, 185,000. Occasional captures of salmon in nets at various points on Massachusetts Bay were soon after reported; and on the 31st of May, 1867, two full-grown salmon were discovered mounting the Lawrence fishway. Since that year, salmon have been artifically bred at the headwaters of the Merrimac, and the full-grown fish have annually ascended a river in which for twenty-five years they had been extinct.

The other chief river of New England, the Connecticut, was the scene of the first artificial hatching of the shad. With the encouragement of the Massachusetts Commissioners, Seth Green, of New York, began, in the summer of 1867, his experiments in shad hatching at Holyoke. His simple and ingenious invention of a hatching box, which kept up a constant current by floating, not horizontally but at an angle, has become a matter of familiar history. Great was the ridicule directed against Green, as he painfully waded about in the river under the hot June sun. But when, a few seasons later, the shad appeared in unusual numbers at the mouth of the river, ridicule was changed to admiration, and the great crop of that year was called "Green's shad."

In the following year, 1868, shad hatching was established on the Merrimac and daily record was kept of the temperature of the air and water, of the number and sex of the fish taken and the quantity of eggs hatched. These tables were the first of the kind published in this country.

The progress of this slight sketch has brought us to the question which underlies the subject of fishculture in its broadest sense, it is the question of the possible exhaustion of great fisheries, and especially those of the sea.

We have seen that soon after the first settlement of the country, complaints of the decrease of fish began to arise. It is very likely that those complaints came rather from the accidental differences of seasons than from any real decrease. Nevertheless, they indicate that the relation between overfishing and decrease of the crop was one that was early suggested to our people. The entire subject was brought into prominence in our own day by the report of the English Commissioners to inquire into the sea fisheries of the United Kingdom in 1864. Of these Commissioners it has been said: "Their industry was extraordinary, and the piles of evidence were such as to leave the impression that every fishwife in the three kingdoms had had her say. The trawlers were vehement against the set-hook men, and the set-hook men were furious against the trawlers. The Commission decided that they all were right, and might fish when, how and where they pleased. But just then Mr. Bertram comes out with his "Harvest of the Sea," in which by fact and figure he aims to show just the opposite, namely, that the open sea fish had decreasd by overfishing.

The question of the progressive exhaustion of sea fisheries came up six years later in America in the form of a monster petition presented to the Massachusetts Legislature, which was asked to pass a law restricting fishing with weirs, seines and gill nets. The petitioners alleged that valuable fishes, such as the scup, the tautog and the striped bass, were taken by the above mentioned contrivances in so wholesale a way as to threaten their speedy extinction. The complaints applied chiefly to the southern waters, including those of Narragansett Bay, where the inhabitants of Rhode Island were equally interested, and both States proceeded to investigate the subject. Their methods, however, were no better than had been those of the English Commissioners, and consisted chiefly in the examination of numerous witnesses. It was the same story over again. The weir men swore against the hook-and-line fishermen and the hook-and-line fishermen swore against the weir men. The moment had evidently arrived to abandon the methods of the court room and to take up those of scientific investigation.

To this end the Massachusetts Commissioners, in the spring of 1881, hired a weir at Waynoit, on the south side of Cape Cod, and put it in charge of an observer, who kept a daily record of the fishes taken, of the wind and weather, and of the temperature of air and water. At the end of the season the results were embodied in a report, entitled Third Notice upon the Possible Exhaustion of Sea Fisheries. It was shown by this investigation that the moment at which fishes leave the ocean to enter rivers is determined by the temperature of the water. It further appeared that these so-called anadromous fishes are usually caught in weirs and in similar traps when hurrying along the coast in their northward migrations, whereas those that arrive near or at the mouth of their native river slacken their pace and cautiously feel their way, like a ship standing into a harbor. These last are more apt to avoid the nets ingeniously set for their capture.

Up to this time the movement in favor of fishculture had been confined to New York and New England, and chiefly to the State of Massachusetts. Dams hitherto impassable had been opened to the passage of the anadromous fishes; fishways of an improved form had been built; a decision of the Supreme Court had given to fish the right of way in rivers; acts for the encouragement of the cultivation of useful fishes had been passed; the artificial hatching of shad and salmon had begun, and an investigation into the exhaustion of sea fisheries had been set on foot. All these measures, were, however, partial and on a small scale. The moment had arrived for the interposition of a power stronger and more general in its character.

That democratic and gregarious fish, the scup, was the founder of the United States Commission of Fish and Fisheries. It is a fish coeval with the first white settlements. In 1621, on the shores of Buzzard's Bay, the hungry Englishmen were entertained by Massasoit with "two fishes like bream, but twice as big and better meat," and Roger Williams says in 1642, "Nishcup the bream. Of this fish there is abundance, which the natives dry in the sun and smoke, and some Englishmen begin to salt." With the first warm days of spring, the scup were wont to push into the bays and fiords and salt ponds in multitudes, standing in from the off-shore depths which had sheltered them and furnished them abundant food during the winter. Then followed a jubilee for poor and rich. Anybody who had a hook and line could catch a "mess of fish" before breakfast; scup he was sure to get, and he was likely to add a fat tautog or a striped bass. But when did a Yankee ever allow any peace to himself or his neighbor, or when did his mind, sleeping or waking, ever cease to dwell on the invention of some labor-saving machine? Hook and line was too primitive a method to be permitted in this age of improvement. About the year 1850, one Benjamin Tallman, being doubtless moved and abetted by the Evil One, conceived the idea of driving posts in a straight line running out to sea, and stretching thereon netting, so as to make a fence; and constructing at the end thereof a sort of inclosed yard. The schools of scup, as they coasted along the shore, ran against the fence, and turning their heads seaward were captured in the said yard. The inventor, in the pride of his heart, named the engine a "trap." He little knew that he had only made a small copy of a contrivance that was know to the Phœnicians, who used it along the shores of the Mediterranean and even on the coast of Spain. There, in later days, the Moors called it the *almadraba*, whence is derived the modern French word *madrague*. If the Moors created as much popular indignation with their *almadrabas* as Benjamin did with his "traps," the fact may account for their expulsion from Spain by the Gothic tribes. For twenty years war and recrimination prevailed between the trappers and the hook-and-line men, until, at length, both parties, like the Jewish factions, determined to a peal unto Cæsar, or as he is now called, Uncle Sam.

On the 19th of February, 1871, was passed a joint resolution of Congress, the preamble of which says: "Whereas, it is asserted that the most valuable food fishes of the coast and the lakes of the United States are rapidly diminishing in number, to the public injury, and so as materially to affect the interests of trade and commerce," therefore, resolved, that the President be authorized to appoint a Commissioner of Fish and Fisheries.

It has been truly said that when the critical moment arrives, the man appears also; and this critical moment made no exception to the rule. A man—nay, the man, was at once found in the person of Professor Spencer F. Baird. The Cæsar to whom the warring factions had appealed could not have sent forth a more judicious prætor. Mercifully he was not one of those self-taught men (of whom, for some occult reason, we are so proud), but a man of careful scientific training, and one as industrious in collecting facts as in arranging them. Also was he a man of a pleasant countenance and conversation, and well calculated to assuage the irritated feelings of the hook-and-liner, or to soothe the exasperated nerves of the trapper. Indeed, he seems to be the only individual in history who ever intervened between two combatants without receiving the blows of both.

Henceforth the history of American fishculture is contained in that of the United States Fish Commission. Its work, widespread and pushed with extraordinary energy, attracted the attention of the whole country. A greater part of the States appointed Fishery Commissions, which coöperated with, and were assisted by, that of the general Government. Its rapidly increasing value and power culminated in the great Fishery Exhibitions of Berlin and London, where the United States exhibits gained the chief prizes.

The history of the movement for the restoration of our fishes, may seem like a triumphal march; but in summing up its results, we cannot in honesty avoid the cold question *cui bono?* of what good is all this?

Up to the year 1880, the Fishery Commissions of the States and of the general Government had had appropriated $1,306,378. Has the country got a return of a million dollars' worth of additional fish?

In 1880, the total value of fishery products of the United States was $43,000,000, a less sum than that of the manufactures in a single Congressional District in the little State of Massachusetts. The two products show that real value is not always to be measured by money. The people of this country could have been deprived of the manufacture of that district, without recognizing their loss, but what an outcry would rise, were they cut off, even for a month, from cod and whitefish, lobsters and oysters.

Did the expenditure of $1,300,000 since 1866 add anything to the $43,000,000 which our fisheries produced in 1880? or did it pave the way for an increase?

To define these questions we must define what we mean by a decrease in fisheries.

When so many fish are annually taken from the waters, that the remainder are not numerous enough to produce a new crop equal in numbers to the old one, there must be a progressive decrease in the yield. It is a very simple matter to demonstrate such a decrease in ordinary rivers or in lakes of moderate size, where it is easy to show that spearing and netting of the trout on their spawning beds has diminished their numbers, or that the establishment of weirs has made whitefish scarce. In the bays and coves of the sea, also, where the waters are shallow, it is not difficult to show that the use of numerous fykes and trawl lines destroy the local fish, like tautog, rock bass and flounders. But, when we come to the schooling fishes of the open sea, it is very difficult to tell how much effect the hand of man has in lessening them. If, for example, we argue that traps and purse seines diminish the crop of menhaden by capturing them in enormous numbers, we leave out of mind the fact that these same traps and purse seines also capture bluefish and small sharks, which are thus taken from their occupation of killing menhaden. Again, when menhaden entirely disappear from a long stretch of coast, they are, in reality, no scarcer than before. They refuse to come to their wonted waters either because the temperature is too low, or because their favorite food is not to be found. They are not destroyed, only absent. There are familiar instances of such disappearance. The scup was plentiful when the whites first landed in New England; they afterward disappeared, and reappeared about the beginning of the present century. The bluefish was caught on the southern coast of New England from 1659 for more than a hundred years. In 1764 they disappeared, and after an absence of sixty-six years, they reappeared about 1830.

Another element that must be borne in mind in estimating the total catch of fish is the number of men and the kind of engines employed. If, for example, the population of a coast is scanty and only a dozen men go a-fishing, each of them is likely to have a good catch; but when the coast becomes thickly settled a hundred men will fish, and though each one may take but few, the catch of the hundred will be greater than that of the twelve.

In the light of the patient investigations of the past dozen years, it is safe to assert, first, that our fresh-water fisheries have in general greatly diminished since early times, and have in many cases been destroyed; secondly, that the local coast fisheries have also to a greater or less degree diminished.

What have our Fishery Commissions done to remedy or to palliate these evils? It is fair to say that they have done a good deal, and are in a good way to do more.

Their first, and perhaps most valuable, service has been to excite universal interest in our fisheries, and to draw general attention to their importance. The second great step in advance has been the accumulation of a vast amount of accurate information concerning the number and variety of our fishes, their food, manner of breeding, condition of life, migrations and stages of growth. The third degree of progress has been fishculture, which may be called negative and positive; negative when obstructions to the increase of fish, such as improper apparatus and impassable dams, are removed; positive when fishes are artificially bred, or when new species are introduced from distant countries.

It may be fairly said that both forms of culture have already given considerable results. Of the success of negative culture, a familiar example is that of the smelt, which a few years ago had grown scanty in numbers and small in size on the Massachuseets coast, because the breeding fish were captured in the brooks when crowded together on their spawning beds. The prohibition of this kind of fishing was followed within three years by the restoration of the smelts to their former numbers and size.

The best instance of positive culture is that of the California salmon in the Sacramento River, where Livingston Stone, by annually turning into the river 9,000,000 young fry, artificially hatched, increased the yearly catch from 5,000,000 pounds to 9,500,000 pounds.

Wide experience in the hatching of shad and whitefish proves pretty clearly that a marked increase may be obtained, if the work be done on a scale large enough and that an amount of work insufficient to produce a positive increase will, nevertheless, check the decrease of these species.

In a word, artificial breeding, by greatly augmenting the proportion of eggs impregnated and by protecting them until hatched, presents a great advantage over the natural process, and gives us an available method of preserving many important fisheries. But to produce results of commercial value, this waterculture must be practiced as universally and methodically as is agriculture.

It is not the custom of Americans to stop half way in a profitable enterprise. Therefore I do not doubt that in the next generation some of our chief fisheries will be maintained by an established system of artificial culture.

Perhaps, in that day the honorable guild of fishmongers will erect a monument of their gratitude, and will inscribe on its tablets the names of scientific men who have in our time labored.

The chairman then introduced Hon S. S. Cox, who spoke as follows:

SPEECH OF HON. S. S. COX.

LADIES AND GENTLEMEN: It is my pleasure and privilege this evening to move a vote of thanks to the Hon. Theodore Lyman for his very felicitous and learned address upon this annual occasion. I am told that by a custom which now obtains in this museum, I am expected to speak to my own motion. If I were in another body I think I should rule it out of order, but I have a special gratification this evening in having a Congressman appear here so thoroughly learned in marine zoology. There is sitting before me, I notice, an ex-member of Congress, the Hon. Mr. Roosevelt (and I beg to say that in this particular province an x is not an unknown quantity), who has also devoted his services, his intellect, and sometimes his sportive nature to the same object as my distinguished friend from Massachusetts. But a New York man has not the same right to talk fish as a New England man. It is the peculiar privilege of the latter, as any one can see who will examine the last census, and you may have noticed all through the remarkable address of our friend that he is associated with the fish interest and with the dams of Massachusetts. I cannot say that I was shocked or astonished at his description, and at hearing the names of the various little streams of that State. We have always heard of them in the River and Harbor Bill. [Laughter.] But I was struck by one thing, namely, that he took very good care in his discussion to connect science with religion. And even at the falls of the Pawtucket, where he said the manufacturing interests did not harmonize with those of fisheries, he associated the old Puritan doctrine with religion, revelation, science and fishculture, which were almost one and the same thing. And it is simply true. If you look at the escutcheon of the State of Massachusetts you will find it to be a codfish, and nearly all the quarrels of that Puritan State have arisen from the same question that vexed the old Hollanders in early days as to whether the codfish took the hook or the hook took the codfish. [Laughter.] I do not know whether that point is settled yet. The State of Massachusetts should be proud of her fisheries. I remember having the honor of being arrested at 3 o'clock in the morning with General Butler, in the House of Representatives, in my attempt to break down the proposition to pay over to England the $5,500,000 growing out of the fishery award. I heard Mr. Rice, another member from Massachusetts, contend for the abrogation of the fishing treaty, which now allows fish to come in free from the Dominion of Canada. I sustained him in that, not because I was unwilling to have fish come in free to this country, but because I did not want fish to come free from Canada or Great Britain, who had cheated us out of $5,500,000. Throughout this whole subject Massachusetts has played a most prominent part. Why not? In early days the Puritans came here to worship God and catch fish. [Laughter.] New England is the home, if not the mother, of invention. The feature which most interests us here to-night is the inventive faculty. It has been shown in such a remarkable degree in fishing, and chiefly in New England, in connection with improvements for the catching of fish. These were displayed on a magnificent scale at Berlin in 1880, and in London in 1883.

You may remember that a certain weaver at Lyons invented his famous net, which revolutionized fishing. They arrested him, and the great War Minister Carnot, sent for him to come before the great Napolean. The Minister said: "Are you the man that can do what God cannot?—tie a knot on a stretched string?" And they put him gently under arrest, for fear he would go to England and there introduce his net.

Since then we have made remarkable strides in the invention of fish apparatus. Our fishing schooner attracted universal admiration in London. We now use steam as an adjunct and the great purse-seine. In the whale fisheries harpoons are no longer of the old sort, but explosive. Not satisfied to blow up dynasties with dynamite, we blow up whales with it (Laughter.)

But the great element of advancement was not discovered perhaps as early as some think—in Japan or China. Our learned friend fixed it at about 150 years ago, but I have data to show that this discovery of fishculture was made in *Ohio*! (Laughter). I know the man! (Prolonged laughter). His name was Dr. Garlick of Cleveland. His discovery like others was not complete at first. It was necessary that New York should perfect what Ohio had begun, and with the aid of several New York men, prominent among whom was my honorable friend in front (Hon. R. B. Roosevelt), this science was brought to perfection. By aiding nature, and with the skill of such men, these investigations have been prosecuted. Congress has been enabled to see something of the inestimable value of food fishes. Out of these investigations came the United States Fish Commission in 1871, for the creation of which I had the honor to vote. We should in a body pass a vote of thanks to Congress. From it came the appropriations that warmed up the hatching places. They helped on the grand results. So that now we can send from one end of the country to the other over car-wheels, tanks of fish. We all have, I trust, or ought to have, a deep interest in the fisheries.

But I forgot that I am speaking on a mere motion of thanks. Besides, I yesterday had occasion to speak at length in Congress in favor of Professor Baird's bill for the preservation of the shad and herring of the Potomac. We carried it handsomely.

I have already spoken too long. I meant merely to refer to what my friend has stated so eloquently, and to make the motion which has already been made. I cannot, however, cease without referring to one matter, which is, that in our legislative action in Congress in connection with fishing and fishculture, we have not been behind other nations, or rather legislative bodies. It is pleasing to know that we have furnished all the appropriations necessary to enable us to meet the nations of the world, both at Berlin and at London. I believe such appropriations should continue to be made. They will enable us to solve, as no other nation can, the problem which you fishculturists are trying to solve here, and which France, Germany, and England are solving. With scientific applications to the multiplication of fishes, we shall always, with the aid of liberal appropriations from Federal and State governments, not only be able to increase our food supply, but also to meet the nations of the world in happy rivalry and successful competition. I will say in conclusion: All honor to men engaged in this work! All honor to the Congressmen who can elucidate its value to the satisfaction of the people. All honor to the men, nay to this chief of men,



MR. F. WINDHOLZ'S BLUE BELTON ENGLISH SETTER BITCH "PRINCESS PHŒBUS."
Winner of First in Puppy Class, New York, 1884.

Professor Spencer F. Baird, who received the grand medal from the Emperor of Germany at Berlin, as the greatest of all living fishculturists. All honor to Professor George Brown Goode and his associates at Berlin and London, who bore away the highest prizes given in Germany and England. I want these honors to come while they are full of life, faith and hope, and can enjoy them. They are worthy of the commendation of Professor Huxley, who said that Professor Baird, Professor Goode and his associates, by their energy, patience, and scientific research, have made the world more and more comfortable for mankind. By their exertions they have advanced into high favor, the doctrine of applying science to human ends. I, therefore, ask you, Mr. President, to put the question of thanks to Professor Lyman for his very able address. I wish I could add to it that emphatic sentiment of the people, who in their homes all through the land gratefully commend the efforts of the United States Fish Commission.

The president of the meeting proposed a vote of thanks to Hon. Theodore Lyman for his eloquent and instructive address.

Hon. James B. Groome, referring to Hon S. S. Cox's statement that Ohio had originated and New York perfected fishculture, remarked: "I beg to say also that Ohio produced, and New York perfected, the model Congressman." (Applause.)

The chairman proposed a vote of thanks to Hon. S. S. Cox, which was carried unanimously.

The meeting then adjourned to meet next day.

THE GREAT FALLS FISHWAY.—The plans for the McDonald fishway at the Great Falls of the Potomac have been accepted by Prof. Baird and transmitted to Maj. Lydecker, of the U. S. Engineers, under whose direction the work will be done. This insures more thorough work than if done by contract, and this fishway will give opportunity for careful and critical study of details. The total hight to be surmounted is 71.9 feet, this rise being accomplished in a horizontal distance of 2,600 feet, measuring from the crest of the dam to the level of low water. The greater part of the ascent to be overcome is in the lower part of the section surveyed, the total elevation being accomplished by a succession of abrupt declivities, rising successively to higher levels. It is estimated that it will require for this work 202 cubic yards of cut stone masonry; 90 cubic yards of coping stone masonry; 479 yards of concrete masonry; 93,600 feet of timber, B. M.; 8,532 lbs. iron; 17,732 short bolts, 2 to 6 in.; 51,664 screws, 2½ to 9 in.; 1,655 cubic yards of rock excavation; 750 cubic yards of earth excavation; and 110 cords of riprap. The work will soon begin. Col. McDonald expects to sail for Scotland about July 10, the Scotch Commissioners having engaged him to construct a fishway on a salmon river, which he expects to complete in time for the fall run of fish.

SOME OTHER MAN is always the one you think will get hurt by accident, and the "other man" thinks it will be you! If he is right, you will be sorry you didn't insure in the Travelers, of Hartford—or your family will.—*Adv.*

The Kennel.

FIXTURES.

BENCH SHOWS.

Sept. 16, 17 and 18.—Collie Bench Show and Field Trials of the Ontario Collie Club, Toronto, Ont. Entries close Aug. 23. Mr. H. J. Hill, Secretary, Toronto.

Sept. —.Bench Show of the Philadelphia Kennel Club. Mr. Benj. C. Satterthwaite, Secretary.

Oct. 5, 9, 10 and 11.—Third Annual Bench Show of the Danbury Agricultural Society, Danbury, Conn. E. S. Davis, Superintendent, Danbury, Conn.

Oct. 21, 22, 23 and 24.—First Annual Fall Bench Show of the Westminster Kennel Club, Madison Square Garden, New York. Mr. Chas. Lincoln, Superintendent.

FIELD TRIALS.

Dec. 8.—Sixth Annual Trials of the National American Kennel Club at Canton, Miss. D. Bryson, Secretary, Memphis, Tenn.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1319.** Volume I., bound in cloth, sent postpaid, $1.50.

POINTERS AT NEW YORK.

Editor Forest and Stream:

Mr. Aldrich seems to look upon the forty signers of that protest somewhat as Ali Baba did upon another famous forty. They are all very, very wicked men. But why should I be especially chosen out of the forty, to be the text of Mr. Aldrich's sermon, when so many of them are better known, both as breeders and exhibitors, than my humble self. I have not said that Bang Bang was throaty. I have not said that he had a black nose. I have not said he was cock-eyed. What is the head and front of my offending? But to relieve Mr. Aldrich's mind I will explain my position in regard to the protest. I was told that a protest was being signed against the judging of the pointers at New York, and asked if I, as a breeder, wished to sign it. In my letter of June 5, from which Mr. A. quotes one paragraph, I expressly gave my reasons for thinking Mr. E. C. Sterling no judge of a pointer. I readily then signed my name to a protest which I thought, and still think, was intended to convey the objection of pointer breeders to that gentleman as a judge, and to prevent his being employed in that capacity at future bench shows. The protest as printed was worded a little differently from what I had expected, but the substance being the same, I did not cavil at the form.

As regards Meteor, I have never undertaken to pick him to pieces, but I frankly say that after hearing a full description of him from Major Taylor, who is an open admirer of the dog, and hearing more of him from others who know what a pointer should be, as well as or better than I do, I do not believe he can beat one side of Beaufort in a large pointer class and under a judge who knows what a pointer is. Mr. Aldrich seems to be under the impression that I am fighting Mr. Mason's battles against the W. K. C. Such is not the case. I consider Mr. Mason amply capable of taking care of himself, and when I condemn Mr. Sterling's judgment it is with no feeling against the W. K. C. I am only championing Beaufort against his foes, and would do so whoever owned him and whoever ran him down. If Meteor is such a grand dog why run Beaufort down? Were Meteor mine I should like Beaufort to be all his friends claim him to be when my dog had beaten him. Every fault that is found in him takes a leaf from Meteor's laurels, and if he is as Mr. Cornell and Mr. Aldrich would fain paint him there is not much glory in beating a cripple. And now I have explained, I want some explanation from Mr. Aldrich. What does he mean by "men like this," as applied to me? If I have not forgotten my grammar "this" needs another word to make sense, and applied to the rest of his sentence it is either ungrammatical or shows that Mr. Aldrich does not understand the wording of the protest. What is "hard" in my signing my humble name to that protest, and who it is "hard" on I cannot say. Perhaps Mr. Aldrich can.

T. B. DORSEY.

Editor Forest and Stream:

It is vain for Mr. Mason to say that Mr. Cornell began the fuss. He certainly cannot deny that his attempt on me was altogether without provocation on my part, yet he deliberately chose to make it a personal matter.

If he opines that only the owners of good ones are entitled to discuss dogs, I might call attention to the fact that I have owned, and indeed do now own, dogs that have won both in bench shows and field trials, first-class events at that, and not tail-end prizes either. But then, as we all know, Mr. Mason would say there was no competition, or if there was then the judges were fools.

This hostility to the record amounts, on Mr. Mason's part, to an assumption of something like infallibility. Whenever a dog he dislikes, as Bang Bang or Thunder, wins, as such ones most commonly do, why then it don't count, that's all. But before he is publicly installed as pope of dogdom, he must make a better case than against Thunder. No such loose statement of the facts, even if what he states are facts, will suffice to discredit a public record. But take it all as he gives it, and it is as strongly against him as could be wished.

There were no birds, he says. Well, then, what were the points upon which the decision was reached? Evidently range, pace, quartering, obedience, etc. If he was such an idiot as represented, it is apparent that he would lack in all those points which are dependent on intelligence, and there would be little left for him to win on but range and pace, which are precisely the points for which he would be disqualified if he had such a defect as is affirmed. Mr. Mason will find that before he will be able to overthrow Thunder's record he will have no resource left him but a resort of personal vilification of those who made the record.

Now I want it understood that I never write anything in favor of my own works, and will not now do so, but I will give a little "fact, hard as granite," that will show beyond dispute that either Mr. Mason is guilty of intentional unfairness, or of complete ignorance of the subject he makes so free to discuss. In my picture of Thunder, with the dog in the position indicated and the spectator at the point of view chosen, and clearly established by the composition of the picture, such a crook as Mr. Mason describes in his criticisms of Thunder's leg could not be detected with the naked eye, or shown by a photograph, even if it were present in the degree he claims. Now he either knows this or he does not, and I care not which horn of the dilemma he chooses.

It is neither necessary nor proper to bring private persons or private expressions of opinions into a public discussion. What cannot be shown by proofs that are public and open to the inspection and verification of all, I am quiet willing to forego. So instead of giving the private conversation of any party to show what "notoriety" there has been in regard to Thunder's field qualities, I will allude to the fact that at Vincennes, Pittsburgh gentlemen, who were well acquainted with the dog and with his owner, backed him in the pools, and against no less a crack than Gladstone!

It is not news to anybody what kind of dog Mr. Mason favors, we all knew he went in for a distinctly show animal, as do a great many others, all of which is their right and privilege. There are, however, many who go in for field quality, and care less for ornamental points. It is not yet proven which of these opposing parties is in the right. The question is open for discussion, and any person, however humble, who can give valuable facts looking to its elucidation, will be listened to with pleasure, but mere assertion, personal denunciation and bounce will not impose upon anybody.

J. M. TRACY.

GREENWICH, July 5, 1884.

NEW YORK FALL DOG SHOW.

THE first annual fall bench show of the Westminster Kennel Club will be held at Madison Square Garden, Oct. 21, 22, 23 and 24. With the exception of bloodhounds, deerhounds, greyhounds and fox-terriers, the show will be confined to the non-sporting classes. The premium list, which we give below, contains ninety-two classes. The prizes offered are liberal, and perhaps as well apportioned as possible. Should the fanciers of any breed feel that they are not sufficiently noticed, we can assure them that a full entry will result in a better classification and larger prizes next year, and we presume that the management would cheerfully sub-divide at this show all of the classes where the number of entries is sufficiently large to make it advisable. We are glad to notice that the club have taken a new departure, and adopted a rule debarring all dogs from the champion class who have not won three first prizes either in open, champion or extra champion classes. We trust that all future shows will, now that the ice has been broken, adopt the same rule. They have also added to the list of recognized shows those held at Crystal Palace, Alexandra Palace and Birmingham, England. The entries close Oct. 6. Following is the premium list as corrected to date:

MASTIFFS.—Champion dogs $20, bitches the same; open, dogs $15, $5 and medal, bitches the same; an extra prize of $10 for best brindle dog, best brindle bitch the same; puppies, dogs $10 and medal, bitches the same.

ST. BERNARDS.—Champion rough-coated dogs $20, bitches the same; open, dogs $15, $5 and medal, bitches the same; puppies, dogs $10 and medal, bitches the same. Champion smooth-coated dogs $20, bitches the same; open, dogs $15, $5 and medal, bitches the same; puppies, dogs $10 and medal, bitches the same.

NEWFOUNDLAND.—Black, champion dogs or bitches $20; open, dogs $10 and medal, bitches the same; other than black, dogs or bitches $10 and medal.

GREYHOUNDS.—Champion dogs $20, bitches the same; open, dogs $10 and medal, bitches the same; puppies, dogs or bitches $10 and medal.

DEERHOUNDS.—Champion dogs or bitches $20; open, dogs $10 and medal, bitches the same; puppies, dogs or bitches $10 and medal.

ENGLISH BLOODHOUNDS.—Open, dogs or bitches, $10 and medal.

FOX-TERRIERS.—Champions, dogs $20, bitches the same; open, dogs $15, $5 and medal, bitches the same. Wire-haired, dogs or bitches, $10 and $5; puppies, dogs $5 and medal, bitches the same.

SHEEP DOGS.—Champion dogs $20, bitches the same; open, rough-coated, dogs $10, $5 and medal, bitches the same. Smooth-coated, dogs or bitches $10 and medal; puppies, dogs $10 and medal, bitches the same.

BULLDOGS.—Champion dogs (any weight) $20, bitches the same; open, dogs (45 lbs. and over) $15, $5 and medal, bitches (35 lbs. and over) the same; dogs under 45 lbs. the same, bitches under 35 lbs. the same; puppies, dogs or bitches $5 and medal.

BULL-TERRIERS.—Champion dogs (25 lbs. and over) $20, bitches the same; dogs under 25 lbs. $20, bitches the same; open, dogs (25 lbs. and over) $15, $5 and medal, bitches the

same; dogs under 25 lbs. the same, bitches the same; puppies, dogs or bitches, medal.

BLACK AND TAN TERRIERS.—Dogs or bitches $10 and medal.

SCOTCH TERRIERS.—Hard-haired, dogs or bitches $10 and medal.

TERRIERS.—Rough-haired dogs or bitches $10 and medal.

DANDIE DINMONT TERRTERS.—Dogs or bitches $10 and medal.

IRISH TERRIERS.—Dogs or bitches $10 and medal.

BEDLINGTON TERRIERS.—Dogs or bitches $10 and medal.

SKYE TERRIERR.—Champion dogs or bitches, champion medal; open, dogs or bitches $10, $5 and medal.

YORKSHIRE TERRIERS.—Champion dogs or bitches over 5 lbs., champion medal, under 5 lbs. the same; open, dogs or bitches over 5 lbs., $10, $5 and medal, under 5 lbs. the same.

TOY TERRIERS.—Rough-coated, other than Yorkshire, dogs or bitches under 5 lbs. $10 and medal, smooth-coated the same.

KING CHARLES SPANIELS.—Dogs or bitches $10 and medal.

BLENHEIM SPANIELS.—Dogs or bitches $10 and medal.

JAPANESE SPANIELS.—Dogs or bitches $10 and medal.

PUGS.—Champion dogs $20, bitches the same; open, dogs $10, $5 and medal, bitches the same; puppies, dogs or bitches, medal.

MALTESE DOGS.—Dogs or bitches $10 and medal.

ITALIAN GREYHOUNDS.—Dogs or bitches $10 and medal.

POODLES.—Dogs (black) $10 and medal, bitches the same. white, dogs or bitches $10 and medal.

DALMATIANS.—Dogs or bitches $10 and medal.

MISCELLANEOUS.—Dogs or bitches not classed, over 25 lbs., $10, $5 and medal, under 25 lbs., the same. Should there be two or more in either class of the same breed a separate class will be made for them, and regular prizes awarded.

MISTAKE IN PEDIGREE.

Editor Forest and Stream:

In reference to the above entitled article contained in last week's issue of FOREST AND STREAM I deem it a duty, not only to myself, but to others, who may be interested in the matter, to make the following explanation:

The pointer bitch Fancy, purchased by Mr. Miller [about 6 months ago), was originally owned by a Mr. M. Walrath, of East Albany, N. Y.; this gentleman obtained her from a Mr. P. Halie. Mr. Walrath obtained the pedigree from Mr. R. G. Wilbur of Albany, to whom it was given by Mr. Halie, pending previous negotiations for the sale and purchase of the bitch between the two latter parties (the pedigree referred to is the one now in question). Mr. Wilbur told me afterward that he was assured positively that the bitch was as represented; that she was one of a litter of nine puppies (four dogs and five bitches) and whelped in November or December (I have forgotten which), in 1881. Here I desire to make a correction on the part of Mr. Miller, who is in error (unintentional I feel assured, however) in regard to the age given at time of purchase by him, which was two and not three years, which corresponds with the date of birth as previously given to me, making the bitch about two years seven or eight months old at the present time.

It is not my custom nor has it ever been to guarantee the pedigree of any stock not bred in my own kennel or from my stock unless I am positively assured beyond any question of doubt as to the correctness of the breeding, and again I regret that Mr. Miller is laboring under an erroneous impression in regard to my certifying as to the pedigree's being correct, not but what it may be so, and beyond a question of doubt with others, but simply because it is not my custom to do so. I have always since my first acquaintance esteemed Mr. Miller as a gentleman, and I believe him entirely incapable of knowingly misrepresenting any stock that he may have for sale. Both Mr. Walrath and Mr. Wilbur, the parties referred to, are gentlemen that are held in high esteem, and both are positive in their assurances as to the bitch's being bred as stated. Mr. Halie I never knew personally, but only through the above named parties, both of whom place entire confidence in him and his statement.

In regard to a technical error in a pedigree, if the pedigree is otherwise correct (*i. e.*, correct as to sire and dam), due allowance should always be made. Mr. Dilley should and undoubtedly does know whether his bitch was bred to Croxteth at all, and if so at what time, and if there was any progeny what disposition was made of them. Either of the parties I have referred to will sustain me *verbatim et literatim* in what I have said, and any communications to them on the subject I am sure will be cheerfully and promptly answered. My specialty in breeding is almost entirely and exclusively Irish setters, and on the subject of pointers and their pedigrees I consider myself but a poor authority. W. N. CALLENDER.

ALBANY, N. Y.

DEATH OF GATH.—We have received a dispatch from Memphis, Tenn., announcing the death, on July 1, of the famous English setter dog Gath, from the effect of a dose of poison administered at Fairmont, Minn. The history of Gath is well known to the readers of FOREST AND STREAM. A capital likeness of him may be found in our issue of Dec. 6. We then said of him: "The setters at this last meeting made a very strong class, and Gath stands at its head. We believe him to be the very best setter in America to-day, and the work which he did in the concluding heat of the All-Aged Stake was marvelous." In describing this heat we said: "The work in this heat was very near perfection, and fully equal if not superior to that in the heat between Gath and Pink B. Indeed, so bewildering was the nature of the performance that we could scarcely realize that we were not upon enchanted ground, and following the evolutions of supernatural dogs." Gath made his first appearance in public in the National Derby of 1882, where he acquitted himself very creditably, but was not placed. Last year, in the hands of Mr. H. M. Short, he won first in the Eastern Field Trials All-Aged Stake, second in the National All-Aged Stake, and at the same meeting divided the champion prize with Bryson's Sue. At the Southern States Trials, a week later, he won second in the All-Aged Stakes and the champion prize. He was shown on the bench but twice. At New Orleans last winter he won first in the open class, the special for the best English setter and three specials for dogs that had been placed at field trials. At St. Louis last April he won in the champion class. He was a finely formed animal with a wonderful turn of speed, and possessed one of the best noses that we ever saw. He was also very stylish when on game. This is a peculiarly aggravated case of dog poisoning, and Mr. Crawford will have the sympathy of all owners of valuable dogs.

THE WARWICK SHOW.—London, S. E., June 20.—*Editor Forest and Stream:* Your correspondent "Lillibulero," in your issue of May 22 last, has indulged his imagination in a description of the judging at this show, and has given it such reins that it appears to have run away with the owner, and it is a difficult task to find out where he gains control and is able to assume the sober, steady pace of truth. He says, "Well, but look here, this did not happen at Warwick, so adieu, imagination, and return hard facts." The hard facts are hard, but the facts are mere presumptuous outpouriugs of an ignorant conjecture, which he seeks to impose on the credulity of his readers. His remarks which follow this announcement are directed against two gentlemen, most honorably and deservedly respected in the mastiff world, and are as far from the truth, as regards the inuendos which they contain, as any imagination, filled with "envy, hatred and all uncharitableness," can make them. He, evidently, knows little of Mr. Portier or Mr. Taunton. He describes the former as "having judged before, but he does not remember where;" and says he has written "over the *nom de plume* of 'Anglo-American.'" It should be "Franco-American," some of whose letters have been among the most able of those appearing in our journals. But did your "Lillibulero" know anything of mastiffs he would be aware that Mr. Portier's letters on that subject were signed "County Monaghan." I shall hardly be accused of partiality, for it is well-known that "County Monaghan" has been my fiercest and most powerful opponent in the controversy on "Mastiffs and their Points;" but always an opponent who fought fairly and gave his reasons for any differences of opinion. Mr. Taunton, as a gentleman of unimpeachable honor, and as a breeder of some of our best mastiffs and foreign dogs, enjoys the esteem of all who are interested in these breeds and is too well known to require any eulogies. The stud prize at Warwick, was awarded to Mr. Taunton's Cardinal, and my own dogs, who represented the progeny of Crown Prince, were beaten. Under the circumstances of the case, as explained by Mr. Portier in the *Live Stock Journal*, I see no reason to cavil at his decision, and feel quite sure it was a conscientious one. I do not like to see exhibitors grumbling at the verdict of those judges whom they have themselves asked to adjudicate, and still more object to a reporter who tries to make people believe that he casts no "suspicion" on a judge's "strict probity," at the same time insinuating that the judge and his friend are "Arcades ambo," which those versed in the comic Latin grammar know how to translate. This is giving "a handle to the party of envy, hatred and all uncharitableness," in which malice may be very safely included. Hoping you will find room in your paper for this protest, as I know Americans like fair play as well as Englishmen, I beg to sign myself.—I. SIDNEY-TURNER.

DOGS BOARDED.—Mr. Wm. H. Pierce advertises to board and condition a few dogs. We have no doubt he will readily obtain all he wishes, as the appearance of his dogs when shown is ample testimony as to his ability to put them in condition and to keep them looking their best.

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, of breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Duke of Hudson, Don, Spot and Lucy. By Mr. Charles H. Malleson, Hudson, N. Y., for King Charles spaniels, three dogs and one bitch, whelped April 27, 1884, by Duke of New York out of his Jumbo.

Belton II. By Mr. B. A. Gage, Pawtucket, R. I., for white, black and tan English setter dog, whelped April 30, 1884 (Yale Belton—Topsy.

Falka. By Mr. Lawrence M. Kostright, Bristol, R. I., for red Irish setter bitch, whelped Jan. 21, 1884, by champion Glencho out of Bess (Chief—Tilley).

Burr. By Mr. C Frank Greene, Jersey City, N. J., for beagle dog, whelped Feb. 21, 1884, by Joy out of Nelly.

Dane Bondhue. By Messrs. Walter and Mason; Providence, R. I., for black, white and tan English setter dog, whelped Feb. 27, 1884, by Gus Bondhue (Dashing Bondhue—Novel) out of Countess Mollie (Count Noble—Spark).

BRED.

☞ *See instructions at head of this column.*

Rena—Agrippa. The Riverview Kennel's (Clinton, Mass.) mastiff bitch Rena (A.K.R. 262) to their Agrippa (A.K.R. 449), May 13.

Delph Viva—The Prince. The Riverview Kennell's (Clinton, Mass.) imported mastiff bitch Delph Viva (E.K.C.S.B. 14,788) to Mr. J. Royle's (Manchester, England) The Prince (Crown Prince—Lady), May 2.

Medea—Dash III. Mr. C. D. Foss's (Boston, Mass.) English setter bitch Medea (Bute—Pride) to Mr. A. M. Tucker's Dash III., May 11.

Hilda V.—Agrippa. The Riverview Kennel's (Clinton, Mass.) mastiff bitch Hilda V. to their Agrippa (A.K.R. 449), May 30.

Antea—Agrippa. The Riverview Kennel's (Clinton, Mass.) mastiff bitch Antea (A.K.R. 244) to their Agrippa (A.K.R. 449), May 2.

CORRECTION.—In the notice last week of the breeding by Mr. C. H. Drayton's Vic to Glencho, Elcho is given as his sire. It should read Echo.

WHELPS.

☞ *See instructions at head of this column.*

Jumbo. Mr. Charles H. Malleson's (Hudson, N. Y.) King Charles spaniel bitch Jumbo (Prince—Gipsey), April 27, four (three dogs), by Mr. A. W. Lucy's imported Duke of New York (Don Carlo—Queen of Bow).

Nora. Mr. Joseph Hayes's (Boston, Mass.) imported red Irish setter bitch Nora (Cigar—Belle), July 7, eight, by Mr. J. J. Giltrap's (Dublin, Ireland) champion Garryowen (E.K.C.S.B. 8,262).

SALES.

☞ *See instructions at head of this column.*

Radnor—Nora whelp. Orange and white English setter dog, whelped April 25, 1884, by Mr. Manasseh Smith, Woodford, Me., to Dr. Charles D. Smith, Portland, Me.

Ruth. White, with orange ears, English setter bitch, whelped August, 1881 (Dashing Lion—Armida), by Mr. E. W. Jester, St. George's, Del., to Mr. E. S. Hawks, Ashfield, Mass. (Wrongly given as Highland Kennel, June 26).

Belton II. White, black and tan English setter dog, whelped April 30, 1884 (Yale Belton—Topsy), by Mr. H. A. Bailey, New Britain, Ct., to Mr. B. A. Gage, Pawtucket, R. I.

Pet Berwyn. Black, white and tan English setter bitch, whelped June 2, 1883 (Dashing Berwyn—May. Druid), by Mr. J. A. Rockwood, West Medford, Mass., to Mr. Walter B. Peck, Pawtucket, R. I.

PRESENTATIONS.

☞ *See instructions at head of this column.*

Pride of Columbia. White, with orange markings, English setter dog, 2½ years old, by Cossack (Don—Fairy) out of Ophelia (Pontiac—Mollie Bawn), by Hon. John W. Browning to Mr. Stewart M. McKay, New York.

DEATHS.

☞ *See instructions at head of this column.*

Gath. Black, white and tan English setter dog, 3 years old (Count Noble—Peep o' Day), owned by Mr. W. J. Crawford, Memphis, Tenn., July 1, at Fairmont, Minn., from poison.

Taurus III. Mastiff dog (A.K.R. 1,152), owned by Mr. B. R. Hampson, St. Louis, Mo., June 17, from pneumonia.

Lorna II. Deerhound bitch, 14 months old (Oscar—Lorna), owned by Prof. Theodore A. Blake, New Haven, Ct., from distemper.

Rifle and Trap Shooting.

RANGE AND GALLERY.

LOCKLAND RIFLE RANGE.—At their Range, June 27, the Lockland Rifle Club made the following scores: Geiger 169, T. Smiley 168, Stickles 162, Best 161, Forbis 161, Critchfield 159. Neiman 157, R. Mace 157, P. Mace 157, Richards 153, Poole 153, Dunn 151, Stevenson 148, Freechey 146, Roll 145, W. Smiley 145, Musselman 143, Potter 139, J. J. Smiley 138, Harrison 118. The average, 151¼, is very good. The shooting was off-hand 200 yards at a Massachusetts target. Our range is situated at Maplewood, just ten miles north of Cincinnati, Ohio. When Mr. W. M. Farrow visited us we were organizing the Rifle Club and he set us a pattern of 165, stating that when any one of us beat that score he would come to our range and set us another pattern. We would be happy to see Mr. Farrow here once more and hope that this will be the means of inducing him to come.—A. R. R.

GARDNER, Mass., June 25.—Members of the Gardner Rifle Club who went out to Hackmatack range to-day, made the following scores, using the American decimal target, distance, 200yds., shooting off-hand, with a possible 100: J. M. Dodge 86, A. Mathews 82, G. F. Ellsworth 81, G. C. Goodale 78, W. C. Loveland 69, George H. Hisler 56.

BULLSHEAD RIFLE CLUB, July 3.—12-ring target, possible 120: A. Lober 117, G. Zimmerman 115, M. Dorrler 115, J. Schrarder 112, G. D. Johnson 111, C. Rein 111, D. Loulzki 104, S. F. C. Weber 105, J. F. Campbell 102, W. Shaw 89.—A. LOBER, Sec'y.

BOSTON, July 4.—There was a large number of riflemen at Walnut Hill to-day, and, with fine conditions, some good work was done. A match was shot on the range between teams representing the Lawrence Rifle Club and the home association, the former winning. Matches B, C and E, which had been running some time, closed to-day. The records made in these contests are appended, as well as the scores in the other contests of the day:

Creedmoor Practice Match.

J W Frost	5555544544—46	D Kirkwood (mil.)	5444445444—42
W Gardner	5444454455—44	A J Kempton	4454454444—42
A Law	4454555444—44	J I Darmeody (mil.)	4553334444 42
G Whitcomb	3544454455—43	J L Fowle (mil.)	4445554434—42
W A Morton	4434555445—43	I P Dodge	4444444454—41

Creedmoor Prize Match.

C E Berry	5555455555—49	J W Whitcomb	4545545545—46
O M Jewell	5554455555—48	D Kirkwood (mil.)	5554544545—46
F W Perkins	5555555454—48	W Fisher	5454554554—46
E F Richardson	5454545555—47	A D Alden	5444445455—44
F Wallace	5445555455—47	A B Archer	5544445454—44
J B Fellows	5555544515—47	W H Oler	4355545445—44
J N Frye	5545554554—47		

Massachusetts Rifle Association.

C E Berry	5555555444—47	O M Jewell	4545545555—47
J Francis	5455545445—46	E F Richardson	5454555455—47
F Wallace	4454445455—44	J W Frost	4454555555—46
P Kirkwood	4444455431—41	A D Alden	5454544454—44
W Gardner	4444424545—40	W Fisher	4545445454—44

Lawrence Rifle Club.

	218		228

Match C.

W Charles	84	86	81	78	—329
F Wallace	76	67	62	59+28	—292

Match E.—Decimal, Off-hand.

W Charles	84	88	—172
W Gardner	77	75+12	—164
J N Frye	74	73+ 8	—155
E B Souther	76	68+20	—164
J B Fellows	78	70+ 4	—152

Decimal Rest.

W Charles	97	93	—190
W Gardner	95	94	—189
J N Frye	96	93	—189
E B Souther	79	79+ 1½	—159½
J B Fellows	86	88	—174

Creedmoor.

W Charles	49	47+			96—458
W Gardner	45	45+3			93—443
J N Frye	43	45+2			90—434
E B Souther	47	45+5			97—420½
J B Fellows	47	44+1			92—418

Match B.

C E Berry	47	47	48	49+ 6	—196
F Wallace	48	47	47	47+ 7	—196
H Cushing	47	47	46	46+10	—196
J P Bates	47	47	45	45+11	—195
J B Fellows	49	47	47	47+ 2	—192
O M Jewell	48	47	47	48+	—190
D Kirkwood (mil.)	45	44	45	46+10	—190
J W Frye	46	46	46	47+ 4	—189
W Fisher	45	45	45	46+ 8	—188
H G Bixby	49	48	47	43+	—187
E F Richardson	48	47	47	47+	—187
G W Whitcomb	46	45	44	44+ 9	—184
A B Archer	44	43	44	43+ 9	—180

July 5.—There was a very slim attendance of shooters at the range at Walnut Hill to-day, in fact the regular "after a holiday crowd," owing no doubt in part to the threatening weather. The clouds were dark and heavy, with alternating sunshine and shadow, with a stormy "fish-tail" wind. Despite this fact, however, Mr. Berry made a fine 47, Creedmoor, and Mr. C. H. Brown a clean score of 100, decimal rest target, and followed it with 8 centers, making 18 consecutive shots put into a 3-inch circle. This is all considered remarkable shooting, when the weather conditions are observed and it is remembered that each gentleman was using a 32-caliber Maynard rifle.

CREEDMOOR.—The members of the Amateur Rifle Club of New York shot at Creedmoor on Thursday, July 3, for the Leech cup, given in 1875 by Maj. Blennerhasset Leech of Ireland. It was won by W. W. De Forest, who made the highest score ever made on the range, 221 out of a possible 225, namely 75 at 800yds., 74 at 900 and 72 at 1,000. Before the 1,000yds. range was shot, a heavy rain storm set in, and the weather conditions at the range made the score most remarkable. There were but six competitors.

	800yds.	900yds.	1,000yds.	
W W DeForest	75	74	72	—221
H P O'Neil	74	71	69	—214
Col H F Clark	75	64	52	—201
L Geiger	68	70	61	—199
N D Ward	75	69	55	—199
J W Todd	65	67	64	—196

THOMASTON, Conn., June 28.—At the weekly shoot of the Empire Rifle Club to-day, the following scores were made:

W H Dunbar	10	11	10	11	11	10	10	11	9	12	—105
G A Lemmon	9	9	11	11	11	9	11	10	10	12	—103
E Thomas	10	10	12	7	10	9	12	11	11	9	—101
C F Williams	9	7	12	10	12	12	7	10	9	10	— 98
G P North	10	12	7	10	7	10	9	11	10	8	— 94
Kerwood	6	5	11	12	12	11	11	5	12	9	— 94
A Fox	9	11	11	11	8	10	9	8	9	8	— 93
C L Alling	9	8	8	9	9	8	9	9	9	8	— 86
F Carr	9	7	10	10	11	6	9	5	10	9	— 86
B W Pease	10	8	6	8	6	11	9	12	12	2	— 84

The club are to have a shoot with the Canton Rod and Gun Club July 8.—F. A. P.

July 4.—Team match, shot by members of the Empire Rifle Club.

W H Dunbar's Team.

G C Canfield	10	10	9	11	6	10	11	9	10	11—97
W H Dunbar	10	7	10	11	10	9	9	11	11	9—97
A S Hubbard	4	11	11	9	8	9	9	9	10	9—89
F Carr	11	11	11	7	6	10	7	9	7	8—97
Kerwood	9	9	8	6	6	8	8	6	5	7—72
A Fox	9	10	4	8	7	4	9	4	4	10—67
G Smith	2	8	5	9	7	5	10	8	8	0—62	571

G Gilbert's Team.

C F Williams	10	10	12	9	11	11	9	7	9	12—100
G Gilbert	8	11	7	8	12	8	5	9	8	11— 87
E Thomas	8	10	10	8	12	2	8	10	6	10— 84
G P North	9	12	10	10	6	10	9	8	2	8— 84
B W Pease	7	11	8	5	8	11	4	10	7	5— 76
C L Alling	4	7	5	10	10	4	8	7	8	10— 73
F A Perkins	7	4	9	2	7	8	10	9	8	8— 71	575

July 5.—Weekly shoot for badge:

G P North	7	11	10	10	11	10	9	11	11	9—99
A L Hubbard	10	12	9	10	9	10	8	10	10	8—97
W H Dunbar	8	10	12	9	11	10	9	10	9	11—97
E Thomas	8	11	9	9	10	11	10	10	11	6—95
C F Williams	10	9	7	10	10	12	8	7	11	9—93
F Carr	8	10	10	9	10	10	12	8	9	9—91
G A Lemmon	6	10	11	12	10	10	5	7	11	8—90
C L Alling	8	10	7	9	8	10	8	7	11	10—88
G Gilbert	8	10	8	9	11	7	7	9	5	8—82
Kerwood	9	8	8	9	9	11	10	6	6	8—82
F A Perkins	11	12	0	7	11	9	9	3	11	9—82
B W Pease	9	7	9	6	11	8	8	4	10	9—81
G Smith	6	7	6	6	5	10	10	10	8	5—63
Atwood	9	3	12	12	10	6	4	5	8	2—61

THE JERSEY CITY SCHUTZEN CORPS held their regular semi-annual practice shoot at the Greenville Schutzen Park, on Friday, the 26th ult. The target used was the German ring, 12in. bullseye, 1½in. center, counting 25:

Geo W Plaisted	23	20	24	19	21	24	24	23	21	23—212
Joe Reisenhour	21	20	21	21	21	24	16	18	21	20—203
Joe Wilkinson	17	22	16	22	23	22	19	22	17	19—199
Capt Newman	19	21	18	16	22	20	24	21	19	17—197
Joe Beck	12	20	14	17	23	24	00	23	19	20—188
John C Wenner	11	20	25	16	19	22	—	22	20	19—174
Eugene Frank	08	11	22	19	23	—	23	23	11	21—151
R von Radonitz	23	19	08	21	14	05	22	19	—	21—150
G V H Brinkerhoff	16	—	14	21	22	02	21	24	—	17—138
Jac Floury	—	10	11	—	18	21	19	04	21	07—111

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

ASSOCIATION OF THE CAROLINAS.

Editor Forest and Stream:

"The day we celebrate" is not an unfitting one on which to inform the readers of FOREST AND STREAM, that the Sportsmen's Association of the Carolinas propose to have a trial of skill at Columbia, S. C., on July 29, 30 and 31. I am authorized to state that visitors from all sections of the country are cordially invited to participate, and we

promise to show them that whatever expertness they may exhibit, we have several members who will be able to make their triumph an honorable one. Not being blessed with much spare cash, our prizes are not large, but such as they are, any one is welcome to get them, if they can. Hotel accommodations are good and the grounds are eligible. WEELS, President.

ROCKINGHAM, N. C., July 4.

TOPSHAM, Me., July 4.—The regular shoot of the Riverside Club on this date was made a side shoot, and was a very interesting and somewhat exciting affair. Twenty clay-pigeons, 10 single and 5 pairs, an i 20 glass balls, 10 singles and 5 pairs, the best individual score to take club badge:

Wm. Dunning's Side.

	Pigeons.				Balls.				
Dunning	0110220200	11	00	11	10 00	00w			— 8½
Alexander	1111111011	10	10	10	11 11	1111111111	00	01	10 11 11—32
Hall, M C	1111111111	01	10	00	11 10	1111111010	10	01	11 11 11—31
Goud	2012111110	01	01	11	10 01	0101001101	10	10	01 10 01—23
Hall, A C	1112110001	10	11	10	10 10	1111110111	11	10	11 10 11—30½
									125

Wm. Tate's Side.

Tate	0000010101	10	01	00	11 00	11w				— 9
Goud	0111111010	10	10	11	11 10	1110111010	11	11	11 10 10—29	
Purinton	2111111011	11	01	11	11 11	1011111001	10	10	01 11 11—31½	
Keene	2020111121	00	11	00	10 10	0000010111	11	01	01 01 11—21½	
Strout	1101101121	00	10	11	10 10	0010221010	10	11	10 10 00—22½	
										113½

Alexander wins the badge.—CHAS. COUD (Sec. Riverside Club).

NARRAGANSETT GUN CLUB, July 3.—Weekly shoot of Narragansett Gun Club at clay-pigeons, for silver trophies:

G J Crandall	10 10 11 11 10 11 11 11 11 11—18
C M Sheldon	11 11 10 11 11 11 00 11 11 10 11—16
E W Tinker	10 11 11 11 11 10 01 10 10 01—14
H D Mathewson	00 10 11 11 11 11 10 10 11 10—14
C C Gray	11 11 10 00 00 01 10 10 10 10—10
A W Rounde	00 00 11 00 11 00 11 00 00 00— 6
G F Butts	11 01 10 10 00 10 00 00 w

Shoot for Ligowsky State Badge.

E W Tinker	111111011111111111111111—24
G J Crandall	111110111111111111111111—24
G F Butts	011101111010111111110111—20
C M Sheldon	110101111010111111011110—19
C C Grey	011111100111001111111010—18
C H Brown	111010100101101101011111—18
F Hanley	101011110011101110101011—18
A J Harris	011111111111101010001010—17
A W Rounde	110110010011110001001111—14
A J Myers	010000001111000101111101—13
G J Robinson	100111000000001010000110— 9

Ties on 24: Tinker 4, Crandall 5. NARRAGANSETT.

WELLINGTON, Mass., July 5.—There were some forty-five sportsmen gathered at the grounds of the Malden Gun Club, at Wellington, to-day. The leading events were the contests for the gold and leather badges, Wemyss taking the former and Scott the latter. The other events were:

First event, five birds, straightaway, 21yds.—Snow and Dickey first, Adams second, Goodnow third.

Second event, five balls, 100yds. rise—Dickey and Symmes first, Nye second, Scott third.

Third event, five birds—Shumway first, Scott and Morrill second, Hopkins third.

Fourth event, five birds—Hopkins first, Morrill and Scott second, Goodnow third.

Fifth event, three pair doubles—Hopkins and Morrill first, Adams second, Green and Scott third.

Sixth event, five balls—Nye and Adams first, Morrill and Hopkins second, Green and Scott third.

Seventh event, five birds—Morrill and Nye first, Scott second, Adams third.

Eighth event, five birds—Nye and Goodnow first, Nichols and Dickey second, Hopkins third, Adams fourth.

Ninth event, five birds—Dickey and Nye first, Hopkins and Morrill second, Scott and Nichols third.

Tenth event, five birds—Snow first, Dickey and Morrill second, Nye third.

Eleventh event, five balls—Morrill and Dickey first, Scott and Symnes second, Foster third.

Twelfth event, three pair birds—Dickey first, Goodnow and Nichols second, Morrill third.

Thirteenth event—Morrill first, Dickey and Snow second, Nichols third,

Fourteenth event, miss and out—Dickey first, Nichols second.

Fifteenth event, miss and out—Nye first, Nichols second.

Sixteenth event, five birds—Law first, Snow and Saunders second, Ricker third.

Seventeenth event, five balls—Law first, Symmes second, Russell third.

Eighteenth event, five balls—Russell first, Snow second, Symmes and Ricker third.

Nineteenth event, five birds—Snow first, Law second, Rockwood third.

Twentieth event, five birds—Law first, Nichols second, Russell third.

Twenty-first event, five birds—Law first, Snow second, Symmes and Ricker third.

Seventy-second event, five birds—Law first, Snow second, Russell and Nichols third.

Twenty-third event, five birds—Law first, Nichols second.

MAYNARD GUN CLUB, Maynard, Mass.—Glass-ball and clay-pigeon shoot on their grounds July 4. Representatives from many of the surrounding clubs participated in the sport.

First event, 7 clay-birds—Dickey first, Cutting second, Wurm third.

Second event, 5 clay-birds—Dickey first, Wurm second.

Third event, 5 clay-birds—Dickey and Wurm first, Nichols and Johnson second, Cutting and McCoy third.

Fourth event, 5 glass balls—Dickey and Wurm first, Cutting and Johnson second, Lawrence and McCoy third.

Fifth event, 5 glass balls—Johnson and Wurm first, Cutting and Dickey second, Nichols and McCoy third.

Sixth event, 5 clay-birds—Dickey first, Cutting second, Nichols and McCoy third.

Seventh event, 5 clay birds—Johnson and Wurm first, Dickey second, Cutting and McCoy third.

Eighth event, 5 clay-birds—Wurm first, Cutting and Johnson second Newton and McCoy third.

Ninth event, 5 glass balls—Wurm first, Cutting and Nichols second, Newton third.

Tenth event, 5 glass balls—Wurm and Dickey first, Cutting and Newton second, McCoy third.

Eleventh event, 3 pair glass balls—Dickey first, Wurm second.

Twelfth event, 5 glass balls—Dickey first, McCoy second, Wurm third.

Match between B. F, Johnson of the Maynard Gun Club and G. H. Wurm of the Massachusetts Rifle Association; conditions, 25 clay-birds, 25yds. rise.

Wurm	1111111111111111111110111—24
Johnson	1111111111111111111011110—23

G. F. CUTTING, Sec.

WINCHENDON, Mass., June 26.—At the regular meeting of the Winchendon Gun Club to-day, only clay-pigeons were thrown from the trap. This is the second time it was used. The result was as follows:

L F Martin	1111111110—10	F M Brown	1110101110—7
James Southerland	0110111111— 8	F E Monn	0011011000—4
F F Hopgood	1101101111— 8	L P Ball	0101000000—2
P S Davis	1001110111— 7		

EVANSVILLE, Ind., July 4.—The match at clay-pigeons at the Salt Well to-day was one of the most hotly contested, as well as one of the best—as far as a fine score is considered—ever shot in this State. The match was at 20 birds, 18yds., rise, ties to be shot off at three yards. The first score was as follows:

Throop	00101001101000111110—10
Gilbert	11111111110111111111—19
W Durham	01101111111111111111—18
Clifford	01111111010111111111—17
Cooper	01111111001111111111—17
E Durham	11111011111111111111—19
Lacy	11010111111101101111—16
Hallock	01111111101011111111—17
Johnston	11111111101111111111—19
Garvin	11111111111111110111—19

This gave Gilbert, Ed. Durham, Garvin and Johnston ties on 19 birds. The distance was moved three yards, and the next score at the birds resulted: Gilbert 3, Ed. Durham 3, Johnston 3, Garvin 3. The distance was then moved three yards further, and the next shoot, which proved the deciding one, was as follows: Gilbert 1, 1, 1, Ed. Durham 0, 0, 0, Johnston 0, 1, 1, Garvin 0, 1, w. This gave the match and the medal to Gilbert, who probably won the tie by having an extra shooting gun. Aside from this he broke three trial birds, i. e., birds tried to test the trap, making him a total of 28 birds broken out of a possible 29. Mr. Johnston, who was second, is deserving of especial praise in his shooting, as ill health has prevented much practicing, and his shooting in this connection was very remarkable.

CASTLEWOOD, D. T., June 27.—This evening the gun club recently organized in this city had their first shoot. Taking into consideration that a strong wind was blowing, and the fact that the majority of the club never had any experience at trap shooting the score is not a bad one: Wm. Shanks 5, E. C. Webber 1, H. Ellefson 0, A. F. Swift 5, E. L. Hills 6, R. Matson 1, A. F. Poulson 4, F. Cheever 1, F. L. Page 3, W. O. Fraser 9.

SACRAMENTO, Cal., June 22.—The Foster Gun Club held its monthly pigeon-shooting contest in Agricultural Park to-day. The birds were a fine lot, flying swiftly, and as there was a strong southerly wind prevailing nearly all were "tailers," and got out of range in short order, consequently the scores made may be considered unusually good. Several birds that were hit hard died out of bounds. Mr. Eckhardt, whose score is the lowest, was very unfortunate, hitting all his birds, but only being able to retrieve 5. He shot a light gun, using wood powder, which is slow, and by the time the shot reached the birds they were most of them too far away to be stopped inside the 80-yd. circle.

Following is the score of the main match to-day, John Gerber winning the first medal by a clean score:

Gerber, J, 21yds	111111111111—12
Gerber, W E, 21yds	111111101111—11
Todd, 26yds	111111011111—11
Miller, 21yds	110111111111—11
Watson, 21yds	101111111111—11
Stevens, 21yds	111111001111—10
McKuno, 21yds	111100111110— 9
Zuver, 21yds	100110101111— 8
Tebbets, 21yds	001110011011— 7
Eckhardt, 21yds	011000091110— 5

A match at 31yds., both barrels, followed. Watson made a clean score and took first money, and Zuver and Nesbitt divided second and third money, with a score of four each.

Several matches at clay-pigeons were shot. The score of a specimen one is appended.

Todd	111111011111—11
Watson	110110111111—10
McKune	110111001111— 9
Stevens	111011110011— 9
Chapman	111001101111— 9
Tebbets	101110111001— 8
Denny	010111010110— 7

The entrance in this match was $2.50.

INDIANA.—The Crescent City and Lamasco Gun Clubs, of Indiana, met on the 4th inst., and had a friendly match. Sides were chosen from the members present. Live birds were used and several good scores were made considering the birds were all as fresh as possible, having not been cooped up over twenty-four hours.

Capt. Halwes's Side.

H Halwes	011111000111111101—15
M Hoepke	111111111100111111—18
P Eberline	01011110 1100111111—14
F Smith	00100011000000101100— 6
J Baumgartner	101111101111001111—15
C Myerhoff	111010100010011011—11
J Emsbach	001011010010000001— 7
G Kline	001110111101111111—16
C O Kervatt	111111111111011110—18—120

Capt. Grill's Side.

Ed Grill	110111111111111111—19
W G Kerth	001111100110011111—14
C Kratz, Jr	011111111111001111—17
P Speck	000110110111111111—15
J Grill	000011101111010011—12
C Kratz, Sr	111000110001011111—13
E Myerhoff	011100011000101111—10
J Rohrenbacher	011111111111111101—18
O B Still*	110111101100000000— 8—127

*Only shot at 10 birds.

There is a movement now on foot to have a two days' tournament at live birds at an early day and to invite all neighboring clubs. The Crescent City Gun Club are anxiously awaiting challenges, Evansville Gun Club preferred.

Canoeing.

CANOEISTS are invited to send us notes and full reports of cruises, club meets, information about canoeable waters, and other communications of interest.

Secretaries of canoe clubs are requested to send to FOREST AND STREAM their addresses, with name, membership, signals, etc, of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to FOREST AND STREAM their addresses, with logs of cruises, maps, and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.

FIXTURES.

July 9 to 15.—Chicago C. C., Annual Cruise.
July 14.—Allegheny C. C., Cruise at Conneaut Lake.
July 19.—Chicago C. C., First Annual Regatta.
July 24 to 26.—Lake George Meet, Lorna Island.
Aug. 1 to 15.—A. C. A. Meet, Grindstone Island.

CRUISING CANOES IN THE A. C. A. RACES.

THE limit of sail in Race No. 10, Class B, should be 75ft. instead of 50ft., as stated June 26. The following letter from the Mohican C. C. expresses the feeling of a large number, as under the present rules the all around canoe of 14 to 15ft.x30in. is practically exclude from the races. It cannot enter Race 3 with any chance of success, as it will meet a boat built nearer to the limit, 17x28, against which it would be hopelessly handicapped. In Race 4 there will be a chance, but in favor of the heavy boats, and it would be absurd for a 14x30 boat to enter Race 7, as there will probably be a 17x28 boat or one of similar dimensions. Race 8 is out of the question, Race 9 handicaps it to the extent of 2ft. length, Race 11 and 12 will allow it to enter, but the whole system of measurements, based on a division into sailing classes and paddling classes, tends to develop special boats for each class, to the exclusion of the all around boat. We would call the attention of the Regatta Committee to this fact, as the great majority of canoe owners are directly interested. Mixed races will tend, to a certain extent, to encourage the all around boat, and a plan is now under consideration to attain the same end.

Editor Forest and Stream:

At a regular meeting of the Mohican C. C. of Albany, N. Y., held July 2, 1884, Gen. R. S. Oliver offered the following resolutions, which were unanimously adopted:

Whereas, It appears from the published list of races to be held at the A. C. A. meet for 1884 in Eel Bay, that no race has been provided for Class B without ballast and without heavy centerboard;

Whereas, The majority of canoes in this club and many others in inland waters are of Class B without heavy centerboards, and are usually sailed without ballast;

Resolved, That we respectfully request the Regatta Committee to place upon the programme of the meet a sailing race for canoes of Class B, without ballast and without heavy centerboard;

Resolved, That a copy of this resolution be sent to the Commodore of the A. C. A., to the Regatta Committee, to the editors of FOREST AND STREAM and of the *Canoeist*;

Resolved, also, That should such a race be placed upon the programme, the Mohican C. C. will contribute a flag as first prize in such a race, if the Regatta Committee desire it.

B. FERNOW, Sec'y M. C. C. ROBERT W. GIBSON, Captain M. C. C.

Editor Forest and Stream:

The official programme of races—A. C. A. Meet of 1884, regatta committee report—is before me. There are two points I notice about it—faults I might say—which could be easily amended. First, the average cruising canoe is systematically neglected, the very one the Association should encourage in every way possible. It is handicapped in every event on the list with perhaps three exceptions, viz.: No. 10, limited ballast race; No. 11, sailing and paddling race, and No. 12, the light race. In these races its chances are slim with other boats built up to the limits.

Second, there is no inducement offered to the canoeist of average ability to enter any race. He naturally feels that his chance of getting a first or second prize is too small to pay for the exertion necessary to win such a place. This has been the fault of every programme offered at any meet thus far. Without changing a letter of the document as it now stands, I would suggest to the committee of three that they add two prizes to their already long list. The first to be given to the canoe making the best average in all the races. The second for the next best canoe. Also that the record of every canoe entering any race be taken (with three events omitted to be named later), and after the races this record to give the exact position to every canoe having taken part. The same to be published with the other results. The canoe with the best average to be classed No. 1, the next best No. 2, and so on down the list. If twenty canoes take part in the races they will be numbered from one to twenty on the record, according to their deserts.

This record will be very simple to make up and of great interest to all. The canoeists entering the races will do their best to get good places at the finish, not only for the individual race prizes but also for the average prize and for the place on the record. A man may be low on the record but ahead of any other one of his club's members. This record will also show the club having the highest average, a very desirable thing. An average 14ft.x30in. canoe will be on a par with a canoe built to the full sailing or paddling limit if, for instance, it gets two third places in two races to the other's first place (sailing) and fifth (paddling)—average for both is six.

Now for the method: Suppose there to be thirteen events, and that ten canoes enter in one of them, the other races all having less than that number. The maximum number of points will then be 10×13, or 130 points. The first canoe in each race (no matter how many enter it) will receive 10 points, the second 9, the third 8 and so on, a canoe not entered or not finishing to get nothing. Of the thirteen events one canoe can enter, perhaps, eight, and if it wins them all will receive 80 points. The canoe securing the most points, all told, to be No. 1 on the record. In case of a tie at, say ten, then two canoes would be numbered 10 and 11 would be dropped. The clubs could also be numbered in the same way, and it would foster patriotism among members to push the club record up as high as possible, thus securing more entries for the races.

The thirteen events are accounted for thus: No. 2 on official programme to be omitted in the averaging—it being a limited novices race. No. 4 is really two events, A and B sailing; No. 10 is also, for the same reason. Nos. 13 and 14 should be omitted. By this arrangement—which I hope to see made a permanent feature—the canoe in any class, built up to the limit, sailing or paddling, stands a very poor show of getting first place—and the canoe built and used for all around work will be pretty sure of getting a good place with fair management. Such a record will also help the novice to select his canoe with an eye to the "average," the true canoer's aim being the "happy medium." What have you to add, Mr. Editor—something, I hope. DOT.

THE A. C. A. MEET.

To the Members of the American Canoe Association:

The site chosen for the 1884 camp of the A. C. A. (Aug. 1 to 15) is on the northeast end of Grindstone Island, distant about four miles from Clayton, N. Y., and five miles from Gananoque, Canada, just south of the boundary line, and facing Canada on the north and Eel Bay on the northeast. The grove in which the tents will be pitched is on the north side of the point, on a rather sharp slope, with a stony shore, but the shore on the northeast side is a gently sloping one, with a sandy beach.

Arrangements have been made at the camp so that those who desire to do so may get their meals at a regular mess, at which meals will be served at reasonable prices. There will also be a camp store established, at which campers may obtain groceries, provisions, etc., at Clayton prices. Milk, eggs, vegetables, fresh meats, etc., can also be obtained at the store. Ice, which has been stored for the use of the Association, will be brought into the camp every morning. Wood in abundance, both for camp fires and cooking purposes, has been provided.

The palatial steamer Puritan, connecting with the Utica and Black River Railroad at Clayton, and with the Grand Trunk Railroad at Gananoque, will land members at the camp wharf, arrangements having been made, by which, during the encampment, she will include the camp in her regular stops. This steamer will carry canoes and kits free. The regular fare (25 cents) will be charged. No other steamer but the Puritan will be allowed to land at the camp wharf without a permit from the officer in command of the camp at that time.

The following railroad and steamboat lines in the United States have agreed to carry canoes and kits free, at owners' risk, but in all cases members must go on same train or boat with their canoes: New York Central & Hudson River, New York, Ontario & Western to Oswego, thence steamer Ontario to Clayton; Utica & Black River Railroad, Delaware & Hudson Canal Company's Railroad; Ogdensburgh & Lake Champlain Railroad, and the Lake Champlain Transportation Company (steamers on Lakes George and Champlain).

The Canadian Southern Pacific Railway will issue excursion tickets at one and a third regular rates. Tickets one way will be at regular rates. The Grand Trunk Railroad will also issue excursion tickets at the same rate; regular tickets one way. The Ontario Division of the Canada Pacific Railway offers excursion tickets at same rates as those above. The Northern & Northwestern Railway will charge one fare for excursion tickets. The Richelieu & Ontario Navigation Company will also sell round-trip tickets at one fare. All these railways and steamers will carry canoes and kits free of charge, but at owners' risk of loss or damage.

Members coming from the South via Jersey City, etc., wishing to ship their canoes by express to the camp, have an opportunity of doing so via the National Express Co., which operates over the line of the New York, Ontario & Western Railroad, and connects with the Adams Express Co. at Union Depot in Jersey City.

All mail matter intended for the camp should be addressed A. C. A. Camp, Clayton, N. Y. Arrangements will be made to have it forwarded direct to the camp. The address of the secretary of the Association will be Clayton, N. Y., after July 15.

CHAS. A. NEIDÉ, Secretary A. C. A.

SCHUYLERVILLE, N. Y., July 2, 1884.

THE A. C. A. BADGE.

Editor Forest and Stream:

I have appointed as a committee on the A. C. A. badge question the following gentlemen:

Wm. B. Wackerhagen, M. C. C., 41 State street, Albany, N. Y., Chairman.

Dr. George L. Parmele, H. C. C., Hartford, Conn.

James L. Greenleaf, K. C. C., New York City.

Months ago I requested the members of the A. C. A. through the *American Canoeist* to send in designs for this badge, or to suggest designs that I might work out and present to the committee, thus giving them valuable assistance in the selection of the badge. The result was the reception of designs from three members of the A. C. A. One of two things appears as almost a certainty. Either the *Canoeist* reaches only a few A. C. A. men, or else very few A. C. A. members are at all interested in the badge question. Once more I will express my desire that designs be sent to Chairman Wackerhagen at the earliest moment possible in order to have the committee report at our annual meeting. Respectfully, yours,

F. A. DICKERSON, Com. A. C. A.

SPRINGFIELD, Mass., July 8, 1884.

[The subject of a badge for members of the American Canoe Association has been under consideration ever since the local meet; and as yet little has been accomplished, as will be seen from the above letter of Commodore Nickerson. It is a matter in which all canoeists are interested, and it remains for them to assist the committee in their labors. If every club will but send a design, there will be no lack of material to work on at the meet. "What is everybody's business is nobody's business," and each individual member is apt to neglect his part, but in such matters, the Commodores of the different clubs must take the lead, and if each will do so, he can readily obtain one design on behalf of his club; but the time is now very short, and what is done, must be done speedily.]

RONDOUT C. C. CAMP.

THE Rondout Canoe Club enjoyed a very pleasant outing on July 4th at their camp on Esopus Island, situated a few miles below Rondout, half a mile long, and a most beautiful spot for a camp. Camp was made on Thursday night, canoeists from Newburg and other places joining the R. C. C.

The next morning nearly a hundred guests of the club, many of them ladies, came down on the little steamer W. B. Crane, chartered for their use by the club. Two cooks from Rondout were an board to look after the dinner, which included 10 gallons of clam chowder, 1000 baked clams, and unlimited ice cream.

The following races came off in the afternoon at 3 P. M., the final one, a tub race, being omitted, as the water was too rough for such frail craft, a swimming race, won by C. V. A. Decker, being substituted.

Firt Race, Paddling.—Entries: Grant Van Deusen, Helena; N. S. Smith, Pixie; C. V. A. Decker, Glance; C. W. Crispell, Zephyr; Conrad E. Hasbrouck, Crazy. Prizes.—Flrt, canoe lantern; second, flag. Result.—N. S. Smith, first; C. W. Crispell, second; Grant Van Deusen, third.

Second Race, Sailing.—Entries: Grant Edger, Dido; Grant Van Deusen, Helena; Jansen Hasbrouk, Jr., Crazy. Prizes.—First, canoe chair; second, flag. Result.—Grant Van Deusen, first; Grant Edger, second.

Third Race, Paddling Tandem.—Entries: Messrs. D. Vaux and N. S. Smith, Dido; Grant Van Deusen and H. S. Crispell, Chum; C. V. A.

Decker and J. Hasbrouck, Jr., Janet. Result.—Dido, first; Chum, second.

The latter portion of the programme was interrupted by the usual Fourth of July storm, which drove all to the boats and hurried them home.

The Rondout C. C. seem to be able to have a good time on less provocation than any canoe club we know of, and from what we hear of their doings the members are much to be envied.

BAYONNE C. C.

THIS club, which started in a small way two years ago is now quite flourishing, the members being all enthusiastic canoeists and hard workers, having built their own house and many of their canoes. Their house is now too small to hold all the boats, and they expect to enlarge it soon. Newark Bay is a fine place for canoe sailing, there being but little traffic, and the tides, though strong, being much better than in New York Bay or the Kills, while there is an excellent beach on the east shore.

The first regatta of the club was held on July 4, there being four races on the programme. In spite of the unpleasant weather the club and their friends enjoyed the sport

The first event was a paddling race with seven entries, distance one mile with a turn. Won by F. B. Collius, with T. Garrett second and A. T. Fleming third.

The sailing race, three miles, triangular course, was not finished, as the mark could not be found in the fog. The double paddling race brought out four canoes, the distance being one mile with turn, and was won by A. Fleming and R. Vienot, by five lengths, with F. B. and J. L. Collins second. The last race, an upset, was won by Com. Smith, with L. F. Burke second, there being five entries.

MOHICAN C. C.

THE Mohicans have lately increased their membership to twenty-eight canoeists and eighteen canoes, and numbers of them may be daily seen on the river. Last Saturday, June 28, a championship badge and flag, offered by Capt. Gibson, was sailed for in a race of about three miles, and won by a new member, Geo. H. Thacher, Jr., in the Lasca, a Rushton Ellard; the Thetis, P. M. Wackerhagen, came in second, and the Uncas, H. R. Pierson, Jr., third, no other canoes participating. Mr. Thacher will have to defend his prize in a race on the 26th of July.

Gen. Oliver offered a silver cup as prize to be sailed for by canoes of any class, sail limited to 60ft., but the Executive Committee has not yet taken any action about it.

At the regular meeting of the club, held to-day, several resolutions were adopted, viz.: That if the official programme of the A. C. A. meet is not amended to include a sailing race for canoes of B class, without leavy centerboard, the M. C. C. will offer a flag, value $10, as first prize for such a race in Eel Bay; and that in races of the M. C. C., canoes with centerboards weighing more than fifteen pounds should not be admitted.

Nine Mohicans talk now of going to the Thousand Islands, but it is not quite sure whether the club will be so well represented.

FIOR DA LICE.

ROYAL C. C.—The race of Saturday, June 14, was sailed in Teddington Reach, with three entries, Imogen, H. Church; Gladys, T. F. Knowles; Violet, W. Watney. There were four rounds to the course, the wind being W. N. W. The times were as follows:

	First Round.	Second Round.	Third Round.	Finish.
Violet	3 55 00	4 15 00	4 36 00	4 56 30
Imogen	3 53 00	4 14 00	4 36 30	4 57 30
Gladys	3 55 30	4 16 00	4 36 30	4 56 00

CRUISING NOTES.—Dr. Neidé and Mr. J. F. Newman, N. Y. C. C., started on a long cruise on July 3, leaving Caldwell at noon, Lorna Island at 9 A. M. on the 4th, Cook's Point 7 A. M. July 5, Ticonderoga 2 P. M. same day, and making camp near Crown Point that night in a heavy blow and rainstorm. The weather was very variable, dead calm or very hot, wind light and squally or blowing very hard. The canoeists expect to be at Grindstone Island by July 20, or perhaps earlier. Mr. Alden is off again on his usual cruise down the Richelieu.

A NEW CANOE CLEAT.—We have received from Mr. Tyson two cleats of a new pattern, designed by Mr. E. B. Tredwen, R. C. C. They are in one piece, light but very long, being 4in. and 6½in., and are so shaped that the cord jams between them and the deck, and are recommended as superior to Paget's rocking cleat, while much cheaper.

ATALANTIS.—Mr. Stoddart, L. G. C. C., resumed his cruise this week around the coast, in company with Mr. R. B. Burchard, N. Y. C. C. They were at Wood's Hole on July 6, stormbound, but arrived at Hyannis at 6 P. M. on the 7th, leaving next morning.

NEW YORK C. C.—The club will meet on Saturday, July 12, at 3 P. M., at the club house, for a series of scrub races for practice. The programme will be decided on meeting. A janitor is now employed regularly by the club.

Yachting.

HULL Y. C. REVIEW AND CRUISE.

SHORT cruises in company are becoming more popular with our yachts each year, and this season a better opportunity than usual is offered, as the 4th and 5th of July, as well as the 30th and 31st of May were both generally observed as holidays, giving a chance for three days away from business. About New York, the Knickerbocker and Jersey City Y. C., and in Philadelphia, the Quaker City Y. C., have taken advantage of the three holidays for their club cruises, and in Boston, the Hull Y. C. has called together all who cared to neglect the races for cruising. The programme called for a review of the fleet in the morning, the start for the cruise following.

Friday morning broke with a promise of a storm, but by 8 A. M., a breeze from the southwest changed the appearance of things, bringing sunlight and every prospect of a fine sail, which was fulfilled by 10 A. M., by which time the Brenda, with Commodore C. A. Perkins on board, signaled for the fleet to pass in review. The Vif, Vice-Commodore William H. Crane, led the fleet out into Nantasket Bay, then in with a free sheet, heaving up under the stern of the Brenda, and firing a gun to leeward, which was answered by one on the flagship, each yacht saluting in turn until all had passed, when they hove to and waited for the Brenda to get under way. At 11 A. M., the signal to make sail was hoisted, Brenda having taken her position at the head of the fleet, passed on through Hull Gut, followed by the schooner Titana, ex-Commodore William Wells; yawl White Cap, Rear-Commodore D. Hall Rice, Vice-Commodore William Crane; schooner Alice, Captain William Lockhart; schooner Tempest, Captain Whittier; sloops Hera, Captain Weld; Echo, Captain Farrell; Nimbus, Captain Jenney; Gem, Captain Osgood; cutters, Sigdriffa, Captain Monks and Ella May, Fleet Captain George Tyler, and other sailing and steam yachts. At 2 P. M. the fleet anchored in Marblehead Harbor.

BOSTON CITY MATCHES, JULY 4.

THE city matches on July 4 brought out nearly one hundred yachts of all kinds and sizes, from Maggie, the stylish cutter of 44½ft., to little Shrimp of 13ft. The wind was very light in the morning, but came out fresher from the east, and held there through the race.

The courses sailed were for first class (sloops and schooners of over 38ft.), from the judges' boat out Broad Sound, leaving Ram Head buoy on the starboard and Egg Bar buoys on the port, rounding Fog Whistle off the northeast ledge of the Graves, leaving it on the starboard; thence to the bell boat on Harding's Ledge, leaving it on the starboard, up Lighthouse Channel, through the Narrows, leaving Fort Warren, Gallop's Island and Nix's Mate buoys and Spectacle Island on the port, to the judges' boat, passing between it and the flagboat, a distance of twenty miles. For Class 2 (sloops and schooners 25 to 38ft.), from the judges' boat down the West Way, leaving Thompson and Rainsford islands on the starboard, Long and George's islands and Point Alderton buoy No. 3 on the port, and back through the Narrows, leaving Fort Warren, Gallop's Island and Nix's Mate buoys on the port, to the judges' boat, passing between it and the flagboat, a distance of fourteen miles. For Class 3 (for keels and centerboards 20 to 26ft.), from the judges' boat round a flagboat moored off Cow Pasture Bar, near the pumping station, leaving it on the port; thence to buoy No. 7, off Fort Independence, leaving it on the starboard; thence to Sculpin Ledge buoy, leaving it on the port; thence to buoy No. 6 on Lower Middle, leaving it on the port, to the judges' boat, passing between it and the flagboat, a distance of eight miles. For Class 4 (keels and centerboards), from the judges' boat to buoy No. 9, leaving it on the starboard; leaving buoy No. 7, off Fort Independence, on the starboard, buoy No. 6 (Cow Pasture Bar) on the starboard, passing between the judges' boat and flagboat, a distance of five miles.

Messrs. Morton, Whittier, Nugent, Lappen, Farrar, Bigelow and Brigham, of the City Council, had charge of the arrangements, the judges being Messrs. Riley, Morris, Loring, Palmer, Melvin and Guild. The tug Wesley A. Gove carried the judges over the course, but it was impossible to see all of the boats on their different courses.

At 10:30 the starting signal was given, the fleet getting away in good order. No time was taken at the various marks, but by noon, when the judges' tug returned to the starting point, Joker was not far away, the first home, the rest coming in in groups.

To time such a fleet was no easy matter, but it was finally accomplished, and the times computed as follows:

FIRST CLASS—SLOOPS.

Name and Owner.	Length.	Actual.	Corrected.
Maggie, George H. Warren	44.06	4 20 56	4 20 55
Nirvana, S. P. Freeman	41.06	4 43 30	4 39 20
SECOND CLASS—CENTERBOARDS.			
Shadow, John Bryant	33.06	2 46 30	2 42 12
Magic, E. C. Neale	30.02	2 53 12	2 45 13
Nimbus, B. Jenny	33.03	2 53 20	2 48 48
Tri, Henry Tudor	33.00	3 10 44	3 05 55
SECOND CLASS (KEELS).			
Hera, C. G. Weld	35.00	2 50 27	2 47 40
Lapwing, M. Forbes	36.00.	2 51 04	2 49 15
Ægis, William McCormick	34 00	2 53 13	2 49 26
Lillie, John P. Gale	36.02	3 00 00	2 58 22
King Philip, C. G. Weld	35.06	3 03 46	3 01 29
Percy H., Albert Hall	32.06	3 08 13	3 02 52
Altaire, J. L. Crowley	28.08	3 26 29	3 16 40
SECOND CLASS (SCHOONERS).			
Bessie, C. P. Curtis	27.02	3 33 50	3 33 50
THIRD CLASS CENTERBOARDS.			
Black Cloud, Brown & Cunningham	22.00	1 34 12	1 30 29
Queen Mab, Burwell & Litchfield	21.00	1 35 50	1 32 03
Thisbe, S. A. Freeman	20.04	1 38 40	1 35 08
Seabird, George S. Forbush	22.01	1 38 08	1 33 32
Amy, E. W. Burr	30.04	1 39 50	1 34 18
J. S. Poyen, Jr., Pierce & Bowen	22.06	1 37 50	1 34 37
Lizzie Warner, T. Lutted	24.06	1 37 50	1 35 31
Greta, J. F. Hill	22.07	1 40 50	1 37 43
Posey, H. J. McKee	21 01	1 44 23	1 39 41
Herald, Frank Smith	20.00	1 48 20	1 42 24
Maid, J. B. Farwell	21.10	1 47 00	1 43 06
Una, John Marno	20.00	1 53 20	1 47 24
Bessie Ethel, Fred Ellis	23.06	1 53 52	1 51 38
Sadie, Charles Allen	22.00	1 57 25	1 53 42
THIRD CLASS KEELS.			
Banneret, N. F. Brown	23.09	1 35 00	1 33 01
Fancy, E. H. Ingalls	25.11	1 37 40	1 37 36
Cricket, W. H. Buckley	21.00	1 47 15	1 42 28
Kitty, Hardell & Adams	22.07	1 46 11	1 43 03
Judith, E. T. Pigeon	22.09	1 46 02	1 43 04
Echo, Putnam & Hudson	24.09	1 44 23	1 43 18
Ibex, Williams & Knowlton	23.00	1 48 07	1 45 24
Gem, Osgood & Savage	25.02	1 48 10	1 47 12
Em'ly, C. A. McManus	25.06	1 48 16	1 47 50
Inez, George W. Tappan	25.06	1 48 45	1 48 19
Notus, G. V. Dana	23.02	1 52 17	1 49 44
Volante, S. A. Crowell	21.10	1 55 55	1 52 01
Ellen, P. X. Keating	20.10	1 59 05	1 54 07
Cimbria, W. H. Wedger	21.06	1 59 19	1 55 04
Sheerwater, W. N. Merrill	18.00	1 45 49	1 44 14
Pet, James McFarland	18.07	1 45 38	1 44 32
Wild Fire, H. A. Keith	17.03	1 47 33	1 45 17
Parole, Henry G. Bowers	17.10	1 48 00	1 46 17
Whiff, J. P. Bullard	15.09	1 50 05	1 46 25
Albert, A. Rottman	15 06	1 57 15	1 53 19
Elf, W. H Besaried	15.00	1 59 10	1 54 43
Susie, William N. Fisher	15.03	2 11 15	2 07 04
Gertie, D. F. Pinkham	18.00	2 15 40	2 14 05
FOURTH CLASS (KEELS).			
Meteor, William Parkinson	16.00	1 48 27	1 45 02
Charlotte, Thomas Cross	17.01	1 47 17	1 45 07
Nancy, J. R. Grose, Jr.	17.00	1 49 12	1 45 47
Zitta, Fowler & Warren	18.09	1 46 55	1 45 57
Hard Times, H. W. Geyer	18.06	1 47 45	1 46 36
Delle, Gifford Bros	19.06	1 46 58	1 46 35
Unique, J. Stewart	19.10	1 47 37	1 47 30
McDuff, John S. Garrick	20.04	2 01 21	1 55 49
Huntress, Samuel Webber	21.06	2 01 56	1 56 35
Celeste, George Plummer	25.04	1 57 35	1 57 08
Willow, A. H. Jones	22.00	2 06 30	2 02 47
FOURTH CLASS (CENTERBOARDS).			
Joker, George Coffin	19.07	1 34 00	1 33 41
Seraphine, Borden & Temple	19.06	1 34 51	1 34 28
Flora Lee, D. H. Lincoln	16.00	1 38 40	1 35 15
Niobe, F. L. Cunne	19.06	1 36 21	1 35 58
Imogene, B. G. Wendall	17.07	1 38 28	1 36 29
Viva, Hutchins & Pryor	18.06	1 38 40	1 37 30
Scamp, Frank Gray	17.10	1 39 15	1 37 32
Spider, Walter Abbott	17.08	1 39 40	1 37 48
Rockett, B. F. Bass	15 10	1 42 05	1 38 30
Tamaria, S. G. King	16.09	1 41 20	1 38 38
Spray, H. H. Faxon	17.07	1 42 21	1 40 25
Nonpareil, E. Lanning	16.03	1 45 30	1 42 20
Hornet, Harding & Merrill	18.11	1 44 16	1 43 26
Yolande, H. W. Burr	16.00	2 03 20	1 59 55
Mist, John A. Sullivan	18.03	2 01 41	2 00 18
Pacer, A. A. Nickerson	15 09	2 07 15	2 03 35
Sophia, William Duffy	13.06	2 10 44	2 04 32
Kate, C. L. Willicutt	17.00	2 11 00	2 08 32

A misunderstanding of the whistles gave grounds for several protests.

KNICKERBOCKER Y. C. ANNUAL CRUISE.

IN obedience to orders from the flagship Sara, Commodore Hobby, the following yachts made sail at 4 P. M., off the club house, July 3; Sara, Gipsy, Lizzie R., Reverie and Gil Blas. The wind was light, and the yachts did not reach Echo Bay, the rendezvous, till late in the afternoon. At 8 P. M., the rest of the fleet were towed up by a tug chartered for the occasion, and under command of the club's busy secretary, W. R. Morse. This fleet consisted of yachts Gracie, Mayotta, Whimbrel, Maggie, Rosetta A, Adele, Mystery, Peerless, Sea Robin, Reckless and Waconda. They reached Echo Bay at 11:30 P. M., and were warmly received by the yachts which had preceded them.

At 8 A. M., July 4, a meeting was held on board the Sara, and the captains agreed to proceed to Larchmont, see the start of the Larchmont Y. C. regatta, and then make the anchorage off the Indian Harbor Hotel, Greenwich. The weather was threatening from the S.E., and by noon it blew "great guns" and heavy rain commenced to fall. When off Larchmont, Sara stowed large jib and set her storm jib, reefed mainsail and kept off for Greenwich, not waiting to see the race start. Some of the yachts followed her, but the fleet became somewhat scattered owing to the heavy weather. Lurline hauled her wind for Cow Bay, and Gipsy and Gracie ran for Milford.

However before nightfall most of the yachts reached the anchorage agreed upon. The crews of the small boats, after dressing in oil skins and rubber boots, retired to somewhat moist sleeping accommodations. Waconda reached Indian Harbor first, with Sara second.

At six bells the next morning the fleet started for Oyster Bay in the face of the easterly gale and heavy rain. Sara reached Oyster Bay first. Peerless was struck by a heavy squall when in the middle of Sound and was blown to Bridgeport before she was able to spread any canvas. Maggie, a wee catboat under command of Capt. Gus Wagner, was pluckily handled and went the rounds with the fleet.

On Sunday A. M., the fleet left Oyster Bay homeward bound, and arrived during the late afternoon and evening. At the start the Knickerbockers were joined by yachts from the East River, Yonkers, Harlem and Newark yacht clubs. That the cruise was brought to a successful termination reflects considerable credit on the seamanship of the members of the Knickerbocker. Three worse days as to wind and weather it would be hard to select from an entire yachting season.

ATLANTIC Y. C. CRUISE.

FLEET Captain R. C. Field has issued the following orders of Commodore H. H. Hogins, regarding the annual cruise of the Atlantic Y. C.:

GENERAL ORDERS NO. 4.

FLAGSHIP AGNES, July 7, 1884.

1. The rendezvous of the fleet of the Atlantic Y. C., for its annual cruise, will be on Saturday, July 26, at the harbor of Norwalk Islands, and off Wilson Point.

Members and guests desiring to join their yachts at the latest moment can take steamboat leaving New York, pier No. 27 East River, at a quarter to 3 P. M., or Thirty-first street at 3 P. M., or train at 4 P. M. from Grand Central Depot, connecting with Danbury and Norwalk Railroad, at Norwalk, for Wilson Point. The facilities of this place as a rendezvous are represented as complete, particularly in the matter of railway, steamboat and telegraph communication and dock accommodation.

2. On a signal from flagship, after arrival of train and boat, the fleet will sail for Black Rock.

3. On Sunday, July 27, service will be held on a yacht of the fleet to be hereafter designated. At half-past ten A. M. a gun will be fired from the flagship, when the service signal will be hoisted on the yacht on which service will be held at eleven o'clock. General attendance is desired, and captains are requested to have their gigs ashore to convey such shore guests as may desire to attend.

4. There will be two divisions of the fleet during the cruise, classes A, B, C and D comprising the first and all other classes the second division, and the signal for starting will be habitually as follows:

First gun from flagship to prepare to sail. Ten minutes later—

Second gun from yacht Nomad, Rear Commodore Wintringham, for the second division to start. Ten minutes later—

Third gun from yacht Enterprise, Vice-Commodore Moffat, for first division to start.

5. On due signals the fleet will proceed as follows:

On Monday, July 28, to New London; on Tuesday, July 29, to Greenport; on Wednesday, July 30, to Stonington; on Thursday, July 31, to Newport; on Friday, Aug. 1, to New Bedford.

At New Bedford (or earlier, further or final orders will be issued.

6. Any Captain in second division desiring to make the start for New London prior to the regular start will be permitted to do so on application to the Commodore.

Attention is called to the fact that, with the exception of the run of July 28, the cruise has been so arranged as to make it feasible for the smaller cabin yachts of the club, and to avoid, as far as possible, the very early start heretofore necessary. It is greatly desired, therefore, that the fleet of such yachts will be large.

7. These daily runs will to an extent be trials of speed, and the first yacht arriving at the destined port will take its own time of arrival and that of the other yachts of the fleet, selecting, if possible, a point for turning that will be equitable and fair to all, and report the result to the commodore.

8. Yachts should be provided with red fire or Roman candles for use in case of fleet sailing at night.

9. These orders are subject to alteration or modification as occasion may require.

LYNN OPEN MATCHES, JULY 4.

THE open matches of Friday last were the first held since 1880, but they were so successful that it is to be hoped they will be held every year. The entries numbered 41, of which 33 went over the course, the boats being from 13 to 27ft. in length. The course for the first, second and special classes was from club house to a flagboat off Point Shirley, leaving it on port, thence to western Lobster Rocks buoy, leaving it on port, thence to judges' boat, a distance of 5 miles; that for class three being from the club house to a flagboot off Pines Point, leaving it on port, thence to Sand Point buoy, leaving it on port, thence to judges' boat, 3 miles. The boats were divided as follows: Class 1, 20ft. and not over 27ft.; class 2, centreboards, 17ft and not over 21ft.; special class, keels, 17ft. and not over 20ft.; third class, 12ft. and not over 17ft. The prices were, first class, $25, $15, $10, $5; second class, $20, $15, $10, $5; special class, $20, $15, $5; third class, $15, $10, $7, $5. The judges were Messrs. W. B. Newhall and B. W. Rowell.

The wind came from the east at 8 o'clock, freshing up sufficiently to make a good race throughout. The following table gives the full times of the classes.

FIRST CLASS.

Name and Owner.	Length.	Actual.	Corrected.
D. Crockett, H. Putnam	20.11	1 42 00	1 23 57
Pearl, J. F. Lee	22.04	2 03 30	1 45 53
Viola, E. C. Smith	20 00	1 41 00	1 21 44
Edith, J Davis	26.11	2 10 25	1 55 22
Jennie L., C. H. Lockhart	23.11	1 43 21	1 26 42
Daisy, W. Hawkes	22.09	2 17 45	2 00 08
Jantho, J. Cole	20.08	2 15 15	1 56 31
Nora, J. McLaughlin	21.08	2 24 20	2 06 17
Nellie J., M. Lake	21.00	2 10 20	1 51 50
SPECIAL CLASS.			
Annie, G. Parker	17.00	2 52 45	2 31 50
Vesper, Benner Bros	18.09	1 58 45	1 38 35
Inez, Goodridge Bros	18 09	2 00 10	1 40 00
Iris, Guilford Bros	17.00	2 14 05	1 52 25
SECOND CLASS.			
Georgie, F. E. Newhall	17.06	2 23 05	2 02 45
Daisy D., W. Martin	18.06	2 21 00	2 00 34
Twilight, A. K. Hall	18.01	1 56 00	1 35 17
Raven, F. Steinbeck	18.01	2 17 45	1 57 02
Alice L., P. Lynch	17.03	2 14 10	1 52 43
Rattlesnake, W. H. Alley	19.00	1 53 15	1 33 17
THIRD CLASS.			
Mabel, F. W. Sawyer	15.04	1 29 00	1 15 01
Imp, J. Renton	13.02	1 38 10	1 22 40
Florence, —. Mansfield	16.10	Ruled out.	
Crescent, T. M. Alley	16.07	1 13 15	1 00 01
Wizard, J. Bertram	13.00	1 28 15	1 12 37
Elsie, C. F. Hardwick	16.04	1 21 00	1 08 30
Flirt, F. H. Hildreth	15.08	1 14 00	1 00 13
A. B. C., —. Mansfield	Ruled out.		
Spray, G. F. Putnam	14.00	1 21 15	1 02 22
Ida A., Rideout Brothers	14.00	1 31 55	1 17 02

The following prizes were awarded: First class—Viola, first, $15; Davy Crockett, second, $15; Jennie L., third, $10; Pearl, fourth, $5. Second class—Rattlesnake, first, $20; Twilight, second, $15; Alice L., third, $10; Raven, fourth, $5. Special class—Vesper, first, $20; Inez, second, $15; Iris, third, $5. Third class—Crescent, first, $15; Flirt, second, $10; Spray, third, $7; Elsie, fourth, $5.

LARCHMONT Y. C. ANNUAL MATCHES.

A FRESH northeast wind made plenty of work for the sailor men of the Larchmont Y. C., in their fifth annual matches, on Friday last, while the day was cool enough to make it pleasant for the spectators, and excepting the rain squalls in the afternoon, the weather was all that they could desire, a strong wind from one quarter all day, and not enough sea to bother even the little fellows.

The club is better situated than any other about New York, having a good anchorage, plenty of water for sailing, and in addition, handsome grounds and club house close to the anchorage, many of the members having cottages near by, while some of the bachelors live in the club house. Although comparatively a new organization the club numbers over 300 members with 114 yachts. Shifting ballast is still permitted on the open boats, of which there are 50 on the club list, but the crews are limited to one man for 5ft. length, the latter being taken as the waterline plus ⅛ of overhang, the time allowanced being estimated on the same basis.

The 24 entries included 6 classes; class C, sloops, cutters or yawls of 55ft. sailing length, or over; class 1, the same of 42ft. and under 55ft.; class 2, 30ft. and under 42ft.; class 3, under 30ft.; class 4, open jib and mainsail boats of 23ft., or over; class 5, the same of under 23ft.; class 6, catboats of 23ft., or over; class 7, the same under 23ft. The prizes were, classes C, 1 and 2, each, $75.00; class 3, $60.00; classes 4 and 5, $50.00; classes 6 and 7, $35.00 each, besides the "Connor Cup" for class C; value, $750.00, and the "Gould Cup," classes 1 and 2, value, $550.00.

The courses were, for classes one and two, from off Pagoda Point, Larchmont, to and around red buoy off Execution Reef, thence to and around buoy off Matinnicock Point, to and around a stakeboat off Captain's Island, around Execution buoy again to the starting point, 22 miles. The smaller classes, after rounding Matinnicock, going to the black buoy off Constable Point, and thence home by way of Execution Point, making 17 miles.

The steamer Belle Horton came down from the city about 10 A. M. with a large party of ladies and gentlemen on board, and after taking on another party at the Horseshoe, steamed over the starting line, where the tug W. Goodwin with the judges, Messrs. W. H. Jenkins, J. Lester Wallack and T. R. Fisher, and reporters, was lying.

Of the twenty-four yachts entered, but eighteen were to windward of the line ready to start, their names being as follows:

CLASS 1.

Name.	Owner.	Length.
Athlon	J. C. Barron, M. D.	54.08
Eclipse	E. H. Wales	50.08
Fanita	George J. Gould	47.05
CLASS 2.		
Crocodile	J. G. Prague	41.02
Schemer	Commodore Monroe	37.03
CLASS 3.		
Yolande	C. A. Stevenson	28.03
Varuna	Edgar S. Turton	27.03½
Amazon	Franklin Beams	26.08
Kathleen	G. R. Barreto	25.11
Gannet	Oliver Adams	21.02
CLASS 4.		
Florence	D. H. Jardine	28.00
Meteor	S. Wainwright	26.06
Cheemaun	W. I. Van Wart	24.10
CLASS 5.		
Zoe	H. A. Sanderson	22.08
Nymph	F. W. Flint	21.09
G. B. Dean	T. W. Whittemore	21.05
CLASS 6.		
Cruiser	A. Bryan Alley	20.09
Jewel	Thomas Mott	19 08

Ileen was entered but was not present. Fanny and Oriva were both sailing about, but not in the race, while Comet, Columbia, Natalie, Princess, Nokomis, and the little launch Sindbad were also on hand.

At 11:21 A. M., the first signal was given by whistle and flag, as stated in the printed instructions, and at 11:26 the second followed, but the yachts, well up to windward in Larchmont Harbor, paid no attention to them. When the time was up but 5 had crossed, and the Sindbad was sent with a roving commission to hurry the loiterers over, but it was not until 11:51:37 that the last one crossed. The fault

certainly did not rest with the Regatta Committee, as the signals were all worked properly, but the whole start was a bungling affair.

Meteor was first over, hauling in her sheet as she crossed. Zoe came next, her crew busy with the bags, as the blocks came together, and she headed for Execution with wind abaft the beam. Then came Fairy with a still larger pile of bags. Cruiser came down, but stopped to reef. Florence, jibing as she crossed, and then came up, rounded the judges' tug, and crossed a second time, jibing again. Then Cruiser, with her reef tied on, by which time the big ones were ready, and Schemer went over with full jib and mainsail and working topsail; then Chemaun and Varuna under jib, main and topsail; Amazon with the same; Crocodile, Athlon and Fanita with jibtopsails set; Eclipse, showing a bright green bottom and red stripe at water line; Yolande, with big square header; Gannet and, last, Kathleen, each hauling in sheets as they rounded. The times of starting were:

Meteor	11 26 33	Amazon	11 45 47
Zoe	11 30 12	Crocodile	11 46 20
Fairy	11 30 35	Fanita	14 46 55
Florence	11 34 18	Jewel	11 48 15
Nymph	11 35 55	Athlon	11 48 36
Cruiser	11 37 23	Eclipse	11 49 05
G. B. Deane	11 38 40	Yolande	11 51 04
Schemer	11 39 40	Gannet	11 51 13
Cheemaun	11 41 39	Kathleen	11 51 37
Varuna	11 45 03		

The run to Execution was made so quickly by the leaders that it was too late to time them when the tug left the start, but the order was nearly the same as at starting. Down to Matinnicock was a beat, long legs on port tack and short on starboard, scattering the boats and changing positions, Schemer and Fanita taking the lead, the little ones doing well, though their crews were soaked. Off Glen Cove the tug sighted a sailboat capsized with a man on her, and another one swimming near by, but two yachts were already trying to rescue them. Yolande, having taken in her club topsail, was now beating to windward with her topmast on end.

At 12:15 a squall of rain struck the boats, returning at intervals throughout the day. Fanita was first at the buoy, luffing around and standing over for Captain's Island on starboard tack, Schemer soon following. Zoe and Fairy had been having a sharp tussle all the way down, and now, just as big Athlon luffed round, they passed through her lee, easing sheet for Constable Point, the bags flying at a lively gait to windward. Meteor, now astern, nearly fouled the buoy, and Yolande was hindered by a clumsy working schooner. Athlon and Varuna both set jibtopsails at the buoy.

The times were:

Fanita	1 13 00	Chemaun	1 26 41
Schemer	1 16 45	G. B. Dean	1 40 15
Zoe	1 17 05	Cruiser	1 44 59
Athlon	1 17 45	Jewel	1 48 39
Fairy	1 18 00	Varuna	1 55 08
Eclipse	1 21 42	Amazon	1 56 02
Crocodile	1 24 28	Yolande	1 57 14
Meteor	1 26 00		

The four miles to Captain's Island were soon made, the positions being the same, except that Schemer was fourth instead of second, as below:

Fanita	1 36 00	Schemer	1 45 00
Athlon	1 40 30	Crocodile	1 48 00
Eclipse	1 43 00		

The fight was lost to view in a heavy rain squall, but all the boats were doing their best though invisible, the big ones hurrying under spinnakers to Execution, and the little ones when passed by the tug still bravely at it. No time was taken at Execution, the tug hurrying home for the finish.

By this time the wind was hauling to the south, helping all home rapidly, Fanita being first in. In spite of the blunders at starting, the boats were curiously grouped together, Athlon, Fanita and Eclipse coming in close, Crocodile and Schemer, Yolande, Amazon and Varuna, Zoe and Fairy.

The times of the race were as follows, the actual times of start and finish and time over the course being given, while the official time taken from the gunfire is given in the fourth column.

	Start.	Finish.	Actual.	Official.
CLASS 1—CABIN SLOOPS.				
Athlon	11 48 36	3 03 10	3 14 34	3 27 10
Eclipse	11 49 05	3 04 47	3 15 42	3 26 45
Fanita	11 46 55	3 02 45	3 15 50	3 21 39
CLASS 2—CABIN SLOOPS.				
Crocodile	11 46 20	3 13 20	3 27 00	3 37 20
Schemer	11 30 40	3 15 27	3 25 47	3 35 32
CLASS 3—CABIN SLOOPS AND CUTTERS.				
Yolande	11 51 04	3 36 57	3 45 53	4 00 57
Varuna	11 45 03	3 35 08	3 50 05	3 57 48
Amazon	11 45 47	3 35 37	3 49 50	3 57 38
Kathleen	11 51 37	Did not go the course.		
Gannet	11 51 13	Did not go the course.		
CLASS 4—OPEN JIB AND MAINSAIL.				
Florence	11 34 18	Did not go the course.		
Meteor	11 26 33	3 05 16	3 38 43	3 38 36
Cheemaun	11 41 39	2 56 47	3 15 08	3 18 32
CLASS 5—OPEN JIB AND MAINSAIL.				
Zoe	11 30 12	2 54 53	3 24 41	3 24 41
Nymph	11 35 55	3 18 45	3 42 50	3 41 21
Fairy	11 30 59	2 54 58	3 23 59	3 22 27
G. B. Dean	11 38 40	3 18 25	3 39 45	3 40 16
CLASS 6—CAT RIGGED.				
Cruiser	11 37 23	3 27 52	3 50 29	3 51 52
Jewell	11 48 15	3 28 57	3 40 42	3 50 09

The success of the races is largely due to the regatta committee, Messrs. Charles E. Jenkins, Thomas B. Brown and J. B. Miley, who had charge of all the arrangements.

BEVERLY Y. C.

THE eighty-fourth regatta, being an open catboat sweepstakes, was sailed at Monument Beach July 4. A large entry of local boats not belonging to the club was expected, but they held aloof till after the entries closed, being afraid of the new Surprise, built this spring by Mr. Hanley. This boat had never been measured, it was known that she was very near the line between first and second classes, and she frightened all but the B. Y. C. boats and one boat from Chatham out of both classes When she was measured on the morning of the 4th and found to be in first class by four-fifths of an inch, the local second class boats wanted to enter, but it was too late.

At the time of the start, the wind at the judges' yacht was brisk N. E., but some two miles down the bay it was S. W. The following courses were selected: First and second classes, from judges' yacht off Tobey Island buoy No. 2, leaving Bird Island buoy No. 13 and Scragg Neck buoy No. 10 on port hand on return, eleven miles. Third class, leaving Dry Ledge buoy No. 12, Abial's Ledge buoy No. 1 and black buoy No. 3 on port hand, seven miles. The preparatory gun was fired at 12:04, being delayed four minutes waiting for the Mattapoisett boats.

The boats started as follows:

Name.	Owner.	Length.	Start.
FIRST CLASS.			
Mattie	Vice-Com. Stockton, B.Y.C.	25.10	12 09 32
Violet	Geo. H. Richards, B.Y.C.	24.05½	12 10 50
Atalanta	J. R. Thomas, B.Y.C.	26 10	12 11 05
Surprise	C. C. Hanley, B.Y.C.	24.01	12 11 40
SECOND CLASS.			
Flirt	Geo. H. Lyman, Jr., B.Y.C.	22.09	12 15 03
Iris	E. A. Bangs, B.Y.C.	21.08½	12 16 20
Tantrum	Jas. M. Codman, B.Y.C.	22.01	12 16 35
Echo	A. W. Baker, Chatham	21.10	12 16 48
Lestris	J. Crane, B.Y.C.	21.10	12 16 48½
Eleanor	Richard Codman, B.Y.C.	22.09	12 18 55
Romp	E. B. Robinson, Pocasset	22.10	12 19 00
THIRD CLASS.			
Vivian	R. F. Nickerson, Chatham	20.05	12 20 59
Clara B	Outram Bangs, B.Y.C.	18.06	12 21 15
Dolly	A. H. Hardy, B.Y.C.	20.01	12 21 49

Romp was timed by request, having failed to enter in time. Flirt's measurement is not official. Mystery, third class, was entered, but could not be got off the beach, where she had gone to clean her bottom, in time.

The two larger classes carried the N.E. wind for the greater part of the run down; about a mile this side of Bird Island they struck a calm and the rear boats closed up. After some time spent drifting around in puffs coming from all directions, Mattie struck a S.W wind and began to beat for the buoy. Surprise and Atalanta took it next, then the leaders of the second class.

Mattie rounded the buoy first and started free for Scraggy Neck. Surprise came next, gaining on her, then Atalanta, followed by Echo, Eleanor, Tantrum and Violet.

Mattie and Surprise carried the S.W. wind around Scraggy Neck buoy and started home before the wind, when Atalanta was three quarters, and Violet, who had passed Eleanor and Tantrum, half way across, the wind came out S.E. and they had to beat for the buoy, which put the two leading a long distance ahead. Atalanta rounded third, then Violet and Echo together, Tantrum and Eleanor.

All this time wind was N.E. at the judges' yacht. Mattie and Surprise carried the S.W. wind over the home line, but it immediately shifted back to the east. The others had it N.E. running home, and as they approached the line found the wind east and crossed line close hauled, as follows: Atalanta, Violet, Echo, Eleanor, Tantrum, Romp, Flirt, Lestris and Iris.

The third class got into the edge of the calm, but when clear of it had the wind N.E.; they stuck closely to each other, Vivian leading the way home, followed by Dolly and Clara B. Following is the summary:

	Actual.	Corrected.
FIRST CLASS.		
Surprise	2 49 50	2 35 30
Mattie	2 52 28	2 40 33
Atalanta	2 56 53	2 45 31
Violet	3 08 50	2 55 07
SECOND CLASS.		
Eleanor	3 02 27	2 44 41
Echo	3 03 36	2 46 12
Tantrum	3 04 59	2 47 57
Lestris	3 10 14½	2 52 50½
Flirt	3 11 30	2 55 31
Iris	3 11 35	2 53 49
Romp	3 03 48	2 47 49
THIRD CLASS.		
Vivian	2 06 51	1 55 54
Dolly	2 07 36	1 54 49
Clara B	2 07 44	1 53 37

Surprise, Eleanor and Clara B. take first prizes; Mattie, Echo and Dolly second prizes. The race being an open one, was sailed under the rules and allowances of the N. E. Y. R. Association. Judges, Edward Bangs, A. H. Hardy, W. Lloyd Jeffries. Judges' yacht, Madcap, B. Y. C.

EIGHTY-FIFTH RACE.

Saturday, July 5, opened with half a gale of wind from the S.W. and a pouring rain; the result was that only four boats started in the match for the Buzzard's Bay championship, and they were under three reefs most of the way. The B. Y. C. measurement was used in this race.

FIRST CLASS CATS.

Name.	Owner.	Length.	Actual.	Corrected.
Mattie	Vice-Com. Stockton	28.10	3 00 31	1 51 42
Flirt	George H. Lyman	25.10	2 13 06	2 00 43
Iris	E. A. Bangs	24.02	withdrawn.	
Tantrum	J. M. Codman	25.00	withdrawn.	

A one-gun flying start was used, Tantrum going off with the lead. Mattie overpowered the others in the beat down to Bird Island Light. Course same as on the Fourth. Judges, George H. Richards, J. P. Gardner, F. I. Amory and W. Lloyd Jeffries. Judges' yacht, Maude, B. Y. C.

BLUE WITH A GOLD CASTLE.

LA NUBIENNE.

THIS steam yacht, the first that has made the voyage to America under French colors, arrived in New York on Saturday morning from Montreal, having left Havre on June 10 and arrived at Quebec June 23. She has on board her owner, Mr. Edmond Blanc, Mr. Paul Saunieres, owner of the famous 40-tonner Myosotis, now the Eva; Mr. Fonande of the cutter Flamberge, and Mr. B. Clerc, proprietor of *Le Yacht*. The party left the yacht at Montreal, coming to New York by rail, visiting Niagara and Albany, joining the vessel here and leaving on Tuesday evening for Newport, where they spend a few days before returning to France.

The Nubienne, formerly the Cumbria, is named after the famous mare belonging to Mr. Blanc, winner of the Grand Prix in 1882, is bark rigged, of 470 gross tons and 596 Thames measurement, and was built by C. Mitchell & Co., of Newcastle, in 1881, being intended by her former owner, Lord Lonsdale, for a voyage around the world, but on his death she was purchased by Mr. Blanc.

She is 179.7ft. long on waterline, 27.1ft. beam, 13.7ft. depth and is built of iron, with five bulkheads and two decks, and is a splendid specimen of an ocean cruiser. Her fittings on deck are all of teak—houses, bulwarks and rail—while below she is finished with English oak. Forward are the crew's quarters on the lower deck, aft of which is a handsome dining saloon for the officers, their staterooms opening into it.

On the main deck aft is a dining saloon on the starboard side, handsomely finished in oak, and ornamented with a painting of the yacht's namesake, Nubienne. Aft of this is a stateroom, and further aft a bathroom, fitted with a very ingenious combination washstand, occupying but little space, while on the port side are staterooms for the servants. Aft of all is the smoking room, a semicircular apartment over the wheel, very handsomely fitted up, with a small yacht piano of English make, the entire keyboard of which folds up out of the way, the instrument, though of good tone, occupying about half the space of a small parlor organ.

The owner's stateroom is on the lower deck, and abaft it are the storerooms and magazine. The chartroom is a very cosy apartment in the forward end of the deck house, under the bridge. The latter is fitted with signaling apparatus of the usual construction, with lever and dial, but in addition has on each side three electric buttons, set under the rail, for signaling ahead, astern, stop, all parts of the ship being also connected by telegraph. The engines are of excellent design, inverted compound 25 and 47in.x27in.

The propeller is of bronze, two bladed, and so fitted that the pitch may be altered from 11ft. to 15ft., from inside the ship. Her armament is remarkable for a pleasure yacht, consisting of eight rifled steel breechloading guns, mounted, four on a side, on the main deck, all being fitted with hydraulic recoils. Besides these she carries an enormous duck gun, while below are a rack of Chassepot rifles and a number of revolvers.

After leaving the North River, the Nubienne steamed up through the Gate, and at 6 P. M., when opposite the Knickerbocker Y. C. house, and running at a good speed, took the ground on the reef between the black buoys. The steamer Pilgrim, seeing her danger, whistled loudly, but the warning was not understood, and she struck with a loud crash; backing off, however, though listing badly to port, proceeding on her way, however, without assistance from the two tugs that went to her help. The rocks were two feet out of water not 100 yards off, and three sailors were on her forward deck when she struck.

YACHTING ON LAKE ONTARIO.

THE first yacht race sailed on the Bay of Quinte this year took place at Trenton on the 1st inst., Dominion Day. The contest was for second class yachts, under B. Q. Y. C. rules, over a course of twenty miles, and the prizes were $60, $30 and $15.

Unfortunately the contest was marked by an incident very unusual in these waters, namely the capsize of one of the competitors—the Surprise, of Trenton.

It was not until after the noon hour had passed that the four competitors were started, the wind being then southwest, and of fair sailing strength. The order of going was as follows: Surprise (Trenton), 12h. 15m.; Iolanthe (Belleville) 12h. 16m. 57s.; Gracie (Belleville), 12h. 18m.; Enid (Trenton), 12h. 19m. 38s. About three miles of the course was windward work, the first two legs of it being a straight run down wind and the second with the wind abaft the beam.

All, except the Enid, carried gaff and jibtopsails; the Surprise, which had been lightened by more than half her standing ballast, gaining somewhat, and the Gracie overhauling the Iolanthe. At the lower buoy light canvas was taken in, but the crew of the Surprise were not quick enough with theirs, and, a sudden puff of wind taking her, over she rolled, those on board shouting to the other yachts to keep on their course, which they did, and the crew of the unfortunate craft were rescued by the Dauntless.

The Gracie was now in the lead, but was closely pressed by the Iolanthe, which, near Indian Island, was close alongside, but to leeward. Wishing to avoid a collision, the Gracie went about, and this cost her first place, and possibly the race, as the Iolanthe stood on and was able to round the mark, which she turned 4 minutes and a half ahead. On the next round the Gracie gained half a minute, but lost all she had made on the run to the harbor buoy, and from this out the Iolanthe gained rapidly, finishing at 4:27, ten minutes in advance. The Enid was fully half an hour behind the Gracie. The mishap to the Surprise was very much regretted, as she would otherwise have made a good race with the two Belleville boats, which thus won the two chief prizes.

At Kingston on the same day there were races for first, second and third classes—local craft. The Gen. Garfield won in the first class, the Laura in the second class and the Merlin in the third class.

Preparations are now being made for the regattas under the auspices of the Lake Yacht Racing Association, which promise to be successful. The Gracie having donned a new mainsail, will challenge the Iolanthe for the challenge cup held by the latter, and for which the former receives a handicap allowance of five minutes.

The big sloops Atalanta and Norah are looking well. The latter will have an entire new outfit of canvas from the loft of Oldreive & Horne, of Kingston, and will adopt the double head rig.

The Iolanthe has been fitted with a new wheel and side and deadlights of the most approved pattern.

We anticipate a rare contest on the 6th prox., with the Atalanta, Norah, Garfield, Aileen, Cygnet, Verve, Oriole, Madcap, Coquette, Alarm, Lady Standly and possibly others in the first class, and the Iolanthe, Gracie, Surprise, Emma, Laura, Katie Gray, Cricket and no doubt, other flyers in the second class.

There seems to be no prospect of a contest for the Fisher champion cup for sloops, which the Atalanta is ready to defend against all comers.

PORT TACK.

BELLEVILLE, Ont., July 3.

CRUISE OF THE MABEL.

Editor Forest and Stream:

It may interest you to hear the latest report from the yacht Mabel, O. Y. C., Captain Jas. H. Stebbins, Jr., of this city, now on a cruise from Clayton through the lakes.

Mr. Stebbins reports that he left Port Calborne, at the entrance to the Welland Canal, on the 26th, before a heavy northeaster, and made Detroit in twenty-four hours, the distance logged being 235 miles. For six hours the only sail carried was the foresail, and the sea was so heavy that two of the crew, both old lake sailors, were sick.

You may remember that the Mabel was changed last winter from a centerboard to a keel and given a cutter rig forward. Mr. Stebbins reports that the alterations not only make the yacht a better sea boat and handier, but have also increased her speed. W. F. HAPGOOD.

NEW YORK.

[The log of a former cruise of the Mabel appeared in FOREST AND STREAM of Jan. 24, 1884, since which cruise she has been changed to a keel boat with cutter rig.]

MIGNONETTE.—This cutter, described in FOREST AND STREAM of March 6, 1884, is now completed and has left her builders, Messrs. Wallin & Gorman, of Bay Ridge. We commend her to all those who are looking for something in place of the old-fashioned sloop, but are not prepared to accept the full cutter, as a great step in advance, and at the same time a boat they can step aboard of without doing violence to their patriotism. She has an iron keel of 1,700 pounds, 3,000 pounds of lead inside, a roomy cabin with good head room, lockers, etc., large cockpit above waterline with scuppers, steers with a stick and has a housing topmast. Her jib traveler, instead of running on the bowsprit, runs on an iron rod on top of the latter. The entire boat is handsomely finished throughout, mahogany in cabin and cockpit, pine ceiling and lockers, all varnished, deck of narrow pine, varnished. Her owner, Dr. Loring, is a member of the Larchmont Y. C., but will use her about Boston this summer. Messrs. Wallin & Gorman have also launched recently a very handsome little catboat, 17ft. on waterline, with 2ft. 6in. overhang, 6ft. 6in. beam, bright finish in cockpit and deck, rather straight sheer, and a neat looking boat in every way. She is intended for use on a small lake. They have also afloat a cabin sloop of the usual American type, for Capt. Samuel Greenwood, 30ft. on deck and keel, 12ft. beam and 2ft. 9in. draft, besides a smaller open sloop with a movable cabin, for Mr. J. L. Riker, of Shrewsbury. Length 22ft., beam 9ft., hold 2ft. 5in. Her ballast will be all iron inside.

ROYAL CANADIAN Y. C.—The R. C. Y. C. gave a sail on July 1 to their lady friends, starting from the club house about 4 P. M., the flagship Aileen, Commodore Leys, leading. Seven yachts were in line—Aileen, Oriole, Verve, Alarm, Coquette, Kent and Madeline. The fleet executed a number of maneuvers, being directed from the flagship by a new and simple system of signaling, worked by the inventor, Capt. Dupont, R. N. After forming a line each yacht tacked in succession, afterward following the flagship up the bay. Further maneuvers were prevented by a squall and a pour of rain, in which Alarm lost her mizzen, the yawl was washed off the deck of the Esperanza, and a sailboat was capsized. A collision nearly took place between the Aileen and a passenger steamer, the St. Jean Baptiste. Next week's cruise will be under the command of the Vice-Commodore, from his yacht Oriole.

SEAWANHAKA C. Y. C. BOOK.—The club book for 1884 comes to us in a very neat and shipshape cover of dark canvas, very much more appropriate and durable than the usual blue and gold. The list this year includes 227 members and 102 yachts, made up of 11 steamers, 17 schooners, 21 keel boats (17 cutters) 23 centerboard sloops and 30 open boats, among which are 3 catamarans and 1 canoe. Besides the club signals, the book contains some useful notes on the barometer, the United States fog signals, the signal code, a map of the club course and rules for colors, salutes, etc. We notice that the expression "under weigh" still has a place in the signal code, as in several other club books.

SEAWANHAKA C. Y. C., CRUISE.—The following order has been issued to members, for the annual cruise: New York, June 28, 1884. Dear Sir—The Club Squadron will rendezvous at Whitestone, Long Island, on Saturday, July 12, for the Annual Cruise. You are earnestly requested to communicate with the Secretary as promptly as possible, stating whether you will be able to join the fleet or not. The Secretary offers a prize of $25 in cash to the sailing master whose yacht upon inspection during the cruise is shown to be in the best order and condition, due regard being paid to completeness and condition of outfit.—L. F. D'OREMIEULX, Secretary, S. C. Y. C.

MAGGIE.—Mr. George Warren's well-known cutter Maggie was placed in Simpson's dry dock last week and some 600 or 800 pounds of the lead recently added to her keel were removed. It was decided by her sailing master during the Eastern Club races that she was trimmed too much by the stern. The removal of the lead brought her back to something more like her old trim, and although the Fourth was rather a poor day to determine how much improvement has been made, it is thought she will make a better showing in the races to come.—*Boston Herald, July 5.*

DAUNTLESS.—This yacht arrived in Newport on July 6, having on board her owner, Mr. Caldwell H. Colt, and Mr. J. Neilson Howard. She left Madeira on June 12, but was delayed by fogs, calms, and head winds. On her arrival she at once hoisted her quarantine flag, which was no sooner seen from the shore than the report spread that she had some contagious disease on board, to the dismay of the residents of Newport. The Harbor Master, Capt. Townsend, boarded the yacht, however, and finding all well, ordered the flag to be taken down.

A NEW BOSTON CUTTER.—A fine specimen of a moderate cutter has just been finished by Mr. Jacob Rood. Her length on waterline is 31ft., beam 7ft. 8in., depth 6ft. Keel, stem and stern of white oak, frames of the same, double 2½x2½ spaced 12in., planking of clear yellow pine in single lengths. Keel of lead, 2½ tons, with composition bolts. Mast 7in. at deck, 22ft. from deck to hounds; head 5ft., with housing topmast 20ft. long. Main boom 26ft., gaff 18ft. 6in., bowsprit 14ft. outboard, fitted to house.

SURF.—Yacht Surf, Capt. Rathborne, returned from her easterly cruise on the morning of July 4. She cruised as far as Gloucester, and met with some very heavy weather. Capt. Rathborne reports a series of calms, gales and fogs, which proved anything but enjoyable. He thinks Chesapeake Bay offers many more attractions to a New York yachtsman, and intends cruising there next summer.

LARCHMONT Y. C.—At a regular meeting of the Larchmont Y. C. on Saturday evening, the following members were elected: John W. Beers, R. H. Egleston, John Q. Underhill, Otto Sarony, E. E. Chase, Arthur Padelford, Edward M. Padelford, Henry S. Hovey, J. H. Wainwright, H. Ellis Hart, Charles Elliot Warren, Charles J. Osborn, Howell Osborn, Alfred de Cordova and Lewis H. Spence.

SAN FRANCISCO YACHTING.—Halcyon, schooner, built last year for Mr. H. L. Tevis, has been sold to Mr. J. D. Grant, who will put her in thorough condition, making several changes below, and will probably put her in the races and cruises of both clubs. Mr. Con O'Connor will present the yacht with a full suit of colors, imported for her from England.

MERLIN.—This cutter was launched on Wednesday of last week from her builder's shop, South Brooklyn, and now lies afloat with mast and bowsprit and rigging in place. She shows to even better advantage outside than when in the shop. Her joiner work is partly in, and she will soon be ready for service.

KINGSTON, ONT.—In the races held on Dominion Day, the Garfield, in the first class, beat the Hebe by 24 minutes, the Laura winning in the second class, with Una, Zeta and Victoria in order behind her, while Merlin won in third class.

DAISY.—This yacht arrived in Boston on Thursday last, and will be sailed to New York, calling at Provincetown, Newport and New London. Her sailing master, William Martell, came with her on the steamer.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

TOPEKA.—Fort Davis, Tex.—1. The address is Topeka, Kan. 2. He has pointers of Faust, Bow and Sleaford blood, also a strain of black pointers.

J. C. S., Pittsburgh.—1. What food will a chicken hawk eat beside raw meat? 2. What is the right food for raccoons? Ans. 1. Raw meat is the proper food. It will eat only animal food. 2. A raccoon

will eat almost anything, meat, raw or cooked, bread, eggs, green corn or fruit. Scraps from the table are as good food as anything you can give it.

J. A. G., Washington, D. C.—The Denison target pads may be obtained through any dealer in firearms. They are specially prepared for testing pattern and penetration.

B. R., Buffalo.—Will you kindly inform me if there is a polo club organized in Chicago, or in any city west of Buffalo, and also give me their names if possible?—Ans. We know of no such club.

M. C. Waterbury, Ct.—At a Massachusetts target, out of a possible 60, A. scored 9, 11, 10, 9, 11, total, 50. B. scored 9, 9, 10, 10, 12, total 50. Is it a tie, or does A. receive the first prize? Ans. A makes the better score.

G. W., Horicon, N. Y.—It is our intention around Brant Lake to have a petition in this fall at Albany to get our time, close, extended to July 1. Can we do this? Ans. You need not petition the Legislature. Your county supervisors have authority to *extend* any of the close seasons. A local enactment will answer your purpose.

INQUIRER.—1. How does the sturgeon rank as a food fish, or is it fit for food? 2. Where is it mostly found? Ans. In England it is the royal fish, and the first one of the season caught in the Thames goes to the royal table. At Albany and along the upper Hudson, where the Dutch settled, it is a favorite. The fishermen of Long Island Sound will not touch it, and it varies in rank in different parts. The flesh is oily, and if parboiled first it makes splendid cutlets. 2. The rivers of the Atlantic coast and the great lakes. It spawns in fresh water.

C. A. R., Taunton, Mass.—1. What are the best places for trout fishing on the Lehigh Valley Railroad? 2. How is Mauch Chunk for fishing? 3. What kind of fish are to be found at or near Geneva, N. Y.? Ans. 1. Meshoppen, Mehoopany and Tunkhannock. 2. There is some trouting to be had in that vicinity. 3. Perch, sunfish, black bass, pickerel etc.

H. B., Glasco, N. Y.—Will you be kind enough to inform me of the name of the bug inclosed in the paper. I have noticed its presence among my bird skins to my regret. Ans. The beetle belongs to the genus *Dermestes*, a museum pest. Poison your skins well. If the bugs are among them in numbers, take the skins out and beat them at frequent intervals for a few weeks.

A. J. J., Hydesville, Vt. A few days ago I shot a bird on our lake here that I cannot identify to my satisfaction. I supposed it was a loon, but do not find any description that fits the bird in Coues's "Key." The bird measured 30½ inches in length, is pure white from bill to tail on the under parts and under sides of wings; back of head and neck a brownish gray and also the back and tail, feathers on back brownish black, slightly edged with white, a short and well formed tail. Legs posterior; inside of legs white and the outside black, four toes on foot, rear toe quite small and the three front ones webbed, similar to a duck; nail on end of toes flat. There are no round spots on the bird anywhere that I can see. It is built the same as a loon, head, bill and neck, and in fact all parts, but the coloring is different. The bird I shot was in company with one other near the highway on the lake, as I was passing with my team and I fired from the buggy, killing it the first fire. The other one immediately disappeared and was out of range of any shotgun, when it made its appearance. The other as near as I could judge was similar to the one killed. Ans. We presume from your description that the birds were either young loons (*C. torquatus*), or young black-throated divers (*C. arcticus*).

A. M. I., Liberty, Neb.—1. Is the bird called kildeer good to eat? 2. Is it a plover or snipe? Large numbers are coming on the prairie which is being newly broken. After the grass has been burned off the prairie, thousands of birds come which people here call snipe. 3. Is it the habit of snipe to peck around on the burned prairie? 4. How many kinds of snipe are there? 5. Are turtle doves good to eat? 6. Do southern people eat robins? Ans. 1. Yes. 2. A plover. 3. Yes, snipe and plover are likely to do it. 4. About ninety species, of which perhaps thirty-five are found in this country. 5. Yes. 6. Yes.

PATIENT, New York.—1. Can you let me know of any book which treats of black bass and trout? 2. What bait is best for bass? 3. What places in the Green Mountains are those fish caught? Ans. 1. The American Angler's Book, by Thad Norris, price $5.50; Fishing in American Waters, by Genio C. Scott, price $3.50, treat of both. The best book on black bass is Dr. Henshall's; price $2.50. We can furnish them. 2. Minnows, crayfish, helgramites and frogs. 3. There are trout in most of the mountain streams, but the fish are small. Black bass are not plentiful in the State, but some of the ponds on the west side of the mountains contain them.

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17.	Piles, Blind or Bleeding,.....	.50
19.	Catarrh, acute or chronic; influenza	.50
20.	Whooping Cough, violent coughs...	.50
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27.	Kidney Disease,.....	.50
28.	Nervous Debility,.....	1.00
30.	Urinary Weakness, Wetting the bed	.50
32.	Disease of the Heart, Palpitation.	1.00

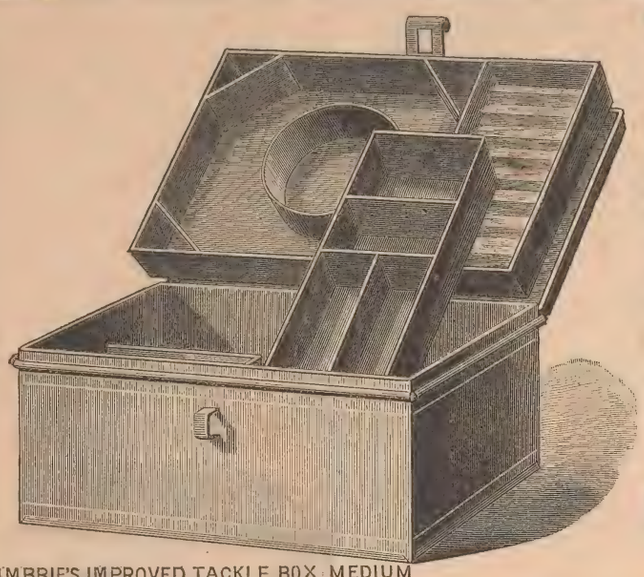
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WALLACE'S

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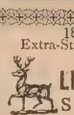
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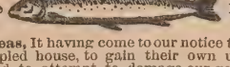
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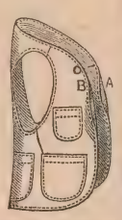
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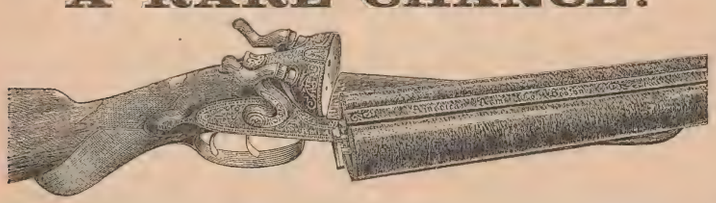
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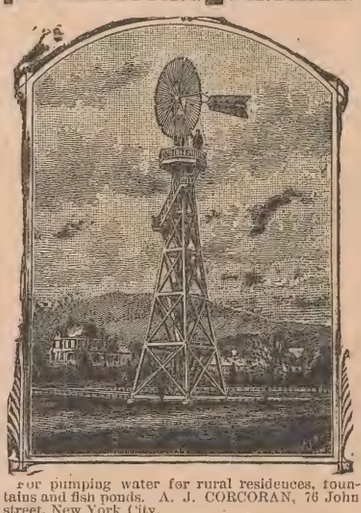
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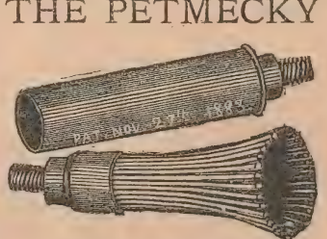
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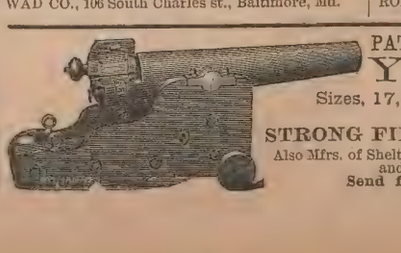
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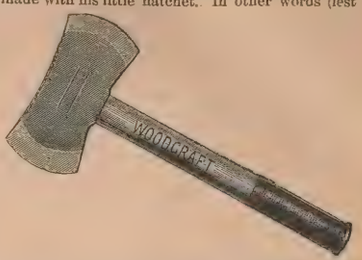
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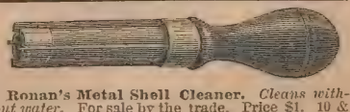
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AN AFTERNOON ON THE RANGE.

TO escape from the noise and worriment of the city away to a restful afternoon on the range is a rare pleasure which many have learned to love. There is about the sport of target-shooting a fascination which is very powerful to certain men. Those who are engaged in sedentary pursuits can find no better way of taking the air and securing a certain share of field sport than in this quiet battering away at the bullseye. The mind is engaged at the same time that the body is taking a good share of exercise. The man very soon finds that, barring physical imperfections, the question of becoming a good shot rests entirely with himself. If he is in good condition or in fine form, the chances are that his score will be of a fine order, but a bit of dissipation on the night before comes back to him at once in a slipping from the bullseye, and a falling away in his average. The best man wins there in the great majority of the cases, and it is this which encourages men to persevere even when they find themselves far down in the list when first going upon the range.

To the casual spectator there are many sights far more interesting than a rifle match, even when the fight is a sharp one. The looker on is very soon informed that he is to use his eyes only, and to take no further part in the affair. Ordinarily, unless he has started in at the opening of the match and kept a very accurate tally, it is impossible to determine how the score stands and what the relative position of the contestants may be. The outsider is reduced to the necessity of sitting down, hearing the sharp bang of the rifle, followed by the puff of smoke, and then in time a bobbing up of the disk, white, black or red, as the case may be. Very soon the watcher grows tired of this, and having no appreciation of what each shot means in the way of thought and effort, he wanders away and finds something to engage his attention in the neighborhood.

While the visitor to the range who comes merely to look on, spends perhaps a very dull afternoon, it is entirely different with the man who has entered his name on the list of competitors. To him the range is simply the place where he is trying the results of his previous precautions and judgments on a dozen points. It is not alone the buying of a good gun which makes a good rifleman. We have seen the finest sporting rifles in the hands of new comers or men who are not willing to take the working road to victory, beaten by the ordinary "gas-pipe" weapons issued under contract to troops, simply because the trooper puts a good percentage of brains and judgment behind his gun when he stood up to shoot.

The trip to the range is always an enjoyable one to the enthusiastic rifleman, because he goes along buoyed up by expectancy. He looks forward to a string of bullseyes, and once on the range he has a score of details to look after. When the ordinary visitor merely notes that it is a sunny afternoon, with a sharp wind blowing, the man who is to shoot is already busy calculating precisely how much of an allowance he is to make for the condition of the light and the force of the wind. He has a book of past scores, not merely the total actually made out of a possible highest score, but a briefly-written history of each shot. He turns back over his records until he finds a set of conditions very similar or exactly so to the present state of wind and weather, and then he duplicates the record on his front and rear gauges. Then comes the shot. It is taken with care, the holding was perfect, the spirit level in front had been kept at the dead-center point, there had been no error in the setting of the sights, the cartridge had been made up with the greatest care, and at the last instant before firing the cautious score-maker had quickly glanced about and made sure that there had been no little twitch in the wind, insignificant, perhaps, to the casual eye, but instantly detected by him, because he knew that a neglect to allow for it meant an outer possibly in place of the expected bullseye. Bang, and the bullet is off beyond recall on its way targetwards. The returns come quick, for the sharp reëchoing ping shows that the leaden bolt has flattened and melted itself against the target, and this report is verified a second or two later by the opening of the trap. It is time for the appearance of the disk, and it comes, not the expected white-faced one telling of a perfect shot, but a red one, which creeps up until it hides a good share of the bullseye and notes a hit close to its lower edge. There is a feeling of disgust at even this loss of a single point, but the rifleman has caught his bearings. He goes up a point on his rear sight, holds as he had done in the previous shot, and there comes an encouraging bullseye disk in response. Again and again it comes up, and then the red disk reappears, only to remind the marksman that shooting is a very uncertain thing, and that in a little streak of forgetfulness he has allowed the wind to shift to the other side of the 6 o'clock point, and that he finds a bullet wafted away to a 5 o'clock center in place of taking its place with the bunch of hits in the 7 o'clock corner of the white iris.

It has in it the delightful element of uncertainty which makes any sport enjoyable—victory is possible, but it must be worked for. It is a perpetual struggle from the firing of the first shot until the final one is safely lodged against the iron disk or it may be the grass parapet before it. Then comes the homeward run. Those who head the list are congratulated and explanations are in order. Those who won give minute explanation and hints as to the precautions taken with every part of their work, from the buying of the empty cartridge shell, through the delicacies of loading, on to the manipulations of firing, and so to the final pull off. Riflemen, generally, are a generous set, and freely help each other to the good results of any discoveries made by them. There is such a large margin of uncertainty that there is ample room for a multitude of explanation, and unless every point is properly covered the chances are that a failure will be scored. The defeated ones are, of course, full of excuse during the homeward trip. Everything is held to blame by some over and beyond their own carelessness. There are cranks on the range as at every point, and to them there is a different wind of a peculiarly perplexing sort, and as they wind themselves up in apology the old range masters smile in a good-natured fashion and says truly, "Practice makes perfect."

TRICKS UPON TRAVELLERS.

THE stroller along South street can find considerable amusement in the inspection of the motley collection of statues that keep watch and ward from the bows of the various ships; a collection that throws the Eden Musée, Barnum's Menagerie, and the Cesnola Antiques, entirely in the shade. A notable addition was made last week to this happy family, in the shape of a huge black and gold griffin that gazed ferociously down from the balance dock on the heads of passers by, from the bow of the French yacht Nubienne.

The reason for the presence of the yacht and its fierce attendant was alluded to in FOREST AND STREAM of last week, but further details of the mishap have since come to light. On anchoring off Twenty-third street, Captain Miller applied for permission to land his boats there, and was approached by a person representing himself as a pilot, and bringing a note signed H. G. Boyton, Harbor Master, demanding a payment of $7.50 for the privilege of landing. The young man, who gave his name as Boulanger, also offered to pilot the yacht to Newport, and as he exhibited some certificates, the captain engaged him.

On coming aboard on Wednesday afternoon, he at once asked for a chart, which excited some suspicion on board the yacht, but he was allowed to take charge, and ran down the Hudson, up the East River and through Hell Gate safely, but when once clear of the Gate, he put her helm over, in spite of a loud warning from the steamer Pilgrim, and deliberately ran the yacht on the reef just south of South Brothers Island, the rocks showing plainly above water a short distance from her bows.

Two tugs came to her assistance, and she was soon afloat, the pilot (?) getting on one of the tugs to come to the city for another pilot, first borrowing five dollars for his expenses. It is needless to say that neither man nor money has been seen since. The Nubienne leaked somewhat, so she ran back to New York, going on the dock on Thursday.

The damage proved to be very slight, she having struck squarely on the keel, in two places, at each of which half a dozen rivets were cut out and replaced, no other damage being apparent. Her trip to Newport was, however, abandoned, and she left on Saturday for Havre.

An inquiry among pilots and officials failed to discover either the bogus harbor master or pilot, neither of the names being in the directory, or known to the pilots. It also appears that there is no one whose business it is to detect and punish such rascals, as the laws are at present.

THINGS HAVE COME TO A PRETTY PASS when men who have been detected in violating the fish laws are appointed to enforce these laws. A case in point is the recent appointment by the Governor of New Jersey of one Abram Terhune, as Fish Warden of Bergen county. Terhune, it appears, has been somewhat notorious in connection with the law applying to bass. He was once arrested by the Passaic County Fish and Game Protective Association for having caught bass out of season. Why the Governor of New Jersey should put such a man in the office of Game Warden is an "opaque conundrum" which we shall not try to solve.

LIST OF OPEN SEASONS.—A list of the open game and fish seasons for several States are given in another column; others will follow as soon as we can get the information. Great care is exercised to make the list authentic and a safe guide to the reader, who eagerly scans it to learn when the law is off on his favorite game. Few changes of dates have been made during the past year. This is well. As the laws become better known they are better observed. Frequent changes confuse the public. Last year we republished our list in convenient pocket form, and it has been in great demand. This year we shall do the same thing.

THE ONTARIO COLLIE SHOW, which is to be held at Toronto, Sept. 16–18, should be well supported. The collie is a valuable dog. He ought to be better known. If farmers generally understood what a collie would do for them on the farm, the demand for good dogs would exceed the supply. Exhibitions like the one to be held at Toronto are useful, because they display in a very effective way just what the collie is and what he can do. Such an exhibition ought to be given at all the State agricultural fairs in this country.

WHERE ARE THE MIGRATORY QUAIL?—It is a long time since we have heard anything about them. Did all the birds disappear never to be seen again? Who can give any information that will lead to a detection of their whereabouts?

The Sportsman Tourist.

MEMORIES OF SENACHWINE LAKE.

BY T. S. VAN DYKE.

First Paper.

TWENTY years have gone since first I trod Senachwine's boggy shores and bent the oar in its shining surface; yet it seems as if it were but yesterday when I was there. Many a happy day before that had I spent along the rushing stream or in the deep dark woods; and many a bright day since has left its autograph in my album of delightful recollections; yet to no period does memory so fondly turn, and around none so lovingly linger as around the two months I spent at Senachwine twenty years ago.

When scarcely out of childhood I had seen Bob White bounce fluttering along the frosty stubble, and at an age when few boys are allowed to even touch a gun, had seen the woodcock furl his whistling wing amid the saddened foliage of autumn, and in the tangled cat-brier brake had hushed the obstreperous wing of the ruffed grouse. But when I saw Senachwine I found that I had only been playing around the gate of Elysium, enchanted with the first flowers that I met and little deeming of anything beyond. I had indeed shot some ducks along the sloughs and snipe meadow of the Atlantic coast, had read nearly all that up to that time had been written about duck shooting, and fancied that I knew something about it. But like a child at the theater an hour early for the play I had sat dreamily gazing at a miserable daub on a curtain supposing that to be the show that I had come to see. It was at Senachwine that the curtain was first lifted and the marvellous reality that lay behind it burst upon me in all its wildest and fullest splendors.

At Henry, Marshall county, Illinois, some two miles below Senachwine Lake, I stepped from the cars into the open arms of as noble a band of sportsmen as ever stopped a whizzing wing. Though a stranger to them all, the mysterious tie of the field was enough. That I was fond of the chase like themselves, and had come a thousand miles to enjoy it, was all they knew or cared to know of me. They gave me a key of the club boat house and placed at my disposal all hunting paraphernalia that I had not brought, took me along upon all hunts, placed me upon the best stands for shooting, and fairly pushed me upon pleasure in every possible way.

It was a bright September afternoon, the day after my arrival at Henry, that Charles Everett—one of the friends above mentioned—and I, were paddling up the crooked slough that leads from Senachwine to the Illinois River. Woodducks, mallards and teal rose squealing and quacking from the slough ahead of us, but Everett paid no attention to them, and I soon ceased dropping the oar and snatching up the gun and getting it cocked and raised just as the ducks were nicely out of range. When we reached Mud Lake—a mere widening and branching of the slough at the foot of Senachwine, we drew the boat ashore. Huge flocks of mallards rose with reverberating wings from the sloughs all around us and mounted high, with the sun brightly glancing from every plume. Plainly could I see the sheen of their burnished green heads and outstretched necks, the glistening bars upon their wings, the band of white upon their tails surmounted by dainty curls of shining green. Everett paid no attention to them. But could I lose such a chance to show him that I could shoot?

As my gun rang out with right and left at a roaring flock, and I saw two relax their vigorous hold on air and descend in a whirl of cinnamon, white, green and gray, I looked around at my new friend with a smile of pride. He too smiled, though for another reason. They had fallen on the other side of a slough, the mud of which exhibited so morbid an appetite for my high-topped wading boots at the second or third step into it that I too smiled—after beating a safe retreat. The idea of considering where a bird was going to fall was something entirely new to me. Probably at this day one is glad to land a duck anywhere along those shores, but at that time ducks were so plenty that the first consideration was generally to land them where they were easily picked up. I never got those ducks, and I shot at nothing more until I saw Everett begin. He soon placed me in some high reeds on a broad tongue of land running out between two shallow sloughs while he went to another point some two hundred yards or more away.

There was already in sight what seemed to me enough of ducks to satisfy any one. Long lines of dark dots streamed along the blue sky above Senachwine, up the Illinois and over Swan Lake—between the river and Senachwine—while from down the slough, up the slough, from over the timber on the west, and the timber along the river on the east came small bunches and single ducks by the dozen. Shall I ever forget that big mallard that bore down upon me before I was fairly hidden in the reeds? He came along with sublime indifference, winnowing the air with lazy stroke, bobbing his long green head and neck up and down, and suspecting no danger. As he passed me at about twenty-five yards I saw along the iron rib of the gun the sunlight glisten on his burnished head. I was delightfully calm, and rather regretted that letting him down was such a merely formal proceeding. If he were further off or going faster, it would be so much more satisfactory, etc., you know. Nevertheless he had to be bagged whether skill was required, or not, so I resigned myself to the necessity and pulled the trigger. Had the sun dropped from heaven at the report of the gun I could hardly have been more surprised. The duck rose skyward with thumping wings, leaving me so benumbed with wonder that I never thought of the other barrel.

But little time was left me for reflection; for a wood duck, resplendent with all his gorgeous colors, came swiftly down from the other direction. Every line of his brilliant plumage I could also plainly see along the gun, for I was as cool as before. Yet this gay rover of the air never condescended to fall sheer, rise or even quicken his pace, but sailed along at the report of each barrel as unconcerned as a gossamer web on the evening breeze.

I concluded to retire from the business of single shots and go into the wholesale trade. This conclusion was firmly braced by the arrival of fifteen or twenty mallards in a well massed flock. They came past me like a charge of cavalry, sweeping in bright uniform low along the water with shining necks and heads projecting like couched lances. I could see four or five heads almost in line as I pulled the first trigger, yet only one dropped and that one with only a broken wing. As they rose with obstreperous beat of wing I rained the second barrel into the thickest part of the climbing mass and another one fell with a broken wing, while another wabbled and wavered for a hundred yards or more, then rose high and hung in air for a second, then folding his wings descended into a heavy mass of reeds away on the other side of the main slough. Meanwhile my two wounded ducks, both flattened out on the water, were making rapid time for the thick reeds across the little slough and both disappeared in them just as I got one barrel of my gun capped.

So it went on for an hour or so. There was scarcely a minute to wait for a shot, yet in that hour I bagged only four or five ducks; and I should be extremely reluctant to swear that two or three of them were not mudhens. I had already seen more ducks than I had ever seen before in my whole life, tame ones included. Yet in the full tide of pleasure I was slowly drowning under a weight of bitter disappointment. The nice little gun that had cost so many guineas in London, that had such a delicate balance, such a perfect fit to my shoulder, whose joints were so perfect, and whose locks had such an oily play and musical click, whose vent plugs, too, were of pure platinum—I had carefully tested them with all the acids known to chemistry—that dear little pet gun that I had so carefully cleaned and polished and oiled and filled with tallow, if I laid it by for a week, that beautiful little gem that had killed so many long shots at field plover and made so many bushy tails relax in the tallest hickory trees, would not stop the slowest duck at thirty yards more than once in five or six shots. And my feelings were not soothed by the steady, dull "wop" that followed each report of Everett's gun, no larger than mine and a cheap American potmetal at that. To tell the truth, I felt a slight nibbling of envy at my heart strings.

While gazing a moment into the blank that despondency often brings before me, two blue-winged teal shot suddenly across the void. With the instinctive quickness of one trained to brush shooting, I tossed the gun forward of the leading teal about the same space that I had been accustomed to fire ahead of quail at that apparent distance. The rear duck, fully four feet behind the other, skipped with a splash over the water, dead, while the one I had intended to hit skimmed away unharmed. I had fallen into the common error of tyros at duck shooting, viz., underestimating both the distance and speed of the game.

Some of my friends who had never been west of the Alleghanies had often said that there was no sport in duck shooting, that it took no skill to stop a clumsy duck in clear, open space, and that the duck was not a game bird anyhow, etc. How I wished for the presence of some of those friends that evening as old Phœbus entered upon the home stretch and his glowing chariot neared the gate of gilded clouds. The number of ducks increased by the minute. They came with swifter and steadier wing and with more of an air of business than they had shown before. Those hitherto flying were nearly all ducks that had been spending the day in and around Senachwine and its adjacent ponds and sloughs. But now the host that during the day had been feeding in the great cornfields of the prairie began to move in to roost, and the vast army of traveling wildfowl that the late sharp frosts in the North had started on their Southern tour began to get under way. Long lines now came streaming down the northern sky, widening out and descending in long inclines or long sweeping curves. Dense bunches came rising out of the horizon, hanging for a moment on the glowing sky, then massing and bearing directly down upon us. No longer as single spies, but in battalions they poured over the bluffs on the west, where the land sweeps away into the vast expanse of High Prairie, and on wings swifter than the wind itself came riding down the last beams of the sinking sun. Above them the air was dotted with long wedge-shaped masses or converging strings more slowly moving than the ducks, from which I could soon hear the deep, mellow honk of the goose and the clamorous cackle of the brant. And through all this were darting here and there and everywhere ducks, single, in pairs, and small bunches. English snipe were pitching about in their erratic flight; plover drifted by with their tender whistle, little alarmed by the cannonade; blue herons, bitterns and snowy egrets, with long necks doubled up and legs outstretched behind, flapped solemnly across the stage; while yellow legs, sand snipe, mud hens, divers, I know not what all, chinked in the vacant places.

When I shot the last one of the two teal ducks instead of his leader, I thought that I had discovered the art of missing, and fondly imagined that the skill I had acquired by shooting in brush would now show my friend Everett something worthy of his notice. How the bright bloom of that youthful conceit wilted under the fire that now consumed my internal economy! The nerves that felt but a slight tremor when the ruffed grouse burst roaring from the thicket now quaked like aspens beneath the storm that swept over me from every point of the compass. There I stood, the converging point of innumerable dark lines, bunches and strings all rushing toward me at different rates of speed, indeed, but even the slowest still fearfully fast. There I stood bothering with a muzzleloader, loading it with trembling hands, fever heat and headache from its recoil under the heavy charges I was vainly pouring into it, with the last duck that had fallen swimming away only wounded, half afraid to reshoot it because my ammunition was getting exhausted, yet knowing that it would surely get away if I did reshoot it; painfully conscious, too, that my chances of hitting a well duck were fragile compared with the certainty of a shot at the cripple, there I stood delighted yet bewildered, ecstatic yet miserable. And little conscious of how cruelly he was harrowing my feelings, Everett called out:

"Let everything go now but mallards, and land them close to your feet."

A fine sentiment! Very appropriate, neatly expressed and handsomely emphasized by the wop of a four-pound mallard in the mud beside him. He might, however, have spared his wisdom for a worthier subject.

Never did nature make a fitter background for such a display as appeared when twilight sunk over the earth. The sky was one of those rare autumnal skies, on which light is shattered into a hundred tints, when, above the horizon all is clear cut in sharp outline, and over all below it lies a pallid glow that intensifies all brilliant colors, but throws a weird, sepulchral gloom upon all somber shades. From the departed sun a broad, rosy light radiated far away into the zenith, while the clear sky on the east was changed by the contrast into pale gold tinged with faded green. North and south the deep blue changed into delicate olive tints, shading into orange toward the center of the great dome. On the west were cloud-banks of rich umber, fringed with crimson fire, on the east long banks of coppery gold, and aloft long fleecy streams of pale, lemon-colored vapor. Over such a stage now suddenly poured a troop of actors, that made the wonders of half an hour, aye ten, five minutes ago seem a mere puppet show.

Hitherto the ducks had all come from the level of the horizon. But now from on high, with a rushing, tearing sound as if rending in their passage the canopy of heaven, down they came out of the very face of night. With wings set in rigid curves, dense masses of bluebills came winding swiftly down. Mallards, too, no longer with heavy beat but with stiffened wings that made it hiss beneath them, rode down the darkening air. Spritgails and other large ducks came sliding down on long inclines with firmly set wings that made all sing beneath them. Blue-winged teal came swiftly and straight as flights of falling arrows, while green-wings shot by in volleys or pounced upon the scene with the rush of a hungry hawk. The old gray goose, too, came trooping in in untold numbers, though few came near enough to give us a fair shot. One fell at a long shot from Everett's gun, striking the earth with a crash that suggested the fall of one of the heroes of Homer—

Doupesan de peson, etc.,

But nearly all of them steered high along the sky until over Senachwine Lake, or Swan Lake—a little below us to the northeast—then, lengthening out their dark strings, they descended slowly and softly in long spiral curves to the bosom of the lake. Brant, too, dotted the western and northern skies, marched along with swifter stroke of wing and more clamorous throats until over the water's edge, then slowly sailing and lowering for a few hundred feet in solemn silence, suddenly resumed their cackle, and like a thousand shingles tossed from a balloon, went whirling, pitching, tumbling and gyrating down to the middle of the lake. Far, far above all these and still bathed in the crimson glow of the fallen sun, long lines of sandhill cranes floated like flecks of down in their southward flight, not deigning to alight, but down through a mile of air sending their greeting in long-drawn, penetrating notes, such a flight as he must often have seen who wrote:

Æthera trauant
Cum sonitu, fugiuntque notos clamore secundo.

Myriads of ducks and geese traveling from the north, swept by, far overhead, without slackening a wing. Far above us, the mallard's neck and head, looking fairly black in the falling night, could be seen outstretched for another hundred miles before dark. "Darkly painted on the crimson sky," the spritgails streamed along with forked rudders set for a warmer region than Senachwine. Widgeon sent down a plaintive whistle that plainly said good-bye. Bluebills, woodducks, spoonbills and teal, sped along the upper sky with scarcely a glance at their brethren, who chose to descend among us. And far over all, with swifter flight and more rapid stroke of wing than I had deemed possible for birds so large, a flock of snowy swans clove the thickening shades as if intending to sup in Kentucky instead of Illinois.

Yet, of those that tarried there was enough for me. With tremulous hand I poured my last charge into the heated gun and raised it at a flock of mallards that were gliding swiftly downward, with every long neck pointed directly at my devoted head. *Wheeooo* shot a volley of greenwings between the mallards and the gun; *kssssss* came a mob of bluewings by my head as I involuntarily shifted the gun toward the greenwings; *wiff, wiff, wiff, wiff* came a score of mallards along the reed tops behind me, as, completely befuddled with the whirl and uproar, I foolishly shifted the gun to the bluewings. As I wheeled at these last mallards after making a half shift of the gun toward the bluewings, they saw me and turned suddenly upward, belaboring the air with heavy strokes, and just as I turned the gun upon them a mass of bluebills with the sound like the tearing of forty yards of strong muslin came in between, and just behind me I heard the air throb beneath the wings of the mallards I had first intended to shoot at. The gun wabbled from the second mallards to the bluebills and then around to the mallards behind me—each chance looking more tempting than the last—and finally went off in the vacancy just over my head that the mallards had filled when I raised it.

Perhaps you think I sighed for a breechloader about that time. If I sighed for anything it was a garden rake, for it would have been about as efficient as the gun and considerably easier to load; and I don't feel at all certain even now that I could not have raked down a few ducks before dark, while I feel quite positive that I could not have done so with a revolving rack of loaded guns at hand, with a gamekeeper to hand them to me.

But in a moment I sighed for nothing. You who think you know all about duck shooting, if you have never been in such a position, have something yet to learn. Excitement and success you may enjoy to the full but while your ammunition lasts you know nothing of the pleasures of contemplation. Amid the shock and jar and smoke, the confusion of even loading the quickest breechloader and retrieving the ducks even with the best of dogs you see nothing compared to what you may see without a gun. Many a mile would I walk to-day to see that scene once more and gladly would I leave the gun at home. I had felt my importance as a factor in the universe more or less reduced at Niagara, but now I felt completely annihilated. As I dropped the worthless gun upon a muskrat house and sat down upon top of it the whole world where I had been living vanished in a twinkling and I found myself in another sphere filled with circling spirits all endowed with emotions, hopes and fears like those that Dante saw in Paradise.

Oude si movous a diversi porti
Per lo grau mar dell' essere, e ciascuno
Con istiuto a lei dato che la porti.

There indeed was the great sea of being, but all one vast whirlpool that engulfed the soul of the poor powderless "tenderfoot," while his ears were stunned with the whizz and rush of wings all around his head, with the thump and bustle and splash of ducks alighting in the water before him, with the squeal of wood ducks, the quack of mallards, the whistle of widgeon, the *scape* of traveling snipe, the grating squawk of herons, egrets and bitterns, the *honk-wonk* of geese, the *clank-a-lank* of brant, and the dolorous *grrrroooo* of the far-off sandhill cranes.

Thankful am I that so many Western readers have seen the full intensity of "the evening flight." For otherwise I should not have dared to tell half the truth.

NEW YORK FOREST COMMISSION.—Albany, July 14.—The Commissioners appointed by the Comptroller to investigate and report a system of forest preservation will meet at Saratoga on July 23. Owners of timber and forest lands, and all who are interested in the subject have been invited to attend. An erroneous opinion has got abroad that this Commission was appointed to look after the Adirondacks only. The act under which they were appointed applied to all the forest lands in the State.

"NESSMUK'S" POEMS.

Editor Forest and Stream:

As you see, I have changed my spot; left Indianapolis and "troops of friends" and have made a camp here—Denver. The fishing was getting very feeble in White River and Fall Creek. The dynamite fiend and the gentlemen with a seine have done the business, and so Major Arnold removed to San Antone and I came here. He is baiting catfish with paste made of Limburger cheese and oatmeal. He says "they come right out on the bank to get it," and while there he secures them; and I am waiting till Colorado law allows me to fish in the neighborhood of Wagon Wheel Gap. I shall have something to report.

I reckon climate will have something to do with the weight and number of the trout that I shall say I have taken strictly with a fly. When I am by myself I do not disdain a worm, a piece of pork cut in the fashion of a frog, or even a grasshopper. I am of a tolerant spirit, and am disposed to defer to the wishes of fish. All the same I own the lightest fly-rod in the State (four ounces), and when not entirely out of meat stick to it.

"Nessmuk's" little book came to hand. It is too little. I read it at one sitting, and cried for more. I have had some experience in camping and fire building and in cooking, all along from 1862 to late in 1865, and later in forest and by stream, and I thought I was an expert, but I welcome "Woodcraft." It is the best thing in its line ever put into covers. It is excellent from end to end. I recognize "the hatchet" and "the face."

I made the acquaintance of "Nessmuk" through your columns, and in the spring of 1882 I dropped him a line of inquiry as to the sport possible in the region of his home, Wellsboro, Pa. He answered promptly in that fine writing of his (he can get as much on a postal card as I can on a sheet), and one day in July thereafter I appeared to him. Found him at work on a boot. He rose from his seat, informed his brother that he should be absent a week or ten days, and took me over and introduced me to the canoe Susan Nipper, his first love. I have not seen Sairy Gamp, and when seen, I shall not ride in her—"she takes somethink," and too much for my weight.

Not soon will I forget the week we had in the neighborhood of Ansley's. I have nothing to say of the number of fish we brought in, although on occasion I can be poetic. We brought in enough. The camp and fire and cooking was as laid down in "Woodcraft." It was all too soon over, but I still see the face of my friend and hear "the whimper of the brook."

I am of an age that I carefully disguise except to my mother, but I have had no happier days than with "Nessmuk" in the little camp some ten miles or so from Ansley's, on a stream fished decently for a hundred years.

"Woodcraft" and FOREST AND STREAM have made us all in love with his practical prose. How I desire to see his poetry in "covers." Not simply for my own sake. I have sat on a log and read enough of it to make a book. I wish it made into a book for the sake of others like myself, who wish that a Robert Burns would reappear on this side of the Atlantic. Somebody who would sing the song of the men who must work and the women who must weep in the land of the free and the home of the brave. "Woodcraft," excellent as it is, is not the best and last of "Nessmuk." He has concealed about his person poems of hope and patience and outlook that would speak to us in mines and mills who have no month or week for "woodcraft." He is as skillful with the heart of man, its needs and cries, as he is with the ways and appetites of the residents of forest and stream. "Nessmuk" is not only a trained observer of the habits of our dumb relations but a sympathetic and a powerful interpreter of the needs of man, woman and child. Please now do for the people of mills and mines what you have done for the people of forest and stream. MYRON W. REED.

DENVER, Col.

FACTS AND FANCIES.

WHILE fishing for trout during the first week in June, in a pond near Umbagog Lake, I noticed a large white sea gull, such as winter on our northeast coast, on her nest, on an isolated rock about two feet above the water. Two pairs of gulls have had nests on two separate rocks in this pond during my past ten summers' observation. As I neared the rock the old bird left and perched 100 yards away. There were two eggs in the large and flat nest of moss. Size of hen's eggs, blotched with black on a light brown ground. Hearing a gentle cry or chirp, I supposed it was the mother expressing her anxiety, but on my guide assuring me it came from the egg, on applying my ear, found it even so. My surprise was lessened when I saw the end of a bill just protruding from the shell, though my guide assured me he had often heard the chirp of chicks before the shell was broken.

The same day there was heard by my friend on the same pond, the unmistakable call of a moose for her calf, 200 yards away. We were about two miles from Middle Dam. A lumber operator told me he knew of moose in that locality last winter, but dared not inform his choppers, as they would prefer hunting to chopping.

A citizen of Upton, at the mouth of the Cambridge where it enters Umbagog, told me that twice during the summer (having no fear of the law before his eyes) he left his house at 6 P. M., went up the Cambridge, and returned each time at 11 o'clock with a deer—hunted with a jack.

There are severals pairs of bald eagles nesting near Umbagog.

Saw a pair of sheldrakes (*M. merganser*), who have a nest in a hollow tree near to a pond two miles from Umbagog. They do all their fishing for themselves and family in Umbagog, a pickerel lake.

A few years since, a friend informed me he shot a sheldrake flying from the lake to his nest. On throwing him into his boat two live pickerel, about four inches long, dropped from his mouth. This shows how pickerel may be transported accidentally to waters where they are not wanted.

Umbagog, the lower lake of the chain of the head waters of the Androscoggin, while the Rangeley is at the head, was once a fine trout lake. Some one, out of spite so said, stocked it with pickerel, and they are abundant. Will they go up Rapid River and into Richardson's Lake, passing Middle Dam? A few have been taken during the past two years at the foot of the dam in Rapid River.

Land-locked salmon appear to suffer no detriment when associated with pickerel, as appears thus far in this State. But woe to the trout and to Maine's great attraction for the angler if ever pickerel enter Rangeley waters. Umbagog is partly in New Hampshire and partly in Maine. The New Hampshire Commissioners, against the opinion of the Maine Commissioners, have introduced black bass into Umbagog. How land-locked salmon and trout will thrive with black bass is an untried experiment in our waters.

Was glad to see by your paper that land-locked salmon had been introduced into Umbagog by way of Rapid River. A few years since, the members of the Oxford Club, who have a club house on Rapid River, deposited a few land-locked salmon in the same place.

A five-pound salmon has been taken in Umbagog. Either one of the above, or one that has come down from Rangeley, as many will unquestionably.

I notice "Major Verity's" comments on my comparison of his statements with others on the performance of shotguns. Not being a professional in Horse Guard affairs, made a needless mistake in titling him General, for there was no general nor minor statement in his facts. All were major.

I considered "Verity's" article the most reliable of the many articles on guns, and intended that my allusion to it should be so understood, and entirely complimentary.

In his line I have a case in point; perhaps an old one. If so omit it. A friend of mine visited a pond, early one autumn morning, for black ducks. The pond was thickly covered with them. He blazed away both barrels for a winrow. To his amazement the whole surface of the pond appeared to rise—ducks and surface. The mystery was soon solved; the pond was frozen over and the ducks' legs frozen in, and the live ducks lifted the whole frozen sheet of ice, taking the slaughtered with them. The sheet of ice made a few gyrations and started southward on a migratory tour. The gunner took the cars in pursuit and picked up the dead ducks as they fell out of the melting ice. He picked up 123. There was oakum over the powder.

The pond is in existence and will be shown in proof to any doubter. AUSTIN.

MAINE WATERS, July, 1884.

MOOSEHEAD LAKE NOTES.

AM back from my trouting trip to Maine. I never saw so many fish taken at Moosehead Lake and vicinity as this season, and I never saw such large ones before. I, individually, captured nothing over two pounds, but I took a companion with me and introduced him to Kineo for the first time, and he had to land a four-pounder. It takes these amateurs to hold the cards. A party brought in one night fourteen brook trout that weighed thirty-five pounds. At another time 160 trout that turned the scales (Fairbanks, not fish) at 128 pounds. Among the lot were two of five and quite a number of four and three-pounders. During the former seasons the fishing has been the greater part of the time on the west shore, but this year it seemed to be along the east shore.

The new Kineo House is almost completed and built in modern style, and contains over 200 rooms. What a pretty idea it would have been to have modelled it after a large log house, with as many piazzas, bay windows and as elaborate finish inside as you please, but to have its exterior in perfect sympathy with its surroundings. It's a big hotel, but great Kineo Rock, towering above it, looks none the less majestic in comparison.

The railroad is laid through to the lake, and is to be opened for passengers July 14. The black flies were not numerous this season, and the fisherman when out on the breezy lake suffered little annoyance.

There was fine fishing at Spencer Pond (off the bay of the same name) but there are only two spring holes, and the trout are small, seldom weighing over one and a half pounds each.

On account of the lack of birch bark there is a steadily increasing demand for canvas canoes, the frame and outlines are the same, and the canvas is said to reduce the weight at least one-fifth.

This lack of the historic birch canoe is a great pity, as to me it has remained one of the pleasantest sights about Kineo. The Indian guides, however, still stick to the birch, and as my old Aroostook guide, Tom Nichols, remarked, "Me not so hard up yet to use canvas."

Many fine large fish were taken at the East Outlet (Wilson's), and many more, but smaller, at Indian Pond, four miles down the Kennebec.

The success of enforcing the game and fish laws the past two years can very easily be seen. When box after box of trout could be forwarded to fish dealers in Boston it was an object to capture more than was needed for daily consumption at the hotels. But now all is changed, only fifty pounds is allowed each sportsman, and he must accompany the box in transportation. Each trout must also be over five inches in length, and I sincerely hope the time will come when the use of the fly will only be allowed in its capture.

With the increase of little steamboats on Moosehead Lake I think the guides are getting a trifle lazy. In former years a paddle to the head of the lake and back, forty miles, was considered nothing for a day's sport, but to cross the lake, ten miles, to-day is quite an effort with a few of the guides.

The weather was perfect for the enjoyment of fly-fishing, not a rain or wind storm for weeks past, and although the mercury ranged from 90 to 100 degrees, it was seldom uncomfortable. That box of fly ointment, made by the Bangor man, "which you sent me," was a great success.

On my return home I stopped off at Portsmouth, N. H., and visited the Isles of Shoals—it's just lovely out there ten miles from land. I am sorry I cannot forward you some photos of this year's trip, but it is the first time on record since its invention that I have visited the woods without my tourograph. I got it into my trunk, but on Mrs. S. remarking that "she believed I had photographed the Maine woods out of existence," I reluctantly took it out—a fellow does have to accommodate his wife once in a while, you know.

HARTFORD, Conn. T. S. STEELE.

INTERESTING FIGURES.

OUR esteemed Chicago contemporary, the *Current*, has been comparing the quantity of matter published in its columns with that of other periodicals. We copy its figures, giving also those of the FOREST AND STREAM. The typographical measurements of the several periodicals for six months past are as follows:

	Ems.		Words.
THE FOREST AND STREAM	6,250,000,	or about	2,500,000
The Current	3,710,000,	"	1,484,000
The Continent	3,171,000,	"	1,268,400
The Century	2,376,000,	"	950,400
Harper's Monthly	1,626,000,	"	650,400
The Atlantic	1,446,000,	"	578,400

The measurement is of the reading matter, exclusive of advertisements. The comparison is interesting. It shows that the FOREST AND STREAM has published more than the *Current* and the *Century* combined, nearly as much as the *Current*, *Harper's* and the *Atlantic* combined, and more than the *Century*, *Harper's* and the *Atlantic* combined. These figures are not at all surprising.

Camp Fire Flickerings.

"That reminds me."

126.

SEVERAL years ago at one of our military posts was a French half-breed guide and interpreter named Battiste. One day Battiste went down to the sutler's store and invested in a new Winchester rifle and a flask of fluid. The latter purchase having its usual effect, Battiste returned to the post feeling very happy. Not far off he saw a pig belonging to the Major; and thinking to try his new rifle, fired at it and mortally wounded it. The next day the Major said to him:

"Battiste, you killed my pig. I shall charge you $10 for it."

"Him dead?" inquired Battiste.

"Yes."

"Well, give him to me then, I eat him."

"Oh!" replied the Major, "I had him for breakfast."

"I no eat him I no pay you," said Battiste.

"I have charged you $10 on the book," said the Major, "and you will have to pay it." Whereat Battiste went off highly incensed, muttering, "By gar! I no eat him, I no pay him. I fix him."

In the winter the Major and Battiste were running buffalo, and the Major's horse jumped into a deep coulée which was filled with snow, and in the struggle to get out, the Major was buried under the horse, only his head being visible.

"Battiste, help!" cried the Major.

"Yes," said Battiste, advancing to the edge of the coulée, "I help you, you scratch out him peeg?"

"Yes, yes," cried the Major, I'll scratch him out."

"Ver good," said Battiste, "the old woman, you buy him dress?"

"Yes," said the Major, "come, hurry up."

"Yes, I help you," said Battiste, and he proceeded to extricate the Major from his unenviable position. J. W. S.

UPPER MARIAS RIVER, M. T.

127.

Some years ago H., one of our leading dealers in sporting goods and a jolly sportsman, told his friends that he had a way of loading his shells that prevented the shot from scattering over more space than could be covered by a man's hand.

"O, yes," replied R., a brother sportsman, "you hold the gun about six inches from the target; anybody can do that."

"No, you don't," says H., "you shoot at forty, fifty, sixty, or even a hundred yards."

Of course it was worth twenty-five cents to be the possessor of such a secret, and the money was handed over. After being told the "secret," R. looked very serious, and remarked: "I'll get even with you or revenge myself upon somebody else." For two whole days R. in turn wanted to "sell" the secret, but nobody seemed to care whether his shot scattered a mile or less. He even offered to give C. the information gratis. But no; C., who talks of nothing but his gun, was so rushed with business that he didn't even stop to say no. In despair R. cried after him, "You use only one pellet in a load!" When the boys gather in the shop now, H. is the only one who smiles when "How to load a gun" comes up before the meeting. FRITZ.

WEST DUBUQUE, Iowa.

Natural History.

NOTES ON SHORE BIRDS.

WHILE recently perusing the list of the "Birds of Eastern Massachusetts," as found in "Maynard's Naturalists' Guide," I could but notice the difference between some of the notes there made and my own experience. I desire simply to notice the shore birds of interest to sportsmen, taking, as the first instance, the golden plover (*C. virginicus*). This species is given as "common spring and autumn migrant." Now during the past twenty years I have never seen one of these birds in the spring, nor did I ever hear of any save once (in the spring), and then it was a single bird from Cape Cod. Their appearance in the autumn is of course admitted.

The "beetle head" (*S. helvitica*) I have repeatedly seen in the spring; in fact I think they are seen and shot every season, though not in large numbers.

The turnstone, "chicken bird" (*S. interpres*) is stated to "frequent rocky shores." So they do, yet I think they are as often shot over decoys set in pond holes on the marshes.

The robin snipe (*M. griseus*) is given as "not uncommon during the migrations." This is one of the waders that I confidently look for any time after the 8th or 10th of July, and from then to and some seasons into September, though last season was an exception, it being decidedly an off year.

The purple sandpiper (*Arquatella maritima*) is given as "found on the coast during spring and autumn." I shot eight in the month of December some years ago, and saw a number of others. From this, and from the similar experience of a friend, I think they sometimes winter here. I never saw any in the spring.

The curlew sandpiper (*T. subarquata*), as stated, is rare, in fact a straggler from other shores. Two or three have been taken on the New England coast. I shot one at Ipswich in 1872.

Tringa canutus, or as here locally known "blue plover," is more, I think much more common in autumn than in the spring, though I have seen it at both seasons. It is not generally met with until the last of August, or better yet in September.

The red-backed sandpiper (*T. alpina americana*), one of the "grass birds," is rare in the spring but comparatively common in September or October, and perhaps later.

The pectoral sandpiper (*T. maculata*) is another and the commonest of the so-called "grass birds" from July 10 or 15, until quite late in the fall, but with us very rare in the spring. There seem to be two sizes of this species, and gunners commonly call them the "big" and "little grass birds."

The stilt sandpiper (*M. himantopus*), known about here as the "bastard yellow-leg," though why I do not know, as its legs are quite dark, is given as "very rare." This certainly differs from the experience of some others. As with all birds, there may be years when they are without apparent cause scarcer than usual, yet about every season when shooting shore birds I have taken them. I know of eight shot at a single discharge at Eagle Hill, Ipswich.

The white-rumped "peep" (*P. bonapartii*) is given as

"abundant." The same is also remarked of the common "peeps" (*A. semipalmata* and *minutilla*). The expression applies well to the last two species, but to the first, certainly not so well

The sanderling (*C. arenaria*) or "white beach bird," is common, though not as abundant as perhaps it was when Mr. Maynard first took notes. Twelve years ago I saw two baskets, each holding half a bushel, and rounded full of these birds that Lewis Stone, of Ispwich, shot between tides, down Plum Island River. I have never seen them like that since, though numbers of them doubtless are shot every season.

As to he willet (*Symphemia semipalmata*) or "humility," as we call it, scarce a season goes by without some being shot. I much doubt its being a "summer resident."

The winter yellow-leg (*G. melanoleuca*) is given as "arriving from the north nearly in August." I have shot them in July and all along until into November. Their appearance in the spring, about May, is, of course, understood.

The summer yellow-leg (*G. flavipes*) is mentioned as "summer resident, common during the migrations." I can name a dozen sportsmen who will corroborate me when I say this is a quite rare species to meet in the spring on our Eastern Massachusetts coast. By the middle of July, perhaps a little earlier, it may be expected confidently unless the off-year throws all plans out.

The solitary sandpiper (*R. solitarius*) is nowadays and near the coast a rather rare specimen at all seasons.

Of course, the spotted or "teeter" is one of the commonest, yet one almost always finds them scattered.

The upland plover, so called, (*T. bartramius*) is given as "not an uncommon summer resident." I have seen stray ones shot in the spring, but I think it is uncommon until the latter part of July and into August and the beginning of September, when some may be found almost any day, though to get them involves patient and persistent efforts, as they are pretty shy. They seem much less alarmed at the report of a gun than at sight of a man. As a rule, they will not decoy, still I have thus secured them.

The buff-breasted sandpiper (*Tryngites rufescens*) is a rare bird, as stated, but those I have seen have not been "found on the sandy shores," but the hills of Ipswich neck. Gunners generally called it the "hill grass bird," and to me it seems a fitting title.

The marbled godwit (*L. fedoa*) I never have seen alive, I mean so as to know it positively, but its capture as recorded by "Mr. H. B. Farley, at Ipswich, on July 17, 1869," is not at all unlikely.

The Hudsonian godwit (*L. hudsonica*), or "blacktail," is rare at all times, still I have shot it, and I think scattering birds are picked up about every season. I never knew of one in the "spring."

Of the curlews, the "old sicklebill," or hen curlew (*N. longirostris*) is, and has been for years, the rarest. The jack curlew (*N. hudsonicus*) is much more common, though scattering birds only are shot, as they seem to be bound right along when passing south in July.

The "dough bird" (*N. borealis*), though the latest is generally the most common. Sometimes in August and in September they are found quite numerous, and often in company with the so-called "blackbreasters" (*C. virginicus*) on the hills of Ipswich and Essex, and again on Cape Cod.

Of the phalaropes, or, as sometimes named, the "web-footed peeps," I have taken two species, (*P. fulicarius*) while on a fishing vessel well out in Massachusetts Bay, and (*L. hyperboreus*) at Swampscott over decoys. I have known of a few others, but they do as stated, "keep off the coast."

Various questions might profitably be discussed while criticising this "List." They are about all within the limits of that very important matter to ornithologists and sportsmen too, the geographical distribution of species, a subject upon which much light may be thrown by observations and data yearly—yes, often daily—collected, and jotted down with but very little trouble. These data placed in the hands of some competent person, like Dr. Coues or Mr. Ridgway, of the Smithsonian, and in a little while we should be able to see appearing in our FOREST AND STREAM some of the results, and I am confident we should learn facts full of interest and now all too obscure. Before closing these remarks let me say it is indeed surprising to see how little real knowledge is possessed by the average sportsman, about even the commonest species. It seems to be enough for him to know a goose from a duck, a snipe from a woodcock, and a few other equally plain things. If my brother Nimrods would try and book up a little I am quite sure it would not detract from their sport (it never has from mine); and then we should, by interesting this large and important class, save valuable birds which now go to the larder and oblivion.

RAYMOND LEE NEWCOMB.

WEATHER CONDITIONS.	TIME.	No. 7	No. 12	No. 17	No. 5	No. 11	No. 10	No. 24	No. 25	No. 22	No. 16	No. 36	No. 1	No. 14	No. 26	No. 19	No. 6	Tl.
75°, calm, clear	4 to 5 A. M.	11	1	9	4	4	10	7	5	6	2	6	6	6	4	3	1	85
74°	5 to 6 "	12	5	9	9	12	12	8	7	4	5	8	8	6	6	4	5	118
77° to 84°, wind light, S.	6 to 7 "	19	4	16	15	9	22	12	10	7	7	8	9	12	11	6	4	171
84° to 85°	7 to 8 "	22	17	22	18	14	17	9	11	7	14	14	8	8	10	6	5	202
85° to 86°	8 to 9 "	26	18	16	19	18	21	9	14	13	13	19	9	7	10	11	9	232
86° to 87°	9 to 10 "	28	25	22	27	25	17	15	15	20	22	12	14	11	7	6	10	276
87° to 89°, wind increasing S.	10 to 11 "	27	32	20	20	27	20	12	9	13	17	17	13	6	10	5	7	255
89°	11 to 12 "	17	18	23	14	24	10	16	14	18	18	12	10	8	4	6	5	217
92°, storm approaching, wind shifting to W.	12 to 1 P. M.	28	27	22	22	17	23	15	13	20	14	13	10	11	4	6	5	250
88°, rain commencing at 1:25	1 to 2 "	16	17	13	12	9	7	5	7	7	8	8	6	7	3	5	2	132
78°, rain ceases at 2:45	2 to 3 "	7	5	8	7	9	4	12	10	11	7	7	2	9	12	3	6	119
80°, clearing, calm	3 to 4 "	41	38	35	45	31	33	35	40	32	24	22	23	18	15	14	8	459
79°	4 to 5 "	25	32	20	22	14	17	14	13	13	6	11	5	8	11	8	5	224
79° to 83°, wind S.W.	5 to 6 "	7	20	11	15	12	12	9	14	12	11	7	10	10	3	7	6	166
82° to 81°, calm, clear	6 to 7 "	11	14	23	15	12	15	24	11	10	14	12	8	4	9	7	5	164
81° to 80°, calm, clear	7 to 8 "	15	11	11	11	17	4	15	10	10	10	9	10	16	15	6	7	177
		312	284	280	275	254	249	217	203	203	192	185	149	147	134	103	90	3277
Number of visits by male		119	104	140	128	127	92	83	119	98	61	73	39	63	58	57	33	1454
Number of visits by female		193	120	140	147	127	157	134	84	105	131	112	110	84	76	46	57	1823

HOW YOUNG BIRDS ARE FED.

Editor Forest and Stream:

It may be interesting to many of your readers to know more about the family cares of our birds. In order to find out how often young martins are fed by their parents, and at what times the principal meals are served, I watched my sixteen feeding pairs during an entire day, June 24, from 4 A. M. till 8 P. M., marking every visit of the feeding parents, males and females, separately.

The martins began hunting at 4:15, but no food was brought until 4:30.

The accompanying table shows that our young martins had to put up with a light breakfast, but the visits became more and more frequent as the sun and mercury climbed up, and reached their liveliest time between 9 and 10 A. M., *i. e.*, lunch time. After that a lull was noticeable, broken only by an approaching storm, which brought new life into the feeding business, but for a short time only, and to be reduced to a minimum during the light rain, 1:25 to 2:45. Even after the rain had ceased little feeding was done until the sky begun to clear up and the sun reappeared.

From that moment the number of visits swelled with great rapidity, and kept me hard at work for over an hour. It was the most substantial meal of the day, and the young martins may well call it their dinner.

After this the parents took a well-deserved rest, but when the sun neared the horizon they were all off again, preparing for supper, which was not so hearty as one might expect.

As a rule, the older the birds in the nest, the oftener they are fed, and from the size of the insect which the parents bring, the age of the young may be judged.

The youngest birds are fed at longer intervals with crushed insects, mostly small beetles, from the craw. About a fortnight old, they are fed from the bill with soft insects of the size of large flies; but insects with stings, such as bees and wasps, are never brought. When four weeks old, large dragonflies, grasshoppers and butterflies make the principal food.

The young martins do not leave their box until they are six weeks old.

The table itself needs no further explanation, except that the occupants of the sixteen boxes were of all ages, from one week old in No. 6 to five weeks old in Nos. 12, 16, 17.

The number of hungry mouths has something to do with the frequency of the visits. No. 7, which heads the list, has four young ones (four weeks old), while most of the other boxes have three. No. 16 has only two. O. WIDMANN.

ST. LOUIS, Mo.

THE ARIZONA QUAIL.

Editor Forest and Stream:

In your issue of June 12, I find an inquiry from Mr. J. B. Battelle, of Toledo, Ohio, relative to the Arizona quail I promised to send him and others. In reply I offer this explanation of the delay. My first proposition was to send the quail in September or October, when they become plentiful in our market here, but in reply to the various letters addressed me on the subject, and the expressed desire to have the quail with as little delay as possible, I concluded to get them elsewhere and forward them to their admirers in time for them to test their breeding and domesticating qualities during the present season. With that end in view I sent to a friend at Fort Yuma for two dozen, to be expressed to me here. This was in March. He replied that on account of the lateness of the season the birds would be difficult to procure, inasmuch as they were mating and consequently were shy of approach. He, however, sent me one dozen, which, in addition to two pair I already had, made up two-thirds of the number I purposed to send away. Unfortunately my cage room was somewhat limited, so I put the dozen strangers into the cage with one of my domesticated pairs. Business engagements called me away for a week, and on my return I found that the pugnacious little rascals had been systematically killing one another off. I took eight birds out of the cage at one time, some dead and others so badly pecked up that I killed them for humanity's sake. That left me so few, and as others were not procurable, I decided upon letting the matter rest until the fall birds came in. Recently, again they have been fighting, and one of the finest of the males has been so badly used up that I do not think he will live. I have one pair in a cage alone, and from them I expect a brood of little ones. The others are laying eggs all over their coop floor. Many of them have been broken. I have, however, just taken out ten good ones. The bulk of the remaining birds are females, consequently it would now be impossible for me to pair them for distribution. I can send two dozen in a cage by express for almost the price that half the number would cost, the weight of the cage being practically the same, and this on cost is quite a saving item. However, let those to whom I promised the birds do as Mr. Battelle has done, deposit the cost of the expressage with the FOREST AND STREAM and I will see that in due time they get their birds. It will be necessary for me to prepay the charges here, consequently by the deposit being made it will secure me against possible loss. I had a letter for eggs, but as I have mislaid the address I cannot forward them to the applicant. I trust that this explanation of the delay will prove satisfactory, for all may rest assured that they will get their birds. ADIOS.

TUCSON, Arizona.

[As suggested by "Adios," it may be well for those who are anxious to have quail of the first shipment to send the money to prepay express and boxing charges to us here. One gentleman has already sent us $4 for this purpose, which will be ample if enough birds are sent and they reach here in good condition. The expenses will be equally divided among those receiving birds, and if any balance remains over it will be returned to the sender.]

THE OAK WOODS SPARROW.

(*Peucæa æstivalis illinoensis*).

BY G. H. RAGSDALE.

I DEVOTED June 2 and 3 especially to a search for the oak woods sparrow, and traveled some fifteen miles through timber that seemed to invite them, but not a *Peucæa* was seen or heard.

On June 24, I started on what might prove another wild goose chase after *Vireo atricapillus*. Having ridden on horseback nine miles through intense heat, I turned from the prairie and rode into a woodland to rest and listen for *Peucæa*. I had not penetrated the wood a quarter of a mile before my ear caught an indistinct sound, which caused me to suddenly draw rein; nothing more was heard for some minutes, but I saw a brown sparrow light in a bush, at which I fired and missed. Tying my pony, I followed the course indicated by the bird's flight till I came upon a flock of sparrows, and fired at a supposed oak woods and killed a field sparrow (*Spizella pusilla*). I began to think I had only heard this bird, but as the locality looked so favorable, I concluded to put in an hour especially to determine whether the birds were present.

Stretching myself on the green sward in the shade of a post oak, I dreamed away about half the allotted time, when the faint, ventriloquial note of *Peucæa æstivalis illinoensis* was distinctly heard. I was wide awake now, and used my utmost strategy to approach the music box, but at the end of half an hour the note had entirely ceased and I had not even seen a feather. Calling Prince, I put him into the grass and tried to tramp up the bird, but it was no go. It was now high noon, and but few birds of any kind were to be heard. The field sparrows occasionally rested from feeding their young and uttered a trill, and some tits (*L. bicolor*) were scrambling after their dinner in an elm, but with this exception it might have been presumed that no other birds were near. As I had not seen one of the looked for birds since 1879, I was loth to give up the chase and sat down and waited. At length I gave up the hope of getting a specimen on this trip, and I returned to my horse and was in the act of mounting, when I heard a song quite close at hand. On advancing directly toward the sound I caught sight of the bird on a dead branch of an oak tree and shot it without its having heard or seen me, as I was screened by another tree. It was a nice specimen and not badly mutilated, but showed the worn dress. It was now 2 o'clock, but I felt well paid as I mounted and started in a hurry after blackcaps, but before I had proceeded a hundred paces I heard another song and gave chase. As I approached the bird would take short flights directly from me, and thereby be screened by the tree in which it was singing; finally I saw it fly and marked the limb it perched upon and secured it. I now "went on my way rejoicing."

GAINESVILLE, TEXAS.

FRIENDLY SQUIRRELS.

WHILE fishing in Spencer Bay, Moosehead Lake, Me., one day this summer, a red squirrel was seen swimming on the water. It soon discovered me and, swimming to the side of the canoe, made two ineffectual attempts to jump aboard, but fell back into the water. My guide then held out his paddle, on to which the animal jumped and gained a safe foothold on the boat. He ran about the canoe, climbed over my shoulder, and finally perched himself at the bow, and with blinking eyes attempted to understand his traveling companions. Having at last satisfied his curiosity, he again passed over my shoulder to the stern of the boat and jumped off into the water, raised his bushy tail for a sail and swam ashore. A similar incident happened to another canoe a few days previous, the variety of which was increased by a party in a second canoe appearing and offering the squirrel a Kineo House doughnut, which, strange to relate, the animal devoured with avidity. On reaching the steamer which was awaiting the party off their fishing grounds, the squirrel jumped aboard, ran forward and climbed the flagstaff at the bows and remained seated on the golden ball top until it reached Kineo dock, when it disappeared in the woods. T. S. STEELE.

HOOP SNAKE IDIOCY.—The editorial hoop snake is rolling on. It was last seen in Virginia: "A green snake was found by a couple of gentlemen in the Roanoke Valley writhing and twisting at the foot of a beech tree. It proved to be a horned hoop snake, which in rolling down hill after some game, had struck the tree with such force as to drive the horn an inch into the solid wood."

WHAT THEY DID.

HANK WILDS.

Hank Wilds, of Chico, and a man by the name of Nelson, have been on an extended bear hunt near Berdan's. While walking along the mining ditch of Holben Brothers they discovered a bruin upon the hillside, and Wildes took a shot at him. This infuriated the bear and he started in the direction of the men. Nelson dropped his gun and told his partner not to shoot again as the bear was coming that way, and skipped out across the ditch and down a twenty-seven-foot embankment. Nelson did not stop until he reached Holben's camp, where he informed the boys of what had happened. They went to the relief of Wildes, and as they reached the place where Nelson left his partner they discovered the latter gentleman about a quarter of a mile distant in the top of a "sturdy oak." They called to him to come down, when he made a statement that the bear weighed 1,500 pounds, and that it had chased him to the tree in which he was found. The bear was found only a short distance below, but it was only a cub.—*Chico (Cal.) Chronicle.*

JOHN GRAY.

Mr. John Gray has had a steel strap set for bears in the gorge below the falls. Last week upon reaching the trap he was confronted by an immense black bear that had been caught by the foot, and was making a fearful racket among the rhododendrons in trying to liberate itself. Mr. Gray was armed with a small shotgun loaded with bird shot. With this he banged away at the bear, which, at the report of the gun, broke away with the trap, chain and all, and tumbled over a cliff fully fifty feet high, falling into the top of a spruce pine, from which Mr. Gray found it impossible to dislodge it, and he was forced to go ten miles down the river, where he collected a crowd of men, and upon returning the bear was found still in the tree, having been unable to descend with the steel trap. The bear was killed, and was found to weigh 400 pounds—one of the largest black bears that has been killed in this county for years.—*Morganton (N. C.) Mountaineer.*

STEVE MEEK.

We were visited last week by Steve Meek, the pioneer hunter and trapper of California. Mr. Meek first set foot on California soil in 1832. He remained here but a short time and then hunted and trapped in the Rocky Mountains, returning to California in 1836, where he piloted the first emigrant train through to Oregon. He is now 79 years of age, and is afflicted with rheumatism, but the luster of the old man's eyes show considerable vitality yet. His mind is as strong as ever, and he remembers clearly events occurring 50 years ago. Like most California pioneers, he is not overburdened with this world's goods, and should receive a pension as a means of sustenance. He resides in Fort Jones with his son.—*Reading (Cal.) Democrat, June 25.*

BILL ADAIR.

Mr. Bill Adair killed another deer on Monday. Bill is beating all of the boys, but they say he deserves no credit for the last one as the deer was foolish enough to come up in sight of the depot and stand there until Adair came up and killed it.—*Goldman (Ark.) Prairie Farmer.*

Game Bag and Gun.

OPEN SEASONS FOR GAME AND FISH.

REVISED TO JULY 17, 1884.

General Provisions.

IT *is unlawful:* To kill, have in possession, transport or sell game birds, animals and fish, save only in the open season for each given herein; to net or snare game birds or animals; to take or kill game fishes by any other means than angling; to shoot waterfowl at night, or with any other than shoulder-guns; to hunt rabbits with ferrets; to enter inclosed land for shooting without consent of owner; to kill (except for scientific purpose) insectivorous or song birds at any time, or to rob nests of wild birds (except birds of prey).

Laws forbidding export of game obtain in Colorado, Connecticut, Dakota, Delaware, Indiana, Michigan, Minnesota, Missouri, Nebraska, New York, North Carolina, Wisconsin, Ontario, Wyoming.

Discriminations against non-residents obtain in Delaware, Iowa, Missouri, New Brunswick, New Jersey, North Carolina, Nova Scotia, Quebec, Tennessee.

☞ *The dates given are those between which the game and fish named may be lawfully taken.*

British Columbia.

Deer, elk, reindeer, caribou, hare, Sept. 1-Jan. 10. Grouse, partridge, prairie fowl, quail, snipe, robin, meadow lark, Sept. 1-Feb. 1. Wild duck, Sept. 1-March 1. Pheasant protected to Sept. 1, 1886.

Connecticut.

Ruffed grouse, quail and woodcock, Oct. 1-Jan. 1. Wildfowl, Sept. 1-May 1. Rail, Sept. 12-Jan. 1 (in New Haven, Fairfield and Litchfield counties, Aug. 20-Jan. 1). Game exportation forbidden. Wildfowl may be shot only with gun "such as is commonly raised at arm's length;" shooting from sailing or steam vessel, or sink-box on feeding ground, forbidden.

Speckled trout, April 1-July 1. Unlawful to net pike, pickerel, black bass, mascalonge. Local fish laws govern certain waters.

Delaware.

Partridge, quail, pheasant, ruffed grouse, woodcock, hare, rabbit, in Kent and Sussex counties, Nov. 15-Jan. 15; in New Castle county, Nov. 15-Jan. 1. Ortolan, reedbird, rail, Sept. 1-Jan. 1. Pinnated grouse (prairie chicken) protected to 1886.

Birds and rabbits may be killed by any person on his own land at any time. Entrance upon land for shooting without owner's consent, forbidden. Non-residents must become members of the Delaware Game Protective Association, fee, $5 first year, $2 per year thereafter. Secretary, George Churchman, Wilmington, Del. Sunday shooting forbidden. License (fee $50) required to export game for market. License (fee $25) required for buying game to sell again.

Indiana.

Ruffed grouse and quail, Oct. 15-Dec. 20. Woodcock, July 1-Jan. 1. Wildfowl, Sept. 1-April 15. Pinnated grouse, Sept. 1-Feb. 1. Wild turkey, Nov. 1-Feb. 1. Deer, Oct. 1-Jan. 1.

Exportation of deer, "quail, pheasant, wild duck, grouse, prairie chicken or woodcock," forbidden.

Maine.

Moose, deer and caribou, Oct. 1-Jan. 1 (forbidden to hunt with dogs), unlawful for one person to take more than one moose, two caribou or three deer in one season. Mink, beaver, sable, otter, fisher, muskrat, Oct. 15-May 1. Wood duck, dusky, black or other sea duck, Sept. 1-May 1. Wildfowl law does not apply to seacoast. Ruffed grouse (partridge), woodcock, Sept. 1-Dec. 1; pinnated grouse, Sept. 1-Jan. 1; plover, Aug. 1-May 1. Woodcock and ruffed grouse may be killed only for consumption within the State. Sunday shooting forbidden.

Salmon, April 1-Sept. 15; netting salmon permitted only from April 1-July 15. Angling for salmon within 100 yards of a fishway, dam or mill race, forbidden. Smelts, April 1-Oct. 1. Black bass, Oswego bass, white perch, July 1-April 1. Land-locked salmon, trout, togue, May 1-Oct. 1; in St. Croix River and tributaries, and all waters in Kennebec county, May 1-Sept. 15; during months of February, March and April it is lawful for citizens to take "and convey the same to their homes, but not otherwise." Unlawful to take land-locked salmon less than 9 inches in length, or trout less than 5 inches; or take, transport or have in possession for transportation more than fifty pounds of land-locked salmon or trout, or both. Unlawful to take these fish in Kennebago, Mollychunkamunk, Cupsuptic, Mooselucmaguntic and Welokennebacook lakes and tributaries, between Feb. 1 and May 1; unlawful in said waters to use spawn bait in September. Unlawful to take trout or land-locked salmon in the Rangeley stream, between the mouth of Kennebago stream and Howard's dam, from July 1-May 1, or at the South Bog stream from July 1-May 1, or in the Bemis stream from July 1-May 1, or in the Cupsuptic stream from July 1-May 1, or in the Kennebago stream between the foot of the first falls, near its junction with the Rangeley stream and the upper falls at the outlet of Kennebago Lake, from Sept. 1-May 1.

The Commissioners of Fisheries and Game are E. M. Stilwell, Bangor; H. O. Stanley, Dixfield. A digest of the laws may be had on application to them.

Manitoba.

Deer, cabri, or antelope, elk or wapiti, moose, reindeer or caribou, Oct. 1-Jan. 1. Ruffed grouse, pheasants, partridges, prairie chickens, Sept. 1-Jan. 1. Woodcock, plover, snipe, and sandpipers, Aug. 1-Jan. 1. All kinds of wild duck, sea duck, pigeon, teal, wild swan, or wild goose, except the variety of wild goose commonly known as the snow goose or the wavy, Aug. 15-May 1. Otter, fisher or pekan, beaver, muskrat and sable, Oct. 1-May 15. Mink and marten, Nov. 1-April 15. Exportation of game forbidden; consent of land-owner required before entering premises for hunting. To collect birds, etc., for scientific purposes, certificate must be obtained from Minister of Agriculture.

Michigan.

Deer, in Lower Peninsula, Oct. 1-Dec. 1; Upper Peninsula, Aug. 15-Nov. 15. Forbidden to kill deer in red coat or fawn in spotted coat, to kill in water or by pit, pitfall or trap. Elk protected to 1889. Ruffed grouse, Sept. 1-Jan. 1. Quail, Nov. 1-Jan. 1. Woodcock, Aug. 1-Jan. 1. Pinnated grouse, Sept. 1-Nov. 1. Wild turkey, Oct. 1-Jan. 1. Wildfowl, Sept. 1-May 1. (Wood, mallard, teal and gray ducks, Sept. 1-Jan. 1.) Snipe, Sept. 1-May 1. Swivel or punt gun and night-shooting wildfowl forbidden. Wild pigeons protected in vicinity (five miles) of nesting. Exportation of deer, ruffed grouse, quail, prairie chicken, wild turkey, forbidden.

Speckled trout, May 1-Sept. 1. Grayling, June 1-Nov. 1. Forbidden to take trout from stream within three years after it has been stocked, to catch grayling or brook trout of less than 6 inches length, to take California trout prior to June, 1885. Special laws govern certain waters.

The State society is the Michigan Sportsmen's Association, Secretary, S. A. Rogers, Jackson.

Missouri.

Ruffed grouse and quail, Oct. 15-Feb. 1. Woodcock, July 1-Jan. 10. Pinnated grouse, Aug. 15-Feb. 1. Wild turkey, Sept. 15-March 1. Deer, Sept. 1-Jan. 15. Plover, dove, meadow lark, Aug. 1-Feb. 1.

Unlawful for non-residents to kill game for exportation from State.

New Hampshire.

Plover, yellow-legs, sandpipers, woodcock, ducks and rail, Aug. 1-Feb. 1. Ruffed grouse, partridge, quail, Sept. 1-Feb. 1. Deer, moose and caribou, Sept. 1-Dec. 1. Mink, beaver, sable, otter, fisher, Oct. 15-April 1. Raccoon (coon), gray squirrel, Sept. 1-Jan. 1. Hare, rabbit, muskrat, Sept. 1-April 1.

Land-locked or fresh-water salmon, lake trout, brook or speckled trout (none less than four inches), April 30-Sept. 30. (Lake trout may also be taken "with single hook and line only," Jan. 1-April 30). Pike-perch, white perch, July 1-May 1. Black bass, June 15-April 30. Muskallonge, pickerel, pike, grayling, June 1-April 1. Forbidden to take striped bass of less than fifteen inches length. Fish introduced by Commissioners protected for five years.

Fish and Game Commissioners: George W. Riddle, Manchester; Elliot B. Hodge, Plymouth; Luther Hayes, South Milton.

New Jersey.

Ruffed grouse and quail, Nov. 1-Jan. 1. Woodcock, July 1-Aug. 1, and Oct. 1-Dec 16. Pinnated grouse, Oct. 15-Dec. 1. Deer, Oct. 15-Dec. 1. Rail, Sept. 1-Dec. 1. Reedbird (marsh hen) Aug. 25-Dec. 1. Upland plover, Aug. 1-Jan. 1. Summer duck, Sept. 1-Jan. 1. Squirrels, Sept. 1-Jan. 1. Rabbit, Nov. 1-Jan. 1.

Salmon trout, March 1-Oct. 1. Brook trout, March 1-Oct. 1. Black bass, June 1-Nov. 1.

Non-residents must become members of a game protective society of the State to shoot or fish within its borders, under a penalty of $50. New Jersey Game and Fish Protective Society has jurisdiction over entire State. Fee, $2 annually. Secretary, Wm. L. Force, Plainfield, N. J. Or, non-residents to shoot or fish in Camden, Gloucester, Atlantic, Salem, Cumberland and Cape May counties, may obtain membership certificate of West Jersey Game Protective Society. Fee, $5 first year, $3 annually thereafter. Secretary, Wm. T. Miller, 106 Market street, Camden, N. J.

New York.

Ruffed and pinnated grouse, Sept. 1-Jan. 1. Quail, Nov. 1-Jan. 1. Woodcock, Aug. 1-Jan. 1 (Oneida, Dutchess and Delaware counties, Sept. 1-Jan. 1). Wildfowl, Sept. 1-May 1 (in Long Island waters, Oct. 1-May 1); use of guns, except such as are habitually fired from the shoulder, shooting from sailing or steam vessels (excepted localities), use of battery or machine, decoys or bough houses at greater distance than twenty rods from shore (excepted localities), blind, net, snare or trap, unlawful. Deer, Aug. 1-Dec. 1; hounding, Aug. 15-Nov. 1, forbidden at all times in St. Lawrence county. Unlawful to crust, to kill by trap or spring gun, or to kill fawn in spotted coat. Robin, meadow lark, starling, Oct. 1-Jan. 1. Rabbit (hare), Nov. 1-Feb. 1; use of ferrets unlawful. Squirrel, Aug. 1-Feb. 1.

Speckled trout, April 1-Sept. 1. California trout, Sept. 1-May 15. Black bass, Oswego bass, June 1-Jan. 1; in Lake Mahopac, Dutchess county, Schroon Lake and River, Paradox Lake, July 16-Jan. 1; Lake George, July 20-Jan. 1. Salmon (or lake) trout, April 1-Oct. 1; in Lake George, May 1-Oct. 1. Forbidden to take striped bass of less than one-half pound weight. Unlawful to catch any fish within eighty rods of fishway.

Sunday shooting and fishing forbidden. Unlawful to export game from Dutchess and Rockland counties. Non-residents must pay $10 license fee to shoot in Richmond county (Staten Island). Forbidden to shoot for market in Niagara county.

Game protectors—See list elsewhere.

Pennsylvania.

Ruffed and pinnated grouse, Oct. 1-Jan. 1. Quail, Oct. 15-Jan. 1. Woodcock, July 4-Jan. 1. Wildfowl, Sept. 1-Jan. 1; on Mondays, Wednesdays and Fridays of each week only; shooting from steam or sailing craft forbidden, also netting and use of "other than such guns as habitually are raised at arm's length and fired from the shoulder." Wild turkey, Oct. 15-Jan. 1. Deer and elk, Oct. 1-Dec. 15; transportation allowed only Oct. 1-Nov. 30; forbidden to kill fawn in spotted coat, or to pursue or kill elk or deer in the water, or to chase them with dogs. Plover, July 15-Jan. 1. Rabbit (hare), Nov. 1-Jan. 1. Rail and reedbird, Sept. 1-Dec. 1. Grouse shooting at night unlawful. Wild pigeons protected on nesting ground. Sunday shooting and fishing unlawful.

Salmon, speckled trout, April 1-Aug. 1. Lake trout, Jan. 1-Oct. 1. Black bass, June 1-Jan. 1. Green bass, yellow bass, willow bass, rock bass, Lake Erie or grass bass, pike or pickerel, or wall-eyed pike, commonly called Susquehanna salmon, June 1-Jan. 1; does not apply to Lake Erie waters, save ponds on Erie Harbor peninsula. Speckled or California trout may not be taken less than five inches in length, nor black, yellow or green bass less than six inches in length.

Pike County: Deer, Oct. 1-Dec. 1; cannot be killed in the water. Squirrel, Sept. 1-Dec. 15. Rabbit, Oct. 15 to Dec. 15. Wood or summer duck, Oct. 1-Jan. 1. Woodcock, July 4-Dec. 15. Quail, Oct. 15-Dec. 1. Ruffed grouse, Sept. 15-Dec. 15. Salmon, speckled trout, May 1-Aug. 1. Pike, pickerel, June 1-Feb. 15.

Quebec.

Moose and deer, Sept. 1-Feb. 1 (female moose may not be killed before Oct. 15, 1888). Caribou, Sept. 1-March 1. Non-residents (except with permit) forbidden to take in one season more than 2 moose, 3 deer, or 2 caribou. Beaver, mink, otter, marten or pekan, Nov. 1-April 1. Hare, Sept. 1-March 1. Muskrat (in Maskinonge, Yamaska, Richelieu and Berthier counties), April 1-May 1. Woodcock, partridge and snipe, Sept. 1-Feb. 1. Black duck, teal and wild duck of any kind, Sept. 1-May 1. Migratory quail protected to Dec. 31, 1886.

Non-residents.—"No person who is not domiciled in the province of Quebec nor in that of Ontario, can at any time hunt in this province . . . without being authorized thereto by license to that effect. Such permit may, on payment of a fee of twenty dollars, be granted by the Commissioner of Crown Lands to any person . . . and is valid for a whole shooting season." Permits may also be granted to non-residents to take specimens for scientific purposes.

Salmon, May 1-Sept. 1. Speckled trout, Dec. 31-Oct. 1. Lake (salmon) trout, Dec. 1-Oct. 15. Black bass, mascalonge and pickerel, May 15-April 15.

Canadian Non-Export Law.

"The export of deer, wild turkeys and quail in the carcass or parts thereof, is hereby declared unlawful and prohibited, and any person exporting or attempting to export any such articles, shall, for each such offense, incur a penalty of $100, and the articles so attempted to be exported shall be forfeited, and may, on reasonable cause of suspicion of intention to export the same, be seized by any officer of customs, and if such intention be proved, shall be dealt with as for breach of the customs laws."—*Customs Act*, 1883.

Wisconsin.

Ruffed, sharptail and pinnated grouse and quail, wood duck, mallard and teal, Aug. 15-Jan. 1. Woodcock, July 10-Jan 1. Deer, Nov. 1-Dec. 15. Fire-shooting deer, chasing with dogs and exportation forbidden; also wildfowl shooting with "other than a gun habitually raised at arm's length and discharged from the shoulder," or by float, sneak boat, sail or steamboat. Otter, mink, muskrat, fisher, Nov. 1-May 1.

Speckled trout, April 15-Aug. 15. Black bass, wall-eyed pike, May 1-Feb. 1.

NEW YORK GAME PROTECTORS.

Editor Forest and Stream:

In answer to your note of inquiry about changes in the corps of game protectors, I inclose you a list of the protectors and of their respective districts as reorganized by the Commissioners of Fisheries at their meeting at Albany in May last, viz.:

First District. Counties of Suffolk, Queens, Kings and Richmond — George W. Whitaker, Southampton, Suffolk county.

Second. New York, Rockland and Orange—Joseph H. Godwin, Jr., Kings Bridge, New York.

Third. Westchester, Putnam, Dutchess, Columbia, Greene and Ulster—Matthew Kennedy, Hudson, Columbia county.

Fourth. Albany, Schenectady, Schoharie, Delaware and Sullivan—Francisco Wood, Schoharie, Schoharie county.

Fifth. Rensselaer, Washington, Warren, Saratoga and the town of Indian Lake, in Hamilton—Seymour C. Armstrong, Weavertown, Warren county.

Sixth. Essex, Clinton and all of the town of Long Lake in Hamilton except that part lying west of the east line of great lots Nos. 4, 5, 41 and 42—John Liberty, Elizabethtown, Essex county.

Seventh. St. Lawrence and Franklin—Peter R. Leonard, Ogdensburg.

Eighth. Montgomery, Fulton and the towns of Benson, Hope, Wells, Lake Pleasant, Arietta and Morehouse, except that portion of Morehouse and Arritta lying north of the south branch of Moose River—Thomas Bradley, Rockwood, Fulton county.

Ninth. All that part of Lewis lying east of the Black River and of the west lines of the towns of Diana and Croghan, all that part of Wilmurt, Herkimer county, and of Morehouse and Arietta, in Hamilton, lying north of the south branch of Moose River, and all that part of Long Lake, in Hamilton, lying west of the east line of great lots Nos. 4, 5, 41 and 42—John L. Brinckerhoff, post-office address, Old Forge, Herkimer county, or Boonville, Oneida county.

Tenth. All that part of Oneida lying north of the south line of Verona, Rome, Marcy and Deerfield, all of the county of Lewis lying west of the Black River and west of the west lines of Diana and Croghan, and all of the county of Herkimer lying south of the south branch of Moose River—Nathan C. Phelps, Remsen, Oneida county.

Eleventh. The counties of Otsego, Chenango, Broome, Cortland and Tioga, and all the towns of Oneida county lying south of the south lines of the towns of Verona, Rome, Marcy and Deerfield—Frederick P. Drew, Washington Mills, Oneida county.

Twelfth. Jefferson and Oswego—Wm. N. Steele, Clayton, Jefferson county.

Thirteenth. Madison, Onondaga, Cayuga, Wayne, Seneca, and the waters of Oneida Lake in Oswego—Wm. H. Lindsey, Canastota, Madison county.

Fourteenth. Schuyler, Yates, Chemung, Tompkins, Steuben and Allegany—A. N. Parish, Reading, Schuyler county.

Fifteenth. Monroe, Livingston, Ontario, Wyoming, Genesee and Orleans—Geo. M. Schwarts, Rochester, Monroe county.

Sixteenth. Erie, Niagara, Chautauqua and Cattaraugus—Stephen A. Roberts, Buffalo, Erie county.

The new arrangement of districts was made especially to afford greater protection to the deer districts in the Northern Wilderness, and to the waters of the St. Lawrence River.

Six protectors were detailed for service in the deer districts the present season, and the results of their services thus far have been very gratifying. In June eight violaters were detected by Protector Brinckerhoff in the Upper Moose River and Independence waters, where heretofore the poachers have defied law. Protector Leonard, of the St. Lawrence district, has had equal success on his beat. Protector Armstrong, of Warren county, reports that the law was never so closely observed in his district as it is now, and good results are reported also by Protectors Liberty, of Essex, and Phelps, of Northern Oneida.

The waters of the St. Lawrence and of Oneida and Seneca lakes have been swept of nets and other unlawful devices, and it may be safely said that there is, on account of the good organization of the protector system, a more general and vigilant enforcement of the game laws than ever before existed in the State.

R. U. SHERMAN,
Sec'y N. Y. State Com. of Fisheries.

OFFICE OF THE SECRETARY, New Hartford, N. Y., July 10.

TWO-EYED SHOOTING.

Editor Forest and Stream:

I have no fine-spun memories on the subject of one-eyed and two-eyed shooting, but for myself, I wish I had never heard of sighting down the barrel.

Any one shooting in the woods who shuts one eye is liable to put the whole load in a limb or a sapling that he didn't see when he pulled trigger; whereas, with both eyes open he would have seen the bird and all intervening objects. Again, if he aims with one eye at a bird coming overhead, the shot will pass under and behind the bird; and this must be so, because the line of fire and the line of flight are in opposite directions. Obviously then, the only way, except by chance, to hit a bird as he flies head on is to aim in front, and this can only be done with accuracy with both eyes open, as anybody may see who will try the experiment. This is also true of cross shots. 49.

VIRGINIA.

THE THREE-DAYS DUCKING LAW.

Editor Forest and Stream:

The most encouraging reports are coming in concerning the quantity and quality of game for the coming fall shooting. Quail and pheasants have wintered finely and are doing well, ducks will be found in the proper localities in abundance, and rabbits are now, as they long have been, predominantly on the increase.

In a recent number of your journal, a correspondent speaks in the highest praise of the "every-other-day" law, regulating the shooting of ducks. Is it not in reality an absurdity tending to disgust, rather than to give satisfaction to the duck hunter, especially to him who travels a long distance and has but a limited time in which to enjoy the pleasure of duck shooting? As an illustration of the fallacy of this law, suppose a city individual whose duties are of such a nature as to render his time extremely limited, manages to lock his safe, don his shooting suit, and joyfully depart for the duck pond or marsh for a week's enjoyment. Arriving there probably on Monday, he awakes to an awful realization of the fact that out of six days set apart by him for duck shooting, three, at least, and probably four days, are irretrievably lost. Yet his board bill and other incidental expenses run on with alarming regularity. Ducks may be, as they often are when you expect them otherwise, conspicuous by their absence, the weather may be in any other state than propitious for duck shooting, etc. Now let me ask the indulgent readers of FOREST AND STREAM whether such a law has not a greater tendency to weaken rather than to

strengthen the moral observation of Pennsylvania's game laws. Is it not a vice rather than a virtue? I would be pleased to hear the opinions of others on this subject. Individually, I unblushingly say that I bear no love for the man who was instrumental in the bill making this law.

C. A. R.

PITTSBURGH, Pa., July 10.

BEARS.—Many bears have shown themselves this summer in the woods and mountains of Bethel, Sullivan county, Pa. Near Black Lake in that region five or six were seen by gentlemen from your city who lately visited this section to arrange for summer quarters for their families. While on a tramp through the woods Messrs. R. and S. came to a large tract of low land with a great deal of fallen timber scattered about and many decaying stumps. Through it ran a small stream, and standing in the stream they saw a large black bear. Not one hundred feet from the *pater familias*, as he seemed to be, could be seen the mother and three cubs. She was busy pulling the bark from the old trees and stumps hunting for grubs upon which her little ones were feeding as the insects were brought to sight. Unprepared for any such sight the gentlemen thought it best to remain motionless, and having no arms it is needless to say they were quite nervous. For over an hour the ursine family kept possession of the lowlands, until a huge stone was rolled down the ridge and a terrific shout was raised, when the bears snorted, drew together, and shuffled off out of sight. At least one dozen full grown animals have been seen in this neighborhood, which has been famous for bears.—HOMO.

A LONG SHOT.—Gold Hill, Nevada.—After a fruitless day's hunt after geese, Friend Bob and myself were tramping toward home tired, hungry and wet, lamenting our bad luck and wishing that small boy who told us where there were "millions on um" was dead, when suddenly three geese were descried feeding about 125 yards beyond a fence just in front of us. Almost wild with excitement we wormed ourselves under the shelter of the fence, loaded up and surveyed the ground. Bob was preparing to shoot when I assured him that the geese were fully 130 yards distant, and that although his gun was a good one, and his shells loaded with 5 drams and BB, he would never be able to reach them. But perceiving that the geese were feeding from us and the chances for a shot decreasing, in spite of my remonstrances, he "let go," and to my surprise one of the big birds toppled over. I ran to it and having carefully examined it, assured Bob by way of explanation of his extraordinary shot, that one pellet had gone directly through the eye. With a fond look at his 10-bore and the most paralyzing cheek he told me that he "always shot at the eye, when shooting at such long range—it makes the business sure, you know."—SANGRADO.

WOODCOCK IN OHIO.—Wooster, Ohio.—*Editor Forest and Stream:* During the month of March I predicted that woodcock shooting this summer would be a failure. I based my predictions on the extreme cold weather we had during that month. The birds arrived very early and began nesting immediately; consequently all eggs were frozen. What did escape to be hatched were driven out by the prolonged drouths, so at this writing there is no shooting. A good shot with a good dog, might make a bag of from six to ten brace a day. Ruffed grouse are plentier than for many years past; quail are doing splendidly, and are quite plenty, the present and past dry weather being very favorable to them. Mr. Harry Miner of New York, and Mr. J. H. Mack of Haverly's enterprises, and myself, spent a few days at Chippawa Lake, woodcock shooting, with only fair success. —JOHN BOLUS.

IOWA CHICKENS.—Latimer, Iowa, July 10.—The open season on chickens now commences Sept. 1 in this State instead of Aug. 15 The weather has been more favorable for them while hatching than for several years past, and the coveys are all full, the most of them having at least a dozen. Saw ten or twelve coveys to-day and all of them could fly nearly as fast as the old bird. Do not think that any of the old ones will have to hatch the second brood this year. I caught three young mallards and put them with my tame ducks.—RAND.

INDIANA.—Evansville, Ind., July 11.—I am happy to say that the game law is being rigidly enforced here. I have three good gun clubs who are aiding me in every way, and we have been a terror to offenders. We have three suits with one party, who thought he could beat us, but we came out beautifully on top. The fish law is a dead letter here, as those most interested seem to take no interest in the matter Prospects for quail are better than for years past.—F. M. GILBERT (Game Warden First District, Indiana).

COLORADO.—Salida.—Have seen a few deer this spring and expect to find plenty in the fall. Of rifles give me a .40-70 and I ask no odds. They kill, are safe and sure. Any American 12-bore, 30-inch shotgun, modified choke, of reputable make, will do good work if you form the acquaintance of your gun.—KOKOMO.

THE MAN TARGET AGAIN.—Salt Lake, June 30.—Frank W. May and Joseph B. Tomlinson, both formerly of this city, went hunting near Belknap, M. T., Wednesday evening. May made a circle in his travel and in the dusk came upon Tomlinson, who mistook him for a deer and shot May dead.—*Sacramento Bee.*

ARRIVAL OF SHORE BIRDS.—Salem, Mass.—Saw four robin snipe (*M. griseus*) July 9, also about two dozen "peeps." Summer yellowlegs are reported, but I have not seen any yet.—X. Y. Z.

WHAT THEY SAY OF "WOODCRAFT."

"WOODCRAFT" is the title of a book that should be in the hands of all who delight in an outing in the woods. It opens with a portrait of the author, that genial old hunter and fisherman, "Nessmuk," who graphically describes in his own easy way what should be taken on a camping-out trip. From years of experience he gives what he has found to be the best method for making camps and camp-fires, fishing with and without flies, the best tackle, etc., and devotes some space to hints about cooking. Canoes, their build and qualifications, occupy a full chapter. The book contains many things that, though probably known before, are often forgotten, and being replete with useful practical information, will undoubtedly supply a long-felt want among pleasure seekers.—*St. John (N. B.) Daily Telegraph.*

Sea and River Fishing.

CAMPS OF THE KINGFISHERS.

Black Lake, Michigan.—X.

THE Assistant Postmaster was eager to try one of those wonderful abortions lately inflicted on the craft in the shape of an automatic, stem-winding, cockless, chokebore, rim-and-center-fire, lightning-geared, wind-'em-in-without-touching-it reel, and accordingly the next morning we took our way in the little weather-boarded boat down to Sturgeon Bay, where we were sure to get as many pickerel as we would care to handle, if nothing else. We took with us five minnow buckets which we intended to fill with good minnows to try on the bass in place of frogs, for pickerel fishing was beginning to be a trifle monotonous, and as I had not yet taken a bass, every joint in my frame was aching to feel the old-fashioned rush of a five-pounder and to experience the sensation of each individual hair straightening out at once when he made his first leap into the air.

Dick and the Scribe were half a mile down the lake ahead of us, apparently in a difficulty with something, and as we neared them we saw that Dick was engaged in a glorious fight with a heavy fish of some kind that was fully trying the stuff his rod was made of, and we lay off fifty or sixty yards outside to watch the issue of the point in dispute.

He was standing up intently watching the line as it cut through the water in a circle around the boat, the Scribe the while sitting placidly at the oars waiting, as he said, "to see Dick's rod break." But Dick's rod did not break, and we watched the progress of a splendid battle, that was hotly contested on both sides, until from sheer exhaustion the fish was compelled to succumb to Dick's better staying qualities, skill and fine tactics.

"Whoa there!" he shouted, as the fish made a powerful rush for the belt of grass. "Look at that, will ye?—must be that old he muskylunge o' Dan's an' yourn by the way he pulls. Come out o' that grass, durn ye, or I'll jerk yer jaw off;" and, as the Scribe swung the boat around, we could almost feel the rod crack in our own hands, so great was the strain on it and so intensely interested were we in the struggle. We could hear the Scribe's quiet suggestion, "Give him a little line Dick, and let him clear that big weed or he'll say good-bye to you," and Dick's vigorous rejoinder, "Who's a ketchin' this fish? back 'er up; swing 'er 'round 'tother way a little—there; now we've got him," and as the rod straightened up a trifle the fish swung out into the lake and headed for our boat. A few strokes sent us out of the way, and Dick again addressed himself to the fish.

"Fool old Richard by sneakin' into the grass, will ye? not much, if this old rod's as good as she used to be. I've been a lookin' fur ye fur twenty-five years, an' now I've got ye we'll have it out right here without any more pollyfoxin'. Sucked in the wrong frog, didn't ye?"

Here he took off his hat and dropped it in the boat, the fish all the time taking the line out from under his thumb with a pull that must have nearly blistered it, but Dick's Scotch was up and he would have paid no more heed to a blistered thumb just then than he would to a mosquito bite. When within twenty yards of our boat the strain was too great for the fish, and he came to the surface with a swirl and started back for the grass again.

"Must be a grass bass," said Dick, as he shortened the line and prepared for another tug to keep the fish out of the weeds. "I'll ye boys, he pulls like a hoss, look at that rod will ye, ain't she a daisy?" and then a few remarks to the fish, "think you'll git over there an' profligate 'round 'mongst them weeds till ye saw the line off an' git away, do ye? I'll jest show ye that it don't lay in yer britches to work that little game on Richard when he's got his sinister eye on ye. Look out there now, you old sardine! or I'll jerk ye whopper-jawed if ye try to git into that grass ag'in."

We laughed "voriferously" at Dick's quaint talk to the fish, but he had his hands too full to pay any attention to us, and the struggle went on. This time when he was pulled away from the bank of weeds the brave, game fish showed sign of having lost heart in the fight and after running most of the line off the reel he was brought back alongside under an easy pull, when the Scribe reached out with the gaff and lifted him into the boat, a dark-backed pickerel a little over three feet in length. He was a fine fish and had made a long and gallant struggle for his life, but Dick's taking ways and the remarks he had made to him at critical points in the battle had discouraged and bewildered him and he had lost his head (literally) and was now ready to take his place in Merrill's bar'l with others of his tribe who had been lured to their downfall by the same hankering after speckled frogs. To say that Dick was inflated with pride over his victory would be drawing it very mild, and as we had enjoyed the sport nearly as much as he had, we gave him a cheer and left him hooking on a fresh frog, with the remark coming over the water to us, "I'll jest angle fur another o' them sardines."

The wind was now rising again, this time blowing straight up the lake, and by the time we passed Pickerel Reef and turned the point toward Black River it was blowing quite fresh and the little boat plunging her bows into the waves with thumps that made the spray fly. Dick and Knots were coming half a mile astern, and it was a plain case that Knots, who was at the oars, had forgotten most of his early aquatic training (if he ever had any), as the boat would first shoot off with a sudden fit of determination toward the sandbank for a hundred yards, then by hard clawing with the starboard oar he would head her around and go lickety-split for the charred landmark on the opposite shore for a while; fierce clawing for five minutes on the larboard oar would then head her down lake for a short distance, and we could see them bobbing up and down like a cork, but evidently making little progress in the right direction. Suddenly, the wind would catch her on the larboard bow and away they would go again for the sandbank. The zigzag of an old-fashioned rail fence wasn't a marker to the erratic course of that "red cruiser of Black Lake," and we were moved to much hilarity at the heroic efforts of old Knots to keep her head to wind, which truly impels me to say was not very brotherly in us, but it must be borne in mind that we were not wooden Indians.

Knots would no doubt gladly have changed places with Dick, but the water was too rough to make the attempt, and with this in mind we let our boat drop back with the wind with the intention of taking them in tow and helping them down into the shelter of Sturgeon Bay, but when we came within hail Knots would not be towed, and when asked "Why all this meandering over the lake?" said, "Oh, I'm just rowing around for exercise, and as this boat is inclined to be a little devious I though best to let her gang her ways;" "An' that 'pears to be mostly sideways," chipped in Dick, who seemed perfectly content to let the Scribe take all the exercise he wanted.

This perversity scattered our good intentions to the winds, but Knots is nothing unless he is perverse, and it has become a settled notion with some of us that should the blessed old bundle of knots and gnarls ever fall into a stream and be drowned, his body would never be found unless near the extreme headwaters, feet up stream, for he never would by any possibility be induced to float with the current.

We left them to pursue their zigzag way and pulled down around the "stem-winder," past the mouth of Little Black and tied our boat to a stake driven into the soft mud in six or eight feet of water, at the edge of the belt of water lilies fringing the point separating the river and Sturgeon Bay, to fill our buckets with minnows; and I will say here, for the benefit of any wandering brother who may go to Black Lake, that around this point and for some distance along the lilies up the little bay is the only locality we found where good minnows could be taken in abundance, and they had to be caught with hook and line, or they might perhaps have been taken with a baited dip net, but this method we did not try, mainly on account of the conspicuous absence of the dip net. Seining for them is out of the question.

If a place is found around this lake, or most of the other lakes we have fished in this northern region where the shores are bare enough of grass, lily pads or rushes to make a draw with a seine practicable, right there you will be sure to find no minnows. We lost no time in getting to work, but a dozen casts around among the open places in the lilies led us to believe we were doomed to another backset, as we got nothing, nor could we see anything that looked like a minnow. A sudden twitch at M.'s line, however, was a symptom, and an instant later a vigorous jerk sent a five-inch shiner sailing over his head, and the hook tearing out, the victim landed "sab" on a broad lily leaf ten yards back of the boat. A suggestion that "leetle more moderation" in the use of the flexors and extensors, as our worthy brother, Dr. Henshall, would likely record it, might produce better results, had the desired effect, and the next one was flipped quietly out and placed in one of the buckets. Soon they came from all directions, out of the grass and lilies, and in ten minutes there must have been a solid half bushel of shiners in sight, all fighting eagerly for our baits the instant they were under water. They were from three to six inches long and we had our pick of sizes to suit the most "facetious" bass, as Dick would have said. Now and then a four or five inch perch would dash in, and with a quick snap seize the tempting scrap of worm and the next moment be dangling and wriggling in the air, wishing, no doubt that he had stood back and strained his jaw laughing at the silly shiners instead of making a fool of himself.

Occasionally a "blue gill" or a "red eye" would suck down worm, hook and an inch of line, and then our little switch rods, cut in the bresh a half mile above, would be called on to show their best qualities and temper in the vehement struggle that would at once ensue. When one of these were returned to the water, they would dart away under the lily pads in open-eyed wonder, thinking, we had a notion, that some new kind of lightning had struck, and they had better hunt other diggings for fear of another stroke.

But the silly shiners had no settled notions on the general effects of this kind of lightning, and just kept on fighting for the seductive worm—and even the bare hook—regardless of the fact that their comrades were being rapidly transferred to our minnow buckets, with crushed hopes and badly yanked jaws.

It was rare sport in a small way, and we enjoyed it vastly more than we would a whole day's bass fishing, at least the bass fishing that I had been having.

Brother Muller avers that he took not less than two dozen of these simple-minded shiners without a sign of bait on his hook, and that he never in his life had as much fun condensed into the same period of time. I think I hear some doubting growler say, "another fish lie nailed," so I will just turn our worthy brother M. over to the tender mercies of the readers of FOREST AND STREAM, to be dealt with by them as gentle as possible, knowing that this was his first day out and not in full practice.

I believe, however, that he did take them with the bare hook, because I was there, but I hardly expect any one else to believe it; however, we have made up our minds that it is "perfectly imperial" to us whether they do or not, as life is too short to waste in trying to prove the truth of all the details of a small fish story. KINGFISHER.

[TO BE CONTINUED.]

WANTON FOOD FISH DESTRUCTION.

THE following correspondence fully explains itself:

F. Endicott, Esq., Staten Island: Dear Sir—I was informed last evening by Mr. Fitzgerald, the proprietor of one of the hotels at the Great Kill (Giffords), that the crews of two sloops engaged in menhaden fishing have been hauling seine along the shores of Prince's Bay for some days past, and have boasted that they took a few days ago at one haul 5,000 weakfish. They have been remonstrated with and requested to desist, but intimate that they will do as they please about it, and are disposed to be quarrelsome. Two or three of the crew of one of the sloops came ashore at Fitzgerald's float yesterday and, after threatening to clean out the place, engaged in a fight in which, I am pleased to say from all that I can learn, they came out second best. I was at the beach last night and endeavored to obtain the names of the vessels then lying at anchor just under Great Kill point. One of Fitzgerald's men, John Crocheron, promised that if they were there this morning to get the names and send them to me. Inasmuch as he failed in doing so I infer that they moved early this morning and have probably gone further down the bay. They are using, so I am informed, a net with two or two and one-half inch mesh. Cannot something be done to stop this lawless proceeding? The resident fishermen of our own county, realizing the justice and medium of the law, have for some years, in response to earnest and persistent effort on the part of the Game and Fish Protective Association of our county, desisted from net fishing during the breeding season. Surely an effort equally as earnest and persistent should be made to prevent the wholesale netting of fish by non-residents on the spawning beds at this season. In haste, yours very respectfully, HENRY T. METCALFE.

Henry T. Metcalfe, Esq.: Dear Sir—On receipt of your letter I forwarded it at once to Mr. Blackford, and herewith append his reply. These people seem to be acting within the pale of the law as regards size of mesh, for by some unaccountable stupidity on the part of former legislators a two-inch mesh is allowed in "the waters over which Richmond

county has civil jurisdiction," one-half inch smaller than in other parts of the State, while in nets used in taking menhaden no restriction whatever is made as to size of mesh. This discrimination was undoubtedly made to protect certain fishing interests in the county, perhaps to save some influential man from the expense of buying a new net. If it has proved to be a two-edged sword and now cuts on our side of the blade, I don't see what we can do but grin and bear it until the next meeting of the Legislature. Still there is a way of getting at them. It unquestionably was not the legislative intent that the fishing for menhaden should be used as a pretext for skinning our waters of the more valuable food fishes, and if sufficient evidence is produced the Association will be glad to test the matter in the courts. Should you be able to give me the names of these ostensible bunkermen but actual destroyers of our food fishes, I think that we may be able to raise the temperature to an unpleasantly high degree for them. I trust that this letter of Commissioner Blackford's will be given a wide publicity through the press of the county, so that all may be on the look-out to detect and punish the offenders. Thanking you for calling my attention to the matter, I am yours truly, FRANCIS ENDICOTT (Clifton, Staten Island, July 10, 1884).

OFFICE OF EUGENE G. BLACKFORD, NEW YORK STATE COMMISSIONER.—*Mr Francis Endicott, President of the Game and Fish Protective Association of Richmond County, N. Y.:* Dear Sir—I am in receipt of a communication which was forwarded to me, making complaints with regard to the menhaden vessels seining weakfish and other food fishes along the shores of Staten Island. If you will at any time send me the names of the vessels, and if possible the names of the owners, who are engaged in this outrage, I will take steps at once which I think will prevent a recurrence. Respectfully yours, E. G. BLACKFORD (Commission of Fisheries, State of New York, July 9, 1884).

HIS FIRST BLACK BASS.

OUR county is dotted with a great many small lakes, there being about sixty-five, averaging in size from the smallest covering three or four acres, to those covering two or three thousand acres. Every summer, since commencing with the proverbial "small boy" up to the present time, we have spent from two to three weeks camping out among these lakes. Of late years, however, having attained the dignity of a family man, we have been obliged to abandon the camp and engage quarters at a farmhouse near some of the lakes, and so enjoy our "outing" with the family.

Fish any? Oh, yes, some. Any one who went to the lakes was expected to fish, as a matter of course, and we think this was the reason that we fished, because it was expected of us, more than from the real love of the sport. But a change came over the spirit of our dreams, and we found that the trouble was not with the fishing, but with the way in which we fished. We are willing to leave it to any fair-minded man if he would consider it sport to sit for half a day in a small boat, in the middle of a lake, under the broiling sun, holding a pole with a line tied to it, and baited with a lowly "wum," waiting for a stray fish to happen around and get caught? We think such "sport" would have discouraged Job himself. But we will tell you how the "change" came o'er us.

At the farmhouse where we were stopping this summer, there were other boarders, and among them a gentleman who was a most persistent angler. He used to invite us to go with him on his fishing trips, but remembering our previous experiences, we did not think the inducement sufficient.

One bright morning, however, we told him we would row him round the lake, but it was done more to "put in the time," than from any anticipation of sport on our part.

He was provided with a fine rod and reel, with the necessary fixtures for bass casting. Rigging up his rod, and baiting the hooks with minnows, he handed it to us, saying, "Now make a cast right over there by that old fence close up to the shore, and you will get a bass." We took the rod, and after making two or three trials, managed to drop the minnows in the neighborhood of the desired spot. Suddenly there was a commotion in the water down by the fence, and sure enough, there was a hungry bass there waiting for his breakfast, and he went for it, too.

"Hold still, hold still," whispered our friend, "don't jerk, wait till he runs with it." Timely advice, indeed, for we were just getting up our muscle, intending to jerk the fish out on the bank across the lake, for it felt and looked like a whale when it captured our minnow. By this time the bass made up it's mind that it had business somewhere else to attend to, and started to do it. Zip! How the line went out and how the reel did hum! It was an experience we never had before. Under the directions of our friend, who was managing the boat, we checked the fish after it had run about thirty yards, and when we brought him up, "he got on his ear" about it, and jumping clear out of the water, shook his head at us, and then started off again as lively as ever.

After making two or three dashes, he was working back near the old fence, where we hooked him, when we felt an extra jerk on the line, then it seemed as though our line was hitched to the bottom of the lake, and the rest of the inhabitants of the waters were trying to take that minnow away from our fish. The water boiled and splashed, and we could swear that that fish had fourteen fins and as many tails, for we saw them. We tried to work him away from the fence, for it was a dangerous place to get tangled up in, but the pull was so heavy we were afraid the rod would snap. Meanwhile the excitement in the boat increased, at least on the part of one of the occupants, and our friend had his hands full trying to keep us from stepping overboard or on him. He said afterward that we danced all around on the gunwale of the boat and kicked him several times in the bargain. We don't believe this story at all, but if he still persists in repeating it, as we hear he is doing, we shall always feel glad that we did kick him. There seemed to be a change of tactics on the part of the fish, and instead of the long, quick runs, there was a heavy, steady pull, with short jumps and dashes first one way and then the other, in fact it looked as though there was a difference of opinion at the other end of the line.

After playing the fish for a short time it gradually weakened and we reeled in our line. When it neared the boat imagine our surprise and delight when we found that we had hooked two fine bass. When we saw two fish we had another attack, but our friend reminded us that they was not ours yet, or we would probably have lost them after all. We soon had them safely in the landing net and then in the bottom of the boat. Weren't they fine? There was never such fish as those caught before, and they were ours! We caught them. Just think of it, two at once. They were both large-mouth black bass; one weighed three pounds two ounces and the other two and three-quarter pounds.

We never knew before why anybody ever told "fish stories" but found out then. We wanted to tell everybody within four miles all about those two fish and how they were caught, and all the other particulars. All our friends in this locality have heard about it so often that they will not listen any more, and we suppose this is the reason we send it to you. We have been converted and have joined the noble army of anglers. You will find us there any time.

Before closing we want to give in our testimony in regard to our grand paper. We are glad that there is one paper devoted to sportsmanship that can honestly be called a clean paper, and by your success you show that there are gentlemen sportsmen indorsing you. We have never seen the necessity of a pocket-pistol attachment to the rod and gun and we admire your nerve in attacking it. CUB.

CHICAGO, Ill.

CHARMS OF SALT-WATER FISHING.

Editor Forest and Stream:

Your issue of July 10 contains an editorial to which I take exceptions. I am well aware that an editor, like a clergyman, always has the floor, and that any reader who makes an issue with an editor in his own paper is quite likely to get the worst of it in the argument. However, when I see what I think to be injustice, it is my disposition to make my protest, let the consequences fall where they may. The article I refer to is yours on "Salt water Fishing." You say:

"There is a wide difference between the salt-water and the fresh-water angler. The former is content to enjoy himself in his own way and say no more about it. The trout and black bass angler, on the contrary, considers the fishing as merely part of his pleasure; the trip, the scenery, the grand old woods, all inspire him to fight his battles o'er again. There is nothing of this in the salt-water angler, be he a member of a swell bass club or an humble brother of the hand-line committee who takes the Staten Island ferryboat in the morning and, with the patience of Job, goes to the rocks and oyster beds for weakfish and with crab bait awaits a "tide-runner," as the big weakfish are called in his vocabulary. This sitting on a hard seat all alone waiting for something develops a reticence that the fresh-water angler seldom acquires. There is no doubt that the surroundings influence the angler to a greater degree than has been suspected, and the depressing effect of the ocean is noticeable on those who angle in it. * * We have yet to see the salt-water angler who possessed the fire and enthusiasm of fresh-water fishers. It is possible that there may be men who love salt water as the trout angler loves mountain streams. If so we do not know them. * * * The salt-water angler is seldom inspired by the beauties of nature because there are no such beauties in the surroundings to be inspired by," etc.

Now, my dear sir, I must assert that you are not fully conversant with that of which you write. In the first place, you forget that such anglers as Genio C. Scott and Robert B. Roosevelt, both notably salt-water anglers, have been anything but "silent men," have never been lacking in inspiration or poetry of expression, and have been what seems to me very happy in their descriptions of the beauties and pleasures of salt-water fishing; and a score more I could name of our devotees to salt-water angling, whose souls are full of inspiration and sentiment derived from their association with the shores, rocks and waves of the ocean, while enticing its finny inhabitants with rod and reel, and even with the despised hand-line, at which let no one cast a sneer. Come with me, my dear sir, and stand on the ledges, near which may be taken that royal fish, the striped bass, the bluefish, or the gamy and obstinate tautog, and let the bracing breezes of old ocean fan your cheeks and fill your lungs with the stimulus of pure ozone, while the breakers dash over the rocks, fling their spray in your face and eddy and boil around your feet, and as some noble fish dashes away with your bait and tries your skill and tackle, and you wonder whether the quarry is yours or whether fish and elements combined are not more than a match for your prowess, and with the voice of the booming waters in your ears, your every faculty awakened and aroused by the grandeur and beauty of your surroundings, come and you shall no longer say there is no inspiration in salt-water angling, but you shall feel the power of nature in your soul, and you shall say that angling has resources far greater, grander and more exciting than you ever dreamed of in your philosophy, and you shall envy the salt-water angler in that he has been all the while the possessor of joys such as had never before come to your knowledge. You will no longer call the sea "monotonous;" you will see that it is ever varying, ever changing and ever and always a source of new beauties and surprises and delights, and at the same time you will feel the resistless power which dwells there and compels your acknowledgment. I have stood on the brink of Niagara and felt silenced by its awful presence. Similar sensations come over one when he communes with nature in any of its grander developments, and the ocean has, perhaps from its very grandeur and force, tied the tongues and pens of many of Walton's disciples; but there have been, and are, many who have described its delights and resources with a fullness and eloquence that need not blush beside the choicest efforts of those who only sing the praises of the mountain stream or woodland lake. The ink has long ceased to flow from the pen of the gentle "Genio," but we have still a Roosevelt and a Ward, and many there be like them, and to these I say, rise up my brethren and assist me in the defense of one of our grandest and most favored sports—salt-water angling.

C. T. DUNCKLEE.

BOSTON, Mass.

Editor Forest and Stream:

Having been a reader and contributor of the FOREST AND STREAM for a number of years, and seeing an editorial in your last issue on salt-water fishing, I write you concerning that sport. I am one of those who indulge in that kind of fishing, and would like to give some of my experience, or rather inform those who love salt-water fishing how I have succeeded for the last three weeks. We all know that everybody is not placed in a position to go fishing for three or four weeks "at a lick," nor write long articles about it, and some people don't believe in fish stories sent on by parties hundreds of miles away, unless they put a little more salt in them.

I will give you an account of my sport and luck combined that I have had lately, hoping others will do the same. Friday evening, June 20, a party consisting of myself and two friends took the last train on the New York, Woodhaven and Rockaway Railroad to Broad Channel, Jamaica Bay (you can start from Hunter's Point, Bushwick, or Flatbush avenue as well). We stopped over night; room and bed for $2.50. Got up at 3 A. M., took a boat and paid fifty cents for use of same. Pint of shrimp cost forty cents. Started at 3:30 A. M., tide running in, and went east to the club house, or a little above it, between the club house and a place they call the "Pot," known to most of our baymen, and dropped anchor, rigged our rods and commenced to fish about 4:30 A. M. I was the first to get the line over, and soon hooked a two-pound weakfish, and a hungry fellow he was, for he had my bottom hook away down in his belly. We fished until 6:30 A. M. The tide changing, fish stopped biting, and to be sure we stopped fishing, put up our tackle, and took a bite ourselves, which we had fairly earned after one hour and three-quarters of exciting sport, for fish at that time in the morning bite fearful and almost take the rod and reel out of your hands. We counted our fish, in sizes running from one and a quarter to three and a quarter pounds, and 129 was the number, all weakfish. Now if this don't come up to your fresh-water fishing, I mean when you fish for about five or six hours and catch thirty or forty fine trout from five to six inches in length, or about six to the pound, and instead of sailing to your hotel in a boat you must walk from three to five miles and carry a heavy load of trout, then I am greatly mistaken. We congratulated each other, divided our fish, and by 8 o'clock we fastened our boat to the float and took the first train for home.

The following Monday, June 23, the same party with an addition of two boys, one nine and the other fourteen years of age, took the train for the same place, started out at 3 o'clock on Tuesday morning, my two friends in one boat and the two boys in the boat with me. We took it very easy, for the largest boy pulled my boat up to the fishing grounds, the tide running in of course, and the two boats anchored close together. My friends began to catch fish while I rigged the boys with drop lines. The small boy on the start lost two fish, but the third one he pulled in with such a force, slapping the fish on the side of my head that my hat went overboard. He continued pulling in fish and caught nineteen before he was tired out. Good for a boy of his age. Fishing up to 8:30 A. M. we put away our tackle, counted our fish, and had 86 and my friends 59, making a nice little pile, 145 in all. We got back to the dock and took the 10:47 train for Bedford Station, got home, and surprised our friends with a grand mess of fine fish.

July 7 the same party, the two boys included, started from the float at Broad Channel for the fishing grounds at 3:30 A. M., the tide running in, water smooth as glass, and full moon. It would cure a sick person to be out on the salt water on such a lovely morning. You could hear the meadow hens cackle for miles around you, now and then you would hear "quack, quack" from large birds called by that name, and bluefish, or snappers, as they call them, could be seen breaking all around. We got on the grounds about sunrise, and such a beautiful sight! The boys felt delighted. We fished up to 7 o'clock. The two boys and myself caught seventy-six and my two friends twenty-four, all weakfish except one bluefish and one blackfish. We started back for the dock, took the 8:47 train for home with as nice a lot of fresh fish as you want to look upon. Now, Mr. Editor, if anybody doubts my word, I live at 715 Myrtle avenue, and can prove this to be a fact.

If some of the salt-water fishermen will follow and give a true account of their luck or sport, you or your fresh-water anglers will begin to think that there is a good deal of sport and pleasure in salt-water fishing. Now where can you find more exciting sport than there is in trolling for bluefish with a seven or nine pound monster hooked on each of the four or five lines out? It takes men with good nerve to stand the excitement or they may get seasick or be pulled overboard by a fish. If anybody would like to catch sheepshead, let him go to Holland's Station, Rockaway Beach. Lewis Walton will furnish you with a boat, or tell you where to go or take you out himself. They catch them under the hotel dock or at the Neptune House wreck, and one or two places under the trestle works. Besides there are plenty of small fish in the bay and good sport for children. A friend of mine caught a four and a half pound sheepshead near the club house while fishing for weakfish, using shrimp for bait. There is good weakfishing on the Rockaway side up the bay on the oyster beds or "Silver hole," only bear in mind that fish will bite only at certain states of the tide, and that is the time you want to be on hand. This week I will try them below the trestle works in the channel or at the "Runt," where they often catch very large weakfish. KNEBEL.

BROOKLYN.

"NESSMUK'S" BREAD RECIPE.

Editor Forest and Stream:

I received my copy of "Woodcraft," and find it extremely good reading. I should know something of its subject, but the extent of the information acquired by one who has really made a study of the matter for a half century, is something wonderful even to one who has often faced nature in her wildest moods. I observe that "H. P. U." is disposed to criticise a portion of the outfit recommended. I can stand "Nessmuk's" boots and cutlery well enough, but I am led to ask further light upon his method of making bread. Upon this subject I am not an authority. It would perhaps be hard to find a man who has camped as much as I, and made less bread. I found on page 93 of "Woodcraft," instructions for the use of three (3) tablespoonfuls of baking powder to a quart of flour. I thought it a big dose, and asked a member of my family, who said she thought the bread would not be good. As I have been led to believe that she knows the most of what is commonly thought worth knowing on this subject, I was naturally confirmed in my opinion, especially as the quantity named far exceeds that given in any published recipe which I have seen. May it not be a printer's error? [No.—ED.] Inquiringly, KELPIE.

CENTRAL LAKE, Mich., July 9, 1884.

THE TALE OF A FISH.

Youth and maiden
In a lakelet
Flirt and float,
Maiden thinks the
Water cool,
Puts hand in it—
Little fool,
From her finger—
Heedless thing—
Loses pretty
Diamond ring.

Maiden frantic
Tears her hair;
Youth disgusted
Has his swear.
Youth next morning
Fishing goes,
Rod, line, bottle,
Rubber clothes.
Yanks a fish from
Out the tide,
Feels big lump
Upon its side,

Wonders if the
Scaly thing
Could have dined on
Darling's ring?
So with great ex-
Citement rife,
Cuts fish open,
Big jack-knife,
Mystery
To unravel,
Finds? Well, no—
Bit of gravel.

—*F. H. C., in Berkshire Courier.*

FISHING IN COLORADO.

THE fishing season has at last opened. Think of what privation we readers of FOREST AND STREAM have been subjected to. Ever since the first of May we have been regaled with the stories of more fortunate wielders of the rod in the East, but our turn is coming. Like dutiful followers of the immortal Izaak, we brought forth the long neglected rod, and the tackle being overhauled we sailed forth to do or be done.

We found the streams much swollen by the recent rains and there being considerable snow on the mountains, may expect them to remain so another month. Nothing daunted, however, we sailed in (this did not happen until we had been fishing for some time, however), and were soon midst the excitement of failing to strike our intended victim on his first rise and full of expectation. A flash and the usual accompaniment on our part, and we have him hooked. A few wild rushes up and down and one misguided one toward shore, in which we assisted, and he lies gasping on the ground, a fine red and black speckled fellow of about a pound weight. And so it goes on until seventeen are reposing in our creel. Pretty good for the first day of the season.

Most of our fishing is done in the South Arkansas River with its branches—Silver and Poncha creeks. In the fall there is fine fishing in the main river (the Arkansas), while across the range, Tomichi Creek affords the best of good fishing. On this latter, about the best ground is in either direction from Sargent. Above us on the main river there are, within an hour's ride on the train, two good streams—Chalk and Cotonwood creeks.

We catch trout altogether, those in the small streams being the regular mountain trout, while in the main river salmon trout hold forth. KOKOMO.

SALIDA, Colorada.

FLY-FISHING FOR BLACK BASS.

Editor Forest and Stream:

I see numerous accounts in your valuable paper of good catches of black bass in various parts of the country with bait, minnow and trolling spoon, but not many reports of good success in fly fishing for this royal fish. I do not know whether it is because bass do not rise to the fly in the places reported, or because the anglers have not yet learned the fact that the fly-rod and artificial fly is the most successful means of capturing the bass, to say nothing of the great superiority of fly-fishing over every other method, in the pleasures to be derived.

During the past two weeks, the fly-fishermen of Syracuse have had excellent success upon Onondaga Lake. Strings of from ten to twenty bass, ranging from one to three pounds in weight, have been brought in almost every day. These bass are all small-mouth, very plump and firm. Every one who has caught them, speaks of the extraordinary power and vigor with which they fight, making many leaps high in the air, frequently breaking loose, or tearing the hook from the mouth.

No such fishing has been had on our little lake for years. Men who never cast a fly are now eagerly learning the art. When one has once felt the thrill of a three-pounder on a seven-ounce rod he discards bait-fishing forever.

With rod, landing net and book of flies and leaders, the kit is complete. No trouble with bait, no searching after minnows to annoy and vex the angler. Here the best fishing is from three o'clock to eight o'clock P. M. or so long as the flies can be seen to drop. The later the hour the darker the fly to be used. WAVERLY.

SYRACUSE, N. Y., July 11.

[Reports from Greenwood Lake, and other waters near New York, say that the bass do not take the fly well this season. Many fly-fishers have been disappointed at this, especially as the bait-fishers have been doing well.]

SAWDUST AND MALARIA.

POTSDAM, St. Lawrence County, N. Y., July 10, 1884.

Editor Forest and Stream:

In the second paragraph of the article on "A Use for Sawdust," printed on first page of FOREST AND STREAM of the 3d inst., is a statement so utterly baseless that it must not go unchallenged. After charging the destruction of the fish in the streams which flow from the Adirondack forest to the presence of sawdust in the water—which is not reasonable, as fish, except trout, are more abundant below the sawmills on the Raquette River than above them—the article continues: "Sawdust kills human beings. Waters polluted by it spread malaria. This is notably the case with the Raquette River, whose whole lower course is cursed with chills and fever; and Potsdam, where one of the State Normal schools is located, has become a very undesirable place of residence from this cause." It is this defamation of character which is odious, the more hateful because the statement is absolutely untrue. Plain language on this writer's part must be excused, because during his residence in Potsdam of sixty years he never heard that a case of chills and fever had originated here. Parties have at long intervals brought the disease here from the West; but in our "sawdust"-laden atmosphere have been rapidly healed. Dr. J. Reynolds, our oldest physician and one of the most respected members of the medical profession in St. Lawrence county, authorizes the statement that in nearly thirty years' continuous practice in Potsdam, and up and down the valley of the Raquette River, he has never known or heard of a case of chills and fever having originated here.

To those who have read the article in FOREST AND STREAM, which has been under consideration, it has seemed very unjust, and that if Potsdam had been a pest hole, and that the State Normal School was planted at a point especially exposed to contagion, the public would not have been more severely cautioned against both. Whereas the truth is that no town in the State has been, or is, more exempt from disease of any and all kinds.

May we fairly expect that FOREST AND STREAM will be willing to repair the wrong which it committed? And to that end will it publish this communication, and thus remove as far as possible the stigma cast upon the town and the school? A CITIZEN.

[The evil effects of sawdust on fish are so well known by those who have given the subject any investigation that it is not worth our while to argue the point. We alluded to the malaria in the Raquette valley as something well known. It is. We are surprised that "A Citizen" should regard the allusion as "odious." The writer of the editorial article in question had, within his own experience, decidedly unpleasant evidences of what he was talking about when he wrote of the malarious character of the district in question; and his own experience was confirmed by this part of a letter, received last April (1884), from a clergyman, who lives not a thousand miles from Potsdam: "Yes, Potsdam has increased greatly in its reputation for malaria, and the entire Raquette valley is a malarial fever producing region. The flow and power of the stream is far short of what they were years ago, while malaria years ago was unheard of. The Grasse valley has not suffered so much, and malaria in this valley is not common. These are the joint conclusions of Dr. —— and myself. If I may venture a prediction I will say that the Normal School catalogue at Potsdam ten years from now will show at least 50 per cent. less attendance from out of town; and while I have not made a comparative examination, yet I think that the attendance upon that school from out of town is much less to-day than five years ago The fault is not with the administration nor with the school, but lies in the deservedly unpopular odium that rests upon the town in proportion to the increase of malaria reported. There is not in St. Lawrence county to-day a village that better merits growth by its enterprise and push than Potsdam, and yet there is not one that is so 'quiet.' The town is in 'stays,' and all as I believe on account of its malaria, that 'will out' in spite of the general disposition of its inhabitants to ignore its presence." Whether the sawdust is to blame for all the malaria or not is a question that will admit of argument. Perhaps the sawdust is only partly to blame; and the damming and back-watering on the Raquette also have their effect. Nothing was further from our intention than to injure the citizens of Potsdam. We thought we were doing a public good by pointing out how they and the dwellers in other malaria-plagued districts might benefit themselves by removing the refuse sawdust pest, and so taking away one source of disease.]

A FISHERMAN'S BAD LUCK.—A gentleman named Emory, residing in Baltimore, Md., but at present stopping in West Chester, Pa., met with quite a thrilling adventure a short time ago while fishing along the Brandywine. He had been visiting the farm of Mr. Charles Roberts, an extensive breeder of Friesian cattle, and while there, expressed a desire to try his luck at fishing. He was supplied with rod and tackle, and as the stream was close by, it was not long before he was deftly casting the fly. After fishing a short time, he was approached by two men who engaged him in conversation. Learning that he was by profession an engraver, and that he made the engraving of fancy stock a specialty, one of the strangers wanted him to go with them, and look at some they would show him. Without the least suspicion that anything was wrong he accepted the invitation. They had not proceeded far when one of them pulled a pistol from his pocket, and pointing it at Mr. E., demanded his money. He remonstrated, and was knocked senseless. When consciousness returned, he found himself at Mr. Roberts's barn, tied hand and foot, and minus a gold watch and over one hundred dollars in money. The case was reported to the authorities, but up to the present time no clue has been obtained to the perpetrators of this outrage.—OCCASIONAL.

PHILADELPHIA NOTES.—Our rivers are commencing to clear up, and should we have no severe rains, in a few days the water will be in a good condition for bass fishing. The Perkiomen Creek will soon have a new railroad—the Schuylkill Valley—running on the borders of the entire stream. This will make it of easy access. Now it is reached by the Reading Railroad, which lands one on the shore of the Schuylkill opposite the point where the Perkiomen flows into the river. This makes it rather difficult to reach without a rowboat, which is not at all times easily procured. Parties who have lately returned from Betterton say the perch are not frequenting those grounds as yet this season. Such as have been taken are small.—HOMO.

DENVER, Col., July 1.—No fishing here yet; too much snow now and snow water.—M. W. R.

Fishculture.

COMPARATIVE EXCELLENCE OF FOOD FISHES.

[A paper read before the American Fishcultural Association.]

BY DR. JAMES A. HENSHALL.

IN this paper I design considering the relative merits of certain fishes as food, solely as to their comparative excellence of flavor, and not, in any sense, as to their nutritive qualities, as commercial fishes, or as food for the masses. The inherent or innate excellence of flavor is alone considered; that is, the fish is supposed to be simply boiled, fried, broiled or baked, without the addition of extraneous substances, as sauces, condiments, etc., except the indispensable salt and perhaps a little black pepper. Moreover, I speak in the light of the ample personal experience of having eaten of all the fishes mentioned, from Montauk Point to Key West, and from Lake Superior to the Gulf of Mexico, and, with the sole exception of the salmon, of having eaten of them all perfectly fresh, or literally out of the water into the kettle, broiler or frying pan, which is the only true test of the peculiar flavor of each fish. Of course one is necessarily guided in such a matter by his own individual tastes and idiosyncracies, and due allowance must be made for this "personal equation," though I believe that most persons will agree with the conclusions drawn. But there is no accounting for gastronomic tastes, likes and dislikes, which proverbially disagree, as evidenced by the old saying, "What is one man's meat is another man's poison," or to express it more appropriately, in this connection, and to perpetrate an old Anglo-Gallic-ichthyc pun: What is one man's *poisson* is another's poison. For the sake of convenience I will separate the different fishes into several groups: (1) fresh water, (2) anadramous, (3) estuary, and (4) marine. The various fishes in the several groups are arranged in their sequence according to their degree of merit.

FRESH-WATER FISHES.

The whitefish (*Coregonus clupeiformis*) is far ahead of all other fresh-water fishes in its exquisite delicacy and richness of flavor. Its flesh is pure white, firm, flaky and free from small bones; and while a "fat" fish, does not cloy the palate like the salmon, mackerel, and other "oily" fishes. But to realize the delicious savor and flavor of the whitefish, it is imperative that it be in its best condition, and that it be cooked as soon as possible after being taken from the water; for when in poor condition, or long out of the water, it loses entirely its characteristic excellence. The whitefish is essentially a broiler, being excessively fat in the fall before spawning, when it is in its best condition. Those of Lake Superior and the Straits of Mackinac are preferable to those of other waters of the United States. I have eaten broiled whitefish at the Old Mission House, at Mackinac, for twenty-one meals a week, and like Oliver Twist, asked for more. It resembles, more than any other fish, the pompano in flavor, and in my opinion is second only to that peerless fish in its excellence for the table.

The brook trout (*Salvelinus fontinalis*), when freshly caught, I consider, among the fresh-water fishes, next to the whitefish for the table; but as obtained at the restaurants, I prefer the black bass or pike-perch. When served up in camp beside a trout stream (the small ones fried, the large ones boiled), the flesh is pinkish, very firm, and of a delicate, delicious flavor, though rather too dry to suit some palates. It is a fish that will not bear transportation, however carefully packed, without losing its savor; and this is likewise true of all delicately-flavored fishes. Moreover, it will absorb and retain the "twang," and smack of the packing material or the container.

The Black Bass (*Micropterus*).—Next to the freshly-caught and cooked brook trout, I rank the black bass of either species. Its flesh is pure white, firm, flaky, free from small bones and of a rich sapid flavor when in proper condition. Just after the spawning period the flesh has a musky taste and odor, which is disagreeable to some persons. The character of the water has much to do with the excellence of the black bass for the table, and as it inhabits so many waters of different conditions of purity and temperature there are as many opinions of its gustatory qualities. The small-mouthed bass is generally the best flavored, as it usually exists in the purest waters; but where both species co-exist in the same water there is no apparent difference in taste or flavor. I have eaten small-mouthed bass of some waters which were inferior to large-mouthed bass of others. Contrary to a popular impression, I will state that the finest-flavored black bass I ever ate, and even superior to any brook trout I ever tasted, were large-mouthed bass of certain streams in Florida, notably the upper waters of St. Lucie River, on the east coast, and the Weekawachee River, on the west coast. These are remarkably clear and pure waters. Black bass should be fried or boiled, according to size.

The pike-perch (*Stizostedium vitreum*) is a staple fish during the early spring throughout the West, being shipped from the great lakes. It bears transportation well, the flesh being hard, white, flaky and of good flavor; consequently, it is much esteemed during the Lenten season. It is a very desirable fish for lakes and rivers which have a good depth of water, being very hardy and prolific, and one of the best percoid fishes. The smaller ones should be fried, those of six pounds and over should be boiled.

The mascalonge (*Esox nobilior*) may be classed as a good dinner fish in the fall and winter, when it is in its best condition; it has, however, been much overrated. It has yellowish or pinkish flesh, according to season, which is of good quality and fair flavor, with fewer small bones than any of the pike family. It is never a "fat" fish, and should either be boiled or cut in vertical slices and fried.

The Mackinaw trout (*Salvelinus namaycush*) varies greatly according to size, season and locality, as to its edible qualities. In the Great Lakes, where it is taken with the whitefish, it is lightly esteemed in comparison. In other waters, as in the lakes of the Eastern States, it is more highly prized. The flesh is yellowish white to red in different waters, and may be classed as rather good and well-flavored when in its best condition. In good condition it is a very fat or oily fish, and should be boiled or cut into vertical steaks and broiled.

Catfish (*Siluridæ*). The various species of catfish and bullheads are good, bad, and indifferent, as articles of food. Some of them are really excellent when properly cooked, and would prove an agreeable surprise to most persons who are prejudiced against them. The forked-tailed cat of the lakes and the Mississippi (*A. nigricans*), and the channel cat (*I punctatus*), when of suitable size, and when parboiled and baked brown, are not to be despised by an epicure, the flesh being rich and savory, though not very firm.

There are a number of fresh-water "pan fish," fair in quality, which I consider best in the order named; as white bass (*R. chrysops*), croppies (*Pomoxys*), rock bass (*A. rupestris*), the sunfish (*Lepomis*), yellow perch (*P. americana*), etc. Last and least in point of merit among fresh-water fishes (and which are just better than "no fish") are the pike, pickerel, buffalo, suckers, etc.

ANADROMOUS FISHES.

The salmon (*Salmo salar*) stands at the head of this group when "fresh run" from the sea. Its excellence is so well known that it needs no further notice here, more than to observe that after spawning no fish is more sorry or ill-flavored. The comparative excellence or worthlessness of anadromous fishes, before and after the breeding season, is more strikingly exhibited in the salmon than in any other of the group.

The shad (*Clupea sapidissima*). Of the anadromous fishes, none is so well known or so much appreciated as the shad, whose rich, delicate and luscious flavor is pronounced by many to be superior to that of any other fish. Suffice it to say that he who has never partaken of that Lenten luxury, "planked shad," has an epicurean revelation in store that will surprise and delight him. The shad should never be served in any other way than planked or broiled. It well merits its name, *sapidissima*, and one can tolerate its numerous bones in consideration of its fine flavor.

ESTUARY FISHES.

This group comprises so many species, and of so wide a range, and some vary so much in edible qualities in different waters, that it is difficult to institute a just comparison.

The pompano (*Trachynotus carolinus*). Although a fish of southern waters, the excellence of the pompano for the table places it at the head, not only of the estuary fishes, but of all known members of the finny tribe. It is incomparable with any other. While in the restaurants of New Orleans and Mobile it is the fish beyond compare, it is worth a trip to Southern Florida to realize the delectable, luscious savor of a freshly caught and broiled pompano. The salmon, whitefish and shad alike pale before its superexcellence. A broiled pompano's head is a *bonne-bouche* to eat and dream of for a life-time. See Rome and die, eat pompano and live! The pompano has a creamy white flesh, of a gelatinous richness, without the oily taste of most broiling fishes. It must not be confounded with the dark-meated fish called pompano on the Carolina coast, which is a crevalle (*Caranx*). The bones of the pompano are few and soft, and one can eat them "bones and all."

The striped bass (*Roccus saxatilis*) enjoys a deserved reputation as a table fish. Its firm, white and delicious flesh is so well known that it needs no further comment. The memory of its savory flavor and odor, broiled at camp fires on the Chesapeake, steals over me as I write, with a conscious yearning for the flesh-pots of Egypt.

The sheepshead (*Diplodus probatocephalus*), while excellent in Northern waters, is only tolerable in those of the extreme South. North of Cape Hatteras it is justly considered a great delicacy, broiled or baked; while in Florida it is not above mediocrity, having a piquant, pungent flavor that is decidedly unpleasant.

The bluefish (*Pomatomus saltatrix*) is another fish that varies in its eatable qualities in different waters, and which, perhaps, depends on the nature of its food. North of Cape Hatteras it is well-flavored, of good quality and much esteemed, though inclined to be too oily; while in Florida waters it is excellent, far exceeding in richness and flavor those of the North. Its flesh is firm and white, and it should always be broiled or planked.

The whiting (*Menticirrus nebulosus*) is a small, but good fish, one of the best for chowders. It has a fine, white, flaky flesh of rich flavor, and is much esteemed as a breakfast fish, broiled or fried.

The weakfish (*Cynoscion regale*) is worthless, unless absolutely fresh, when it is peculiarly sweet and gelatinous, fried or boiled. The Southern species, the salt-water trout (*C. maculatum*), is equally as good a fish for the table.

The red snapper (*Lutjanus blackfordii*) has become a popular hotel and restaurant fish throughout the South and West, where it is shipped from the Gulf of Mexico. It is also extensively shipped to Havana. Being of large size it is a good dinner fish, its flesh being rather coarse, but very white, firm, flaky, juicy, and of good flavor. It should be either boiled or baked.

The tautog (*Hiatula onitis*) has fine white flesh, and broiled or fried is quite toothsome, with a rich lobster flavor. It does not lose its good qualities when out of water, so soon as most fishes.

The redfish (*Sciæna ocellata*) is essentially a Southern fish, though during the summer it ranges as far North as Cape Cod, when it is in its best condition. It grows to a large size, with firm white flesh, of no decided flavor. It is a tolerable dinner fish, and should always be boiled. It is also a fair chowder fish.

Crevallé (*Caranx*). There are several species of crevallé, the *C. hippos* being the most common in Southern waters. They are dark-meated fishes, firm and flaky, with a sharp, strong flavor, (similar to the bonito), which is relished by some but disliked by others. It is an oily fish and should always be broiled. It is easily cured by smoking, when it forms an appetizing dish, far better than when fresh, and superior, I think, to smoked halibut. There are quite a number of good estuary "pan-fish," among the best being the Lafayette (*L. xanthurus*) and white perch (*R. americanus*).

MARINE FISHES.

The Spanish mackerel (*Scomberomorus maculatus*) stands at the head and front of the pelagic or marine fishes. It is second as a table luxury only to the pompano and whitefish. It is a creamy, white-meated fish of great delicacy and richness of flavor when broiled. By many it is thought to be the best fish that swims.

The common mackerel (*S. scombrus*), when fresh and fat, as in the early fall, is one of the best fishes for broiling. As a breakfast fish it is greatly and justly prized, and is too well known to need further notice here.

The codfish (*Gadus callarias*). I mention the codfish out of respect and sympathy for my fellow man, and not for any love that I bear for it myself. It is, perhaps only necessary to say that at the last annual meeting of your Association, your worthy recording secretary* declared that he preferred a fresh codfish to the brook trout or black bass.

*Being a prominent member of the Ichthyophagous Club, any statement of his regarding the flavor of fishes should be received with due caution, inasmuch as by virtue of the onerous duties of his office—"head taster"—his sense of taste has presumably become perverted or impaired.

FISH AND FISHING AT POINT BARROW, ARCTIC ALASKA.

[A paper read before the American Fishcultural Association.]

BY JOHN MURDOCH.

I HAVE been spending the last two years among the Esquimaux of Northwestern Alaska, and it has occurred to me that a short account of the fishes that they use for food, and the methods they employ in capturing them, might be of interest to the Fishcultural Association.

Point Barrow, as you probably all know, is the northwestern extremity of the continent of North America, the place where the coast line, after running nearly northeast from Behring's Strait, turns and runs in a direction a little south of east toward the Mackenzie River and the northwest passage. The point itself is a long, narrow sandspit, continuing the northeast direction of the coast line for some five miles, and then bending to the east-southeast, running on for some three miles more, thus inclosing a sheet of water known as Elson Bay. Just at the elbow of the point is a little knoll of land somewhat higher than the rest, and this is occupied by an Esquimaux village. There is another village about eleven miles down the coast to the southwest. The inhabitants of these two villages together number about three hundred men, women and children. Fish forms an important article of their diet, which consists, I may say, entirely of animal substances, and occasionally becomes their chief dependence. East of Point Barrow, and the nearest about fifty miles off, are three large rivers running into the Arctic Ocean, and to these the Esquimaux resort for the purpose of catching the whitefish and burbot with which they abound.

Early in October, as soon as the rivers are well frozen and enough snow has fallen to make sliding practicable, a number of families start out from both villages, with all their hunting and fishing gear, and proceed to these rivers, where they camp in tents, or build snow huts when they can find snow enough, and remain till the daylight gets too short for hunting, which is about the middle of November. Those of the men who are well supplied with ammunition devote themselves to hunting reindeer, while the others and the women attend to the fishing. The whitefish are caught in gill nets made of reindeer sinew, which are set through holes in the ice and allowed to remain, being visited from time to time and the fish removed.

Three species of whitefish are caught; a small species belonging to the same group as the lake herrings, which has been described by Dr. Bean with the name of *Coregonus laurettæ*, the large *Coregonus kennicotti*, found also in the Yukon, and another large species, also found in the Yukon, which Dr. Bean considers to be undescribed, and which he proposes to call *Coregonus nelsoni*. The burbot, or *titta'lă*, as the Esquimaux call it, is the ordinary species *Lota maculosa* common to all our Northern waters, and is caught with hook and line, though one will occasionally try to swallow a small whitefish which is entangled in the gill net and become "meshed" himself in the attempt.

They use a large bone squid, about four or five inches long, having either a barbless hook of iron or copper, of their own manufacture, or a good-sized cod hook, bought from some whaleship. The bait is a large piece of whitefish, with the skin and scales left on, which is carefully wrapped and sewed round the squid, much in the same way as fishermen on our own coast make an eelskin drail for bluefish. With this they fish through a hole in the ice and take a good many fish. They consume a good many fish, of course, on the spot, but the rest are carefully stowed away in a little house built of slabs of ice, and at that season of the year immediately frozen solid. When they are ready to leave camp, they break up this mass of frozen fish into lumps of a size convenient to load on their dog sleds and bring them back to the village in this condition.

The season of no sun and short daylight is passed at the village. This lasts till about the end of January, and then many families again resort to the rivers, and stay, living in snow huts always at this season of the year, till the first or middle of April. Fish do not appear to be quite so plenty at this season as in the autumn, but they still catch a good many. In the meantime, those who have remained at home have not been without a supply of fish food. There is a small species of codfish, the Polar cod (*Boreogadus saida*), which appears along the coast in large schools about the end of January, or when the sun again begins to rise. We were unable to find out whether the fish really leaves the coast to return in January, but at all events the Esquimaux do not fish for them until then, and say there are none to be found. They would be likely to fish for them were any to be caught, because just at this season of the year they are very apt to be pinched for food, as no deer are to be had, and if the ice happens to be unfavorable seals are very scarce.

Wherever there is a level field of this season's ice inclosed by lines of hummocks, the fish are sure to be plenty. Such a field as this, about half a mile long, practically afforded a living to most of the people in the village during the season of 1883, because that year the ice was very unfavorable for sealing, and food was pretty scarce in the village.

The fishing is carried on mostly by the women and children, though one or two old men generally go out, and one or two of the younger men, when they cannot go sealing and food is wanted at the house, will join the fishing party. Each fisherman is provided with a long-handled icepick, which he frequently leaves sticking in the snow near the fishing ground, a long line made of strips of whalebone, reeled lengthwise on a slender wooden shuttle about eighteen inches long and provided with a copper sinker and two pear-shaped "jigs" of walrus ivory armed with four barbless hooks of copper, and a scoop or dipper made of reindeer antler, with a wooden handle about two feet long. Hardly an Esquimau, and especially no Esquimau boy, stirs out of the house in winter without one of these scoops in his hand. To every party of two or three there will also be a good-sized bag of sealskin, generally made of a piece of an old kayak cover, for bringing home the fish. Arriving at the fishing grounds, each proceeds to pick a hole through the ice, which is about four feet thick, clearing out the chips with the scoop. The "jigs" are then let down through the hole and enough line unreeled to keep them just clear of the bottom where the fish are playing about. The reel is held in the right hand and serves as a short rod, while the scoop is held in the left hand and used to keep the hole clear of the scum new of ice which, of course, is constantly forming. The line is kept in constant motion, jerked up quickly a short distance and then allowed to drop back, so that the little fish that are nosing about the white "jigs" after the manner of codfish, are hooked about the jaw or in the belly.

As soon as a fisherman feels a fish on his hook he catches up a bight of the line with his scoop and another below this with his reel, and thus reels up the line on these two sticks in loose coils till the fish is brought to the surface, when a skillful toss throws him off the barbless hook on the ice, where he gives one convulsive flap and instantly freezes solid. The elastic whalebone line is thrown off the sticks without tangling, and paid out through the hole again for another trial. If fish are not found plenty at the first hole the fisherman shifts his ground until he "strikes a school." They are sometimes so plenty that they may be caught as fast as they can be hauled up. One woman will frequently bring in upward of a bushel of the little fish—they are generally about five or six inches long—from a single day's fishing. This fishing lasts until about the middle of May, when the ice begins to soften. A good many are also caught along the shore in November in about a foot of water when there are tide cracks in the ice. At this season the Esquimaux use a little rod about two feet long with a short line and a little ivory squid at which the fish bite.

During the summer, many of the natives are encamped in tents at a place called Perginak, just at the bend of Elson Bay, and after the ice leaves the bay, gill nets are kept constantly set, and visited from time to time. In these they catch whitefish chiefly, *Coregonus laurettæ*, a few salmon, *Oncorhynchus gorbuscha*, and another undetermined species, and occasionally large individuals of a sea-run form of *Salvelinus malma*, the Pacific red-spotted trout.

This fishing lasts from the middle or end of July into September, but is never very productive. The trading parties that go east to the Colville River in the summer, also catch large quantities of fish. *Salvelinus malma* was so abundant in the summer of 1882, that the dogs were fed with it.

Another food fish appeared on the coast in the summer of 1882, which appears not to be utilized by the natives as they have no nets small enough to catch it. This is the caplin, *Mallotus villosus*, which we netted by the thousand in the outlet of the lagoon close to the station, and found most excellent eating. The natives who live on the river running into Wainwright's Inlet, seventy miles down the coast, also catch through the ice a good many smelts, *Osmerus dentex*, which are as delicious as the smelt of our coast. Fish, when cooked at all, are always boiled; as, indeed, all Esquimaux food is, but many are consumed raw or frozen. Very little of a fish is wasted except the scales and perhaps the larger bones.

To close my account of the fish of this region, it may be well to say that the Esquimaux tell of a large lake between Point Barrow and the Colville, in which there are fish "as big as a kaiak." This certainly has the appearance of a "fish story."

NOTES PERTAINING TO FISHCULTURE.

[A paper read before the American Fishcultural Association.]

BY JAMES ANNIN, JR.

Gentlemen and Members of American Fishcultural Association:

It is with keen regret that I find at the last moment that I shall be unable to attend this, the thirteenth annual meeting, especially after such care and pains have been taken by the committees in charge to make it of great interest and profit. Business prevents my preparing an extended or elaborate paper and I but briefly call your attention to one or two subjects.

The California, or rainbow trout, are they a success in waters of the Atlantic coast? In one stream in which they were planted some five or six years ago I consider that they are not. I have reference to Caledonia Spring Creek, Caledonia, Livingston county, N. Y. This stream has contained them longer than any others east of the Mississippi River, but to-day you can catch no more, and no larger ones than you could the second or third year after the first plant was made. Where have they gone? I have not answered it satisfactorily to myself yet. They could not have been all caught out as the stream is preserved. From observations the writer thinks that many have gone down, finding their way into the Genesee River and Lake Ontario, just as the California salmon did several years ago; they have gone as suddenly as the salmon. Stories are afloat of large ones being caught miles below. As the spawning season approaches they also run up stream just as far as they possibly can, and as the stream is generally at its best at this season they cannot get back unless they do so before the water subsides. I have often found them in water holes that had no connection with the stream except during high water and where they would die in a short time. I heard of one found in a man's garden this spring that was nearly a mile away from the stream, the fish had gone up there in a little stream that was formed by melted snow and rain, and which run dry in a week. Brook trout generally find their way back and don't get stranded. You would suppose that the natural increase would keep the stock up in a preserved stream, but it does not in this case, and here I would call your attention to the fact that at the best, not more than 50 or 60 per cent. of the many rainbow trout eggs taken at the hatcheries at Caledonia can be impregnated. There is no such percentage of empty eggs of others of the trout family that are handled here.

During the past winter I made an experiment with eggs taken from a fine healthy brook trout; impregnated by a number of good males of the same. First, I took 350 of her eggs, placed the milt with them and then washing it off as quickly as possible, and forty-five seconds after taking the eggs placed them on the screens in the hatching trough. Next, I took 350 more eggs from the same fish and let them stand three minutes before washing off the milt. Next, the remainder of the eggs the fish contained, 335 in number, I let remain in the spawning pan the usual length of time—about thirty minutes. The three lots I carefully placed on trays; picking out the bad ones every day, until they were old enough to plainly show the eye spots, when I counted what I had left of each of them:

First, which had an exposure of forty-five seconds, only 6 were impregnated.

Of the second, with exposure of three minutes, 31 were impregnated.

Of the last, thirty minutes exposed, 208 remained that were good.

This is only the result in case of one fish, but if it should prove the same in all, is it any wonder that fishculture is a grand success?

SHAD HATCHING IN CONNECTICUT.—The catching of shad for the purpose of securing the spawn for artificial propagation on the Housatonic River, closed about July 1. Mr. Fenton, who has had charge of the hatching, gives the New Haven *Palladium* some very interesting facts in regard to the mode in which the business is conducted. The total number hatched out and deposited in the rivers will exceed 3,000,000, of which one half have been emptied into the Connecticut River, at Enfield Bridge, and the remainder into the Housatonic. Mr. Fenton estimates the average number of eggs secured from each fish at 30,000, although at least in two cases he has secured fish that had over 60,000 eggs each, the eggs from the two fish filling a common sized milk pan. The fish are emptied into the river at the turn of the flood tide so that, as the tide goes out, the young shad are carried down the river far enough so that the impurities emptied in the river from the paper mill may not kill them. Mr. Fenton seems to think that the acids discharged in the river are not so destructive to fish as generally supposed, and says in support of his views that several days since, just after the hatching of several thousand shad, the vats of the paper mill were discharged into the river while the tide was rising and consequently the impurities were forced up the river to the hatching boxes, a few hundred yards above the mill, filling them with impure water so that the young fish could not be seen; but after the tide went out and the water became pure no perceptible harm was done the fish. Besides the young shad placed in the river here, the United States Fish Commissioner had placed 1,000,000 fish in the river at Milford, although he is doubtful if many of these live to reach the Sound, as not only do they have to run the risk of being devoured by the bass and pickerel in the lake, but the passage over the dam, during the month of September, when the water is low, is doubtful, and if they take to the canal and pass through the water wheels of the different shops they go to sure death, as has been demonstrated at Windsor Locks.

WISCONSIN.—The Fish Commission of Wisconsin has hatched and planted 2,000,000 brook trout, 2,000,000 mountain trout, 10,000,000 wall-eyed pike, and 17,000,000 whitefish.—BADGER.

The Kennel.

FIXTURES.

BENCH SHOWS.

Sept. 9, 10 and 11.—Third Annual Bench Show of the Montreal Kennel Club. Chas. Lincoln, Superintendent. John F. Campbell, Secretary, P. O. Drawer 1,955, Montreal, Canada.

Sept. 16, 17 and 18.—Collie Bench Show and Field Trials of the Ontario Collie Club, Toronto, Ont. Entries close Aug. 23. Mr. H. J. Hill, Secretary, Toronto.

Sept. —. Bench Show of the Philadelphia Kennel Club. Mr. Benj. C. Satterthwaite, Secretary.

Oct. 8, 9, 10 and 11.—Third Annual Bench Show of the Danbury Agricultural Society, Danbury, Conn. E. S. Davis, Superintendent, Danbury, Conn.

Oct. 21, 22, 23 and 24.—First Annual Fall Bench Show of the Westminster Kennel Club, Madison Square Garden, New York. Mr. Chas. Lincoln, Superintendent.

FIELD TRIALS.

Dec. 8.—Sixth Annual Trials of the National American Kennel Club at Canton, Miss. D. Bryson, Secretary, Memphis, Tenn.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1407.** Volume I., bound in cloth, sent postpaid, $1.50.

POINTERS AT NEW YORK.

Editor Forest and Stream:

Mr. Tracy's reply to my last contains nothing but irrelevant matters and is too weak for me to notice further, beyond my saying that Thunder has no field trial record, and that he was made notorious by a newspaper, the editor of which has publicly proved his ignorance of dogs ten thousand times over.

I should have answered Mr. Munson before this, and have only waited until this late hour in the day expecting him still further to commit himself. Give him rope, said I, and he will hang himself; he has fulfilled my prophesy. A well-devised scheme for transferring this discussion to the columns of a contemporary has failed. The controversy must be brought to an issue on neutral ground, and in the columns of a paper conducted by gentlemen.

A word here about the protest will be in order. An attempt is being made I am told by some unscrupulous individuals, to convey to the public the impression that the protest was proposed and framed by me on account of the decision which gave the money in the champion large class to those interested in Meteor. This is a deliberate wilful misrepresentation of fact, and is a report which is circulated for reasons obvious to all. Not only were those who indorsed the protest distinctly informed that it was general in its meaning and did not apply to any one decision in particular, but the very wording of it is sufficiently comprehensive to place it beyond misconstruction by any person possessed of ordinary common sense. Some people, however, have none. The protest reads as follows: "*We*, the undersigned *exhibitors and breeders* of pointers, request you to place on record in the pages of FOREST AND STREAM *our* disapproval of the *awards* of Mr. E. C. Sterling, at the New York dog show, held in Madison Square Garden, May 6, 7, 8 and 9, 1884." The italics are mine. Does such language not equally apply to the unaccountable decision which gave the champion small pointer bitch prize to a rank bad one—Vanity; and do such lines not apply with equal force to the absurd decisions in the open classes?

A great laugh will go up on some irresponsible meddler when it becomes generally known that the protest was not suggested by me at all, but by a gentleman who was most outrageously treated, and whose exhibit was placed behind an animal entered for competition in Mr. Munson's name. Let it be known, however, that I am willing to take every ounce of responsibility attached to that protest on my own shoulders. It was framed in the interest of the public, and of pointer breeders and exhibitors throughout the length and breadth of this great country.

Let it be known, also, that I do not fear either the cowardice, the abuse or the slander of a Punic press, and that I am not to be retired with Mr. John Davidson's pension, though I would appreciate the honor of being found in such company, for there, I am told, do good dog lovers dwell. I will write something more about the protest on a future occasion.

Mr. Munson admits he has never bred a good dog, and for that reason it may surprise some people why I notice him. In his case I find it a duty to reply, a duty to myself, a duty to

my brother lovers of pointers. He has misrepresented dogs, forfeited every confidence ever placed in him, and demonstrated beyond the question of a doubt that unless things are altered dog shows must degenerate into a complete farce, if indeed, they have not done so already.

Mr. Munson tells us there was not a "well-informed pointer man" among the spectators who did not see at a glance how far superior Meteor was to Beaufort. Mr. Munson cannot name one single pointer judge who indorsed that decision. Is Mr. Waddell, the well-known Western breeder, well-informed, and what did he say about Beaufort? Here it is: "The best large pointer I have ever seen." Is Mr. Edmund Orgill (probably the best judge in America) well informed, and what did he say? Here are his own words: "A grand fellow—same stamp as Faust and Bow, but beats them all to pieces—the best I have ever seen—should like to breed to him." What did Dr. Strachan say? and what was Mr. Steel's opinion? How about Messrs. Gregory, Garrett Roach, Satterthwaite, Lamb, Tallman, Martin, Phelan, and a hundred others I could name. Is Mr. Thos. Orgill well informed, and what is his opinion? "I call Beaufort a grand dog, and fail to see where any one can find fault with him. In my judgment he is the best-looking large pointer in America, in which opinion I am backed by my father." Americans give Mr. Wise credit for knowing a pointer, and that gentleman has said, "He (Beaufort) could win anywhere," and that Beulah, the dam of Beaufort, is one of the best bitches living in the field. Now for the press. FOREST AND STREAM has said, "We consider him the best-looking pointer that we have ever seen. We are assured by several gentlemen who have seen him at work, that he is also an excellent field performer." The *Kennel Register* holds a similar opinion, and *Turf, Field and Farm* did not indorse the decision against him. The London *Field* says, "These questionable decisions positively sink into insignificance compared with what Mr. Sterling did with the pointers * * * altogether we must say that more dissatisfaction we never heard expressed at any single-handed judged show. * * * The pointer awards were dealt out in a strange fashion by Mr. Sterling. He began with large champion pointers, and Mr. Munson's Meteor beat Beaufort, Knickerbocker, Don, Croxteth and Perth. Meteor was decidedly outclassed in such company. He has been the subject of a good deal of controversy, and at Toronto he was shown in another person's name, but here he was, by coming in as Mr. Munson's, rendered eligible for some extra prizes. He is bad in head, wants squareness, has a bad eye, ears set on too high, shoulder blades wide apart at the top, shallow chest, short back, and a badly carried tail. * * * Croxteth also is much better than Meteor. * * * Beaufort was decidedly the best dog of that class." The only paper that indorsed the decision was the one in which Messrs. Munson and Sterling have a large sum of money invested. If I am wrong in this statement let Mr. Munson deny it under his own signature.

Mr. Munson does not see any "honor" in Meteor's beating Beaufort—neither do I—but let me say right here that Meteor never did beat Beaufort. Beaufort's reputation does not rest on my advertisement that he is the handsomest pointer in America. It rests on the fact that he is the grandest pointer ever seen in the opinion of the best judges and every independent paper. This is the more remarkable when a clique, assisted by a newspaper editor, has undertaken to annihilate both dog and owner. Mr. Munson is wrong when he predicts the New York show was Beaufort's Waterloo. I am inclined to the opinion that it was Messrs. Munson and Sterling's Waterloo.

It was reported before the N. Y. show that several members of the W. K. C. had pronounced Meteor a very inferior specimen, and it is well known that Mr. Munson expressed a similar opinion of Bang Bang. Unfortunately I have not in my possession documentary evidence to sustain me in regard to Meteor, but I hold proof that before the *tête-à-tête* in New York Mr. Munson considered Bang Bang a very ordinary animal. Was a tacit understanding arrived at between Mr. Munson and the Westminster Kennel Club, whereby Mr. Munson was to pronounce Bang Bang the best small pointer in America and the club reciprocate the kindness by sending Meteor off as the best large pointer in America? I am guided to such a conclusion by the following documentary evidence, which will also explain how Beaufort was placed behind Mr. Munson's exhibit, entered in the catalogue as being by Garnet out of Jilt. Mr. Munson writes in your paper of June 12 as follows: "I am willing to go on record as saying that Meteor and Bang Bang are (barring the head of each, which, I think, could be slightly improved) the best pointer dogs in America, and the only type of the pointer to breed to." Mr. Munson here admits Meteor and Bang Bang to be of the same type, and to be perfect excepting in head, in which respect they could, in his opinion, be slightly improved. I take him at his word. Let us now see what Mr. Munson wrote about Bang Bang in April, before he had "arranged matters" with the Westminster Kennel Club:

ST. LOUIS, April 9, 1884.

Charles H. Mason, Esq., N. Y.:

DEAR SIR—I expect to catch fits in the papers for passing Bang Bang by at Cleveland, but I am sure I put the ribbons where they belonged. I am not pleased with Bang Bang. * * * I am told Beaufort is a remarkably handsome dog. Yours truly,

JNO. W. MUNSON.

ST. LOUIS, April 15, 1884.

DEAR SIR—Your favor of the 12th to hand. If I had thought Bang Bang the best dog at Cleveland he would have won first. I thought him good enough for second only. I don't fancy his head—especially his front face—and eyes. The latter are black and cocked, showing the inside white of both when he looks at you. I don't think his tail good, nor his throat. In fact, I don't think him a first-class dog.

Very respectfully,

JNO. W. MUNSON.

Now, it is my turn to go on record, and I go there as saying that Mr. Munson forfeits forever the good opinion of every pointer breeder and exhibitor in America, and he will never enter a judging ring again. I do not wish Mr. Munson to tell us that Bang Bang was not in condition when shown at Cleveland, for bad condition would rather hide the faults he alludes to than otherwise. Mr. Munson's written opinion of Bang Bang in April was impartial and honest; he had not met the W. K. C. in New York and had no axe to grind. He thus conclusively proves, supported by the strongest evidence—his own—that Meteor is not a show dog. Why, then, does he object to my criticism of his dog, every word of which was correct? Why also, may I ask, do the W. K. C. refer your readers to Mr. Munson's opinion of Bang Bang?

I now repeat that Meteor is not a show dog and that judges of pointers such as Messrs. Whitehouse, Price, Brierly, Lort, Viscount Combermere and others would disqualify him or any other dog possessed of such a head. I repeat, too, that at the N. Y. show Bravo was the gentleman of the small size classes, and I am indorsed by no less authority than Mr. John W. Munson. It has been a complete mystery to me how men who have had true pointers, such as Faust, Bow and Keswick, before their eyes, could come forward and tell us that Meteor and that rank bad bitch, Vanity, are pointers at all.

The whole business is now explained. The love I have for my pointer, and a sense of duty compelled me to publish Mr. Munson's letter or I would not have done it. Important as are such matters to everybody interested in the breed, there is another question yet to be settled, a question closely allied to improvement, a question of grave importance with us all, and I now call on Mr. Jno. W. Munson, or whoever the owner of Meteor may be, to show in a clear and straightforward manner that Meteor is by Garnet out of Jilt, as advertised by Mr. Munson in the public stud.

CHARLES H. MASON.

TOMPKINSVILLE, July 14, 1884.

Editor Forest and Stream:

I cannot pass over the unfortunate complexion the discussion of the pointer award at the late Westminster Kennel Club show has assumed, and must severely condemn the acrimony that pervades the majority of the articles written pro and con, and above all the ungentlemanly accusations and aspersions reflecting on the honor and character of the gentlemen who generously braved the dangers of past experiences. One word as regards type. In my humble judgment the sole typical pointer from A to Z, I would respectfully refer them to imported Snapshot, dead and worthless so far as individual field qualities are concerned, but he was *par excellence* the pointer so far as form, of the day. I am not going to criticise Beaufort, Bang Bang, Meteor, Croxteth or others, but I cannot overlook the fact of the childish peevishness displayed in advancing as a damaging argument the quibble that Bang Bang begets black and white progeny.

"Mad let us grant him then; and now remains
That we find out the cause of this Effect;
Or, rather say, the Cause of this Defect;
For this Effect, defective, comes by Cause."

Certainly this coloring in the progeny is foreign to the argument under discussion, and assumes the farcical phase of the two little hoodlums. When one threatened to whip the other for throwing stones at him he yelled back in defiance, "Well, I'll call your sister names." If a man should breed to Wyandotte Smythe's pointer Bellicose, whose sire was one of Lang's celebrated black pointers, or Mr. Whitman's, or Old Phil, an orange or white or lemon and white pointer bitch, and among the result of this union came one or more black youngsters, would it damn the litter or prove a *casus belli?* Well I guess not, stranger. That men who wish the world to recognize them as breeders, judges and sportsmen should stoop to such cavil seems beyond the comprehension of intelligence. Then again, gentlemen, you are switching on a siding when you drag in the merits of the deeds done afield by one or the other; in a case like this it is but a secondary issue at the best. My good friend Donner harps on the ivory and texture of the bone. Is the outward size a sure indication of the quality, or is it impossible for a small bone to be spongy and porous like the large, or *vice versa?* I am seeking enlightenment in this quarter. I am hungry, Mr. Donner, but feed me sparingly of ivory, as my masticating powers are but mediocrity. Brother sportsmen, in a case like this, look straight over the gun barrels, hold right on, fire away if loaded with powder of truth, charity and justice, and take my word for it, you'll hit the bullseye every time, and the recoil won't be felt.

WASHINGTON A. COSTER.

FLATBUSH, July 13, 1884.

Editor Forest and Stream:

I have been an interested reader of the controversy going on in the columns of your paper relative to the pointer judging at the late show of the Westminster Kennel Club, held in this city. Instead of confining themselves to the merits of the question under discussion, certain individuals have converted it into a mere personal wrangle, and made it the channel through which to bring odium on a gentleman whom but to know is to esteem. I refer to Mr. C. H. Mason. In a Western paper I find a number of columns devoted to the very chivalrous work of hurling abuse and epithet at Mr. Mason. Any one who is at all conversant with the style and tactics of that great exponent of knowledge, and will take the trouble to look beneath the surface of the article alluded to can only see therein an under-stratum of petty malice, hate, and cowardly imuendo. Doubtless this doughty editor thinks it brave to sit in his office and hurl mud at a man a thousand miles away, and then deprive him of the opportunity to defend himself by closing the columns of his paper against him. And what crime, pray, has Mr. Mason committed, that should call forth this great onslaught upon him? From the moment his calm and temperate criticism of the pointers at the late show appeared until now he has been a target for shafts of fury and hate from all quarters. Where is the pointer breeder or lover that will not admit the justice of his criticism or does not feel indignant at the distribution of awards at the late show, in awarding the ribbon to the nondescript Meteor over the pointer Beaufort, or to Vanity over such bitches as Lady Bang or Duchess? Where is the judge of a pointer who will say that those were awards of merit?

It does not weaken the published protest one particle that a portion of the signers were non-exhibitors. Any man who has the interest of the breed at heart had a right to protest against such infamous judging. Neither does all the abuse hurled at Mr. Mason weaken his statements, they stand out pillars of truth supported by plain facts and sound logic. The statement made by the writer to whom I have alluded, that Mr. Mason is not a breeder, is false, reference to the English Kennel Club Stud Book will conclusively prove that he has bred winners at the best show in the world, the Birmingham show, which takes precedence over all others. This unprincipled attack upon Mr. Mason will be the cause of drawing around him a host of defenders. American gentlemen love fair play and justice to all.

T. H. DWYER.

NEW YORK, July 15, 1884.

Editor Forest and Stream:

In your issue of the 3d inst. Mr. Mason takes occasion to again attack Thunder, and this time slurs the field qualities of the dog.

He has persistently hounded after this dog for a year or two, all of which I bore in silence, knowing that the reputation of the bench qualities of the dog could not be injured by anything that he could say.

So long as he confined himself to dissecting (no matter how he hacked him) the form and general appearance of the dog, it mattered not; but when he, not satisfied with that, has the presumption to publicly state that the dog has no field qualities it is quite time for me to speak.

I most emphatically declare Thunder to be a most excellent a field dog.

That he has no appearance of idiocy, but, on the contrary, possesses as much intelligence as is usually found in dogs.

How and why a man, who never saw a dog at work in the field on game, can publicly assert him devoid of quality, and, even when the records show the contrary, passes my comprehension.

Mr. Mason has posed as a self-constituted judge of not only dogs, but of the gentlemen who have been kind enough to judge them. Will the gentleman now assume the attitude of sportsman and field trial judge?

Perhaps he may make it appear that the writer is no judge of field dog.

E. S. WANMAKER.

ELMWOOD, N. C., July 7.

Editor Forest and Stream:

A Western contemporary, in a six-column editorial, devoted to slandering Mr. Mason, advertising the Munson kennel, and telling us what a wonderful man the editor is, gives it out that Mr. Mason has never won prizes at the best shows or bred good dogs, and consequently cannot be a judge of dogs. The English stud books, which are not "in the printer's hands," prove that Mr. Mason has won the highest honors at shows, and bred the winners at Birmingham, Crystal Palace, Manchester, etc. I find that in 1876 Mr. Mason won first in both the large classes at Birmingham, and was breeder of the first and second prize winners in one class, a record I believe to be unequaled. He won the champion prize at the same show the year following and bred the Crystal Palace winner Marquis, who also won first at Birmingham. Mr. Mason's name appears as the owner of the winning dog at the Crystal Palace, 1880, and to go through his entire list of winnings would fill one issue of your paper. I believe that a man to be a judge must have owned and bred good dogs. Until he has accomplished this he must not assume to teach others. Will your Western contemporary reciprocate my kindness and tell us what good pointer it has ever owned or bred, and what sort of company its dogs have been shown in? The editor might have found Mr. Mason's record by reference to the English stud books, but possibly he does not keep them, in company with the subscriptions to the National American Stud Book—in his pocket.

FAIR PLAY.

SHOOTING OVER BEAGLES.

Editor Forest and Stream:

Having for a number of years given attention to the breeding of beagles and collies, and their proper education for field work, I became much interested in articles recently published in your paper upon "The Proper Size of Beagles."

As regards size, I herewith indorse the article of Mr. Pottinger Dorsey, in one of your late issues.

It has been my pleasure in times past, in company with Mr. Dorsey, to enjoy very many days' sport "across the glen and upon the hillside," with our beagles "roading up" and chasing the timid yet swift rabbit. On account of strength, hardiness, industry and energetic work, I think it imprudent to reduce the size (height) below thirteen inches (I refer to beagles, not bassets, and I furthermore refer to beagles as used for rabbits exclusively).

As regards the practice of shooting rabbits before a pack of beagles, I am of the opinion, based upon observation, that the practice is pernicious, and if persisted in may render a pack comparatively useless, and often cause the pack to bolt a hot foot when a neighborhood boy shoots at a chipmuck or robin.

I do not consider a pack of beagles properly qualified for field work if they have not the stamina to either kill or send everything that starts to the ground or hollow log. If "puss" gets under cover let her go; start a fresh one; she'll be out another day. Besides, dogs become more thoroughly in earnest when permitted to mouth their game, and to a sportsman the sport does not consist in the amount of game killed, but in the manner in which it is done.

If the pot-hunter desires a quantity of rabbits he starts out with a cur of his own, borrows a half-dozen more from some neighbor, and with the lot can under-run every brush-pile, bark around every bog, and start up every living thing in a neighborhood, and of course the master of ceremonies can sneak up and get a shot, and go home with a bag full of prey.

The object of keeping a pack of beagles is sport as exemplified in the chase. Certainly any gentleman can become interested in watching the search for cold trail of the night before and the maneuvering of the pack to "road up" puss; presently the "fresh trail" is felt, the signal note of the chase sounded, and away they go in line, the scent being yet low down. Puss shows up at every turn. Shall the pot-hunter with his gun cut short the sport at the start? Do not do it. Wait a minute, puss feels anxious and begins to warm up, her "foot" is hot and the scent floats high. Now note the pack, lining or trailing is done; each dog is pushing for the lead. Here they come, three, four, six abreast, noses up, necks outstretched, giving tongue most gloriously. Such music. Note and tone more harmonious than the bang of any shotgun. The chase cannot long continue at this speed. Let it end! What matter how? Puss in the bag or safely sheltered in the groundhog's home. Is not the sport in either case the same to a true sportsman?

Does the master of a pack of foxhounds permit reynard to be slaughtered by lead? No! Just as the fox and hounds is to the mounted sportsman, so should the rabbit and beagles be to the sportsman on foot.

I remember a two-days' hunt in company with Dr. J. W. Downey, his brother Frank, and some gentlemen from New York city, in Berkley county, Va. During the hunt we had sixty starts and bagged fifty-six, and scarcely any of them were shot.

We may sum up as follows the disadvantages of shooting game before a pack: First, deprives the sportsman of the pleasure of the chase; second, causes the pack to be careless in hunting for a lost or over-run trail; third, loss of animation by not freely mouthing game; fourth, causes inattention to business, by "harking" for the gun, all of which render a pack almost worthless for true sport.

F. C. PHEBUS.

BERNARDSVILLE, N. J., July 10.

THE LAVERACK SETTERS.

DURING the controversy which took place a year or so since between the adherents of the Laverack setter and the breeders of the field trial or what has been lately termed the Llewellin setter, it was my intention to have added to the long list of writers who ably defended their respective favorites that which I had learned of the first-mentioned dog, but press of business prevented it. It may not be amiss at this late date to relate my experience with the Laverack setter, several of which I both imported and bred. It would seem that Mr. Laverack, jealous of the high standard he had attained in breeding his dogs and anxious that his setter should still hold the position they had gained under his management, overstepped the limit and continued his inbreeding to such an extent, that where he improved their wonderful scenting power and more firmly stamped their natural tendency to find and point game, he multiplied that nervousness to which all inbred animals are prone until shyness of the gun has become such a part of the nature of the breed that it is an exception to the rule when the timidity in this particular does not show itself. Were it not that the Laverack setters have with me evinced intelligence in many ways, I would term the nervousness an idiocy, but so convinced have I become of their good sense in other important points, I would select as a stud dog a pure Laverack for certain bitches, in order to procure in the progeny the exquisite scenting powers and innate faculty of pointing game the youngsters of this most famous breed possess.

I cannot make a better comparison in regard to the intense nervous organization of the Laverack setter when I liken the timidity the breed as a rule exhibits at the report of a gun or any sudden sound to a human being fearful of a thunder storm and not being able to overcome it, knowing the while he is enjoying full as much safety during its prevalence as his surrounding companions. So marked has this peculiarity shown itself to me that I detect it most frequently (far too often) in the field trial or Llewellin breed of setters where there is a preponderance of Laverack blood in them, and they show the typical points of the older breed. While the Laverack setter is apparently courageous when allowed his own way in the pursuit of game and self-willed in his method, he will bear no correction. It becomes, then, a most difficult task even with the cord to train him to obedience or by taking advantage of his affections to guide him as he should go. In all the setters of this breed that I have owned or ever saw there seems to be a want of knowledge on their part that their powers should be coupled with those of their master in order to render themselves useful. In my opinion, no setters are better formed for speed and endurance than the Laverack, and the only breed that is marked in typical points. The Llewellins so widely differ in this respect, it is a question with me if they yet deserve the distinctive title they bear, and just here is the proof that Mr. Laverack, breeding to gain that which in his estimation was to be desired in a setter, accomplished his object. In reaching this point, however, continued inbreeding was resorted to and resulted in both increasing good quality and intensifying nervous temperament.

It is not my desire to have this short article taken as an attack on the Lavercks. I consider the breed valuable beyond question. In the stud they are priceless, in the field useless. I have now in my possession several letters from Mr. Laverack, written to me not very long before his death. All through these epistles there runs a vein of matter which plainly shows that he was fearful the dogs I purchased from him would exhibit the same timidity and shyness of the gun many of

his own must have done, mating as he was at the time, unless I was very careful in handling them. His instructions, minute and involving much time, were carried out to the letter, and but one of my importations proved of any value in the field, and she (Magnet), litter sister to Fairy II., became what she was only by long and continued cautious treatment. I must repeat again that the scenting powers and innate desire, and I would say the determination to hunt, of all the Laveracks I ever saw, was phenomenal, and herein consists their very great value to breeders in this country, yet I would warn sportsmen not to cross them where the same blood is very prominent. We must use the Laverack setters to improve our native stock; judiciously mate them, and for this purpose they will be most useful. HOMO.

MISTAKE IN PEDIGREE.

Editor Forest and Stream:

The pedigree of the pointer bitch Fancy, said to be by Croxteth ex Royal Fan, about three years old, and so advertised by Mr. Miller, is undoubtedly a fraud, from the fact, corroborated by Mr. Dilley's letters on the subject, and my personal knowledge, that the only bitch of that breeding was sent to me. This bitch pup was whelped Nov. 27, 1881, at Mr. Dilley's kennels, Rosendale, Wis., was liver and white, and I kept her in my yard till quite large, then I passed her over to a friend, Thomas F. Connolly of this place, to break and train for me. During that early fall I sent her to a friend in the South, to work her on quail. After some time I received a letter from him stating that she was so gun-shy and intensely nervous of every noise that she was worthless. I wrote for her and told my friend Hamilton he could have her under certain conditions, as I did not want to bother with her any more. He disposed of her, and at this present date of writing says he can produce her in New York city in four hours. This bitch is the only one that came East, beyond a doubt. Therefore, the only construction in accordance with the facts in Mr. Miller's explanation, is that Mr. Callender has been made the victim of a rascally imposition, and in all innocence has transferred with the bitch Fancy this imposition to Mr. Miller. Who the originator of this is, deponent saith not, but one thing is sure, whoever it is, all subsequent purchasers have been most shamefully duped, and I feel it my duty to advise Mr. Miller to ferret out this originator. I will cheerfully give and obtain all facts, dates, etc., and personally aid him with my best endeavors. He has my sincere sympathy, as I have suffered some few years ago in the same manner. W. A. COSTER.

FLATBUSH, L. I.

ENGLISH KENNEL NOTES.

IX.

MAIDSTONE show has given us plenty to talk about. The entries did not reach 500, and the attendance on both days fell equally short of expectation. I trace the falling off in entries to two causes. In the first place there are too many shows advertised this year, and owners of valuable kennels justly decide that their dogs can't stand the racket. A show is a great strain upon a high-bred dog's system. Your dogs generally lose a pound or two in flesh from pining and the confinement.

I know that at most large shows they announce in their schedules that the dogs will be taken off the bench once a day to ease themselves, but I have not much faith that this is carried out. Take the Kennel Club winter show at the Crystal Palace, for instance. The dogs are benched in the galleries within the palace. It would be an impossible task to loosen 1,300 dogs daily, lead them down the staircase, through the palace, its corridors, and thence into the grounds. I am sure this feat is not attempted, nor do I think the Crystal Palace Company would allow their grounds to be used for such a purpose. What happens then? Why, your dogs are hitched to two feet of chain, cooped up in a few square inches of room for four days and nights. This unsanitary confinement shortens the days of show dogs. We cannot be too grateful, therefore, to the Warwick executive, who provide a large inclosed green to which all the dogs are regularly taken out for exercise, etc

I am aware that there must be difficulties in the way, but surely it is playing rather small for the Kennel Club to even have others set them such an example, and still more pitiful that they are unable to follow it. The club is rich, why do they not purchase a piece of ground and put up an iron building. If they chose a plot in a good neighborhood, they would probably be money in pocket at the end of the year by letting it for flower shows, bazaars, and other shows. They should also have their own benching and fittings. If the Crystal Palace Company were to refuse to allow the Club to hold their shows on their premises, I think the committee would be at their wits' end. Where could they go? The Agricultural Hall is closed to them, the neighbors objected to the uproar made by the dogs, and obtained an injunction. The Alexandra Palace, the best of all places, is closed. There might be another place; I remember some two years ago, the late General Burnaby, uncle of the author of the "Ride to Khiva," showed me some plans for the construction of a huge building on the Agricultural Hall plan, in Kensington near the Addison road. It was designed to be let for the Royals and other big shows. I have not heard of it since his death, and don't know, therefore, if the works are in progress, or if even they were commenced. London is really in need of a large show ground.

It is surprising that this subject of not taking the exhibits off the bench has not excited more attention in a kennel press ever ready to encourage the ventilation of subjects that lead to prolific discussion and make capital "copy."

In all our catalogues one reads among the regulations: "Any person found untying or removing a dog from its number during the hours the exhibition is open, without the permission of the committee, chairman or secretary, will be expelled from the show; and if an exhibitor, the dog so removed will be disqualified from winning any prize at the show." This rule, however, is wisely not too strictly adhered to. Most exhibitors take their dogs off for a minute or two and that is long enough for the purpose. There is another way of looking at it of course, and that is from the public's point of view. They have paid their entrance money to see the dogs and they feel disappointed and consider they have been treated with bad faith if they find empty benches under prize cards, but the next time they come round that way they will usually find the tenant returned, looking all the better and more comfortable for the few minutes he has been down. But there is another regulation that I think managers should not yield upon, that is not to allow owners on the last day of the show to remove their dogs before the time advertised to the minute. I know exhibitors, particularly those of the sex, incorrectly, so far as concerns those who show dogs, described as the weaker, pester and wheedle the good-humored secretary to "let me take my dog out at half past four; will you, please, I've got to travel forty miles and I'm very anxious to get home to-night, which I shall not do if I miss this train," but the official should be firm, for if he gives them a pug they'll take a mastiff, and it is an intolerable nuisance to the public, who are quite prepared to clear out of the show at the hour they know it will close, and who came in expecting to have a quiet look round till that time, to be hustled and bustled by selfish dog owners hustling along through the gangways with their four-footed obstructions. They are "going to catch the train," so get out of the way. Here comes a man leading six collies; you screw yourself against the bench to let him pass, feeling very nervous, because you have heard collies are treacherous dogs, when one, a nervous bitch perhaps, starts round your legs. While the owner tries to disengage the poor creature that is now flying about in a frightful state of excitement, the others are jumping up at you. Another fellow comes along with some fox-terriers, who immediately fall out with the collies, and you dance about in a surging mass of canine profanity, treading on everybody's tail and getting snapped at generally. You will feel quite relieved when you are released from the confusion of chains and breathlessly jerked on to a bench where, while you lie panting, the occupant, a sedate bulldog, will patiently chew your coat collar. When the collie man and the terrier have told you all they could think about your clumsy conduct, they will leave you to struggle out to seek caustic for your wounds and needle and thread for your breeches. When you get home you will probably recall the story of the young diplomatist who was sent out to a new colony to report upon the customs of the natives. The dispatch he sent home will strike you as applying with some truth to doggy men: "They have no manners and their customs are beastly."

Maidstone again. Another fact to account for the few entries is, that the Palace show was fixed for a few days later, and many did not think it worth while to give dogs a gruelling at Maidstone that had a good chance at the Palace. The attendance was so meager as to lead one to seek for local reasons. The secretary lacked neither zeal nor energy, but I think he was deficient in experience. On a former occasion the show was run by two local doggy men, Mr. Towsley, a St. Bernard breeder, and his partner, Mr. Carr. They made a good thing out of it. This time, as usual, the committee stood the judges a dinner. I have tried to find out what happened at the dinner, but I knew nobody who was present intimately enough to ask. I suppose there were the conventional speeches. I hear that the chairman did his share, that Mr. Mellor replied for the judges, "Capting" Langdale (who also judged) for the press—Mr. Langdale's title is not a military one, but it is explained that the sons of the clergy are all "captings"—and Mr. Krehl for the successful exhibitors, and a member of the committee for the disappointed exhibitors. That seems rather hard. The party, I hear, was a jovial one, and only broke up when the light went out.

The awards were well received. Mr. Mellor, as usual, had most of the hard work. The St. Bernard classes were not quite up to the mark in quality, and as Sultan III. was superbly shown, he won in spite of his faults. It has usually been "body he wins, tails he loses" with him.

It was a hard case for the owner of the winning pointer to have his dog disqualified for being overweight. Sir Garnet, they say, was below the stipulated weight before the judging, but when it was over and he had won, his owner gave him a good "tuck in," but the treat cost him the prize, for when the wily objector came along, poor Sir Garnet turned the scales. Hard lines indeed, and there's a moral attached to the lesson.

Foxhounds, harriers and beagles gave the show quite a bright and novel aspect. Mr. Langdale here blundered a little, but should be spared censure as he undertook to judge them only to oblige, and confessed he was not well up in those breeds.

The tallest dog I have ever seen made his successful début in the boarhound class. Adric the Saxon was imported by Mr. Pemberton. He is a fine, raking young dog, with great bone, full of muscle, and gives one the idea of immense power, but withal an elegant creature. He has a true head, and the only "but" I heard about him was his color, which is a yellow red. He fairly beat Nero and Leal, both giants. The same kennel supplied the winner in bitches. I have seen larger, but never a truer, more typical specimen than Else.

Mr. Clarke, of Nottingham, won in fox-terriers, with Result, a smart terrier, and the same gentleman I heard claimed a pup in the show for £10 that he declared to be better than Result for whom Mr. Redmond offered £140.

The only unpleasant incident connected with the show was the poisoning of two collies. One of these expired in the show, the other, Sly Fox, who took first prize, was immediately sent home, and as his death has not been announced, I hope for the sake of his owner that he was able to throw off the drug. Of course, the scoundrel will never be discovered, nor have any motives for the crime transpired. The owner of the two dogs, I am told, is a London gentlemen, and popular among his fellows. I hope the fear of having our dogs poisoned is not to be added to the sufficient anxieties that already surround dog shows.

With regard to the proper size of foot-beagles, when I complain of fourteen-inch hounds being too large I am naturally, as "Rusticus" points out in your columns, speaking from the English point of view. I say that when the fourteen-inch beagles break away on the straight they run right away from you and you see none of the fun, and I think that by neglecting the smaller dogs, one body of their admirers will be lost and go ever to the bassets. The basset men are not letting the grass grow under their feet. I have seen in the papers that their club has founded a club hunt. I will write to a friend who takes an interest in the breed, and ask him to get me some particulars of their hunting capabilities. In their native land I know they are chiefly used by shooting parties to put up game in covert. I have also written to some masters of beagles for their opinions. The last time I was in the neighborhood of Tunbridge Wells I saw several good wire-haired beagles, all rather large.

The latest about the fox-terrier bitch claimed by Mr. Clarke for 10 guineas at Maidstone is, that her breeder sold her for 50 shillings to his brother-in-law, who made 100 per cent. on her in getting £5 from the man who has just lost her at £10. What will Mr. Clarke get for her? is now the question.

Correction—In notes of May 20, for Morpe Barham read Thorpe Barham. LILLIBULERO.

JULY 1, 1884.

MR. LLEWELLIN TO AMERICAN SPORTSMEN.

Editor Forest and Stream:

There appears to have in some way arisen considerable misapprehension concerning the class of dogs I have sent to America, which I think it is due, both to the American sportsmen and to myself, to correct. Such correction is necessary, in view of certain willful calumnies which have appeared in a contemporary of yours, founded, as it appears to me, on the use of the word "culls" in a letter from me to an American, who wished to persuade me to sell Count Wind'em a dog which an offer of fifteen hundred pounds would not have parted from me.

The real facts of the case are, that I have invariably kept for myself the first pick out of all litters bred in my kennel, and the second pick I have sent to the Americans. Those inferior to the second pick I have disposed of to Englishmen.

I wish it to be distinctly understood that the dogs which Americans obtained were only inferior to those which I retained for myself, and superior to any which I sent elsewhere. Thus Americans have had the best dogs in the world of my breed, with the exception only of those picked by me for my own reserved kennel. Whatever changes may take place in those dogs which I have sent to America, after they have left me, and encountered various altered surroundings, I have nothing to do with, if any such there may be. The class of dogs sent to America, which I referred to as second choice to my own reserved ones, were of so superior a character that, unless fortunately for me America had not been open to me to send them to, I might possibly have been even driven to the extremity of taking seriously into consideration the question of destroying them. The reasons why I might have been placed in this extremity are the following:

For many years a dead set was made against me, with the object of driving me from the field, by a ring of men whom my great success with this breed at field trials and dog shows had maddened into hostility, and finding that in fair competition it was useless for them to try and put down my breed, they descended to detraction and misrepresentation of all sorts to damn the solid reputation of the breed. Since this was the state of affairs, I determined that as they wilfully denied credit to my dogs for real excellencies which they possessed, they should be compelled to stand to their words, and should not be permitted to enjoy excellencies whose existence they denied, nor to have the chance to improve their beaten dogs by a cross with mine, and then boast that any improvement that might result from such cross was owing to the blood of their dogs and not of that of their conquerors. Until, therefore, a day should arrive when they would be forced by the force of public opinion upon them to fully and freely acknowledge the superiority of my breed, and change their tone altogether concerning them, and should come forward desirous of obtaining them, I would take care that they should not be suffered to procure from me anything like the second choice of my kennel. If therefore America had not been open to me I should have been puzzled to know what to do with those dogs of the second choice, which were too good to fall into the hands of the enemy, and which I could not keep myself, as my kennel was amply stocked with those superior to them, which I reserved to myself.

All those times are, however, passed away, the breed has outlived opposition in this country, and their superiority is now fully recognized, their advance in public estimation, like the incoming tide, has steadily and surely made its way, in spite of all obstacles, until their position is now a fact, whose existence stands simple proof of its being. I am not, therefore, now placed on the horns of the dilemma described above, and no longer need preserve my dogs jealously from being sold in England. I am now free to sell in this country dogs which heretofore Americans only could obtain.

I need merely point to the case of the famous bitch, Countess Bear, which I sent to America, thinking I could spare her, and having done so found I could not do without her, and was obliged to buy her and get her back here again. The class of dog which I sent to America was so near in value to what I kept myself that I sailed too close to the wind sometimes, as in the above instance, and sent away what I afterward found I could not afford to spare. R. LL. PURCELL-LLEWELLIN.

RANTON ABBEY, Stafford, July 1.

THE KENNEL HOSPITAL.

PARTICULAR FRACTURES.

FRACTURE of the lower jaw sometimes happens, and when not implicating both sides is curable. The difficulty is to fix the parts, after approximating the broken ends, so that fluid nourishment can be admitted. This is done by placing between the teeth on either side narrow plates of thick leather and then passing a narrow bandage around the nose and jaw. To prevent the broken end of the bone inclining inward, the hollow between the two sides of the under jaw is padded with cotton wool or tow. It is necessary to obtain exact approximation of the fractured ends, to remove any splinters of bone or loose teeth which are in the way. Having set the jaw properly and bandaged it, not even food or water should be allowed to interfere with the parts for at least a whole day, and then only fluids must be allowed until some reunion has taken place. This will require about ten days.

Fracture of the Nose.—The nasal bones are when fractured always depressed. No apparatus is required to hold them in position when they are raised to their proper place. This can be effected by passing up the nostril a strong metal probe and gradually forcing the bone back to its proper level. Occasionally pointed instruments penetrate the nasal and facial bones. In such cases when bleeding has ceased remove the hair and apply an adhesive plaster. In some instances such wounds do not heal, and a slight watery discharge constantly oozes from them. This is when the duct which leads from the eye to the nose is injured and a lachrymal fistula is established. It is incurable, and the application of caustics or astringents is simply inflicting pain with no chance of success.

Fracture of the Orbit.—Blows just above the eye may fracture the bone arch which forms the roof of the cavity in which the eyeball lies. The bone is depressed, and causes protrusion of the eye. To elevate the bone a flattened steel instrument about the size of a penholder is required. A dentist's tooth-elevator does very well. This is introduced through the skin above the fracture, pushed forward till in position under the bone, and then steady pressure will effect what is requisite. No plastering is necessary.

Fracture of the Ribs is not very common in dogs; even after a cart wheel has passed over an animal it is rare to find any of these bones broken. When it does occur the ends of the bone are usually depressed toward the lungs, and therefore nothing can be done except to place a wide bandage round the chest to limit the movement of the ribs. No pad is to be placed on the site of the fracture, as that would only make matters worse.

Fracture of the Spine is followed immediately by paralysis behind the seat of injury. It usually occurs about the loins, and, when not traceable to direct injury, may be mistaken for paralysis of the hind-quarters due to some other cause. In many cases manuipulation fails to detect the injured spot, and we can then only diagnose the case by the aid of the history, the circumstances accompanying it, and the abscence of other diseases. Paralysis appearing suddenly, being very complete and not responding to treatment in a few days, may usually be associated with spinal injury, and is incurable.

Fractures of the Hip Bones are not uncommon, and can seldom be benefited much by surgical interference. Rest is the great essential, and recovery may be looked for at the expense of some deformity. The advisability of killing an animal with a broken hip depends upon the extent of the fracture and its exact position, and also upon the requiremeuts of the dog. If lameness for life is probable, it is no use treating sporting dogs. Pets, in whom a deformity is not seldom an extra cause for attachment for the owner, may always be treated. Bitches which are suffering from fractured hip bones or pelvis should be carefully examined as to the amount of damage and deformity resulting, as it may be sufficient to prevent parturition. In such cases death can only be the result of pregnancy.

Fracture of the Thigh.—I have referred to and need only repeat, that no bandaging can do any good, and in most cases must do harm. Adhesive plasters may be employed with a view to limit motion, and the dog must either be kept in a confined space or tied up very shortly.

Fracture of the Shoulder Bone is not common. In addition to adhesive plasters, a bandage may be used with advantage to limit motion. It passes first round the chest behind the shoulder, is brought back between the fore legs, and may include the elbow of the injured limb if the position of the fracture renders it advisable.

Fracture of the Elbow.—Strictly speaking the elbow is a joint, but I here use the term to denote a region. It is very far from rare to have a young dog brought for examination said to have "something wrong with his elbow." The history is nearly always the same—a fall from a chair or a table, or down stairs. The elbow is swollen and painful, but no crepitus can be detected. The swelling is not at the point of the elbow, but toward the upper part of the joint. These cases are partial fractures of the lower end of the bone that runs from the elbow upward to the shoulder. There is no crepitus, because the bone is only broken partially through. The end of this bone contains a deep notch, into which a prominent point of the other bone forming the elbow joint fits. The arrangement may be likened to a cleft in the end of a stick into which a wedge is placed. Force the wedge violently to one side, and you fracture one of the extremities of the stick. This is just what happens with the bones. The treatment is to press back the broken part into position, and then retain it there with strips of adhesive plaster. Place the fingers between the body and the elbow, the thumb being

outside on the swollen part, and very little pressure is requisite to nearly replace the broken end. Unfortunately, the fracture is most likely to extend into the joint, and we find as a consequence that this lesion is usually followed by more or less permanent stiffness.

Fractured Claws.—When the skin is broken, and the amount of injury done to the bone is very great, it had better be removed at once with a pair of scissors. When all or many of the bones of the foot are broken, they must be placed in position as well as possible, cotton wool put between them and behind them so as to preserve the form of the foot, and strips of adhesive plaster so arranged as to firmly retain them *in situ*.

Fractured Tail is often very difficult to treat. When the injury is near the root, a long splint must be fixed along the back, and extend sufficiently over the tail to afford support to a starched bandage enveloping the injured member. When near the point, amputation is the simplest course, but if the beauty of the animal would suffer by this, a starched bandage will prove effectual.

No lotions or liniments should be used to a fractured part, but the bandages and other appliances should be kept dry. Care should be taken to see that no chafing of the skin occurs. If it does, cut away the offending substance as far as necessary.

Bandages should be retained for at least fourteen days, and if they are causing no great discomfort, for three weeks. When a broken leg, especially a front one has weight placed on it too soon and no artificial support, it is apt to become bent. When deformity is no object, or when permanent lameness may be forgiven, fractures in dogs which do not injure any vital organ may be treated with every prospect of saving life. Even when a bone does not reunite, the parts adapt themselves to circumstances. Wounds heal marvellously, and very ugly compound fractures make good recoveries. Hardly any case is hopeless if nature be given a fair chance.

DISLOCATIONS.

Compared with other domestic animals, dogs are rather liable to dislocations, but they are not nearly so often sufferers from this accident as the human subject. The difference is accounted for by the formation of the joints. In those joints in which the formation is such as to limit motion to one direction, or in which strong short ligaments are strengthened by the passage over them of broad tendons, dislocation is rare. In those joints where motion is freely permitted in many directions, dislocation is common. A short explanation of the structure of a joint will show how this results. The simplest moveable joint consists of the junction of two bones, which are held together by ligaments. The ends of bones entering into a joint are smooth, and covered with a thin layer of cartilage, or what is commonly called gristle. Completely surrounding these ends is a thin membrane containing the synovia, or joint-oil, which lubricates the gliding surfaces of the bones. Outside of this thin membrane are strong fibrous bands or ligaments, which hold together the bones and limit motion to certain directions, and in a definite degree. These ligaments are inelastic, and, if the movement of a bone be forcibly carried beyond its normal distance, they become stretched, or even lacerated. In those joints where movement in different directions can be freely effected, such as the hip and wrist, the ligaments are long and comparatively loose; consequently any violent extension of the bones is not only sufficient to stretch them, but is also liable to cause displacement of the joint surfaces, in other words produce dislocation. In those joints where movement is more limited in degree and direction the ligaments are shorter and firmer; therefore, while stretching or sprain is readily induced, dislocation seldom occurs. It may, in short, be said that the greater the freedom of movement possessed by a joint the greater the liability to dislocation; the more limited the movement the greater the liability to sprain, but the less the risk of dislocation. In the joints of the limbs of horses we find a formation limiting motion in a remarkable manner nearly entirely to one direction, and we seldom see dislocation. In the joints of the limbs of man we find a construction giving great facility of motion in various directions, and dislocations are common. The joints of the limbs of dogs take an intermediary position, and we find dislocation only in those joints possessing the greatest freedom of motion.

The cause of dislocation is always external violence, such as kicks and blows, or falls, when the animal's own weight is the force causing the injury. I have never known a case of dislocation in a dog to result from its own muscular action. When dislocation is complete and the two bones forming the joint are quite displaced a further separation is caused by the contraction of the muscles, which pull upward the lowermost bone, thus causing the limb to become shorter, and producing deformity at the point affected. Another characteristic sympton of dislocation is the immobility of the joint, not only by the animal, but by any one examining the limb and attempting to move it. This fixedness does not exist to the same degree in an old-standing dislocation; in fact, in some cases of the dislocation of the hip movement is free enough, but deformity is most apparent, being increased by wasting of the muscles. The existence of fracture, with or without dislocation, is detected by the crepitus or grating which accompanies movements of the limb. Fracture is very often found with dislocation, especially at the elbow. When it exists adaptation of the parts is more difficult, as a simple dislocation when once reduced remains in its place, but when the bone is broken separation of the parts takes place again immediately the extending force is removed.

Treatment.—To reduce a dislocation we have to forcibly extend the limb, so as to bring the head of the displaced bone to a level with the surface of the other bone forming the joint, and to direct it by pressure back into the position from whence it came. In many cases simple extension is sufficient, as when the bone arrives at the requisite level, it is pulled into its place by the muscles attached to it. In others some manipulation is required, and that, of course, differs according to the form of the joint, and the direction in which dislocation has occurred. In dislocation of the higher joints of the limb where large muscles are found, extension is painful and difficult. In these cases the greatest assistance is derived from the administration of chloroform, which in dogs is unfortunately not very safe. A dislocated joint is for a long time liable to a recurrence of the accident.

The Hip Joint is the most common seat of dislocation in dogs. In nearly every case the thigh bone is driven backward and upward, causing a deformity which cannot be mistaken. Extension must be made in the direction of the bone, *i. e.*, downward and forward. In large dogs a bandage may be fixed above the hock to assist in extending the limb; in small ones sufficient grip can be obtained with the hand. In all cases the hip bones must be fixed by an assistant, who keeps the parts steady by firmly holding the dog by the loins, and if necessary the tail. When reduction is effected a firm adhesive plaster should be placed over the seat of injury, and movement limited as much as possible for a week or two.

The Stifle Joint is often the seat of a most troublesome dislocation, especially in young dogs. The large bones forming the joint are not implicated, but a small one which plays in a groove on the upper and front part of the joint. The stifle of dogs and other animals is the analogue of the knee in man, and the knee-cap or patella is the bone I am now referring to. This little bone moves upward and downward in a shallow groove and is held in its place by ligaments on either side. Should it be violently forced inward or outward the ligaments are stretched, and it slips off the groove. The result is the leg is drawn up, the stifle more or less fixed, and the whole limb carried behind its normal position. The displaced bone is easily felt in its altered place on the inside or outside of the joint.

So long as the stifle remains flexed it is impossible to replace the bone, but if the limb be extended by drawing the foot forward and downward it is easily pushed into its place. Unfortunately it is easily displaced, and very often few steps are taken by the dog before the bone is, by the action of the muscles attached to it, again pulled from its groove. An old case of this kind is almost hopeless, but a recent one only requires a firm adhesive plaster to be applied after reduction and movement of the limb to be limited by a splint, to recover rapidly.

The Wrist is seldom completely dislocated. It is a very complex joint, including in its formation about a dozen different bones, a number of which are arranged in two rows placed between the larger bones forming the joint. Occasionally one or more of these small bones become displaced, and are not easily reduced. Slight extension of the foot is made while a movement backward and forward is given with one hand, the other being employed in pressing back to its proper place the prominent bone. The majority of dislocations of the larger bones of the wrist are accompanied by fracture, and are to be treated accordingly, *i. e.*, by reduction and a fixed bandage.

Dislocations of some weeks' standing are nearly always incurable. The joint surfaces of misplaced bones soon undergo alterations of form which prevent their again being adapted to each other. Cavities become filled up and prominent ridges flattened down. The ligaments also adapt themselves to altered circumstances, and when much inflammation occurs exuded material becomes organized and entirely alters the structure of parts.

Dislocations do not kill, although they cause great deformity and lameness. Dogs whose usefulness does not depend chiefly on their soundness of limb may therefore live a long time without pain or inconvenience after the acute symptoms of an unreduced dislocation have passed off.

Immediately a dislocation has occurred is the best time to effect its reduction without chloroform, as then no inflammatory changes have taken place and the shock to the system renders the muscles less active in counteracting extension of the bones. As effective extension is often sufficient to produce replacement of the bones an amateur is justified in attempting reduction in an emergency.—*Wm. Hunting in Land and Water*

WARWICK SHOW.—Pittsburgh, July 11.—*Editor Forest and Stream:* When I read your bright correspondent's article on Warwick show and the mastiffs there, I thought he was going it a trifle too strong. So I sent a copy of the paper to a mastiff fancier, who was in no way interested in any of the dogs exhibited, nor in any of the exhibitors, and asked his opinion as to the correctness of Mr. Portier's judging. His reply was: "He (Mr. P.) evidently knows the correct thing when he sees it." This is from one of the oldest and most critical judges in England. As to Mr. Taunton, I have always heard him spoken of in the very highest terms, as a gentleman above reproach. A well-known breeder in this country had considerable correspondence with him, and says that if it had been possible for Mr. Taunton to take advantage of any one, he gave him the chance, and it was not taken. Mr. Richard Cook, Hon. Secretary of the old English Mastiff Club, a gentleman certainly of spotless character, always writes of Mr. Taunton with the utmost respect. Mr. Wm. Graham of Belfast, who knows doggy men as well as any man in England or Ireland, and who was admirably described as "downy but straight," also spoke of Mr. Taunton as above all suspicion of underhand dealings. I do not remember the exact words "Lillibulero" used and cannot find his article, but I distinctly remember that it was calculated to create the idea that Messrs. Taunton and Portier were colleagues in an underhand way. This may not have been his intention, and if it was not I think he should make an explanation. This is apropos of Mr. Turner's letter in yours of the 9th.—W. WADE.

CHAMPION BUSH.—Providence, July 11, 1884.—*Editor Forest and Stream:* In your paper of July 10, Mr. Frank Kent, of Monticello, New York, advertises beagle pups for sale out of his champion Bush. I being the owner of champion Bush and a litter of six weeks' old pups out of her, think there must be some mistake. Are there two English beagle bitches named champion Bush?—A. H. WAKEFIELD.

PHILADELPHIA DOG SHOW.—The list of special prizes which have been promised by leading firms in Philadelphia is daily increasing in number, and the building in which the exhibition will be held has already been erected. Numerous letters have been received by the Kennel Club inquiring for particulars. These will be sent you in time for your next publication.—HOMO.

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, of breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Cad L. By Mr. T. M. Steele, Dover, N. H., for blue belton English setter bitch, whelped Feb. 28, 1884, by Cashier (Dash III.—Opal) out of Jersey (Blue Dan—Flake).

Badger Queen. By Mr. John Bolus, Wooster, O., for black, white and tan English setter bitch, whelped Feb. 15, 1884, by Captain Snoozer (Rake—Phyllis) out of Elsie Belton (Laverack Chief—Fame).

Belle Rogers. By Mr. John Bolus, Wooster, O., for black and white English setter bitch, whelped Jan. 14, 1884, by Prince Al (Leicester—Dodge's Rose) out of Moll (Belton—Snow).

Storm. By Mr. E. H. Lathrop, Springfield, Mass., for black, white and tan English setter dog, whelped September, 1882, by Mr. J. Y. Ross's Carl (Leicester—Dart) out of Countess Vesta (Dan—Countess).

Echo. By Mr. Herman F. Schellhass, Brooklyn, N. Y., for black, white and tan beagle bitch, whelped April 15, 1884, by imported Ringwood out of Trinket (Flute—Queen).

Bron. By Mr. E. S. Gaylord, New Haven, Ct., for black cocker spaniel dog, whelped April 29, 1884 (Obo II., A.K.R. 432—Smut, A.K.R. 858).

Belle Gladstone. By Mr. John Bolus, Wooster, O., for blue belton English setter bitch, whelped April 21, 1884, by champion Gladstone out of Jessamine (A.K.R. 1062).

Virginia. By Dr. Geo. A. Quimby and Mr. C. W. Littlejohn, Leesburg, Va., for lemon and white pointer bitch, whelped Oct. 29, 1883 (champion Sensation, A.K.R. 217—Rose, A.K.R. 214).

Clifton. By Mr. Guy Tremelling, Summit, N. J., for liver and white pointer dog, whelped April 18, 1884, by Donald (A.K.R. 1246) out of Grace (A.K.R. 1250).

BRED.

☞ *See instructions at head of this column.*

Glenfinlass—Dick Laverack. Mr. T. G. Davey's (London, Ont.) English setter bitch Glenfinlass (A.K.R. 588) to his champion Dick Laverack (Thunder—Peeress), July 4.

Topsey—Jake. Mr. Geo. E. Browne's (Dedham, Mass.) Gordon setter bitch Topsey (Bailey's Tom—Fanny Rupert) to Mr. Wm. Quiggle's Jake (Tom—Bess), June 1.

Bellona—Sensation. The Westminster Kennel Club's pointer bitch Bellona (A.K.R. 204) to their champion Sensation (A.K.R. 217), July 5.

Blonde—Blue Dick. Mr. John Bolus's (Wooster, O.) English setter bitch Blonde (Carlowitz—Magnet) to his Blue Dick (Blue Dash—Jolly May), July 5.

Daisy—Blue Dick. Mr. John Bolus's (Wooster, O.) English setter bitch Daisy (Belton—Floss) to his Blue Dick (Blue Dash—Jolly May), July 8.

WHELPS.

☞ *See instructions at head of this column.*

Speck. Mr. J. A. Backus's (Newark, N. J.) English setter bitch Speck (Roderick—Foster's Speck), July 7, ten (two dogs), by Blue Blood (Leicester—Doll); one dog living.

Young Swan. The Milwaukee Kennel Club's (Milwaukee, Wis.) imported Irish water spaniel bitch Young Swan (E.K.C.S.B. 12,671), June 15, twelve (four dogs), by Blair's imported Drake (Connaught Ranger—Quail II.).

Dora. Mr. C. M. Munhall's (Cleveland, O.) pointer bitch Dora (Sensation, A.K.R. 217—Devonshire Lass), June 28, eight (two dogs), by his Donald II. (Donald—Devonshire Lass); all liver and white.

Nellie. Mr. J. Crompton's Gordon setter bitch Nellie, June 5, ten (four dogs), by Mr. Geo. E. Browne's Glen II. (Dr. Aten's Glen—Border Lily).

Polly. The Westminster Kennel Club's pointer bitch Polly (A.K.R. 212), June 26, eight (five dogs), by their imported Bang Bang (A.K.R. 394).

Lulu II. Mr. J. J. Scanlan's (Fall River, Mass.) red Irish setter bitch Lulu II. (Berkley—Lulu), July 5, eleven (eight dogs), by champion Glencho.

Delph Viva. The Riverside Kennel's (Clinton, Mass.) mastiff bitch Delph Viva (E.K.C.S.B. 14,738), July 4, eight (six dogs), by The Prince (Crown Prince—Lady).

Rena. The Riverside Kennel's (Clinton, Mass.) mastiff bitch Rena (A.K.R. 262), July 12, eight (five dogs), by their Agrippa (A.K.R. 449).

SALES.

☞ *See instructions at head of this column.*

Dash. Lemon and white pointer dog, whelped Feb. 19, 1882 (Sensation, A.K.R. 217—Lill), by Mr. W. Phillips to Dr. A. McCollom, New York.

Obo II.—Smut whelp. Black, with white on chest, cocker spaniel dog, whelped April 29, 1884, by Mr. H. C. Bronsdon, Boston, Mass., to Dr. Gaylord, New Haven, Conn.

Belle's Pride. Blue belton English setter bitch, 4yrs. old (champion Paris—Harrison's Belle), by Mr. T. G. Davey, London, Ont., to Mr. Hugh Hill, New York.

Canadian Queen. Black, white and tan English setter bitch, 1½yrs. old (Lava Rock, A.K.R. 369—Liddersdale, A.K.R. 592), by Mr. T. G. Davey, London, Ont., to Mr. Geo. C. Sterling, New York.

Storm. Black, white and tan English setter dog, whelped September, 1882 (Carl—Countess Vesta), by Mr. R. B. Nesbitt, Storm Lake, Ia., to Mr. E. H. Lathrop, Springfield, Mass.

Echo. Black, white and tan beagle bitch, whelped April 15, 1884 (imported Ringwood—Trinket), by Mr. N. Elmore, Granby, Conn., to Mr. H. F. Schellhass, Brooklyn, N. Y.

Gladstone—Jessamine whelp. Black, white and tan English setter dog, whelped April 21, 1884, by Mr. John Bolus, Wooster, O., to Dr. S. D. Woods, Connellsville, Pa.

Topsy. Black, white and tan English setter bitch, 2yrs. old (Blue Dick—Burlesque), by Mr. John Bolus, Wooster, O., to Mr. Wm. Fies, Marion, O.

Bonner. Black and white English setter dog, whelped Dec. 24, 1883 (Blue Dick—Bramble), by Mr. John Bolus, Wooster, O., to Col. W. H. Rankin, Paducah, Ky.

Topsey. Gordon setter bitch, whelped August, 1881 (Bailey's Tom—Fanny Rupert), by Mr. E. C. Alden, Dedham, Mass., to Mr. George E. Browne, same place.

Bron. Black cocker spaniel dog, whelped April 29, 1884 (Obo II., A.K.R. 432—Smut, A.K.R. 858), by Mr. H. C. Bronsdor, Boston, Mass., to Mr. E. S. Gaylord, New Haven, Conn.

Bang Bang—Rose whelp. Liver and white pointer dog, whelped May 15, 1884, by the Westminster Kennel Club to Mr. A. Diaz Miranda, Philadelphia, Pa.

Katherine. Red Irish setter bitch (A.K.R. 1085), by Dr. Wm. Jarvis, Claremont, N. H., to Mr. R. R. Howard, Devil's Lake, Dak.

Glencho—Juno whelps. Red Irish setters, whelped April 6, 1884, by Mr. Geo. Langran, Yonkers, N. Y., a dog to Mr. Rudolph Eickemeyer, same place; a bitch to Mr. N. Putnam, same place, and a dog to Mr. Frank Harmon, New York.

Donald—Grace whelps. Liver and white pointers, whelped April 18, 1884, by the Clifton Kennel, Jersey City, N. J., a dog to Mr. G. W. Whaite, Elizabeth, N. J.; a dog to Mr. C. R. Thorburn, Ridgefield, N. J.; a dog to Mr. Guy Tremelling, Summit, N. J., and a bitch to Mr. L. B. Kline, Huntington, Pa.

PRESENTATIONS.

☞ *See instructions at head of this column.*

Donald—Grace whelp. Liver and white pointer dog, whelped April 18, 1884 (Donald, A.K.R. 1246—Grace, A.K.R. 1250), by Mr. G. W. Whaite, Elizabeth, N. J., to Mr. Chas. E. Scott, Bristol, Pa.

A DEFINITE AMOUNT OF INSURANCE, lowest cash rates, plain contract, ample security—such are the special advantages offered by the Travelers, of Hartford, Conn.—*Adv.*

Rifle and Trap Shooting.

RANGE AND GALLERY.

GARDNER, Mass., July 9.—The regular meet of the Gardner Rifle Club occurred to-day. The American decimal target was used; shooting off-hand; distance, 200yds., with a possible 100. The score tells the work of each:

G F Ellsworth	93	W C Loveland	80
G E Fordyce	88	G H Heywood	77
A Matthews	87	H Perkins	62
M Atherton	80		

BOSTON, July 12.—The attendance at the range at Walnut Hill today was very small, most of the gentlemen being away on their vacations. Those that shot had to contend with a strong, puffy wind, which blew from 6 o'clock. In the Victory match, Mr. J. B. Fellow made a good 80. In the rest match, Mr. C. H. Brown made one 97 and one 91. In the decimal match, W. Charles scored two 85's off-hand. Appended are the best records of the day:

Creedmoor Practice Match.

R Reed	4554455554—46	J Darmoddy (mil)	5444454345—42
W J Look	4544455545—45	J C Mallory (mil)	4444154344—40
E C Barnes	5444454554—44		

Creedmoor Prize Match.

F W Perkins	4445545555—46	F Wallace	4545554544—45
R Reed	4454554555—46	W J Look	4444544455—44
T Everett	4455544545—45	J A Cobb	4445454444—42

MONTREAL July 12.—The annual prize meeting of the Quebec Rifle Association has been fixed for the 12th of August at Point St. Charles range. The battalion teams are reduced to six men. In consequence of the rule at Wimbledon the shooting with Martinis has been changed from 800 to 500 and 600yds.

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

NEW ENGLAND ASSOCIATION.

Editor Forest and Stream:

At a meeting held in Boston, July 9, steps were taken toward forming a "New England Trap-Shooters Association," and a committee appointed to draft by-laws and shooting rules. I would like to be allowed to offer for their consideration the following suggestions:

First—Would it not be more satisfactory to trap-shooters generally to charge each individual member of the association a certain sum as annual dues, instead of a certain amount for each club, as is the case now in the Massachusetts State Association, and at the time of joining, the person to state what club he identifies himself with, which would do away with all liability of dispute in the case of a person who is a member of several different clubs, as to which club he should shoot with, as has sometimes been the case in the past.

Second—Should the association offer badges for competition, to make all matches open to all members of the association, the winner of the badge to name time and place of the next match. Under the present rules of the Massachusetts State Association, all badges are subject to challenge, and if several parties challenge the holder nearly simultaneously the first challenge received by the secretary of the association is accepted and the others are obliged to wait until after the match takes place before they can challenge again, when the same thing is liable to happen again, thus disappointing many who would like to contest for the badges. Under the proposed conditions I think more interest would be taken in badge matches, a larger attendance secured, the badges more likely to be distributed among different clubs, and more satisfaction given to the shooters generally.

T. S. HALL.

FALL RIVER, Mass.

Editor Forest and Stream:

In conformity with the call extended to the New England sportsmen, a meeting was held at Young's Hotel, Boston, July 9. A large number attended, and the New England Trap Shooters' Association was thoroughly organized. The following comprise the officers elected: President, Dr. C. H. Gerrish, N. H.; Vice-President, E. W. Tinker, Providence, R. I., and L. G. White, Worcester, Mass.; Secre-

tary, C. H. Orr, Boston; Treasurer, A. F. Adams, Boston; Directors, D. Kirkwood, Boston; E. S. Luther, East Providence, R. I.; Col. E. C. Farrington, Portland, Me.; C. M. Stark, Dunbarton, N. H.; Harry Nichols, Bridgeport, Conn. The meeting passed off in the best style, and augurs well for the future of this organization.

BOSTON GUN CLUB TOURNAMENT.

LAST Wednesday found a throng of the strongest shooters in the New England States assembled to run through the programme provided by the Boston Gun Club, and the day being well adapted for clay-pigeon shooting found representatives from Portland, Me., Exeter, N. H., Providence, R. I., Massachusetts also having their best shooters in the lists. In fact, no stronger lot of 50 trap-shooters have yet been brought together. The spacious awning recently added, tended most agreeably to the comfort of the sportsmen, and although the meeting in the afternoon of the New England Trap-Shooting Association narrowed the time limit, some 3,500 birds were disposed of in a summary manner. Below records the success of the different shooters:

First event, 5 birds, 18yds. rise:

H W Eager	01011—3	S B Bartlett	01111—4
W S Perry	01110—3	M Plympton	01000—1
C Plympton	11111—5	G A Sampson	10110—3
W Webber	01101—3	G H McKenney	01001—2
C DeRochmont	10000—1	T B Davis	00011—1
O J Jenkins	10011—3	G Hall	00000—0
C M Stark	11111—5	W L Lavis	11111—5
D Kirkwood	11111—5	E T Smith	11111—5
J A Cole	01111—4	H E Harmon	11110—4

Kirkwood, Davis and Smith first, Harmon, Cole and Bartlett second, Perry and Webber third.

Second event, 8 pair doubles, 15yds. rise:

Eager	10 10 00—2	Sampson	11 11 10—5
Jenkins	00 10 10—2	Smith	00 11 11—4
DeRochmont	10 10 11—4	Kirkwood	00 11 10—3
Perry	10 11 11—5	Stark	11 11 10—5
Webber	11 11 10—5	Bartlett	10 11 11—5
M Plympton	11 11 11—6	Hall	11 11 01—5
Davis	10 11 11—5	McKenney	10 00 11—3

Plympton first, Stark second, and DeRochmont and Smith third.

Third event, 7 birds, 18yds. rise:

Stark	1110111—6	Sheldon, C M	0110111—5
Perry	1111110—6	Payne, J B	1010110—4
Jenkins	1110011—5	Plympton	0111011—5
De Rochmont	0111111—6	Luther	0100101—3
Smith	1111111—7	Sheldon, W H	1111111—7
Bartlett	1000111—4	Webber	1111111—7
Cole	0100000—1	Houghton	0101000—2
Eager	1101111—6	Kirkwood	00110 w—2
Sampson	1111001—5	Harmon	00010 w—1
Davis, W L	0101000—2	Snow	1111110—6
Roberts	1010111—5	Rowell	0111110—5
Tinker	1110111—6	Crandall, G	0100111—4
Davis, T B	0101000—2	Cooper	00100 w—3
Carey	1110101—5	Johnson	0110010—3
Gray	1111111—6	Francis	1110111—6
Payne, C B	1100111—5	Crandall, W	1101111—6

Smith first, Tinker second, Plympton and Rowell third, Crandall, Bartlett and Payne fourth.

Fourth event, 4 pair doubles, 15yds. rise:

Perry	10 00 00 10—2	Jenkins	11 10 00 11—5
Tinker	10 11 11 11—7	Houghton	11 11 10 10—6
Kirkwood	10 10 10 11—5	Francis	10 10 10 11—5
W L Davis	11 10 11 10—6	Smith	10 10 11 11—6
Rowell	11 11 11 11—8	Snow	10 11 11 10—6
DeRochmont	10 10 11 10—5	Webber	11 10 11 11—7
C C Gray	10 11 11 11—7	Stark	11 10 11 11—7
Eager	00 11 11 00—4	Crandall	10 10 11 10—5
Cooper	10 11 11 11—7	Sampson	11 00 11 10—5

Rowell first, Stark and Gray second, Davis third, Sampson and Kirkwood fourth.

Fifth event, 7 birds, 18yds. rise:

Sampson	1111111—7	W Sheldon	1111101—6
Cooper	1101101—5	Payne	1010011—4
Jenkins	1001010—3	J R Payne	1101000—3
Perry	0110001—3	Webber	1001000—2
Eager	1110110—5	M Plympton	1011001—4
Tinker	1100101—4	Barmy	1111110—6
Smith	1110000—3	Harmon	1111100—5
C Plympton	1100101—4	Lorett	1001011—4
Cole	1100111—5	Bartlett	0110011—4
M D Gilman	1001111—5	G F Cutting	0010111—4
Stark	0001111—4	Snow	1100111—5
Carey	0111110—6	Luther	1110111—6
Francis	0110010—3	Rowell	1011111—6
McKenney	1010100—3	Johnson	1101010—4
Houghton	0100011—3	G Crandall	0001101—3
Roberts	0100101—3	H D Mathewson	1101111—6
C M Sheldon	1111101—6	G G Tidsbury	1111011—6
W Davis	1110011—5	L A Adams	0111111—6
Gray	1110111—6	A L Papanti	0111010—4
DeRochmont	0110110—4	J Nichols	0111010—4
Kirkwood	1000110—3	T G Stanton	1110101—5

Sampson first, Tidsbury and Sheldon second, Eager third, Lorett and Plympton fourth.

Sixth event, 5 pair doubles, 15yds. rise:

Kirkwood	10 11 11 00 11— 7	W Crandall	01 10 11 11 10— 7
Roberts	10 01 10 00 01— 5	Gray	11 01 10 01 00— 5
Stark	11 11 01 10 11— 8	Eager	01 11 11 11 11— 9
DeRochmont	00 10 10 10 11— 5	Carey	01 01 11 11 11— 8
Tinker	11 10 00 10 11— 5	Smith	11 01 11 11 10— 8
Perry	01 11 11 11 10— 8	C Payne	10 10 11 11 11— 8
Cooper	11 11 01 11 01— 8	Luther	10 11 10 11 11— 8
Jenkins	11 11 11 11 11—10	Webber	11 11 11 11 01— 9
Sampson	11 00 10 01 11— 6	Tidsbury	10 11 11 11 11— 9
Rowell	11 11 11 10 10— 8	Francis	11 10 11 11 01— 8
Houghton	10 11 11 11 10— 8	Mathewson	11 01 11 00 00— 5
Davis	11 11 11 11 11—10	Johnson	11 10 01 11 01— 4
Gilmore	10 10 11 11 11— 8	Snow	10 10 11 10 10— 6

Davis and Jenkins first, Eager, Webber, and Tidsbury second, Cary third, Kirkwood and Crandall fourth.

Seventh event, 7 birds, 18yds. rise:

Eager	1101011—5	Sampson	1011001—4
Perry	1100111—5	Adams	1101011—5
DeRochmont	1011101—5	Stark	0110110—4
Gilman	1111010 5	C Payne	1101111—6
Smith	1111011—6	C P Plympton	1111111—7
Roberts	1100111—5	J H Brady	1010001—3
W Crandall	0111001—4	Rowell	1111111—7
Stanton	1010011—4	M Plympton	1101111—6
Harmon	0111001—4	Kirkwood	0111110—5
Carey	1010111—5	Cole	1100110—4
J B Payne	1010111—5	Johnson	0110001—3
Bartlett	1101010—4	Davis	1000011—3
C M Sheldon	1111010—5	Houghton	1111111—7
Jenkins	1111100—5	Tinker	1101111—6
Cutting	1001111—5	Papanti	01000w—
Webber	1111110—6	Francis	0100101—3
Snow	1001111—5	Mathewson	1111110—6
C C Gray	0100110—3	G Crandall	1111111—7
W Sheldon	1111100—5	Tidsbury	1111101—6
Cooper	1111110—6	Luther	1100111—5

Plympton, Rowell, Crandall and Houghton first, Smith, Webber, Payne and Mathewson second, Jenkins third, Crandall and Stark fourth.

Eighth event, 7 birds, 18yds. rise:

DeRochmont	1001100—3	Stark	0111001—4
Dodd	1111011—6	Sampson	1110111—6
Cole	1110111—6	Mathewson	0111110—5
Eager	1010111—5	Gray	0001010—2
Law	0011111—5	Tidsbury	1111101—6
Jenkins	0111111—6	Smith	1101011—5
Sheldon	1111111—7	Crandall	0111110—5
Tinker	1111111—7	M Sheldon	1110110—5

Sheldon and Tinker first, Sampson and Cole second, Eager third and Stark fourth.

Ninth event, Boston Gun Club medal match, open to all clubs in the New England States. Conditions: Two men, 7 birds from 5 traps; 7 birds from one trap; 3 pairs double from 2 stationary traps:

Worcester Sportsman Club.

	5 traps.	Doubles.	Singles, 1 trap.	
Eager	0100011	11 10 11	0111110	—30
Perry	1110111	10 11 11	1110011	

Worcester Second Team.

Gilman	0110001	11 11 11	0111110	—30
Sampson	1011101	11 11 11	1011110	

Worcester First Team.

Smith	1011000	11 11 00	0110111	—24
Houghton	1010110	00 10 01	1011011	

Exeter Sportsman Club.

Cooper	0101110	01 00 01	1111101	—30
Jenkins	0111011	11 11 11	1111111	

Narragansett Gun Club, of Providence, R. I.

Sheldon	1110010	11 11 11	0111010	—30
Tinker	1001100	11 11 11	1111111	

Watchemoket Gun Club, of East Providence, R. I.

Luther	1010100	11 10 11	1100011	—24
Barmy	1111100	00 01 11	0011011	

Massachusetts Rifle Association.

Rowell	1111111	01 00 01	1111111	—35
Tidsbury	1110111	11 11 11	1111111	

Narragansett Independent Team.

Gray	0101101	01 11 10	0110001	—23
Crandall	0111110	11 10 10	0000111	

South End Club of Worcester.

Davis	1101111	11 00 11	1111111	—33
Webber	1101011	10 11 10	1111111	

Union Gun Club of Pawtucket.

Payne	1001111	00 11 11	1111101	—27
Roberts	1110111	01 00 11	1010010	

Narragansett Third Team.

Sheldon, C M	0101101	11 11 10	0111101	—31
Carey	1001011	11 11 11	1111111	

Boston Gun Club.

Snow	1110011	10 10 11	1010010	—29
Stark	0101101	11 11 11	1111111	

Union Gun Club, Second Team.

Brady	1101111	00 10 11	1101001	—25
J R Payne	0110000	10 10 10	1101111	

Brockton Club.

Bartlett	0111001	11 11 11	1111110	—34
Francis	1110111	11 11 11	1111011	

Willard Shooting Association, Portland, Me.; First Team.

Hall	1100011w.			
McKenney	0110011w.			

Willard Shooting Association, Portland, Me., Second Team.

Harmon	1000101w.			
Davis	1111101w.			

Rowell and Tidsbury first money and the beautiful gold badge presented by the Boston Gun Club, Bartlett and Francis second, Davis and Webber third, Sheldon and Carey fourth. The two teams from the Willard Club had to withdraw for an early train.

CLAY-PIGEON TOURNAMENT.

THE inter-state clay-pigeon tournament, mentioned in these columns the other day, has been arranged. It will be held at the Metropolitan Baseball Park, this city, Aug. 14-16. The full programme of the meeting is now in preparation, and may be had on application to the Ligowsky Clay-Pigeon Company, 59 Murray street, New York. This is the first of a contemplated series of similar tournaments, concerning which further particulars will be given in our next issue.

Following is the programme:

Thursday, August 14.—Match No. 1, purse $200, individual sweepstake, entrance $5, 7 single clay-pigeons, 18yds. rise. Match No. 2, purse $300, individual sweepstake, entrance $6, 7 single clay-pigeons, use of two barrels, break with second barrel to count ½, rise 21yds., four monies, 40, 30, 20 and 10 per cent. Inter-State team championship contest.—Match No. 3, at 2 P. M., purse $500, open to teams of three from any duly organized gun club (Members of teams must be of at least 30 days standing as club members.) Entrance fee $25, 7 single clay-pigeons, 18yds. rise, 3 doubles, 15yds. rise, no class shooting. A printed list of the clubs entered will be circulated on the grounds.

Friday, August 15.—Match No. 4, purse $250, individual sweepstake, entrance $5, 7 singles, 18yds. rise. Match No. 5, purse $300, open to any team of two, entrance $7, 7 singles, 21yds. rise. New York Harbor team, championship contest.—Match No. 6, 2 P. M., purse $500, open to teams of five from any duly organized gun club (members of teams must be of at least 30 days standing as club members), entrance fee $25, 7 single clay-pigeons, 18yds. rise, 3 doubles, 15yds. rise, class shooting. In this match, No. 6, the club of the team coming from within a radius of 50 miles of New York city, making the highest score of similarly located clubs shall be entitled to the New York Harbor championship medal, donated by the Ligowsky Clay-Pigeon Co. Also the club of the team of N. Y. State making the highest N. Y. State team score shall be entitled to the N. Y. State championship medal, donated by the Ligowsky Clay-Pigeon Co. Also, the club of the team of New Jersey making the highest New Jersey State team score, shall be entitled to the New Jersey State championship medal, donated by the Ligowsky Clay-Pigeon Co. Also the club of the team of Connecticut making the highest Connecticut State team score shall be entitled to the Connecticut State championship medal. (Through courtesy of present holders of said medals at request of the donors; said medals to be subsequently subject to challenge in accordance with the original conditions.

Saturday, Aug. 16—Match No. 7, purse $250, individual sweepstake, 3 pairs doubles, 18yds. rise, entrance $5. Match No. 8, purse $300, individual sweepstake, entrance $5, 7 single clay-pigeons, 24yds. rise. At 2 P. M. the finals of match No. 6, viz., the New York Harbor team championship contest. Match No. 9, purse $200, the Ligowsky walking match, 2 pairs double birds, entrance $5.

Ligowsky rules (June, 1884) to govern unless herein otherwise stated. The angles of the traps shall be fixed (and not changed) similar to the arrangement at the first international clay-pigeon tournament, held at Chicago, May 27-31, 1884.

The traps will be reloaded after each shot. Shooting at sweepstakes, as per programme (supplemented by extra sweepstakes whenever occasion offers, under direction of the officers of the day), will begin daily at 10 A. M. and last until 2 P. M., when the championship matches will commence. Sweepstakes will be "class shooting" unless otherwise stated. Purses will be divided into 50, 30 and 20 per cent., and use of single barrel only, unless otherwise stated. All sweepstakes shall be handicapped. The records of this tournament only to govern the handicaps (see rules). Sweepstakes open to all amateurs. In sweepstakes, ties in double bird shooting shall be shot from traps No. 2 and 4. Ties in single birds shall be shot from trap No. 3, miss and out.

All matches will be from 5 traps (screens), 3yds. apart. Charge of powder unlimited; charge of shot 1¼ozs. Ties for championship matches shall be shot at 5 singles 21yds. rise, and 2 doubles 18yds. rise. The new Ligowsky rules are principally those used at the Chicago tournament.

All entries close with the firing of the first gun in each match. In the championship contest (matches 3 and 6) choice of position will be awarded in the order of entering. Clubs can enter at once, and thus gain this advantage, by remitting $5.

In the championship matches Nos. 3 and 6, each team will finish its singles before shooting doubles; each member of team will remain at the score until he finishes his "singles," etc.

TRENTON, N. J., July 10.—The Trenton Gun Club had a glass ball and clay pigeon shoot at Trenton to-day, 20 glass balls, 18yds., Card rotary trap, and 10 clay-pigeons at 15yds. rise, resulting as follows:

Glass Balls.

Jas M Allen	01111111110111111101—17
Wm Mickel	11110111101111110110—16
A S Leigh	01001110101010110000— 9
H Loveless	11000110000000000010— 6
C Neale	11111111111111101000—16
J Dumount	10010000001010101— 8
C P Barwis	00001000001000000000— 2
W L Barwis	00001111010101001001— 8

Clay-Pigeons.

Jas M Allen	1111101111—9	J Dumount	0111111101—8
Wm Mickel	1011110000—5	C P Barwis	0001000001—2
A S Leigh	1111000101—6	W L Barwis	0001010010—3
H Loveless	0001000101—3	M Quinton	0111110100—6
C Neale	0011111110—7	F E Arrend	1110101101—7

MERIDEN.—Connecticut State Clay-Pigeon Shoot, July 9.—Six clubs were represented by four men from each club, 25 pigeons each man. Shooting for the Ligowsky medal, won by the Bridgeport team with a score of 81 out of 100 pigeons, which was the best shooting done this season. Following is the score: Bridgeport 81, Spencer Gun Club (Windsor, Conn.) 78, Parker Gun Club (Meriden) 74, Wallingford Gun Club 75, New Haven Gun Club 71, Parker Gun Club No. 2, 64. For the individual State medal, Folsom and Goodrich tied on 45 out of 50, and in shooting off tie Folsom broke 5 straight and Goodrich 3. The next individual match will be shot in Windsor, July 23.

THE REFEREE'S POSITION.—Wallingford, July 11.—I was referee at a clay-pigeon shoot the 10th. There were about 35 shooters and they had two judges, one judge said broken bird, the other said lost bird, one judge was on one side of the trap and one on the other, and then I spoke up and gave my decision after one had said broken and the other lost. I took it that they disagreed and gave my decision. Everything went all right until I got home and then some of the boys said I had not ought to have said anything until I was asked. I did that way to keep the shoot agoing and have no delay, when one judge said broken and the other said lost. I thought that was disagreement enough and rendered my decision, was I right or wrong? [Wrong.]

When there are two judges, one on one side and one on the other side, so they can see the birds that happen to go that way, the boys said that if one said lost bird the other had no right to say a word because the bird did not come his way. I claim that either judge had a right to speak and it was what they were put there for; was I right or wrong? [Right.]—J. B. B.

UNION GUN CLUB.—Regular monthly shoot on the grounds at Spring Valley, N. Y., July 5; 10 clay-pigeons, 18yds. rise:

J Dunlop	1111011110—8	Geo Dunlop	1111011001—7
J E Christopher	1111111101—9	C B Fisher	1101111111—9
Jas Miller	1011111011—8	W H Eickhoff	1111111101—9
E Eickhoff	1000011111—6	G W Hageman	1001101101—6
J D Wannamaker	1111110101—8	W H Jersey	1011101011—7
H D Grindle	1101111111—9	J Van Blarcom	1011011111—8
J D Van Riper	1011111110—8	F Blackledge	1100011111—7
Bert Moeller	1111011101—8	H D Towner	0101000111—4
Fred Tomkins	1111110101—8		

Ties for the first prize (a gold badge), miss and out, C. B. Fisher won. Second prize (box of shells), J. Dunlop and J. Miller divided.

MONTGOMERY SHOOTING CLUB.—The club celebrated the Fourth by a tournament at Jackson's Lake, Mo., 150 persons being present to take part in the shooting and feasting that followed. A number of the best shots were engaged, including some from the Snowdoun Club, and Mr. G. W. Tunstall of the Mobile Gun Club. Several others were expected from that city and New Orleans, but failed to arrive. Some very fine shots were made. Match at 5 birds, 25yds., plunge traps:

W K Jones	11101—4	T W Oliver	11111—5
W W Tunstall	11000—2	Ed Smith	00111—3
H Barnes	11011—4	A J Taylor	10001—2
B Fitzpatrick	10111—4	H D Long	11111—5
D Ledyard	11011—4	John Crommelin	11111—5
George Marks	11101—4	F C Randolph	01111—4
S T Westcott	11111—5	H Hall	11101—4
Y Rowland	11011—4	W L Hutchings	00111—3
W T Pinkston	11111—5	J E Hall	10111—4
W E McGehee	11001—3	W T Atkins	01011—3
H Crommelin	11111—5		

Ties of 5, 30yds.—Westcott won. Ties of 4, 40yds., miss and out.—Marks and Hole divided on 4 each. Ties of 3, 30yds., miss and out.—Hutchins won third with 3.

Second match, 4 birds, 30yds., class shooting:

Jones	1111—4	Marks	1111—4
Fitzpatrick	0111—3	Rowland	0111—3
Ledyard	1111—4	Randolph	1011—3
Tunstall	1111—4	McGhee	0001—1
Long	1110—3	J Crommelin	0101—2
Ball	1111—4	Davidson	0101—2
Pettus	0000—0	Hall	0101—2
Pinkston	1111—4	H Crommelin	0101—2
Oliver	1111—4	Westcott	1110—3
Smith	1100—2		

Ties of 4, miss and out, 35yds.—Jones won with 5. Ties of 3, miss and out, 35yds.—Randolph won second with 9. Ties of 2, miss and out, 25yds.—Smith won with 3.

Third match, 3 pair double birds, 23yds. rise:

Randolph	00 10 01—2	Marks	11 10 11—5
Ledyard	01 00 11—3	Fitzpatrick	11 11 11—6
Tunstall	11 10 11—5	Rowland	10 10 10—3
Smith	10 11 10—4	Westcott	10 00 10—2
Oliver	10 11 11—5	Jones	11 11 11—6
Long	11 10 00—3	S Crommelin	11 11 11—6

Ties on 6, at 2 pairs: Crommelin 0; Fitzpatrick and Jones divided on 3 each. Ties of 3, at 4 pairs: Tunstall 6, Oliver 5, Marks 7.

Match at 3 pairs, 30yds.:

Marks	1 1 0—2	Oliver	1 1 1—3
Westcott	1 1 0—2	Pinkston	1 0 0—1
Smith	1 0 1—2	Hall	1 1 1—3
Long	1 0 1—2	Jones	0 1 1—2
B Fitzpatrick	1 0 0—1	R Fitzpatrick	1 0 0—1

Oliver and Hall divide first. Ties of 2: Marks 2, Westcott 1, Smith 1, Long 0, Jones 0.

KNOXVILLE, Tenn.—At the regular monthly shoot for the club medal, 15 clay-pigeons, 18yds. rise, trap at fourth notch, the following scores were made:

Jenkins	110111111111111—14
Hebbard, A H	111111101111111—14
Slocum	111111110111011—13
Duncan	111101111110111—13
Kohlhase	001111111111011—12
Ross	001111111111101—12
Nicholson	011111111111101—11
Armstrong	110110110110001— 9
Dedrick	110011111100001— 9
French	001101001110111— 9
Campbell	111010100101100— 8
Hebbard, C C	001110111001101— 8
Woodbury	000111101101100— 8
Eldridge	110101011000010— 7
Groor	001011100011100— 7

Jenkins won the medal. C. C. H.

WORCESTER, Mass., July 8.—The contest for the badge offered by the South End Club was continued to-day at their grounds, Mr. W. L. Davis, who had it, having been challenged by E. T. Whittaker. There were ten strings of five balls each. On the third string Davis broke the lock of the left barrel of his gun, yet he successfully competed with his rival. Messrs. C. B. Holden and E. S. Knowles were the judges, and Mr. Alba Houghton referee. The score is as follows:

Davis	1111111101111111100111101111111111111111110111111—45
Whittaker	1111111111111111111111111111011111111111111111010011100—44

WINCHENDON, Mass., July 9.—At the regular meet of the Winchendon Gun Club, the members tried their hand at clay-pigeons. The result was as follows:

P S Davis	0111111111—9	L F Martin	0000011111—5
Dr J G Henry	1101110010—6	James Sutherland	1001000101—4
F M Brown	1110001001—5	L P Ball	0001011000—3
F F Hapgood	0100011111—6	Chas Cram	0000000000—0

On the Fourth the members had a series of matches. B. F. Loveland, H. E. Curtis and William A. DeLand were the judges. The results of the several matches were as follows:

Pigeons—J. Sutherland first, P. S. Davis second, F. E. Mann third.

Pigeons, open to outsiders—F. W. Loud first, H. E. Washburn second.

Sweepstakes, 5 glass balls—C. S. Lord first, S. Davis second, J. Sutherland third.

Sweepstakes, 5 clay-pigeons—P. S. Davis first, F. F. Hopgood second, J. Sutherland third.

Sweepstakes, 7 clay-pigeons—J. Sutherland first, F. F. Hopgood second, G. A. Taggart third.

Five glass balls and 5 clay-pigeons—J. Sutherland first, F. F. Hopgood second, L. F. Martin third.

SOUTHBRIDGE, Mass., July 8.—The Quinebaug Rod and Gun Club had a field day on the 4th. The attendance and interest was good. The first event was the match between the Quinebaug and the Charlton Gun Club, each has previously won one of the three in the series. The result is as follows:

Quinebaug.		Charlton.	
F B Howe	1010011011—6	H E Brown	1011001011—6
W H Campbell	1101111111—9	J W Cundall	1111011000—6
W Harrington	1100000111—5	F Deon	1011110111—8
C Bradford	1011111010—7	F Pike	1010111100—6
E C Ellis	1111111011—9	J R Warren	1101111110—8
F M Marble	1010101101—6	L E Stewart	0101011101—6
E M Phillips	1011111110—8	W L Bradford	0010000101—3
C W Williams	0101110101—6—56	I Bradford	1110100111—7—50

The remainder of the day was occupied in shooting sweepstakes as follows:

First event, 7 glass balls—Stewart, Todd, Bates, Warren and Pike divided first, Harrington and Campbell divided second, L. W. Bradford and Howe divided third, J. Brantford fourth.

Second event, 7 clay-pigeons—Graham first, Cundall second, Harrington third, Ellis and Stewart divided fourth.

Third event, 5 glass balls—Pike and Stewart divided first, Howe second, Todd and Graham divided third, Brown fourth.

Fourth event, 5 clay-pigeons—Marble first, Harrington second, Williams and Campbell divided third, Cundall fourth.

Fifth event, 6 glass balls—L. W. Bradford and Deon divided first, Bates second, Brown third, Stewart fourth.

Sixth event, 5 clay-pigeons—Harrington and Todd divided first, Stewart second, Harrington third, Cundall fourth.

Seventh event, 5 clay-pigeons—Todd first, SteWart second, Harrington third, Cundall fourth.

Eighth event, two-men team, 5 glass balls each—Graham and Bates, Cundall and L. W. Brandfor divided the first, Campbell and Pocci second, Howe and Ellis, Harrington and Marble divided the third.

MILFORD, Mass., July 8.—The Milford Sportsmen's Club, with guests from Holliston, Franklin, Mendon and Hopkinton, had a field day on Wilkinson ground, where the Milford range is located. The several events resulted as follows:

First sweepstakes, 11 entries, 5 balls—Howe 5, Kinsley 4, Connors 4, G. Whitney 3, Brooks 3, Cook 2, Hancock 2, Carpenter 2, J. Whitney 2, Fletcher 2, Wilkinson 1.

Second sweepstakes, 14 entries, 5 balls—Howe 4, Cook 4, Wales 4, Phipps 3, Wilkinson 3, Brooks 3, Carpenter 2, G. Whitney 2, Manchester 2, Shiner 1, Kinsley 1, Conner 1, Fletcher 1, J. Whitney 1.

Third sweepstakes, 5 clay-pigeons, 12 entries—Howe 4, Wilkinson 4, Kinsley 4, Manchester 4, G. Whitney 3, J. Whitney 2, Conners 2, Phipps 2, Walls 2, Shiner 2, Cook 2, Carpenter 1.

Fourth sweepstakes, 7 clay-pigeons, 14 entries—Cook 3, Phipps 2, Fletcher 2, J. Whitney 2, Shiner 2, Wales 2, Conners 1, Carpenter 1,

G. Whitney 1, Kinsley 1, Brooks 1, Manchester 0, Howe 0, Wilkinson 0.

Fifth sweepstakes, 5 balls, 15 entries—Cook 4, Shiner 4, Manchester 4, Howe 4, Connor 3, Kinsley 3, Wales 3, Phipps 3, J. Whitney 3, Carpenter 2, Wilcox 2, Wilkinson 2, Bass 1, Whitney 1, Bennett 0.

Sixth sweepstakes, 7 balls, 10 entries—Martin 7, Wilkinson 6, Cook 6, Shiner 6, Howe 5, Kinsley 5, Whitney 4, Fletcher 4, Connors 3, Manchester 2.

Seventh sweepstakes, 5 clay-pigeons, 7 entries—Howe 5, Martin 5, Kinsley 3, Whitney 3, Cook 3, Wilkinson 3, Shiner 1.

Eighth sweepstakes, 5 balls, 6 entries—Howe 5, Wilkinson 4, Kinsley 3, Martin 3, Whitney 3, Cook 1.

Ninth sweepstakes, 7 balls, 5 entries—Howe 7, Wilkinson 6, Cook 6, Martin 5, Kinsley 3

Tenth sweepstakes, 5 balls, 6 entries—Howe 5, Cook 4, Linsley 2, Martin 2, Wilkinson 1, Brooks 1.

Shooting for prizes. 14 entries—1st prize, keg of powder, Howe; 2d, bag of shot, G. Whitney; 3d, 5lbs. powder, Connors; 4th, box shells, Wilkinson; poorest shot, box wads, Avery.

WELLINGTON, Mass., July 12.—The Malden Gun Club had its regular shoot at Wellington to-day. Messrs. Sanborn and Pratt attempted to take the gold medal away from Mr. Wemyss, but failed. Mr. Scott had the leather medal in his pocket, but no one appeared to shoot for it, and so he still holds it. The other matches were:

First event, five birds—Lewis first, Shumway and Snow divided second, Morgan third.

Second event, five birds—Snow first, Morrill second, Pratt and Lewis divided third.

Third event, three pairs—Brown, Loring and Shattuck divided first, Adams second, Snow third.

Fourth event, three pairs—Snow first, Hopkins second, Lewis third, Adams fourth.

Fifth event, five birds—Snow and Hopkins divided first, Lewis and Short divided second, Morrill third, Brown and and Morgan divided fourth.

Sixth event, five balls—Snow and Hopkins divided first, Shumway and Pratt divided second, Short third.

Seventh event, five birds—Hopkins and Snow divided first, Adams and Lewis divided second, Brown and Scott divided third, Loring and Shattuck divided fourth.

Eighth event, five birds—Brown first, Scott second, Morrill third.

Ninth event, five birds—Morrill and Hopkins divided first, Snow second, Adams third.

Tenth event, three pairs—Snow first, Shattuck second, Hopkins third.

Eleventh event, five birds—Snow and Lewis divided first, Hopkins second, Short and Morgan divided third.

Twelfth event, five balls, both barrels—Shattuck first, Pratt and Hopkins divided second, Snow third.

Thirteenth event, five birds—Hopkins first, Short and Shattuck divided second, Morgan and Pratt divided third.

Canoeing.

CANOEISTS *are invited to send us notes and full reports of cruises, club meets, information about canoeable waters, and other communications of interest.*

Secretaries of canoe clubs are requested to send to FOREST AND STREAM their addresses, with name, membership, signals, etc., of their clubs, and also notices in advance of meetings and races, and reports of the same. Canoeists and all interested in canoeing are requested to forward to FOREST AND STREAM their addresses, with logs of cruises, maps, and information concerning their local waters, drawings or descriptions of boats and fittings, and all items relating to the sport.

FIXTURES.

July 19.—Chicago C. C., First Annual Regatta.
July 24 to 26.—Lake George Meet, Lorna Island.
Aug. 1 to 15.—A. C. A. Meet, Grindstone Island.

A CANOE CRUISE ON THE ANCLOTE.

A BEAUTIFUL morning in May, one of Florida's fairest rivers, a little canoe, a double blade, basket of lunch, bottle of coffee, and the old man and the Madam. The canoe swings away from the wharf, the flood tide catches her, and with now and then a dip of the paddle we float lazily up the Anclote.

Nature is at its best this morning. The marsh, lately burned over, has put forth a fresh growth and lays under the shimmering sun like a carpet of green velvet. Fringing the marsh stand the cabbage palmettos, their feathery tops quivering in the morning air; over and beyond is the dark background of stately pines; everything is bright, fresh and joyous. Nature is smiling this morning. The birds are out in force; there is a blackbird piping his liquid notes; beyond swings a cardinal pouring out his song to his mate, and near by sits a mocking bird nearly bursting his throat trying to outsing them both. Over on that dead cedar a snake bird is drying his wings in the sun, his long neck twisting and turning, his bright eye glancing warily around on the lookout for foes or prey. Here and there a fish leaps from the dark water, his sides gleaming in the sunlight like molten silver.

But the scene changes rapidly. The marsh is left behind; the river banks are closing up nigher to each other and getting higher. Trees begin to overhang the water; live oak, water oak, maple, haw, holly, the cypress, and many others mingle their branches along this beautiful river. Wild grapevines hang from nearly every tree. The long gray Spanish moss, the many varieties of air plants, and other parasites of the woods all contribute to make a lovely picture. We float on under the shade of the high trees; it is cool and refreshing, just beyond the reach of the paddle blade. The sun pours down in his full strength.

We glide along without a sound, taking nature unawares. We see many strange and curious things. A huge turtle sunning himself on an old log never dreams of the approach of strangers until we are so near as to almost brush him off, when with most ludicrous haste he makes a scramble, a splash, and he is gone.

Yonder sits a black squirrel; yes, and there is his mate. They see us, but do not appear to be frightened. Ah! there they go, but only one branch higher, where they stop and peer after us as long as we are in sight. Rounding a little point we almost run over a wood duck.

Now we run under a grand old live oak, its trunk nearly covered with parasites its branches draped with festoons of the Spanish moss. As we look up among the wilderness of foliage, we get a glimpse of that quaker of the woods, the swamp pollet, his sober plumage so near the color of the surroundings as to be nearly invisible.

Hark! we hear a sharp little note, and looking closely discover one of the numerous family of flycatchers; the little fellow is intent on breakfast; how he darts from leaf to leaf, peering under each one; how closely he examines every twig and every crevice in the bark, and what a cunning little fellow he is too, scarcely larger than a bumble bee. his back of steel blue, white bars on his wings, and his throat a beautiful yellow.

The banks are quite high now, the stream scarce thirty feet wide, the timber too is different, ash, hickory, bay, and here and there a magnolia; yonder is a beauty, tall and straight, its top a wealth of snow white blossoms, that fill the whole atmosphere with fragrance.

It is about time to lunch, and this is as good a place as any. We let the canoe drift under the thickest shade we can find, secure it with a hanging vine, and pulling out the lunch basket dine like princes. To be sure we have only boiled eggs, bread and butter and coffee, but food isn't all there is to a dinner. The bright sunshine and the cooling shade, the glad songs of the birds, the beautiful scenery, the balmy southern air, loaded with the perfume of magnolia and palmetto blossoms, altogether make a scene which, with the appetite induced by out-door exercise goes far toward a glorious feast.

Dinner over, the pipe lighted, we cast off and on again, our course still up stream. We soon come to a rustic foot-bridge, formed by felling trees across the stream, and twisting vines from branch to branch to make a hand rail; it is a pretty picture.

The stream is narrower still, our progress becomes more and more difficult, until we finally come to a stand still some sixteen miles from our starting point. We land and climb the high bank to find that the beauty is not all on the river.

Tall, graceful pines, each one alone and still all together; how they nod and whisper to each other, the soft summer wind making rare music among the golden green needles in the tops. Then there is the willow oak, with its feathery foliage of indescribable beauty; the black jack, the dwarf palmetto and the evergreen ti-ti, with hundreds of wild flowers. Birds are everywhere; blackbirds, mocking birds, cardinals, thrush, flycatchers, etc. Anon a quail starts out almost from under our feet, and making a terrible bustle is soon out of sight. Yonder is an owl, a little bit of a fellow scarcely the size of a robin, blinking at the sunlight from his hole in the stump of an old black jack.

But the sun is past the meridian, we have sixteen miles to paddle and must be off. Going down stream we paddle for a few yards right in the wake of a huge alligator. He never suspects our proximity until making a short turn he gets sight of the canoe. What a splash! Who would think such an unwieldy brute could move so quick.

As we float noiselessly down the stream we come again to the rustic foot bridge. Strutting back and forth on the logs are two wild turkeys, so intent on love making they never see us until we are within fifty yards. What luck! I, who have so wanted to shoot a wild turkey, have hunted and tramped, waited and watched times without number, and never got a shot at one yet. And here I am within fifty yards of a brace, and I've got no gun. I suppose it's fate and I may as well bow to the inevitable and make up my mind to die without even the pleasure of shooting at one.

Well, they look better alive anyhow. I couldn't eat a whole one if I had it, it's mating time too, and I don't care much for turkeys any way. All at once they catch sight of us, whir-r-r, they are gone, and we go, too. A few more miles and we sight the marsh, the sun is getting down among the trees, we settle down to good solid work, the Eric scents home, soon she rounds up to the little wharf, the crew disembark, and later under the cool veranda we review the day's cruise and vote it a success.

Reader, go thou and do likewise, and may you enjoy it as well as

K. Noo.

CRUISE OF THE PITTSBURGH C. C.

ON the morning of the 23d day of June five members of the Pittsburgh C. C. embarked in their canoes at Mayville, on Lake Chautauqua, in the western part of the State of New York. They had arrived at Mayville the day previous by rail from Pittsburgh, and were now started on their annual club cruise. It had been expected that a much larger number would participate in this cruise, but at the last moment several members were compelled to give it up on account of pressure of business and other engagements.

For two days the club remained on Lake Chautauqua, slowly sailing down the lake toward Jamestown. The winds were regular all the morning, blowing up the lake, and in the afternoon changing and blowing steadily in the opposite direction. As a consequence, the cruisers had abundant opportunity to practice sailing both with and against the wind, something which was much needed by the club, as the home waters are not especially adapted for sailing, the rivers being narrow and the winds at all times uncertain and puffy. Fortunately the trip was made without a capsize, although several narrow escapes were made.

At Jamestown a portage of a mile and a half had to be made around several dams before the cruise could be continued, which portage was made by wagon. Tuesday morning the five cruisers started on the Conewango Creek, which name is said to be a corruption of the sentence, "Canoe won't go," which about expresses the state of the case, for the canoes had to be hauled over shoal waters and lowered over no less than nine dams and dragged across nearly as many booms before the Allegheny River was reached at Warren, Pa. The distance from Jamestown to Warren by road is only twenty miles, but by water it must be nearly seventy. To do justice to the Conewango as a canoeing stream it should be stated that from Frewsburg to Warren is a splendid run, the creek being one succession of swift rapids. If any canoeists contemplate the Chautauqua-Allegheny trip the P. C. C. would advise them to ship their canoes from Jamestown to Frewsburg rather than put them in the water at any point above that place. There are about three dams between Frewsburg and Warren, which can be easily carried over.

At Warren the Pittsburghers were met by the Warren C. C., who treated them most royally, doing everything in their power to make the stay in Warren a pleasant one, in which they were eminently successful.

On Friday morning the cruise was continued, there being five accessions to the party, four of them members of the Warren club and one a member of the P. C. C. who had concluded to come up and join us. The run that day was most enjoyable, there was a good wind down stream so that matters were taken easily, and when the evening camp was made on a beautiful little island the hungry cruisers had journeyed somewhat over thirty miles. Here two of our Warren friends left us, the remaining two concluding to continue the cruise to Pittsburgh.

The trip down the Allegheny has been written up before, so it is not necessary to go into further particulars, sufficient to say that it was a delightful experience to every one. It took twelve days to make the entire journey from Mayville to Pittsburgh, it could be done in a much shorter time, but the P. C. C. were inclined to take things very easily.

In conclusion a word about Lake Chautauqua. It is a magnificent sheet of water, about twenty-five miles in length and varying from two to four miles in breadth. It would be a splendid location for a meet. At Warren one of the W. C. C. proposed that next year an endeavor be made to get the Rochester and Cleveland clubs to join with Warren and Pittsburgh in holding a meet there during May or June. The lake is easily reached by rail from these cities. It is to be hoped that the project may be successful. REBA.

THE A. C. A. RACES.

Editor Forest and Stream:

In replying to the criticisms on the published programme of the American Canoe Association races, I would call your attention to the fact that, in the first place, your announcement was incorrect in several particulars, some of which misprints have not even yet been corrected, the fault for which is certainly not with the committee, and in the second place, the committee worked under certain definite orders from the Executive Committee, given in meeting at Albany last October. These were "to cut down the official races in every way, if possible to have only two days' racing." The programme as arranged, gives the classes, as they now exist, each an official race at the usual distance and at a convenient hour, and in the sailing races, each of the two classes has a race for every usual condition, racing trim, cruising trim and without ballast. In the last race, which has always been for any canoe, the divisions into A and B classes becomes unnecessary, but account is taken of the fact that a good number of boats have now fixed boards of considerable weight, and these are permitted to start for a separate flag, at the same time.

The Executive Committee very wisely, in the writer's opinion, decided to have only such races under their auspices as would do justice to existing classes, but they encourage and hope to see many other races, designed to bring out special points, take place under private or club auspices during the camp. Further, the Regatta Committee have no power to make a special race for the numerous boats which are about 14×30. The present classification does work well, we know, and any regrets which the canoeing editor of FOREST AND STREAM may feel for his own former and superceded classification, should not, in common justice, be put in the mouths of an unknown "large number" of canoeists—the editorial we, perhaps?

"Dot's" suggestion in the last number I consider an admirable one. It is simple, will encourage entries, and give the all-round value of each boat as well as encourage a nice *esprit de corps* among club members and generous rivalry all round. I sincerely hope it may be adopted as a permanent feature.

The Mohican request being already provided for, their resolution was unnecessary. Do they want all the flags?

As to the American Canoe Association badges which Commodore Nickerson writes about, I would like to express an individual opinion against such a scheme. We are not like a lot of boys who must have a secret society pin displayed at all times. Badges of all kinds savor of display, and are, in my opinion, in questionable taste. But this, of course, is only my own feeling. If the majority want something of the kind, I hope the Committee will decide on some plain design without enamel or other mixtures of color, and the smaller the better.

WM. WHITLOCK, Chairman Regatta Committee.

[Mr. Whitlock has certainly misunderstood the tenor of our note in last week's issue, as there was no intention of finding fault with the Regatta Committee, and there was nothing to justify that conclusion. We are aware that they were acting under definite orders and as far as the programme itself is concerned, it is by far the best yet arranged. The faults lie with the present rules, and we simply called the attention of the Regatta Committee to them, as they are the proper persons to remedy them in the future. Our authority for the programme published June 26 was the copy furnished by the Regatta Committee, in which there were two errors, both of which appeared in our report exactly as in the copy. We need not notice the personal allusion of Mr. Whitlock's letter, further than to repeat our assertion that the present rules are unfair to the cruisers, and we are content to leave it to canoeists themselves to say whether we correctly represent their opinion.]

Editor Forest and Stream:

After talking with members of the Toronto C. C. on the subject of Mr. Vaux's proposal about an "average prize" and an "average record," I have a few words to say about it.

The "average prize" idea appears to require some modification. Objection is taken to the plan of counting in every man who starts in a race, no matter if he is nearly last. Would not it be better in making up the average, to count in only half of the total number of the starters? For instance, if nine start, count in only the first five who cross the line. This would insure some merit on the part of those counted in for the average prize. But the last few men in the race may have made a wretched showing, yet they would be counted in; and several quite inefficient sailors or paddlers might start, with no chance for a place, and the result would be merely to push up the average of some man or men who otherwise would be nowhere.

Then it must be borne in mind that the average prize is to a considerable extent a prize for entering a great many races.

The "record" plan appears to be open to the serious objection. There are first class men with sail or paddle who either would not desire to enter more than one or two races, or might be prevented by circumstances from doing so. It would be very unjust to such men that they should be placed in a low position on an official record, which would be extensively read among canoeists. Then, as to the clubs, it would be placing the smaller clubs at a great disadvantage, because, of course, the large clubs would take the cake. If a prize is to be given to the largest club on the ground, put it in that shape, and not under the guise of a record.

Mr. Vaux's plan is one requiring careful consideration and thought before adoption by the A. C. A., especially as to details. Would it not therefore be better for some large club to give it a trial by offering an "average prize?" We should then see how it worked, and if it worked well, the A. C. A. might adopt it for 1885. ISABEL.

[The above letter suggests several objections to the proposed plan which are worthy of consideration. On the first point the result that "Isabel" anticipates is exactly what has long been desired, an inducement for all to enter races. In nearly all races the chances are in favor of one or two of established reputation who are almost sure of first prize, and men will not enter against them; but here we have a strong inducement for every man to enter and work for a place, even though he may feel certain it will be neither first or second, and a man who under such circumstances does enter deserves some recognition. In the second place, it would not be unfair to the "first-class men," as they would in any event take a first prize in each race, while the record would be something additional to work for, and their chances would be the best for a "double first," to borrow an expression. As far as the clubs are interested, their reputation seems to be independent of the size of their membership roll, success depending more on the spirit shown by a few than by the presence of a large number, and a club represented by five or six men of average skill and spirit would have a chance of coming out first on the record. If put in practice this year the scheme will be carried out by a few, entailing no additional labors on the present officers, and certainly can work no harm.]

Editor Forest and Stream:

The Mohicans have read the suggestions made by "Dot," that prizes be offered at the A. C. A. meet for "all round" or averaged merit, and they express general approval of them and will if they are put into practice, give them cordial support. It is conceded that the A. C. A. classification, while it is good and probably the best attainable, does tend, as any classification must, to develop separate types unless recognition is given to the canoe which can do fairly well in many things because it is not specialized for any particular one of them. Some of us have agreed to take notes and construct a record upon the plan recommended of our club races by way of experiment, and see how it results. It is evidently advisable to make one or two trials and observations before making assertions.

So much for our club opinion; doubtless some others will give individual views. For my part, I would advise, first, that the extra trouble of trying the experiment at the Thousand Islands should not be put upon the regular regatta committee, because they have (as has been seen) as much to do as an average committee is capable of; and, second, that the matter should not be allowed to drop, even if it does not secure immediate official sanction. I am very willing to assist if I can, to this end, as follows: I will join Mr. Vaux in keeping the record necessary (and perhaps some other A. C. A. man will be willing to make a trio of this self-constituted committee), and present a report or a petition or a resolution, or any other advisable document, to the A. C. A. meeting and abide by the decision the meeting may arrive at as to the desirability of the scheme. If necessary, we can furnish the prizes, and simply say that such and such canoes have done such and such things, and that it is desirable to recognize the merit reported, and, therefore, Mr. Mr. Vaux moves and we second that the A. C. A. present these as official prizes, and that in future meets the programme shall include similar prizes as the regatta committee may arrange.

I suggest this course because I think that under some circumstances action is better than argument. Just now there is scarcely time to revise the official programme without making confusion, and moreover, this experimental method will do no harm. If it is Mr. Vaux's opinion that these suggestions are not good I will support his scheme in any other desirable way. If we try it, or he tries it, and the experimentalists find, or the A. C. A. finds that it is not good, there is no harm done; but in any case Mr. Vaux deserves credit for an effort for the general good.

I have no doubt that with the improvement and simplification which a little working will put into it, the scheme is a very good one, and I shall be glad if I am allowed by its author to join in the experiment. R. W. GIBSON, Captain M. C. C.

ALBANY, July 11, 1884.

Editor Forest and Stream:

I have read the above letter from Mr. Gibson. The regatta committee, I suppose, will appoint a time keeper for the races. To get the record complete it is only necessary that he should note the time of finish of every boat entering a race instead of the first three, as heretofore. No work need devolve upon the committee. The writing up the record, when all the facts are in, will be a very simple clerical matter. I will gladly do this myself; or, I will accept Mr. Gibson's proposal, and with him and perhaps one other gentleman attend to the whole matter of the record and the average report. The time is so short now before the meet that perhaps we had better wait till we meet at Grindstone Island and then arrange details together and get official sanction for our work, or do it unofficially and report result for future A. C. A. approval. The prizes for the winners is a very minor matter, and if the Mohican Club will furnish first prize, as Mr. Gibson proposes, the N. Y. C. C. will supply a second prize—flag, of course.

In writing my letter last week I had no thought of revising or changing the programme as it now stands, but suggested that the record be kept by the clerk of the course so it could be written up as per plan proposed. I heartily indorse Mr. Gibson's ideas.

To try the experiment in the clubs will require careful arranging of races. I would suggest for a club record that the winner of a race be credited only with as many points as there are canoes entered. It would be fairer for all this way for club work, but not so for the Association races. At least this is how it seems to me. For two years I have been trying to mature such a plan for our own club. Hoping to see it go through in some form, I remain, etc., C. BOWYER VAUX.

THE CAMP FIRE.

CANOE AND CAMP COOKERY.

V.—GAME.

Fried Pigeons.—Dress them, parboil until they are tender, then cut off the legs and wings, slice off the breast pieces, roll in flour or meal and fry in hot pork fat till they are nicely browned. Grouse, ducks, quail, snipe and plover may also be fried, but are better cooked as given below. Snipe, quail and plover need no parboiling.

Fried Squirrels.—Skin and clean, cutting off heads, tails and feet. Parboil and fry same as pigeons.

Roast Quail, Snipe or Plover.—Dress and impale each on a stick with a piece of fat pork in each bird. Set the stick in the ground before a big bed of live coals in a slanting position so that the heat will fall evenly on all portions of the bird, and turn frequently till a sharp sliver will easily pass through the breast. Catch the drippings in a tin cup and pour over the birds again and again, and if they are served on toast pour the drippings also on the toast. The blacksmith's pliers mentioned in a previous paper will come in handy for turning the birds before the fire on their sticks and holding the cup to catch the drippings. Without this tool the cook's hands are likely to be roasted by the time the birds are done.

Roast Ducks and Grouse.—Parboil till tender, then roast as above.

Roast Woodcock.—Pick but do not clean; roast as above without parboiling. Remove the entrails after the bird is done.

Rabbits or Hares require considerable parboiling unless young. They may be fried, like squirrels, cutting them into pieces, or made into stews or soups.

Stewed Rabbit.—After skinning and cleaning the rabbit cut it into pieces, and wash again in cold water. Mince an onion, cleanse and cut into small pieces one half pound of fat salt pork, and put with the cut up rabbit into a pot with about a pint of cold water. Season with pepper and salt, cover the pot and let it simmer till the flesh can be easily pierced with a sharp sliver. Take it up when done and set where it will keep warm, and make a gravy by adding to the water left in the pot one cup of boiling milk or water, stirring in gradually one well beaten egg and one or two tablespoonfuls of flour. Boil one minute and then pour over the rabbit.

Stewed Ducks or Pigeons.—Exactly the same as the above recipe for stewed rabbits.

Roast Venison.—The saddle is the best portion for roasting, and after this the shoulder. Hang it by a cord over a huge bed of coals, with thin slices of salt pork or bacon inserted in gashes cut with a knife where the flesh is thick enough to admit of "gashing," or skewered on with hardwood twigs where it is not. Turn frequently.

Woodchucks and Porcupines do not properly come under the heading of game, but when properly cooked they are little inferior to many kinds of game. They must be thoroughly parboiled before cooking, and may then be roasted or stewed. A young woodchuck or porcupine may be baked in the ground with the hide on after being drawn, and is very palatable. SENECA.

TORONTO C. C.—At a meeting of the Toronto C. C. held on the 3d of July it was decided to give prizes for two races at the A. C. A. meet. First—Two prizes given by the club for a six mile sailing race open to all A. C. A. canoes, no limit as to rig or ballast. Second—Two prizes, given by the commodore, for a sailing race before the wind, not less than a mile, open to all canoes, sneakboxes, or similar craft. No sails to be hoisted until the starting signal is given. By this race the commodore hopes to show the superiority of a sail hoisted by a halliard over lateens, etc. It is quite possible the superiority may not be shown to any great extent, but at any rate it will be an amusing race, and one that ought to have a large number of entries. In running, length is probably the most important factor, and as canoes do not vary much in that measurement all should have a chance. Now don't forget your spinnakers when starting for the meet. The date for these races will probably be the 10th of August, when all likely to participate in races will be present. It was also considered that the A. C. A. should give prizes for meeting gears, canoe tents, sleeping outfits, cooking kits, etc. Such contests would not be open to the objections urged against racing. If the A. C. A. does not move in the matter perhaps clubs might.—BOREAS.

MONTREAL C. C.—The officers of this club, elected July 22, are: President, Forbes Torrance; First Vice-President, Chas. M. Whitelaw; Second Vice-President, D. R. Ross; Treasurer, R. Campbell Nelles; Secretary, E. A. Patterson. The Executive Committee is formed of the gentlemen mentioned above. The club is composed of several divisions, each having a commodore and vice-commodore, as follows: St. Anne's, R. M. Esdaile, Commodore; L. Dowker, Vice-Commodore; Pointe Clair, J. E. Rendell, Commodore; — Campbell, Vice-Commodore; Lachine, W. de Blaquiere, Commodore; A. Kohl, Vice Commodore; Vaudreuil, D. W. Allen, Commodore; ——, Vice-Commodore; Valois, J. Paton, Commodore; J. G. Ross, Vice-Commodore; Dorval, ——, Commodore; ——, Vice-Commodore; Longueuil, A. M'Keand, Commodore; C. S. Shaw, Vice-Commodore. These gentlemen with the executive committee, form the general committee of the club. Delegates will be appointed by the executive committee to attend the A. C. A. meet. A constitution and by-laws, club colors and motto will shortly be decided on. Applications for membership should be made to the Secretary, No. 226 McGill street, Montreal.

NEW YORK C. C.—A sailing race took place on Saturday, July 12, at New Brighton, between the Dot, C. B. Vaux, Freak, C. V. R. Schuyler, and Tramp, C. A. Stevens, over a triangular course of about three miles. The tide was running down, with a fresh breeze up, when the boats got away at 4:30, Freak leading. Tramp dropped out on the first leg, Dot led at first mark, a bark anchored off the cotton docks, and kept her lead on the run to Buoy 17, but coming in Freak passed her, winning at 5:25 P. M. Mr. King, Clyde C. C., was present, and took several photos. After the race the canoeists sailed up the Kills and took supper at Marmalade Lodge, spending the night there. Another race will take place next Saturday at 4 P. M. Mr. Newman is away with Dr. Neidé at the camp, Mr. Burchard is cruising with Mr. Stoddard, and reported at Provincetown on the 11th, Mr. Alden is on his annual cruise down the Richelieu, Messrs. Norton and Van Rensselaer are cruising in the latter's yacht Daisy.

ROYAL C. C.—On Saturday last a race came off at Teddington under novel conditions, which it was thought would prove attractive to many of those members owning cruising canoes of paddleable-sailing type. Only four entries were received, however, and of these only two were of the class for whose benefit the prizes were offered. Paddling and sailing race; sail down wind and paddle back; three times round—Zoedone, Mr. A. B. Ingram; Windrush, Mr. C. Penrose; Mignon, Mr. F. T. Miles; Foam, Mr. H. Church. Windrush did not start. They started paddling down stream, Ingram soon showing to the front, followed by Church. Miles was in a heavy canoe, and failed to keep up with the others. Ingram maintained his lead until sailing up for the last time, when Church got a breeze and closed up considerably. Ingram was similarly favored shortly afterward, and won a good race by over 50yds.—*London Field, June* 28.

OSHKOSH C. C.—*Editor Forest and Stream:* The Oshkosh C. C. held their first race on July 4, around a triangle, 1 mile on each side, for three prizes. The entries, with time, were as follows:

		Start.	Finish.
Alice	Otto Schloub	3 17 00	3 57 00
Sis	F. H. Gray	3 17 00	3 57 30
Reme	Wm. Session	3 17 00	3 58 20
Dollie R.	Wm. A. Radford	3 17 00	Not taken
Aloha	Wm. J. McKay	3 17 00	Not taken
P. D. Q.	Frank Hellard	3 17 00	Not taken
——	Gus Timme	3 17 00	Not taken

Wind light from the west. Judge, D. H. Montgomery. The club will have have a race July 16 for the championship.—F. H. G.

PETERBORO BOATING CLUB.—A parade of canoes by moonlight took place on Little Lake, Peterboro, on July 4, nearly fifty canoes of the P. B. C. taking part. Each canoe carried one or two lady passengers and was decorated with several Chinese lanterns. Tue procession formed in line across the lake at 8 P. M., under command of the president of the club and Col. H. C. Rogers, rear-commodore of the A. C. A., after which they paddled down, performing a number of maneuvers, finally returning to the starting point, after which all the canoes gathered together and songs were sung, the meeting breaking up at 10 P. M. Thursday evening of each week will be set apart for similar squadron drills and parades, in preparation for the A. C. A. meet.

AMATEUR PHOTOGRAPHY.—It is probable that a number of canoeists who will attend the meet next month will take their cameras with them. Would it not be a good time for an exchange of experiences on the subject of amateur photography? If such an expert as Mr. L. W. Seavey, of New York, is present, he would no doubt give a most interesting discourse on the subject, and such amateurs as Messrs. Pullen, Fraser, Taylor and others could give beginners the benefit of their experience. Views of camps, canoes, etc., might be exchanged. Let us hear from all canoe and camera men.—BOREAS.

A. C. A. MEET.—Dr. Neidé is now in camp at Grindstone Island, and his address until Aug. 15 will be "A. C. A. Camp, Clayton, N. Y." We note in another place a moonlight parade of canoes in Peterboro. Why would not a similar display be possible at the meet? In view of such an event each canoeist should provide a few Chinese lanterns and candles as a part of his equipment.

AMSTERDAM C. C.—This club enjoyed a run down the Hudson on the night of July 3, camping out and spending the following day sailing, there being a fine breeze all day.

Yachting.

FIXTURES.

Secretaries of yacht clubs will please send early notice of proposed matches and meetings.

July 19.—Hull Y. C., Ladies' Day.
July 24.—Eastern Y. C., Annual Cruise.
July 26.—Beverly Y. C., Nahant, Second Championship Match.
July 30.—Lake Y. R. A., First Matches, Oswego, N. Y.
July 30.—Oswego Y. C., Annual Matches.
July 30.—Quincy Y. C., Third Match.
Aug. 2.—Hull Y. C., First Championship.
Aug. 4.—Quaker City Y. C., Review and Harbor Cruise.
Aug. 9.—Boston Y. C., Annual Matches.
Aug. 11-25.—Quaker City Y. C., Annual Cruise in Chesapeake and Delaware Bays.
Aug. 16.—Salem Bay Y. C., Open Matches.
Aug. 16.—Hull Y. C., Open Matches.
Aug. 23.—Boston Y. C., Third Club Match.
Aug. 23.—Beverly Y. C., Open Match.
Aug. 26.—Beverly Y. C., Special, Marblehead.
Aug. 28.—Quincy Y. C., Fourth Match.
Aug. 30.—Hull Y. C., Second Championship Match.
Sept. 3.—Hull Y. C., Third Championship Match.
Sept. 4.—Salem Bay Y. C., Second Championship Match.
Sept. 6.—Beverly Y. C., Marblehead, Special Match.
Sept. 6.—Hull Y. C., Third Championship Match.
Sept. 11.—Quincy Y. C., Last Race.
Sept. 11.—Brenton's Reef Challenge Cup.
Sept. 13.—Boston Y. C., Ladies' Day.
Sept. 13.—Boston Y. C., Fall Matches.
Sept. 14.—Quaker City Y. C., Review and Cup Race.
Sept. 28.—Quaker City Y. C., Review and Harbor Cruise.
Oct. 5.—Quaker City Y. C., Closing Review and Cruise.

THE BIG JIB MUST GO.—The fact is some yachtsmen, or those in charge of yachts, have been working so long in one rut there is no possibility of their leaving it. With many yachtsmen racing simply means hoisting sails, and then if the wind blows hard enough so that the big jib cannot be carried, why—they go home. This has been the time-honored custom, but it cannot be so much longer. The yachtsman who has the enterprise to rig his boat with chain halliards, so as to be ready for all kinds of weather, will be the yachtsman who will win cups when the water is rough.—*N. Y. Herald, July* 12.

FROM PORT MORRIS TO LAKE GEORGE.

A FRIEND of mine, being anxious to take a sailboat to Lake George, we determined to sail it up ourselves. The trip presented many amusing incidents, which I now will endeavor to jot down.

We started from Port Morris, near Harlem, three of us, in the Breeze, which we had converted from a sloop into a catboat. She is about 25ft. long, 10ft. beam, stiff as a house, and quite fast. It was Sunday morning, which day we had chosen because fewer ferry and other boats run on that day. We passed Hell Gate in fine style, a strong wind blowing at the time; down the East River we proceeded, the wind beginning to die out. There was so little little left when we reached the bridge that we merely drifted under it, and kept on drifting, too, until, to all intents and purposes, we seemed bent on a trip to Europe.

By and by a little breeze sprang up, and we were enabled to go up the North River and managed to reach Yonkers that evening. Here we anchored for the night and took our last meals on shore for quite a while.

Next morning before we sailed away, the little oil stove was put into requisition, hot coffee, bread, corned beef, hot corn, sweet peas, and a can of peaches furnished that morning's entertainment, which the cook for the day, an honor evenly divided between us, called "just a light breakfast," which we innocently took as such. As we had a heavier lunch and a still more weighty dinner, followed by a mild supper, I shall not refer to food again, therefore, let at once the alarmed reader know that starvation was no part and parcel of the programme.

The next day's sail was very pleasant up the broad Hudson, with its beautiful lofty banks, here and there dotted with pretty, cool summer residences. Reaching the Tappan Zee, a good wind blew over the broad expanse of water, and pleasant indeed was the sailing then, after the hot days in New York. That evening we reached Haverstraw, and anchored near some brick works in a very pretty little bay. Next day we started somewhat late, and with little wind and a great deal of drifting, we reached West Point, where we stopped all night near the railway track, and the thundering of trains and the big swells from the night steamers kept the others awake, but not the writer, who sleepeth the sleep of the just at all times, and hath even, but calumniously, been accused of snoring, albeit the flood gates of heaven and the peals of thunder have poured forth the vials of their wrath on the thin and only blanket which hath at such time been his sole covering under such aforesaid heaven.

The next day was uneventful, we only reached Poughkeepsie, and anchored near there; saw none of the maidens that dwell within the caves of Vassar, but we allowed ourselves to dream of them at leisure—lots of leisure. Next morning we mildly drifted up with the tide for one or two miles, when just before noon the wind began to blow great guns, and we, before dark, covered the fifty-odd miles up to Catskill, making a splendid run. The wind right behind and blowing so as to make us feel glad the Breeze had a good solid mast. Next morning the wind kept up and we finished the distance up to Albany in about five hours—some thirty and a few miles.

Here we had our mast unshipped and were compelled to say good bye to one of our party who was obliged to return to New York, so that my friend, the owner of the Breeze, and myself, with Jim, an Irish setter, were left to go on with the journey.

From here we were towed up to Troy, and thence to West Troy, where we arrived in the afternoon; we then went to Waterford, where the Northern Canal to Whitehall begins.

Here we happily fell in with an exceedingly intoxicated but withall friendly gentleman, who many times consigned himself, his eyes and his soul to everlasting perdition in endeavoring better to prove his high regard for his friends, and who gave us much information as to canals in general and his own disinterestedness in particular. The result was that we got a clearance that evening and engaged a native to tow us to Whitehall.

We lay ourselves down to sleep in the boat near the canal, after carelessly exhibiting several firearms, and assuring the trusting aborigines that Jim the setter has been found guilty of manslaughter on several occasions. Poor Jim! Thou oft calumniated canine, I must doubt whether thou ever hast tried to bite aught but a flea, and even then hast thou probably not succeeded.

Next morning, after passing through locks innumerable until our heads felt dizzy, two unfortunate Columbuses might have been perceived seeking new worlds to conquer in a canal, meandering through the complicated curves of said canal.

Our painter was lashed onto the back of the craziest buggy I have ever seen, in fact quite a new thing in the way of buggies, resembling a daddy longlegs after a stampede. The driver was peacefully nodding away the stilly hours, seated with great daring on that very buggy, and drawn by a quadruped whose back might have shed the rain beautifully on account of its sloping Gothic shape, and whose head in profile resembled that of a goat, and in full face that of a bald eagle.

On this canal new things were revealed unto me, the fact is, I really had never heard any swearing before. Many times in the gorgeous Maine woods had I heard a guide deliver an oration so interlarded with profanity that the cold shivers ran down my back. On many other occasions, as a wanderer over the face of the earth, had I heard a thing or two in that line; but notwithstanding all this, I was really innocent as a child unborn to blasphemous literature until I came across these sturdy champions. I have recently read of a man who described a certain variety of pie, manufactured by his fond maternal parent, as being almost religion; this was not religion, but it decidedly belonged to the book of revelations. We often could see a set of canal mules trudging toward us a quarter of a mile away, the sweet strains of blood-thirsty endearments would reach our ears, louder and louder would they grow, the canal boat would pass us, our driver and their driver would cheerfully salute each other with sundry absolutely ferocious insults; our hair stood on end. With an extra kick at and from the mules they passed on, and the sweet music would last until they were lost in the distance.

Two days were thus whiled away, and one afternoon we reached Whitehall. We had been informed that we could that day take the Canada tow, which conveys many large canal boats to Canada, and was to start at 4 o'clock. We arrived at the locks and managed to get through them at about five minutes past four, in excellent time to see the tow puffing away in the distance. We tried to row the big catboat up and reach the tow, and our efforts were proving unavailing, when two kind gentlemen who were enjoying a row offered us a help, and taking our painter they pulled us up manfully, and we succeeded in reaching the tow. We hitched on to one of the boats and enjoyed a good rest.

The boatman informed us that we would reach Ticonderoga at or about one in the morning, a cheerful prospect, and then asked if we had any whiskey on board. We had to acknowledge the soft impeachment and pull out about half a quart that was left of a solitary bottle (upon my word) which we had laid in in New York, for possible medical use. Then our men on the canal boat, and I have carefully since computed that their stomachs can stand a pressure of about seventeen atmospheres, for in a few seconds the bottle was empty and the whole gone, not to join the angels.

One of the men assured us that he would let us know when we reached Ticonderoga; he said we could not mistake it anyhow, and described it lucidly, saying that there was a point and then a bay, and old ruins on top of the point; that was very clear, of course, as points and bays were as thick as peas, and the darkness of Egypt prevailed. We suddenly, at about 1 o'clock, thought that we must be about there. We could see a bay and a point, of course, as we could have done anywhere, our friends were all asleep, so trusting to luck we cast off our line; my friend had seen Ticonderoga in the day time a few years before, and thought this might be it.

We pulled the boat toward shore and anchored for the night, after having had our blood half curdled in our veins by a set of the most demoniacal yells I have ever heard, but which probably really consisted of the dilettante efforts of some amateur bullfrog.

At dawn of light next morning, we found that we really were right near Ticonderoga, so we pulled the boat a few hundred yards up the river, and majestically anchored in two feet of water on a tenacious mud bottom.

That day we could proceed no further, but we made arrangements with a teamster to take us into Lake George, for the boat had to be taken out of the water, placed on a wagon and taken to the lake, a distance of about a mile and a half. We arranged to have everything done the next morning, and for the first time since we left New York we went and partook of most excellent hotel fare. During the night it poured hard, and we took refuge in the hotel. We had arranged to be at work next morning at 7 o'clock, but seeing that it was pouring hard at about half-past 6, we turned on our pillows and slumbered on, persuaded that no one was anxious to get drowned.

The first thing we knew our teamster friend made a violent irruption into my room, a cloud of vapor arising from his garments, and with the peculiar husky voice which so generally results from much water "extra" and much whisky "intra," informed me that he'd be considerably perditionized if he was going to wait any longer. I put on my rubber coat, rubber bip boots and rubber hat, my friend did about the same, and we sallied forth. When we reached the river we found a large wagon, on which two large timbers had been bolted to hold the keel. The wagon was backed into the river by our man, who was at that time at the happy stage of intoxication, and who was backing his horses into the river in an aimless way, with great danger of drowning himself and his horses. At last it was far enough out, and the boat was floated onto and made fast to the wagon. Then, with perfect happiness, we found out that neither two nor four horses could draw it out, the wheels being a foot deep in the mud. At last we managed to procure a set of blocks, and making everything fast, with a team of horses on the fall we got her out.

The teamster meanwhile had mostly looked on, sworn at the bystanders, and taken frequent swigs at a pint bottle of fluid lightning, and had become half maudlin and half uproarious, as he wanted to boss the whole busines, and did everything wrong. This was a big nuisance, and we planned several ways of getting rid of him. I proposed knocking him over several times, and then laying him in the boat, but we thought the remedy was slightly harsh. Then we thought of giving him more lightning, but we remembered again that Ticonderoga was but a small town and probably did not contain enough of it to soak thoroughly such a sponge. Finally we managed to get on, as he became affectionate and only wanted to kiss us. We promised we would let him if he behaved, and finally reached Lake George, where the wagon was again backed in the water, and the Breeze afloat once more.

Next day the mast was shipped, the sail bent, and ballast put in, as we had removed what we had in before taking the boat across. In the afternoon we sailed, but as the wind died out we only reached Rogers Rock, and we stopped all night at the hotel there.

Next morning we sailed off once more, but the wind blew so hard that we had to take in a reef, for the first time during the voyage. The wind being dead against us we had to tack about a great deal, and, though going very fast, we did not get on very rapidly toward our destination. During the afternoon we were struck by two or three very violent squalls, in which the Breeze behaved nobly.

Toward evening the wind died out and we were doing nothing for quite a while. Toward our left on shore we could preceive the Horicon Pavilion, and we tried to reach that. I got out in the skiff, tied the Breeze's painter to the seat of the skiff, as I had no ring behind, and began tugging toward there. It had become pitch dark then, but we could see a faint light toward the pavilion. The water was smooth and glassy, the sky cloudy and dark.

Suddenly, like a lightning flash, the water became one white sheet about a quarter mile north of us, and in one moment the squall struck our sail that had been flapping idly before. Fortunately our main sheet was loose, but the shock was so sudden that the bow swung round, dragging my skiff and myself sideways. I shipped almost half the skiff full of water, but managed to save myself from upsetting and reached the Breeze. I made the skiff fast and rushed forward. My friend had already let down the peak, and I let down the throat, and we got the sail down on deck, for we could not think of sailing in such a squall, in absolute darkness, among hundreds of rocky islands. We drifted slightly toward shore, where we could still see the light burning, and made ready soon to cast the anchor, when suddenly the light went out, leaving us in the darkness of Egypt. We guessed at how near we were to shore, and shortly after cast our anchor. About sixty feet of chain rolled out and it stopped; we let out about thirty feet more and waited anxiously. It was holding.

The wind was whistling furiously through the rigging, huge waves were tossing us about, but worst of all was the darkness. At 11:30 we began dragging, let out more chain, dragging still, all we had, dragging again; we suddenly stopped a moment, a big wave lifted us up, we felt a shock and the big anchor and a hundred feet of chain were gone. Now we began drifting; it was about 1 o'clock; we made a drag with our pail, but it did not help us much. In that way we drifted, how long I hardly know, through a maze of islands which made me shiver next morning when looking at them. We suddenly were stopped, in the dark, and we knew we had stranded somewhere. Regardless of the boat or anything else, we hopped into the water, nearly to our waists, and made for shore, a few yards distant, where we froze all night on a luxurious granite couch.

When morning came we saw we were in the only place where the Breeze could have stranded for miles without hurting herself, and, curiously enough, hardly two hundred yards from the Hundred Island House, which was our destination. The Breeze was safe and so were we. Thus ended a pleasant trip, and thus ends, I am afraid, a long and perhaps tedious narrative. G. V. S.

"KITES AGAINST SAILS."

THE following account, as promised in my last letter to FOREST AND STREAM, of one of the races in which a kite-drawn boat was engaged, is copied from an English magazine of 1880:

"It was on a fine August morning, forty years ago, when we made our way to Rownham Ferry to try what we could do with the Laura against the Gipsy yacht, whose owner, proud in her achievements, had laughed to scorn our willingness to match our kite-sailed boat against her from Rownham to Old Passage and back.

"Our party was a numerous one, mustering upward of a dozen, and very merry were we, but anxious witnal, as the Gipsy was well-known for her fast sailing qualities, and the wind was of just that nature that best suited our opponents.

"The kites and apparatus we had sent on before, and when we arrived at the Ferry we found the Laura all ready for us and the Gipsy just getting out into the stream. After a little delay we started about 10 o'clock, but in the meantime the wind had dropped and shifted so that our expectations were somewhat more cheerful than they had been as we journeyed to the river. It did not take long to get off, the pilot kite ran up in rare style, and the main followed without trouble, and was soon brought into work. Away we went, but not so the Gipsy, for the wind had fallen so that she scarcely moved, and after we had gone as far as the Hotwells it became obvious that if there was to be any race at all it must begin lower down, and so we threw the main kite on the wind and stood by to allow the yacht to slowly overtake us. When she did so her owner confessed that we had the better of him in the narrow gorge, as his sails could get no wind, and ours, right away above the crest of the downs, were as full as we wished, but he was convinced we should have no chance further on, and so we sailed for Pill, and waited till the Gipsy, by sailing and tugging and the aid of the stream, floated down to us. At Pill the race really began, and the yacht had decidedly the best of the start. The breeze had freshened, and away both boats bowled past Broad Pill and the Gibbet Pole into the Channel.

"It soon became obvious that we could do as we liked with the Gipsy, who only led for a few hundred yards at the beginning, and as we got off Cluttering Wharf, we were leading so far that we ran across the bows of the yacht, and allowed her to pass to port of us. No sooner had she gone by than we crossed back into our course and came up to her hand over hand. In vain she maneuvered, in vain her captain endeavored to shake us off. We slipped past her as if she were standing still, and off Aust Cliff, which was the end of our outward journey, we were half a mile ahead.

"We turned and waited till the yacht came up, and when she went about we followed her, and commenced her return. But if the kites had beaten the sails easily on the journey up the Channel they fairly made an exhibition of them on the run home, for the wind had backed and we could sail much nearer it than the Gipsy could, so after a good deal of 'chaffing' and sailing around her once again, we bid her crew good-bye, and giving an extra pull at our braces to bring the kites into full action, literally jumped off from her, and sped away to Rownham to order the dinner at the expense of her owner, which, by the terms of the match, the loser had to stand.

"I will sometime or other copy out from the same magazine a description of the kites used on this and similar boats, and perhaps some small yacht may put one on at the bow and go "kiting" to victory "Hollis." ELLIOT.

HULL Y. C. ANNUAL MATCHES.

THIS club held their forty-second matches on Saturday, July 12, over their course off the club house at Hull. The race was open to yachts of the club only, which were classified as follows: first class, sloops and cutters of over 30ft., $25; second class, sloops, 25ft. and under 30ft., prizes, $20 and $15; third class, sloops, 21ft. and under 25ft., prizes, $15 and $10; fourth class, cats, 20ft. and under 25ft., prizes, $15, $10, $5; fifth class, cats, 18ft. and under 20ft., prizes, $15, $10, $5; sixth class, cats, under 18ft., prizes, $10, $5.

Each yacht was allowed one man per 4ft. of length. In third class, sloops were allowed only mainsail, jib and gafftopsail, catboats being allowed but one sail.

The course for first and second classes was: From judges' line to Black Brush buoy, No. 1, half a mile south, leaving it on starboard, to yellow barrel marked H.Y.C., off Pettick's Island, leaving it on the starboard, through Hull Gut to buoy on Winslow's Rock off Rainsford Island, leaving it on starboard; thence leaving Hunt's Ledge and Point Allerton buoys on starboard to bell boat on Harding Ledge, leaving same to port; returning, leaving Point Allerton and Hunt's Ledge buoys on port, to judges' boat, passing between it and flagboat; distance eleven miles. Course for third class—From judges' line to West Gut, leaving Pettick's Island on starboard; thence northeast by north three-quarters of a mile to black buoy on Wilson's Rock, leaving it on starboard; thence to striped buoy on Hunt's Ledge, leaving it on the starboard, through Hull Gut, to the judges' boat, passing between it and the red flag—seven nautical miles. Course for fourth, fifth and sixth classes—From judges' line to steamboat barrel off Seal Rocks, leaving it on starboard, to buoy off Prince's Head, leaving it on port, to No. 1 Brush buoy (½ mile south of starting point), leaving it to starboard, to yellow barrel buoy marked H.Y.C., off Strawberry Hill, leaving it on port, to steamboat barrel off Seal Rocks, leaving it on port, to buoy on Prince's Head, leaving it on starboard, to barrel buoy off Pettick's, leaving it on starboard, to judges' boat, passing between it and flagboat.

The Regatta Committee were Messrs. M. J. Kiley, chairman; J. A.

Osgood, W. H. Miller, H. N. Curtis, F. M. Griffin, E. A. Dow, and P. M. Bond secretary. The judges, Messrs. H. E. Crowell, F. C. Brower and Col. Harrington, were on board the sloop Bertha.

The wind was light from southwest, freshening later on. At 3:15 P. M., the first gun was fired, the second following at 3:20, Nimbus crossing the line alone in her class. A third gun fired at 3:25 sent off Banneret, Em'ly, Transit, and Altaire, and at 3:30 came Sea Bird, followed by Davy Crockett and Alda. The large cats went over at 3:35, Queen Mab ahead, Joker, Niobe, Amy and Thisbe after her, then at 3:40 came Hornet, Viva, Kismet, Myrtle, Sheerwater, Spray, Spider and Imogene, while the smaller ones came last at 3:45, Charlotte G., Mirage, Samaria, Zip and Idlewild. Thilga, somehow or other managed to start in second class, although belonging in third. Thisbe was unfortunate enough to carry away the jaws of her gaff, so returned. About 5 P. M. the boats began to come in, and made lively work for the judges in taking their time correctly.

The following table gives the result of the race:

Name, Rig and Owner.	Length.	Actual.	Corrected
Nimbus, c. b., B. Jenney, Jr.	34.05	1 49 54	1 23 41
SECOND CLASS.			
Transit, k., E. H. Ingalls	27.03	1 55 23	1 22 39
Banneret, k, J. Brown	25.01	2 01 35	1 26 25
Em'ly, k., C. A. McManus	27.00	2 03 49	1 30 49
Altaire, k., J. H. Sherburne	28.09½	2 09 55	1 38 45
THIRD CLASS.			
Sea Bird, c. b., G. S. Furbush	24.01	1 19 51	55 51
Davy Crockett, c. b., H. Putnam	21.06	1 25 12	59 46
Alda, c. b., W. H. Wilkinson, 2d	24.01	1 27 50	1 04 39
FOURTH CLASS.			
Queen Mab, c. b., Burnell & Litchfield	22.06	1 23 35	59 04
Amy, c. b., E. W. Baxter	21.05	1 25 33	1 00 03
Niobe, c. b., F. L. Dunne	20 06	1 27 19	1 00 56
Joker, c. b., George Coffin	20.08	1 28 48	1 08 26
Thisbe, c. b., S. A. Freeman	21.05	No time taken.	
FIFTH CLASS.			
Hornet, c. b., H. L. Harding and A. B. Merrill	19.03	1 36 13	1 08 31
Viva, c. b., Hutchings & Prior	19.06	1 30 56	1 03 31
Kismet, c. b., H. N. Curtis	18.11	1 35 12	1 07 09
Sheerwater, c. b., W. M. Merrill	18.09	1 33 02	1 04 48
Imogene, c. b., B. T. Wendell	18.10	1 34 16	1 06 07
Myrtle, c. b., C. H. & R. C. Poor	19.06	1 35 22	1 07 57
Spider, c. b., Jere Abbott	18.11	1 33 26	1 05 23
Spray, c. b., H. H. Faxon	18.10	1 33 10	1 05 01
SIXTH CLASS.			
Mirage, c. b., L. M. Clark	17 10	1 33 00	1 03 42
Samaria, c. b., S. G. King	17.09	1 35 59	1 06 35
Charlotte G., c. b., S. A. Freeman	17.11	1 39 31	1 10 18
Zip, c. b., G. W. Morton	16.09	1 46 05	1 15 25
Idlewild, c. b., Henry Taggart	17.08	1 50 40	1 20 38

Next Saturday will be ladies' day, and the club will join in a sail.

A RACE BETWEEN TRADING SCHOONERS.

THE schooners Hines and Judy, which were racing from Baltimore to Morehead City, reached that point yesterday morning, the Judy being ten minutes ahead. This is, perhaps, one of the closest ocean races on record, and excited much comment in the city yesterday. But there seems to be some doubt about surrendering the purse of $350. Mr. Thomas B. Schall, owner of the Hines, claims that the arrangement was that each boat was to go round the sea buoy off Morehead City, and that his vessel did this, while the Judy ran round the inner buoy and thus got in ahead. In fact, he claims that the goal was the sea buoy referred to, and that the race ended there. He therefore refuses to surrender the money. Mr. Schall bases his action upon the following telegrams:

"MOREHEAD CITY, N. C., July 11, 1884.—We made the sea buoy and went round. They made inner buoy and claim race. Do not give up money. Will write particulars. C. F. TERRY."

"MOREHEAD CITY, N. C., July 11, 1884.—Your referee left it to crew. They admit they never made sea buoy. Could not have made it first, as they were off the course. C. F. TERRY."

Terry is the commander of the Hines.

"MOREHEAD CITY, N. C., July 11, 1884.—Give no money up. Will be some trouble. Things going crooked. T. B. SCHALL, JR."

"MOREHEAD CITY, N. C., July 11, 1884.—Arrived this morning. Judy passed buoy ten minutes ahead. W. T. SMART."

Smart is Mr. Schall's referee. He stated yesterday that he had telegraphed Mr. Smart to the effect that the race was to the sea buoy above referred to, and he must make his decision accordingly. Mr. Schall claims that he has witnesses to prove this. Mr. M. Garrett, owner of the Judy, claims that the race was finished in accordance with the terms of agreement, and has the following telegram from his referee to show for it:

"MOREHEAD CITY, N. C., July 11, 1884.—Arrived this morning. Judy passed buoy ten minutes ahead. W. W. MARSH."

Capt. J. R. Billups, commander of the steamer Havana, in speaking to a *Sun* reporter of the race, said it reminded him of the old days of the Baltimore clippers. From 1855 to 1858 he was in the service of Mr. Pendergast, running a clipper schooner between this port and Charleston, S. C., and the West Indies. There were many vessels of this class engaged in the trade, and the competition between them was lively. Two would leave here together and race all the way to their distant port. At night each would hoist a lantern to the topmast-head to let the other know where she was. Frequently when one vessel had clewed up her sails in Charleston harbor the other clipper would put her jibboom over her stern and tie up to the dock. Sometimes a number of them would leave Charleston together and race all the way up the coast. If it happened that they reached Sandy Point at night they anchored there and waited for morning. In those days vessels would not come through Bodkin Swash at night, but rode at ancher until morning. Many a time the crews would sit up all night and wait for the first streak of dawn, so as to take advantage of the earliest moment of starting. It was not at all unusual for them to enter Union Dock several together, or at intervals of a few minutes.—*Baltimore Sun, July* 12.

HULL Y. C. CRUISE.

THE second day of the club cruise opened on the fleet in Marblehead Harbor, bright and pleasant on the morning of the 6th instance, and the signal was hoisted on the flagship Brenda to get under way promptly at 8 o'clock A. M. All of the yachts that were to accompany her made sail, and the schooners Brenda, Captain Abbott, flying the pennant of Commodore Perkins; Vif, Vice-Commodore Crane; yawl White Cap, Rear Commodore Rice; schooners Alice, Captain Lockhart, and Tempest, Captain Whittier, and sloops Nimbus, Captain Jenney, and Gem, Captain Osgood, and cutters Sigdriffa, Captain Monks, and Ella May, Fleet Captain Tyler, stood out of the harbor to eastward before a gentle southwest breeze. The Tempest laid to off Lowell Island to take aboard additional guests, and so was delayed for some minutes.

Running out through Salem Bay past Baker Island lights, the fleet plunged into a heavy southeast swell and bore up for Cape Ann. Off Gloucester the Brenda signalled for all to make for Portsmouth Harbor, and the fleet passed Thatcher's Island with the White Cap in the lead, closely followed by the Alice, Brenda, Nimbus, Gem, Ella May, Sigdriffa, Vif and Tempest in the order named. Hauling up under the cape in smooth water, the Alice rapidly forged ahead, and heavy puffs of wind came off Gloucester Head, one of which carried away the topmast of the Gem, forcing her to turn back, and parted the sister hooks of the topmast shroud on the White Cap, as she was carrying gafftopsail, while the other schooners had topsails clewed up.

As the fleet cleared the land the wind gradually moderated into a steady southwest breeze, and the run across Ipswich Bay was made in fine style, the larger yachts gradually leaving the smaller ones in the heavy roll of the sea. Off Whaleback Light the leading yachts laid to, to await the smaller ones, the Alice rounding to about four minutes in advance of the White Cap, which led the Brenda by about the same distance, while the Tempest came next, and the Vif, with the two cutters and the Nimbus followed with the latter in the lead. As the last yacht came up all stood up Portsmouth Harbor, and rounding to above the fort, dropped anchor off Newcastle.

After dinner, all hands went on shore for a visit to the "Wentworth," about a mile from the landing, a part of the number taking a barge while the larger number preferred the exercise of a short walk, under the lead of the sturdy commodore. An hour or two was very pleasantly spent at this noted summer hotel, already crowded with visitors, its grounds and verandas brilliant with electric lights, which shine far out over the open sea to where the "flaming signal" on White Island, at the Shoals,

"Answers you, passing the watchword on."

On the return all took to the barges, which, by the way, can be had at Newcastle for a moderate expense (and are very good) for a visit to any place in the vicinity.

After a few songs from the Temple Quartette on the Brenda, and an impromptu quartette on the White Cap, christened the "Pagodas" by the boys, all hands turned in.

At 8 o'clock on Monday morning the smaller yachts got under way, in charge of Vice-Commodore Crane on the Vif, followed by the four larger yachts an hour later, heading for Portland after rounding Whale Rock Light with a light westerly breeze. The day was perfect, and only the long, heavy southeast roll of the sea continued to impede the progress of the fleet. Off Wells Beach the westerly breeze died out and a southerly one sprang up. The Tempest being in the lead slightly, and outside, caught it first and shot ahead, while the other large yachts took it later. Off Cape Elizabeth the larger yachts again laid to, and all came up; the Tempest having held her lead, followed by the Alice, Brenda, White Cap and others. The fleet then stood in for Portland Breakwater in close order.

On the way up, and while lying to, a large coasting schooner exhibited a specimen of viciousness only too common. She first tried to run into the Brenda while the latter was lying to, and only missed her by about thirty feet by the activity with which she was kept away. Afterward as the White Cap was passing to windward of her, within about fifty feet, to avoid a buoy on a dangerous ledge the captain of the schooner deliberately ordered his helmsman to luff sharp up out of his course, to run into the yacht, but the latter was brought up just in time past the buoy to escape by superior speed in shooting ahead under a quick luff. As it was, the great jib boom of the schooner just touched the yacht's mizzen as she forged ahead. Such conduct when the wind was fair and done so maliciously, certainly deserves the most severe condemnation, if not some penalty to be imposed.

The fleet rounded the breakwater in close order and came to anchor opposite Portland, thus bringing to its limit a successful cruise, which will long be remembered by those who enjoyed it. From here the Tempest kept on to the eastward, the White Cap visited Casco and Booth bays, and then with the rest of the fleet returned, filling up five days out and back.

The Hull Y. C. has displayed a spirit of enterprise in these cruises, which is greatly to the credit of its members. The owners of the small yachts particularly deserve great credit for so boldly displaying the merit of their craft in the long run in a heavy sea in company with such larger ones as Brenda, Alice, Tempest and White Cap. They have demonstrated that the club cruise need not be confined to large yachts, and that its social enjoyments are within the reach of the owner of the smaller boat, which is well equipped for the open water.

AMERICAN Y. C. RACES.

THE American Y. C. will hold their first steam yacht races on the Sound, on Aug. 7, the particulars of which are given in the following circular, issued by the secretary, Mr. Henry A. Taylor:

There will be a rendezvous of the yachts of this club, prior to a regatta and cruise, at the Larchmont Club House, on Wednesday afternoon, Aug. 6 next.

From thence, at 10 A. M. on the following day, there will be a race around the lighthouse off Stratford to abreast the lighthouse at New London, and prizes of equal value are to be competed for in two classes of yachts, viz, first class, all exceeding 100 gross tons; second class, all under 100; two or more entries in a class necessary to make a race.

The restriction of yachts to but two classes is for this occasion only and is the consequence of there being but two prizes for competition, with allowance of time. A third prize will be awarded to the yacht making the least time over the course without reference to allowance of time.

Owners of steam yachts of any organized club are invited to enter and to compete for the prizes under time allowance.

The allowance of time is that recommended and reported by a select committee and which has been adopted by the club.

Owners of yachts desiring to enter for competition in the above race, or in any that may occur during the cruise, are required to furnish the measurer, Charles H. Haswell, Post Office Box 2,961, New York, on or before Monday, Aug. 4 next, at 2 P. M., at which time the entries will close, with the name, tonnage—as taken from their register issued during the current twelve months—area of grates and character of combustion, as whether natural draft, jet, blast or exhaust, also with a copy of their signal, provided it is not already furnished.

The Regatta Committee will make the necessary arrangements, compute the time allowance and have direction of the race, or any that may occur during the race; and all questions arising between competitors will be decided by them, under the rules and regulations of the club, so far as they may apply, and the decision of the committee will be final.

The Larchmont Y. C. have offered the use of their house and grounds to the A. Y. C. on the occasion of the rendezvous, which offer they have accepted.

PORT ORANGE Y. C. ANNUAL MATCHES.

Editor Forest and Stream:

The fourth annual regatta of the Port Orange Y. C. took place July 4, 1884. The race was run over the Port Orange Y. C. course. Seven boats entered. The day was fine and the wind light from the east, which gave the boats a run over most of the course, but on the homestretch the wind freshened up so as to cause some of the boats to reef and others to take in their light sails. The wind also shifted to southeast, making it a beat most of the way home. The boats had a chance to try the wind in all ways, from dead ahead to right aft. The time made and names of boats are as follows:

FIRST CLASS.

	Ft. In.	Actual.
Ripple, V. Vuillaume	26.00	2 37 40
Gretchen, Fred. Knappe	20.04	2 34 02
Gretchen winning with time allowance in 9.23.		
SECOND CLASS.		
Annie, H. H. Robinson	18.06	3 00 53
Bessie, H. Pacetti	18.06	3 09 33
Magnet, George W. Johnson	15.03	Withd.
Annie winning with time allowance in 8.50.		
THIRD CLASS.		
Comet, V. Vuillaume	18.00	3 34 25
Maud, Fred. Fowler	18.00	3 43 10

Judges—Eugene Marcile, W. L. Bunker, Capt. A. L. Daggett.

PORT ORANGE, Fla. JOHN B. ALLAN, Secretary.

NEW YORK Y. C. CRUISE.

VICE-COMMODORE E. E. CHASE has ordered the squadron to rendezvous at New London on Aug. 9, for the annual cruise. From New London the fleet will cross to Newport, where a number of races, both for sailing and steam yachts will take place.

Commodore Bennett has offered the following prizes: A cup of the value of $1,000 to the steam yacht winning with time allowance, a cup of the value of $1,000 to the steam yacht making the shortest time over the course, a cup of the value of $500 to the steam yacht arriving second without allowance of time. The above race to be over a course of not less than sixty statute miles, and no race unless five vessels start. Cups of the value of $500 each to two classes of schooners, and cups of the value of $500 each to two classes of sloops, to be awarded to the winners of a race from Brenton's Reef Lightship to and around Sandy Hook Lightship and back to the starting point. The race to be without time allowance.

A race will probably be arranged for two classes of launches not over 60ft. waterline, the prizes being handsome cups, also presented by the Commodore. The race for the Goelet cups will also be held at Newport, over a triangular course of 45 miles, with time allowance, the prizes being two cups valued at $500 each, for the two classes of schooners, and cups of the same value for two classes of sloops.

BEVERLY Y. C. REGATTA.

THE first championship matches of the season were fixed for Marblehead, July 9, and for the third time this season the race was spoiled by bad weather. The 8th was thick and foggy, preventing the south shore boats from coming over, and the 9th opened with a strong northeasterly wind, making a dead bent across and preventing their arrival in time.

Just before the start the wind died out, the start was made in a light N. E. wind, making it a dead beat to Bowditch's Ledge; after they had been out about half an hour, they ran into a flat calm, lasting three-quarters of an hour, which was succeeded by light winds from every direction, shifting round so that the first class had a beat all the way over their course, and the small boats almost all the way.

The result was that the race was not made in time, Peri came in first about twelve minutes over the time, with Witch one minute later, then Hoiden, Spider, etc. In first class Thialfi and Countess made a very close race, Countess came into Marblehead Harbor ahead, but while she was beating for the line, Thialfi got a breeze under the shore and crossed without tacking, about half an hour over the time.

At first it was intended to postpone the race till Saturday, the 12th, when a good entry would have been assured, but this idea was abandoned when it was found out that the Hull and Boston Y. C.'s had races on that day, and the race was resailed on the 10th, with a very small entry, as several owners were unable to devote two days to a race in the middle of the week.

The boats went off to a one gun start; first class at 12:20, and the others at five minute intervals, with a brisk W. N. W. breeze. The course for first class was: Leaving R. buoy No. 6, Bowditch's Ledge beacon, Gale's Ledge buoy, stakeboat off S. E. breaker, and Halfway Rock on starboard hand and return, 10½ miles. For second and third classes, leaving Bowditch's Ledge beacon, and stakeboat off Curtis's Point on port hand, B. buoys 7, 5, and 3, and buoy on Selman's Berth on starboard, and return, 7½ miles.

The wind died out at the finish and the boats drifted over the line. Summary as follows:

	Sailing Length.	Actual.	Corrected.
FIRST CLASS.			
Thialfi, slp., Amos Cotting	30.8	3 20 45	3 14 00
Countess, slp., Geo. B. Chase	31.6	3 23 33	3 17 27
Bessie, schr., Chas P. Curtis	27.1	not timed.	
SECOND CLASS.			
Witch, cutter, B. B. Crowninshield	22.6	1 37 28	1 20 20
Peri, cat, Com. Parkman	20.7	1 41 36	1 23 27
Spider, cat, Walter Abbott	20.	not timed.	
THIRD CLASS.			
Mirage, cat, L. M. Clark	19.4	2 04 10	1 49 38
Tulip, cat, Gordon Dexter	18.7	2 19 53	2 4 32

Thialfi, Witch and Mirage take prizes and pennants. Countess and Peri second prizes. BLUE WITH A GOLD CASTLE.

PACIFIC Y. C. OCEAN RACE.

SAN FRANCISCO yachtsmen have made a departure from the usual routine of bay cruises, and on July 5 the Pacific Y. C. turned out for an ocean race. There was plenty of variety—light winds, calms, and at last a tearing breeze with rough water accompaniment, making lively work and an exciting finish.

The fleet was ready early in the morning, but there was very little wind, what there was being from S.E. A large number of spectators were present at Santa Cruz to witness the start, which took place at 10 A. M., Annie crossing at 10:17, Nellie 10:21, Lurline 10:24, Fleur de Lis 10:25, Aggie 10:27. Besides the racers were Casco, Nautilus, Lady Mine and Clara to witness the race.

Fleur de Lis started far Monterey, carrying a breeze for some two miles, when it left her becalmed, the others, who had gone further off shore in search of wind, being in a like predicament. When the wind did come, it was from northwest, Annie catching it first and the others a little later, all but Fleur de Lis, which lay way astern until 11:50, when a breeze found her, and away she went with all drawing to catch the leaders, only Aggie being within sight of her.

Running on to the stakeboat, the Lurline turned first, then Nellie, Lady Mine, Aggie, Annie, all passing Fleur de Lis going one way as they went the other, the leader being ten miles ahead of her.

For a time the wind was light, with calms at intervals, but Fleur de Lis still held on, overhauling the others, and at passing Aggie, the latter withdrew soon after for no apparent reason. After the tempers of the yachtsmen had been thoroughly tried by calms and catspaws, old Æolus relented and sent them wind enough in a lump for two or three good races in the shape of a blow from the west, soon rolling up an ugly sea.

Annie lost her jib at once, and ran into smoother water to set matters right, while the others quickly reefed down. Now was Fleur de Lis's chance, and she was driven through in a way that soon put Annie under her lee, and finally placed her less than a minute behind Lurline at the finish, the full time being:

	Start.	Finish.	Actual.	Corrected.
Lurline	10 25 48	5 03 20	6 37 32	6 37 32
Fleur-de-Lis	10 26 43	6 03 53	7 36 50	7 22 48
Nellie	10 22 04	6 05 34	7 43 30	7 26 00
Annie	10 17 43	7 02 05	8 44 22	8 14 34

The prizes, which are of silver, were awarded; first to Lurline, second to Fleur-de-Lis, third to Nellie, and fourth to Annie. In the evening a ball was given at the Ocean House, at which the prizes were presented.

CUTTERS ON THE LAKES.

THE contest between sloops and cutters has at last extended to Lake Michigan, and the cutter has scored a grand victory on the occasion of her introduction to Chicago yachtsmen. The following letter and the extract from the Chicago *Tribune* tell the story plainly. In a storm that scattered the fleet, forcing the large yachts to seek a harbor and disabling several of them, the little Verve, 42ft. on waterline, was first in at Milwaukee, some six hours ahead of the famous Idler, 46.5ft. long. The race that followed was no less remarkable; in weather in which the racers declined to sail, Verve started out, the Wasp alone caring to accept the challenge, and in a race of 18 miles the cutter was beaten by but 13min. 51s., the sloop being a new and powerful boat, 64ft. on waterline, 19ft. 10in. beam, and 6ft. draft. Our correspondent writes: "Wasp is a 50-ton centerboard sloop, Verve is a 10-ton, deep draft cutter, recently imported from Glasgow. She is the first cutter on Lake Michigan, and is, as the clipping says, a 'revelation;' it having been freely asserted, publicly and privately, that she could be no match for the local yachts. The proof of the pudding is in the eating, and Chicago yachtsmen are eating 'cutter pudding' just now." The following details are from the Chicago *Tribune*, July 5:

The members of the Chicago Y. C. are thoroughly disgusted with their trip to Milwaukee. For nearly two days and nights they were either drifting hopelessly along without the faintest suggestion of a breeze, or were tossed and tumbled about by the turbulent waters of Lake Michigan. They have been chilled through by murky fogs, drenched to the skin by heavy seas, and scorched by glaring sunlight until sharp rheumatic pains dart through every limb, while their burnt and blisted faces have much the appearance of boiled lobsters. There is not one but wished he had stayed at home and enjoyed the quiet seclusion of his club, but it would be unsailorlike to admit his weakness, so he smiles a ghastly smile and tells about the rollicking jolly time the boys had after the gale caught them.

All of the boats, with the exception of the Wasp, left the Government Basin at Chicago about half-past 4 o'clock Thursday afternoon, and slowly drifted out between the opening in the breakwater onto the lake. It was ten minutes of 5 when the Wasp got away, and at 8 o'clock in the evening the boats were scattered along the shore from Lincoln Park to the crib, their sails flapping against the masts and scarcely a breath of air stirring. About 10 o'clock a squall from the northeast struck the squadron square in the face, and they flew down the lake under double-reefed canvas. The crew of the Zephyr got all they wanted and ran back home. The other yachts separated and saw no more of each other until morning. The Wasp and Verve shot ahead of the others and were soon lost in the darkness. The Idler stood out into the middle of the lake in order to prevent collision or from being blown on the beach. Then the rain fell in torrents and the gallant commanders and their guests went below.

Capt. A. P. Seymour's new sloop-rigged yacht, the Mamie, was the first to suffer disaster. Capt. Seymour was at the wheel when the squall came, and had just given the order to take in sail when the topmast snapped like a pipestem and went by the board. A heavy sea swept over the decks at the same time and she was thrown on her beam ends. When she righted it was found that the small boat and davits had been carried away. She hove to and cast anchor just astern of the flagship Cora. A few moments later she narrowly escaped being run down by a lumber schooner, and throughout the rest of the night torches were burned. There was a narrow escape from loss of life on the Cora. Two of her crew were washed from the deck by the sea, but life lines were thrown to the almost drowning men and they were picked up and saved.

The squall died away before daybreak and was followed by a dense fog, so that the boats lost sight of each other most of the time. About 4 o'clock in the afternoon the wind freshened up considerably and steadily increased in violence till after 9, when a brisk gale was blowing from the southeast. Under its influence the yachts fairly flew through the water, and at an early hour this morning three of them had cast anchor in Milwaukee Bay. As they came straggling in at the peep of day an object was seen on the waters which appeared to be a large-sized pumpkin seed with a stick standing up in the middle of it. The squadron approached it, and found it was an odd-looking boat lying at anchor. On the stern they read the name Verve.

That little pumpkin seed, built on the Clyde and brought over the salted deep, to Chicago, had been the first of the Chicago fleet to reach Milwaukee, and was awarded the basket of wine. She cast anchor at 11:30 Friday night. The Wasp got in nearly a half hour later, and the Idler, Cora and Harry Burke about breakfast time. The Una and Mamie were missing. At 4 o'clock this afternoon the Mamie arrived in tow of a tug. She ran into Oak Creek about half way between here and Racine for shelter, telegraphed for a tug and was towed in. The Una has not been heard from, but she was in company with the Cora off Racine and probably made that port for shelter.

It is not decided yet when the yachts will return, but they will all go back independent of each other. The owners and their guests are quartered at the Plankinton House, and are being entertained at the Milwaukee Club to night. The Mamie will be repaired here, and will leave Monday for Thunder Bay, Lake Superior, on a three weeks' fishing cruise. The Rev. Luther Pardee, rector of Calvary Church, and the Rev. T. D. Phillips, both of Chicago, and the Rev. W. F. Taylor, of the Springfield Diocese, are on board.

In some respects the regatta that was arranged to take place this morning was a failure. In other respects it was the most exciting exhibition of yacht sailing ever witnessed on Lake Michigan. The wind was blowing a living gale from the west, the velocity being estimated at fully forty miles an hour. It was a gale that drove many large vessels into the harbor for shelter, and it is little wonder that all of the Milwaukee yachtsmen and all but two of the Chicagos refused to venture out.

It had been arranged to sail an eighteen-mile triangular course, and

the United States revenue steamer Andy Johnson marked off the course at an early hour. The Johnson and the propeller Michigan had large parties of visiting guests, among whom were several distinguished statesmen, members of the Board of Trade, and a liberal sprinkling of ladies.

At 11:15 the starting gun was fired, but none of the yachts made any preparation for the race, although the Idler and Wasp had their mainsails set. Then it became rumored that the majority of the yachts would not sail on account of the heavy weather, and that the race had been declared off.

But the British cutter Verve made sail and commenced cruising around the bay. Her graceful evolutions excited Capt. John Prindiville, and he ordered the Wasp got under way. At 11:36:20 the Wasp crossed the line under double-reefed mainsail and staysail and sped along the course. She proved to be a marvelous seaboat. She stood up beautifully before the gale and fairly flew through the water, the wind abeam of her. The Verve followed, crossing the line at 11:38:05. The Verve was a revelation to yachtsmen. It had been predicted that she could not stand a gale of wind. She didn't stand, but she laid down and skimmed along the white-capped waves with the speed of an antelope. Jerry Stever, her owner, lashed himself to the rail while his English sailing-master stood in the cock-pit at the tiller. The crew of eight were lashed to prevent being washed overboard. At times boat and crew were completely buried in the sea, with only a portion of the mast and canvas above water. The main-boom was under one third of the time. The guests on board the Johnson momentarily expected to see the Verve swamp, and both cutters filled with life-preservers were cleared away and made ready to launch at a moment's notice. They were not needed, however.

The Wasp rounded the first stake boat at 12:06:11 and the Verve at 12:15:04. In rounding the second stake the Wasp missed stays and was obliged to wear around, and in doing so sprung her mainboom and carried away her jib sheet. She got around the stake at 12:47:50, but was so badly disabled that she hoisted a flag and signaled for a tug to tow her in. The staysail was finally set, however, and she started for the finish. Oscar Krause was on the Wasp, and in jibing was swept by the mainboom into the scuppers. He was caught by the heels and saved from being washed overboard. The Verve floundered along and rounded the second stake at 1:02. The Wasp finished at 1:23:09 and the Verve at 1:37. Archie Fisher says he has seen many exciting contests on salt water, but none of them compared with to day's exhibition.

SALEM Y. C.—None of the yachts succeeded in sailing over their courses in the allotted time on July 4, so that the race will be sailed over on Thursday, July 17, under the same regulations as the previous match.

SEAWANHAKA CRUISE.—The secretary has issued a notice, dated July 9, stating that the cruise has been indefinitely postponed, by order of the commodore. Notice will be given of the time appointed.

BAY OF QUINTE Y.C.—At a meeting of this club on July 8, the date of the annual matches was fixed for August 6, the start to be at noon. This will be the third race under new Lake Yacht Racing Association's management; large entries are expected. The circuit fixed on is from Oswego on July 30, to Kingston, Aug. 2, Belleville August 6, and afterward to Cobourg and Toronto, all the clubs being represented. The prizes for the races on the 6th will be for first clas $150, $75, $30 and $10; second class, $100, $50, $25 and $10; entrance fees, first class $10, second class $7.

Answers to Correspondents.

☞ **No Notice Taken of Anonymous Correspondents.**

F. E. W., South Manchester, Conn.—Will five medium-size brook trout live in a well? Ans. They may live but will not grow much.

J. M. M., Toronto.—Can you tell me if quassia is a good repellent for flies and mosquitoes? Ans. It is said to be, but we never had much success with it.

PARK, Red Hook, N. Y.—What disposition did Congress make of the Yellowstone National Park bill? If passed, did it pass as published in FOREST AND STREAM? Ans. The bill referred to passed the Senate, but is, we believe, still in the hands of the committee of the House to which it was referred.

READER, Astoria, N. Y.—Is there any difference between a black bass and a sea bass? Where are they found and where do they spawn? Ans. The black bass is a fresh-water fish, found in lakes and rivers; it spawns in June in this locality. The sea bass is a salt water fish, which spawns in July and August.

W. S., Tampa, Fla.—Can you tell me where the orchid is to be found in Florida? It resembles the passion flower rather. Ans. The description is too vague. There are many members of the orchid family growing in Florida. We have seen twenty in one collection, and know of none that can be said to resemble a passion flower.

D. C., Minneapolis.—1. Is the red snapper caught in the waters of Mississippi Sound? 2. What is the best time to catch them? 3. Do they sell readily in the markets of New Orleans and Mobile? Ans. 1. They are caught in the Gulf of Mexico mainly, but some are taken east of Florida. 2. In the winter and spring. 3. Yes; also, in New York.

F. W. G., Erie, Pa.—Is the preparation called "Rex Magnus" safe for use? Some time ago I saw it stated in the New York papers that the Board of Health had condemned its use as dangerous. I expect to take in the Nepigon, etc., this season, and would like to take with me something that will enable me to bring home in good condition a half dozen of my largest fish to astonish our local fishermen with, and had thought of using Rex Magnus, but of course do not want to do so unless it is perfectly safe. Ans. We believe the preparation to be perfectly safe. Have used it ourselves without any ill effects, and have heard it recommended by chemists in no way interested in its sale. We believe that the Brooklyn Health Board pronounced it deleterious, but have not the particulars.

POT LUCK FROM EXCHANGES.

GOOD TO TAKE ALONG.—The *Sun* cholera mixture is a remedy for the ordinary summer complaints, colic, diarrhœa, dysentery, etc. Take equal parts of tincture of cayenne, tincture of opium, tincture of rhubarb, essence of peppermint, and spirits of camphor. Mix well. Dose, fifteen to thirty drops in a wineglass of water, according to age and violence of the attack. Repeat every fifteen or twenty minutes until relief is obtained.

The personal appearance of the catfish is against him. His moustache, although thin, is too prominent, and his forehead altogether too wide to be in keeping with his chest measurement. Then his complexion is bad, and when he smiles he exposes rows of pale gums totally destitute of teeth. No, the catfish is certainly not prepossessing. But he must not be judged by his looks. Beauty is but skin deep, any way, and beneath the dark coat of the catfish there lies meat as tender as that of any fish that swims. It is time that justice were done the catfish. He is humble and unobtrusive, and has been content to lurk in obscurity while carp and pretentious fish have paraded themselves for the admiration of the multitude. Yet there are few of the finny family worthy to be compared with him in those solid qualties which fit a fish for the pan. For it is in the pan that the catfish is pre-eminent. Other fish may do well enough to broil, or for chowder, but who shall say that the catfish can be surpassed in the pan? The S. F. *Exchange* and other dyspeptic journals may carp at the catfish as they please, but let the catfish be properly cooked and he need fear no rivalry. He is as tender in death as he is tough in life.—*Sacramento (Cal.) Bee.*

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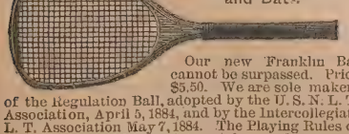
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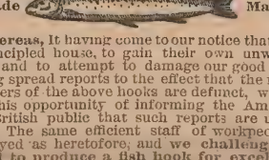
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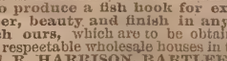


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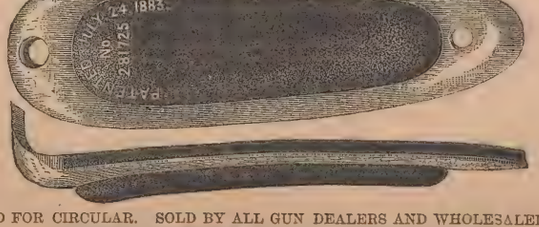
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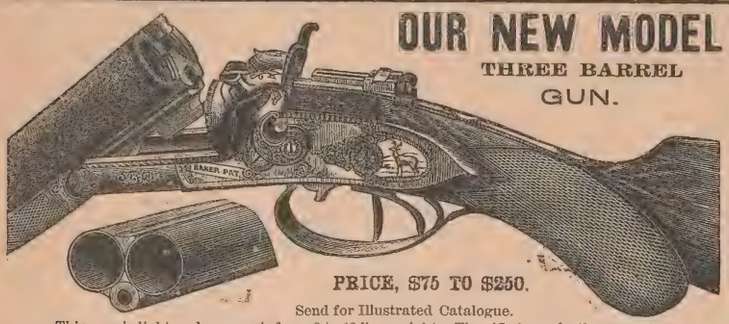
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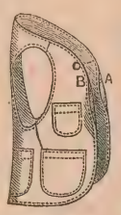


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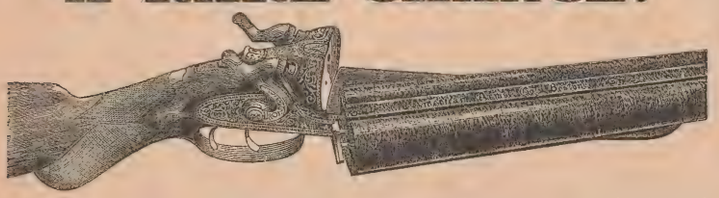
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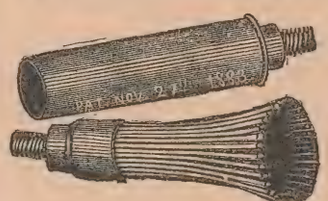
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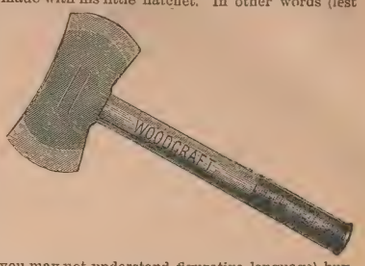
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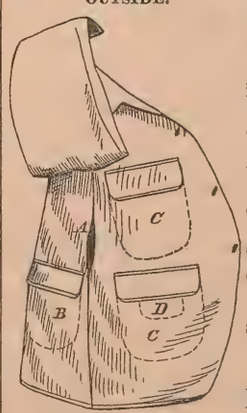
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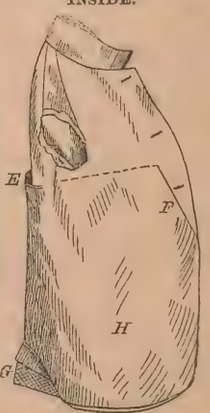
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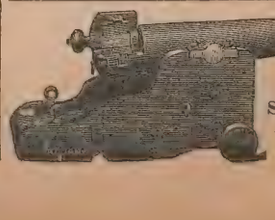
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THE GREELY RESCUE.

WITHIN the week the wires have flashed around the world the news that the Greely party had been rescued. The pitiful remnant of seven out of the twenty-five men who made up the expedition have been found alive. They were starving, weak, almost in the death agony, when the rescuing ships reached them—only just in time. Two days more of this weary waiting would have ended the struggle for all. The eager hands that have now brought life and happiness to the survivors, would have had only the mournful task of carrying to the ships, which were to bear them home, the lifeless forms of the whole party. It would have been another DeLong tragedy.

The sorrowful tale of suffering and death is told on another page. The heroism of each member of the little band is unconsciously brought out in the graphic narrative of the survivors. Everywhere throughout the account appears the fact that the success of the expedition was very largely due to the fortitude and ability of its commander. For the expedition was successful, notwithstanding the fact that three-fourths of its members perished miserably of starvation. During the three years of their sojourn at Lady Franklin Bay, there was but a single death, and they did not begin to suffer seriously until, despairing of a rescue, they left Fort Conger in August of last year, and moved southward, leaving behind them eight months' provisions. The difficulties and dangers of the march greatly reduced the stock of food which they had taken with them, so that throughout the winter passed at Cape Sabine, they lived on quarter rations. At length their provisions entirely gave out, and they were reduced to eating their sealskin clothing.

Up to the time of the arrival at Cape Sabine the health of all the men had been excellent. Scurvy, the most dreaded disease to which travelers in the Arctic are exposed, had not attacked them. Their camp at Cape Sabine was opposite the spot where the Proteus sank in 1883, and yet no adequate supply of food was found to have been deposited here for the benefit of the explorers. A few stores had been tossed ashore and abandoned, but nothing had been done in the way of establishing a depot of supplies. Lieut. Greely is reported as saying that if 500 pounds of meat had been left at Cape Sabine by the Proteus the lives of his whole party would have been saved.

The terrible loss of life appears to have been due wholly to the mismanagement of the authorities at Washington. Garlington was ordered to push through to Lady Franklin Bay, and in trying to do so lost the Proteus, and turned back. By some strange fatuity he had been ordered to leave provisions on the east side of Smith's Sound instead of on the west side, where Greely was stationed, and where the latter had directed that supplies should be left. Even without such instructions it might have been supposed that in the event of a retreat being made the natural thing for the party to do would be to make its way south along the coast as rapidly as possible. Smith's Sound in the late summer—the time at which such a retreat would be begun—is often partially open water, and impassable for heavy boats or sledges.

The Greely party—as was to have been expected—retreated down the west coast of this body of water, while the careful authorities at Washington had laboriously placed all the provisions on the other side of the sound, at Littleton Island and elsewhere. Thus, when the party under Greely reached Cape Sabine they found no stores, although two costly expeditions had been fitted out and despatched to their rescue. Through sheer stupidity and blundering at Washington nineteen out of the twenty-five men belonging to the party were thus allowed to perish.

The work done by the expedition is said to be most important. A vast quantity of meteorological and magnetic observations have been made, and many photographs secured. We shall know better what the scientific results of the expedition are after they have been submitted to the examination of specialists.

It is apparent that if the work of Arctic exploration is to be continued, those who are to engage in it must be protected in every possible way from the dangers to which the dweller in the Arctic is inevitably exposed. Of all the circumpolar meteorological stations, Fort Conger was in the most dangerous position, from the fact that it was accessible only about once in three years, and yet these men were allowed to station themselves there without having any base of supplies on which they could depend. They were to rely for rescue wholly on the chance of an open summer, when a ship could come through to them. There are many people who believe that this exploratory work should cease—that the results to be obtained from it are not commensurate with the suffering and death which has ensued. The work of the Greely party, however, shows very clearly that such Arctic observatory stations can be supported, and that the observers may maintain themselves, even in this rigorous climate, without any great degree of suffering and in perfect health. But to do this they must have food.

Beginning at some point which is always accessible, on the west shore of Smith's Sound, houses should be built at short intervals, certainly not more than fifty miles apart. Each of these houses should be as well fitted up and as well supplied with provisions, tools, and all the implements and articles required in Arctic travel and living as if it were to be the winter home of an expedition for several years. Then from the northernmost of these houses, a short advance should be made and another station built, fitted up and supplied. No long advance northward should be permitted, no matter how apparently favorable the conditions, but a slow and steady progress should be made, each summer being devoted to the establishment of a station further north than the last one. Each summer vessels should be sent out carrying men and material, which should be left at the northernmost station accessible, and thus the waste at the northern end of the line would be constantly supplied. The observers would be always within easy reach of warm quarters, and the supply of food could be made inexhaustible.

It may be objected that the plan suggested would be enormously costly and very slow, but even so, it would be sure to accomplish what is required, and the money would be well spent which should save human life and lessen human suffering.

If these explorations are of real scientific value, as we believe, it is certainly worth while that they should be carried on with such system that they will be productive of the best results.

A SPORTS DEFENSE SOCIETY.

IN its original form the bill introduced into the English Parliament to suppress pigeon shooting contained a clause extending the operation of the act to "any vertebrate animal, whether of domestic or wild nature, kept in confinement or captivity." This was a blow at the sports of hunting the carted stag and coursing hares in inclosures. The followers of these three pastimes, with other sportsmen, regarded the bill as "the thin edge of the wedge," and they thought that in time other sports, fox hunting and grouse shooting, would be interdicted. Accordingly a society known as the National Sports Protection and Defense Association, has been formed. Its avowed purpose is to resist all measures intended to interfere with the various forms of sport mentioned, and our English exchanges report that the membership of the association is sufficient guarantee of its influence in this direction.

We surmise that the society will be powerful so far as it keeps abreast of and reflects the popular sentiment of the times. If public opinion in Great Britain condemned hunting a carted stag and chasing rabbits in inclosures, as public opinion does in this country, no society could withstand the attacks that would be sure to be made—and eventually with success—upon these practices. No society could ever be formed in this country strong enough to bolster up the repute of such exhibitions as, for instance, are occasionally given by the Newport huntsmen in their chase of maimed foxes.

"WHO WINS?"—This is the query propounded to newspaper editors by anxious correspondents. Most often the dispute is over a game of cards, or a bet on a horse race, or a presidential election. Our esteemed contemporary, the *Spirit of the Times*, usually attends to the card and horse puzzles, and the New York *Sun*, in addition to its matrimonial advice, dispenses oracular utterances on election bets. It is with no little jealousy that the FOREST AND STREAM witnesses the confiding trust of the bet-befogged public in other journals, while its own opinion on similar themes is seldom sought; and it is with a genuine thrill of complacency that we once in a while read a letter like this: "Hamburg, N. J., July 11. *Editor Forest and Stream:* Will you be kind enough to decide the following bet through the columns of your valuable paper? A bets B that he can tell him where he got his supper on a certain night. They bet, A names the place where he supposes B ate supper, and B says 'I had no supper.' Is the bet a draw, or who wins?—STIFF." Now, if we should devote our time and intellectual powers to the earnest consideration of such intricate problems as this, we might in time convert the FOREST AND STREAM into a vehicle for the dissemination of useful information; but we shall do no such thing. We smother the ambition that would lead us into such an exalted path, and deeply as we are touched by the confidence displayed in us by "Stiff," we must content ourselves with keeping the FOREST AND STREAM what it is to-day, a journal of shooting and angling, the best in the world, and we shall do this even though A and B and all the rest of them remain forever suspended on undecided bets.

THE FOOD OF NESTING BIRDS.—The very interesting communication on this subject published in our natural history columns last week deserves more than a passing notice. The observations there recorded by this careful observer teach a lesson to the agriculturalist which he will do well to lay to heart. They show how important it is that our insectivorous birds should be rigidly protected, not by law alone, but by public opinion as well. If we assume that at each visit to the nest but a single insect was brought—and probably five would be nearer the truth—we see how great a check these birds are on the rapidly multiplying insect life of our summer months. Of these insects a large proportion unquestionably belong to species injurious to vegetation, and their destruction is of the greatest benefit to the farmer. It is this class above all others that is especially interested in the protection of our small birds. The care and patience of the observer during his long vigil deserve high praise.

THE MARYLAND ASSOCIATION.—The Maryland Association for the Protection and Preservation of Game and Fish has gone out of existence, owing, it is said, to the indifference of its members. This is the more to be regretted because of the importance of the work which the association was organized to do. We hope to see a revival of the society.

The Sportsman Tourist.

MEMORIES OF SENACHWINE LAKE.

BY T. S. VAN DYKE.

Second Paper.

AROUND Senachwine Lake I spent that fall nearly three months in uninterrupted shooting, for in those days I cared nothing for the difference between rain and shine. Many a day I threaded the driftwood, snags and elbows of the slough below Senachwine, where the wedge-shaped wake of the muskrat or the dart of the pickerel rippled the dark water before the boat, and ducks rose quacking or squealing from every little cove or inlet or from behind lodged masses of driftwood. Yellow-legged snipe, both large and small varieties, trotted along the shores of open mud or stood bobbing and craning their long necks until I could almost reach them with the oar; then rising, with clear and penetrating cry and long legs dangling behind, they would wing their way with a vast display of fuss and feathers some ten or twenty yards further up stream, to repeat the same programme in about half a minute. Upon the same open, muddy shores the English snipe were about as abundant as the others, for in the West they frequent this kind of ground about as much as any kind. At almost any time I could see two or three of these snipe and often more trotting along the water's edge, probing the soft mud at every few steps with long black bills, scarcely noticing the boat until it came within a few feet, then with a sudden *scape* and erratic twist one would twitch himself away, dart skyward, pitch to the right, pitch to the left, deliver himself of many a *scape*, then after a long detour make a sudden wheel and, like the thread of a corkscrew, come down about fifty yards further up stream. Wisps of small gray snipe, sandpipers, etc., often whisked by with soft, insinuating whistle, and an occasional flock of plover skimmed along the muddy bars.

But at such times the gun was hardly ever raised from its resting place in the boat. When I wanted snipe shooting I had far better opportunities. There were still many warm autumn days, when the ducks were lazy through the middle of the day and flew but little until toward evening. On such days I had such snipe shooting as I had never seen before and have never seen since. I have seen snipe in greater abundance, but for easy, tranquil sport, freed from the wear and tear, from the work, mud and annoyances of ordinary snipe shooting, without the tremenduous strain to which patience is often subjected until broken on the wheel of waiting, I have never seen anything that approached the shore shooting along Senachwine Lake in those days. Along its shores was a boggy strip for from five to fifteen yards wide. For a few feet along the water's edge this was soft open mud. This soon merged into thin, short grass, which grew taller and thicker, with the ground drier as the shore receded from the water; the width and wetness of the two strips depending upon the rate at which the water had fallen in the two or three weeks preceding. On some days there would be two or three English snipe to almost every yard of this strip of shore, and when the wind blew up or down the lake, grand was the sport that could be had with this wayward little beauty. Though fat and untroubled by hunters, he was still saucy and swift, and up wind would test severely your quickness and your gun. But when you were walking down wind along that strip, he pitched and tacked about on your right or left or shot skyward over your head in rapturous style. Rarely was there any need to fire at those that might fall into the lake, for there were birds enough that went by on the land side.

Along the shore at the foot of this lake occurred that fall a remarkable piece of "pot-shooting" that will give some idea of the abundance of snipe. My friend, Henry Ruggles, of Henry, a capital duck shot and one of the best hunting companions that ever lived, had long looked with pitying eye upon my total depravity in shooting such small birds as English snipe.

But once, about the middle of the day, when ducks were unusually slow in coming to our blind, and Ruggles was tired of smoking and picking cold roast duck, and the flies would not let him sleep, he actually condescended to shoot a snipe, it being absolutely necessary to do something to kill time. He left me, and was gone less than an hour. During that time I heard him shoot twelve or thirteen times, certainly not over fourteen times at the outside, and all of these shots came from the same place. He came back and tossed a bunch of Enalish snipe at me and said:

"Hanged if I didn't just sit down behind a bush on the edge of the lake and pot 'em all in one spot, sometimes three or four at a shot." To my certain knowledge he had not a snipe when he left me and there was no one near from whom he could have got them. I am almost afraid to tell the number of snipe in that bunch. There were exactly twenty-seven. And recollect that they were all English snipe and that Ruggles had nothing but coarse duck shot with him.

Though ducks in the West do not come to decoys in the autumn as well as they do in spring, there are still many days when they come quite well, especially wood ducks, teal and bluebills. Many a time during the middle of the day we pulled the boat into a blind of reeds and willows, and set out decoys in the open water a few yards outside the brush, and many a time did I have to drop the roasted snipe or pumpkin pie and snatch up a gun as the air began to sing beneath descending wings. And many a time, when yielding to the soporific influence of a heavy lunch on a soft Indian summer day, did I suddenly start from the land of Nod just in time to hear my comrade's gun from the other end of the boat, to see two or three ducks come whirling and splashing below, while the rest of the flock were towering nicely skyward just as I got hold of my gun.

What camp-fires roared along the Illinois in those days! It saddens me to think that such days may come no more for me. Driftwood piled as high as we could throw it shot a glare across the river until the dead cottonwoods upon the other side looked like imploring ghosts with arms stretched heavenward, and we could almost see the white collars on the necks of the geese that passed high above us. Bunches of mallards, wood ducks, sprigtail, etc., hung around the fire, with every color glowing brightly as in the evening sun, and naught was needed save a string of trout or a deer to make the scene complete. Cold and all other jars that shiver this mortal crockery were banished there, and all thought of the whole outside world went whirling away into the vortex of flame and sparks that streamed skyward through the treetops. Little did I hear of the song or jest or the laughter that almost woke the echoes from the eastern bluffs. For by some strange principle of suggestion, some mysterious mental connection, the whole outer circle of darkness was to me a picture gallery upon which I could lie and gaze by the hour. The walls of that dark rotunda beyond the fire were for me full hung with the brightest scenes of the new life I had entered, and they drew with them by association all those that I had passed through before. There again was the bright sky swept by long strings of whizzing life widening out and streaming toward me in swift descent; and by its side was the old dog rolling with happy gallop over the buckwheat stubble, slackening into a catlike tread as he swings to leeward of the clump of brush in the corner of the field, stiffening into rigid faith as he crawls under the fence and enters the tangled woods beyond. There again was the stately mallard or more gorgeous wood duck relaxing his hold on air and falling a whirl of brilliant colors, or the wary old goose, with drooping neck and folded wing, coming to earth with impetuous crash; and by their side the catbrier brake or hemlock-clad slopes, where the wintergreen fills the air with its fragrance, while the ruffed grouse shoots like a shaft of light among the dark ranks of tree trunks. And bright among them all were those autumn days, when the bloody sun struggles down through smoky air, and the whistle of the woodcock's wing in the sapling grove sends through the heart a more tender thrill than ever. Succeeding years have hung many a new picture in the dark rotunda that surrounds the camp-fire; but none of them in all the freshness of youth shine with more brilliancy than still through the mist of years shine those around the camp-fires on the Illinois.

Lulled to sleep by the *too-whoo* of the great owl, the *scape* of traveling snipe, the frequent *honk* of passing geese, the *clank-a-lank* of brant, the quack of mallards in the lake near by, or the *grrroooo* of the sandhill cranes traveling far up in the dome of night, we got up before daybreak to get upon our stands for the morning flight of ducks.

Though the morning flight of ducks is often very heavy, it generally lacks that tumultuous intensity of presence that characterizes the evening flight. Beginning with the first gray of morning, when a lonely mallard perhaps comes winging his way slowly out of the circle of darkness around you, crosses the open sky above in dim outline, doubles up at the report of your gun and sinks at your feet with a sullen whop, the flight increases with every new beam of light that struggles through the misty morning. They fall no longer from above, as in the evening, and stream in from every other quarter of the horizon about as much as from the north. There is less rush and bustle, but they move with steadier march. They are not shot by you in volleys like projectiles from some uncontrollable impulse, but they move with more majestic sweep and more as if they had some inkling of what they are about. At the first report of your gun the air throbs beneath the beat of thousands of wings, and a wild medley of energetic quacks, dolorous squeals, melodious honkings and discordant cackling as the myriads of ducks, geese and brant still roosting in the ponds rise in a clamorous mob. Again, for a few moments the tyro may lose his wits as the vast horde breaks into a hundred divisions, each circling perhaps a dozen times through the lightening sky and streaming over his head without remembering or caring that it was from that spot that the fire just spouted skyward. As the fire again leaps upward the circle of sky overhead is cleared for an instant as the ducks sheer and climb the air out of danger's reach; but in another moment it is thronged again with rushing wings. Beware, now, how you waste your fire upon this flock of teal just emerging into the gray, for you can hear the mallards' heavy wings, a hundred strong, beating the dark air close behind them. Beware how you waste your fire even upon the mallards, for upon the right the deep-toned honk of the goose sounds most thrillingly near. But, alas! how can the tyro reason calmly when the hiss of a sailing flock of mallards is heard just behind his head before his premises are thought of, and his conclusion is rudely hastened by a deep, dark line of bluebills pouring out of the remnant of the night upon his left?

This lasts, however, but a few minutes. As soon as dawn has fairly begun the wildfowl travel wider and higher, you must keep yourself well concealed and do your very best shooting. For an hour or two, and often longer, the flight may be strong and steady and then it will shade gradually off until you may find yourself waiting fifteen minutes for a shot. The evening flight rises by rapid steps to an overpowering climax, while the morning flight tapers away into all the flatness of the anti-climax.

One scarcely needs to be told that neither the morning nor evening flight is always during duck season such as I have described it. There are days when ducks will not fly as they will on other days, though they still throng both lake and slough in myriads. At such times the flight of those that do move is more over the face of the water than elsewhere, and then I have had rare sport from a big barrel sunk almost to the edge in the mud and water of Swan Lake, a little below the foot of Senachwine. Through a fringe of reeds around the edge of that barrel I have watched great flocks of mallards skim low along the water until the long green necks glistened within ten yards of the barrel. Then as I suddenly rose to my feet, what a glorious medley of flashing bars on terrified wings, of shiny cinnamon breasts, white banded tails, with curls of burnished green, red legs and beaded eyes rose whirling and quacking upward. There, too, I have watched the geese winding slowly down out of the blue sky until near the center of the lake, then, with set and silent wing and every honking throat hushed as if in death, every neck and head immovable, drift softly along a few feet above the water, until, as close as the corner of the ceiling where I sit writing, I could see their eyes sparkle in the sunlight. And then what an uproarious *wiff, wiff, wiff*, of sheering wings, what a *honk-wonk-onk-kwonk*, and what a confusion of white collars and black necks, of gray wings and swarthy feet would crowd upon my eye as I rose and looked along the gun!

It is sad to think that such scenes are fading fast into the things that were. There are, perhaps, parts of our country where the scenes of Senachwine twenty years ago are still repeated. But it may be doubted if they are repeated on so grand and varied a scale; and even if they are it will not be for long. The increasing interest in game protection will preserve many kinds of game to such an extent that our children's children may see shooting of some kinds better than we now see. But no legislation can recall from the past the mighty hordes of wildfowl that once darkened the waters of the West, that dotted its skies and made its cornfields alive with roaring wings. Nor can any public sentiment, whether expressed in laws or not, bring back the primeval solitude of those swamps and river bottoms which were such an important condition in such scenes as I have described. Those vast stretches of timber, broken only by ponds and their margins of mud and reeds, or by the long lines of the winding sloughs, those wide reaches of open land covered with wavy grass or reeds, cut with sloughs or broken by rush-fringed ponds of acres and acres in extent, over all of which one could see no sign of civilization save an occasional road, and hear none of the sounds of progress save once in a while the far off puff of the high pressure steamer that was trailing its sooty banner along the distant sky, can never be restored.

It was at the head of Senachwine Lake that I first made the acquaintance of a nuisance that, in his full development, can be seen only on a Western duck stand. He forms so decided a feature of Western duck shooting that any sketch of that shooting would be incomplete without him.

Mr. Peter Popper, a Chicago parvenu—one of the first of the shoddyites created by the war—had come down for a few days' shooting. He came out to Senachwine in a buggy and planted himself on a piece of dry and open ground about one hundred and fifty yards from where I, hidden in reeds, was standing knee deep in water. He had high-topped rubbers also, but he did not incline to mud and reeds. There were also hundreds of acres of ground just as good as where I was shooting. Yet he drifted as naturally to where he saw some one else killing ducks, as a boy does to the "hole" from which his comrade has just pulled a fish.

The first intimation I had of his presence was the sheering of a flock of mallards that were coming directly toward me, followed by a bang whang of Popper's gun some hundred yards away from them.

"Most too far," I remarked tentatively.

"Oh, no!" he replied. "This gun will kill a hundred yards. Cost three hundred dollars in England."

Having seen plenty of hundred yard guns and their owners, I knew the futility of any reply. It was but a few minutes before a pair of mallards, coming down the water opposite me, rose high with heavy beat of wing, and bang went the first barrel of Mr. Popper's gun again, followed by the other as they got well skyward.

"Those are too far anyhow," I called out rather decidedly.

"Oh, I'm only shooting for sport anyway; I couldn't hit a flock of barns," replied Mr. Popper with consoling tone. He evidently thought that I felt bad to see him miss.

"Why don't you get in the reeds and not let them see you?" I called out in as argumentative a tone as an interrogative sentence would permit.

"Too muddy. I can get all the mud I want in Chicago. Here comes a lot," he replied, with a bang whang at an incoming flock that would surely have given me a good shot if he had been out of the way.

"You are scaring all the ducks," yelled I, somewhat indignantly.

"By Jove," my friend, that's the best I can do. I'm only shooting for fun anyhow. I couldn't hit a flock of barns."

A few minutes passed away, during which I revolved unuttorable things in mind, and in my indignation executed some artistic misses on ducks coming from the direction opposite Popper. Presently a flock of mallards, coming down along the water a hundred yards or more from Popper, but headed directly for the point where I was standing, sheered and sprang skyward at the report of his gun.

"Why don't you let them come further down?" I bawled, somewhat hoarsely, for I was getting mad.

"That's what I'm trying to do. But they won't come down, yah-yah-yah."

"But you are disturbing all the ducks. You don't—"

I finished the sentence with a savage bang whang at a duck that came whizzing down the pond, while Popper was loading.

"That's what I came for," replied he, blandly. "I don't see as you are disturbing them much more seriously though," he added, as my duck went on undamaged.

"But you are spoiling my shooting. Look there, those would have come close to me if you had kept out of sight," said I, as a flock of sprigtails, with long, forked tails trailing behind, sheered off from Popper. Bang went his gun at them, and one, struck at about ninety yards just over the eye with a stray shot, dove head first into the mud.

"Plenty close enough. You only want a good gun," said he, with exultant laugh.

"That was only a scratch."

"It's a wonder you don't make a scratch or two for a change," he replied.

Completely snuffed out, I shouldered my gun and left him master of the field where, far into the twilight, he held undisputed possession.

> "And from about him fierce effusion rolled
> Of smoke and bickering flame and sparkles dire."

A LO HUNT IN THE STAKED PLAINS.

I WAS in East Las Vegas, N. M., running a store and restaurant for a man during the summer of 1881. I had worked hard seven days in the week and was worn down. One day my friend Lew came in and wanted me to quit the store and take a liquor dealer down the Pecos River to the small Mexican plazas in a buggy, as I knew the country and could talk Mexican.

Knowing it would be a pleasant trip and improve my health I consented, and a week from that time found me on the road south. A top buggy and a span of good ponies constituted the team. I had a repeating rifle and a six-shooter revolver, while Singer, the spectacled Hebrew, who was my passenger, had a British bulldog revolver. He was very captious and fault-finding, and told me several tales of which he was the hero, seeming to wish to impress me with the idea that he was a brave man. I have since thought he was afraid of me on account of my arsenal.

We went along from town to town with varying success, selling some goods by sample. Starting from Fort Sumner at about 7 one morning we drove ten miles and came to a large ranch near the road. As we drove up we observed a stir among the people, and when I got out to get a drink of water I was met by Tom S., who owned the ranch. After a hurried hand shake the dialogue was as follows:

"What are you doing down here?"

"Driving that drummer who is selling whisky."

"I lost all my horses last night; stolen by Indians or rustlers [white horse thieves]. I have found the trail; it leads for the Staked Plains. I have got three horses and three good men. Take your horses and come with me after them."

"I will if I can get my Jew to consent," said I. I went out to the buggy and explained the affair to the fellow but he would not go nor let me go. Tom came out and we both begged him to let me go, and Singer "jawed" until Tom got mad, and turning to me said, "Will you go, Dick, if I will square it at home?" I said "yes." So Tom coolly unhitched

the horses from the buggy, leaving Singer sitting in it and told a Mexican peon to draw the accursed Hebrew around into the shade of the house. Singer vowed he would not get out of the buggy. Tom remarked that he could sit there till Hades froze over, if he wanted to, and told him that he would pay him for his time when we got back. We saddled the horses. I filled my pockets with crackers and jerked beef, hung a gallon canteen of water to my saddle, took my gun and pistol and my old cavalry overcoat for bedding, and a lariat, and off we rode, followed by awful talk from Singer, who threatened me and my employer with a suit for damages; said he would expose me—that threat seemed rather indefinite. As we faded away in a cloud of dust, I turned in the saddle and could see him stamping around and lecturing in broken Spanish to an appreciative audience of Mexican peons.

We were five in number. Tom had a Sharps .45-100; one one man a .50-caliber Springfield needle gun, commonly called a "flop over" down here, because the breech opens in a peculiar manner; the two others and myself were armed with Winchester rifles—model of 1873. Every one had a Colt's .45-caliber revolver, single action—the popular pistol of the West. We crossed the Pecos River at the ford and soon found the horses' trail running straight east up on the Staked Plains. The northern and western edge of the plains are at least 300 feet above the prairie, and when you approach them they look like a range of hills, but when you get on top it is a rolling prairie. They are called the Staked Plains because a certain Government survey marked out a trail across them with stakes, as there are no landmarks. They are of an oval shape, hundreds of miles in length and breadth, and said to be waterless. I asked Tom after we had gone a few miles how far it was from the Pecos to water the way we were going, and he said about eighteen miles. By the way, on the road home he confessed to me that it was the first time that he had ever been over ten miles out on the plains, but he dared not say so for fear we would turn back.

We had to travel slowly as the trail was on the grass and the ground hard. Tom lost the trail several times where the horses scattered, but we found it again and found a water hole toward evening. Turning the horses loose with the saddles on so that they could eat, we chewed away at the crackers and jerked beef, and washed them down with water. We ate up half we had and I was still hungry. Then filling my canteen, we pushed on till it was so dark we could not see the track, and made a dry camp on the trail. As soon as it was light in the morning we saddled and rode. In about a mile we came to a well beaten road about four feet wide, with several paths on each side of it running parallel to the main trail. The middle trail was made by ponies dragging tent poles. It must have been used for years. Tom said that he had heard of the path though he had never seen it before. It is the road used by the Comanche Indians and white renegades, who still find a refuge in the Staked Plains when they raid the upper Pecos, and it is called the Comanche War Trail. The horses we were after traveled in the track and we could ride as fast as we dared push our horses. After we had ridden about twenty-five miles from the last water we came to a big water hole that looked like permanent water, finished our crackers and beef, and rode on at a steady gait.

About an hour before dark we saw a big valley ahead. The trail was very fresh; horse droppings not dry yet. We rode cautiously, Tom in the lead. At the last ridge he dismounted, crept on hands and knees to the top of the ridge and peeped over into an oval valley about half a mile long and a quarter broad. It was a sink hole about twenty feet deeper than the surrounding prairie and partially walled by a ledge of rock about ten feet high. There was a large pond in the center and the ground around it was worn bare by the constant use of animals, till it looked like a corral. Seven Indians were near the water cooking at a little fire, and the nine stolen horses and two Indian ponies were feeding about half way from us to them. Tom came back and we held a council of war. I was in favor of getting around to the edge about 200 yards from them and trying to kill them with a volley, but Tom was afraid that the survivors would get away with the horses and so we decided to all go over the ridge on horseback and make a charge. Three of us to go straight at the Indians and not shoot till we got close to them; and to do the shooting with our pistols; the other two meanwhile driving off all the horses. We tightened our girths, and suddenly it flashed through my mind what a fool I was to come out there to fight Indians, but it was too late. And here we went, well spread out, with a mad rush over the ridge and at them. They did not see us until too late. One ran a few steps toward the horses, two grabbed their guns and fired, but did not hit anything; and then we were almost on top of them, and were shooting as fast as we could; and they all ran through the water, making it fly, and up among the rocks and bushes on the east side, leaving their stuff scattered around. My horse ran into the water. I jumped off, went down on all fours and had a drinking match with my horse. Tom unslung his rifle and fired a shot or two while I drank, and then I filled my canteen, took my gun out of its scabbard and watched for something to shoot at while he was drinking, but did not see anything.

Tom picked up a needle gun and hung it on his saddle and smashed two or three old rimfire Winchesters. I took a good blanket that was lying by an old bug of an Indian saddle, and we started back as fast as our water-filled horses could carry us, followed by a few shots. When we had ridden about two hundred yards Tom looked back and said, "Hold my horse and I'll make that Comanche fellow stop that," only he didn't say fellow. The gentleman in question was lying on his back on a sloping rock, about four hundred yards away, with his heels in the air and making insulting gestures. Tom jumped down and shot. I saw a streak of dust fly off the rock about six inches to the right of Mr. Indian, and while he bounced off the rock and took to the brush we made tracks toward our retreating horse herd. When we caught up the boys were hurrying the horses along, still hobbled, with their ankles cut and bleeding. We stopped when we reached the outfit, caught fresh horses and turned our tired ones loose, unhobbled the rest, and by dark were ten miles away on the back track. After it was fully dark, so that no one could see our trail, we rode off the trail at right angles and camped two miles north, with a chew of tobacco for supper and the canteen dry; the boys had emptied it when I came to them, for they had not been able to get to water. I passed a miserable night, very thirsty, and more sick than hungry. We took turns standing guard.

At dawn we saddled and rode for home, a disconsolate-looking party. About five miles from water we rode past a buck antelope about 400 yards away. Tom told me to shoot him, but I was afraid I should miss, and proposed that four of us should get down and all shoot at once. We did so, and killed him "too dead to skin," as the Texan cowboys say. Every ball hit him. We rode out to him and got down, and some of the boys drank blood. It made me sick to think of it, but I ate a little piece of raw liver, and then we cut the carcass up and started for the water. We got there by 9 A. M., and how we drank! My tongue was swelled and my lips cracked and dry. The trip did not tell so badly on the others, as they were used to exposure and an outdoor life, and I was right out of a store. Tom cautioned me, and I only drank a little at a time. We built a fire of horse and cow chips, and broiled meat; some of the boys couldn't wait to much more than scorch it on the outside, and we all ate it rather rare and dirty, and with no salt; but it was filling. Away we went as soon as we could on the trail for home, all the time expecting to see a big gang of Indians after us.

At about 3 P. M. we reached the next water, cooked and ate more antelope, and just before dark started our weary horses for home—eighteen miles away—crossed the ford at about 10 P. M., and at 11 were eating *chile con huevas* (red pepper gravy with eggs dropped into it after frying them in lard), *tortillas* (Mexican bread) and some coffee, black and strong. Mr. Singer, strange to say, was in good spirits, and seemed as much at home as a tame cat. There was a Mexican lady at the ranch who was very handsome and quite friendly, and he had been giving her lessons in English.

I slept well on a big wool mattress, and the next morning Tom gave Singer $20 for forcible detention, me $20 for my employer and my pick of the two Indian ponies for myself. We all went up to the Plaza that evening. Tom and the rest, including Singer, got very full on Anheuser lager beer at fifty cents per bottle. I don't drink, and so the evening's entertainment was an awful bore to me.

When I got back to Anton Chico I sold the Indian pony to Mr. Monk, who keeps hotel, for $30, and the next week was back at the old job in Las Vegas with a good appetite, thanks to my excursion. W. J. DIXON.

COLORADO.

"WOODCRAFT."

THE little book "Woodcraft" has been received with such general favor and treated so leniently that I would not advert to the few critical exceptions only that they are calculated to mislead. I wish to be brief.

One writer criticises the light boots recommended on page 5 of "Woodcraft." He prefers shoes every time and always, because the boots will get wet and can't be drawn on and off. Quite right as regards the average boot usually bought of dealers; wrong as regards the boot I recommend. I have a pair of them on my feet as I write. This is the third season I have worn them. They have been worn on two rather rough cruises in the North Woods; have been waded in for nearly a day at a time through the muddy ditch called "Brown's Tract Road," where shoes would be a nuisance; have been worn on three trips down the Tiadatton the present season, where I was overboard a dozen times a day among the rapids, and they have never bothered me two minutes at a time in drawing on or off. They are waterproof at this time, and easy as a pair of moccasins. They weigh two pounds six ounces. Any competent bootmaker should be able to get up such a pair for $5 or $6.

Exception is taken to the hunting knives described on page 13 as being of too high temper, liable to "nick," and hard to sharpen. I did not and do not recommend high temper, but the best. And the best is the tough, tenacious steel that will hold a keen biting edge, without being hard or brittle. The strong double-blade shown in the cut does not come up to my idea of a pocket hunting-knife, but is the best I could find on sale. *En passant*, I have just received a lot of pocket hunting knives made after a model whittled out by myself. I have sent one to the hunting editor of FOREST AND STREAM, who, I presume, will be pleased to show it to any reader who takes an interest in camp kit, and I will only add that it pretty well represents my idea of a model pocket hunting knife.

Another writer takes exception to my directions for using baking powder (three tablespoonfuls to one quart of flour), and thinks it may be a printer's error. The directions are substantially correct—for the woods. Experience and experiment will prove to "Kelpie" that the quantity of baking powder which may be sufficient in a dry, warm kitchen, will have but little effect in the cool, damp atmosphere of the forest, particularly if there happens to be a brisk wind whiffling fitfully around the camp. I soon learned this, and came to think that the powders would not work well in out-door cooking. I found some old guides and woodsmen, however, who made good bread, and I was not long in picking up the "kink," which was simply, that the guides who used the powders most freely always had the lightest bread. Of course a good deal depends on the mixing, handling and baking. I was with a Brown's Tract guide in the summer of 1880, whose bread and pancakes were always light. I am loth to say how many tablespoonfuls he used to a quart of flour, much more than three, however. And he remarked that making bread in the woods was expensive, because the powders cost more than the flour.

Among the many newspaper notices of "Woodcraft," I note one in the New York *Evening Post*, wherein commendation and criticism are so neatly blended that I would not say a word were the criticism sound—which it is not. Firstly, the writer objects to the "general fishing rod," which, he says, "most people consider, and justly, a nuisance. Not good for bait-fishing and almost worthless for fly-fishing." If the writer will select the best eight or ten-ounce bait-rod he can find in New York, he will probably admit that it is "good for bait-fishing." Then let him add a good fly-tip, and if he cannot make it something more than "worthless for fly-fishing," I venture to suggest that the fault will be found somewhere near the butt of the rod.

Again, the writer says: "The description of the headlight, used almost entirely for shooting deer out of season, might have been omitted." Just so. The headlight being a most useful and handy article in a woodland camp, and the best light to float a deer in season, is to be "omitted" because a poacher may use it out of season. And the boat and the 10-bore, being necessary to float a deer in the hands of a law-abiding sportsman, had better be omitted, because they can be used as well by the poacher. A lame and impotent sort of logic. The witty allusion to the soap and towel, carried for seven weeks in the Wilderness without being once used, with the suggestion that "probably the portrait of 'Nessmuk,' which forms the frontispiece, was taken just before the seven weeks were up," are so neatly put that I will not say a word in explanation, especially as the writer concludes that "on the whole, the book is sound and practical, and well worth the reading." NESSMUK.

RESCUE OF THE GREELY PARTY.

THE International Geographical Congress at Hamburg, in 1879, adopted a scheme for the establishment of circumpolar stations for scientific observation in the Arctic regions. The location selected for the United States station was at Discovery Harbor, Lady Franklin Bay, in latitude 81° 45′ north, longitude 64° 45′ west. This was the most northerly and difficult of access of all the projected stations. Lieut. A. W. Greely, Fifth United States Cavalry, was appointed to the command, and on the Fourth of July, 1881, the colony left St. John, Newfoundland, in the steamship Proteus. The expedition opened most auspiciously. The Proteus found an open passage and made a run quick beyond parallel. Within one month from leaving port she reached her destination. On the day of their arrival the party killed fourteen musk oxen, which dressed 300 pounds each—three months' rations. The men set about building their house, which had been already prepared in this country, with its double frame—a house within a house; two years' stores of provisions were landed, and there were dogs and sledges, with Esquimau drivers, boats, and a steam launch and coal. With letters full of confidence and hope, written by Lieut. Greely and the others, and parting directions about the relief vessels which were to come in the summers of 1882 and 1883, the Proteus sailed away, Aug. 18, and left the Greely colony in their snug quarters at Discovery Harbor. According to arrangement, in 1882 and 1883 relief ships—the Neptune, the Proteus and the Yantic—set out to carry succor and supplies to the party, but, as is well known, they failed to accomplish their mission; and from the 12th day of August, 1881, until the wretched survivors were brought back to St. John, July 17, 1884, no word came of the fate of the Greely colony. Last Thursday the telegraph brought to us the news of their rescue, and a story of heroism, endurance, suffering and self-sacrifice well worthy to rank with the most thrilling chapters in the annals of Arctic exploration.

I.—CAMP CONGER.

They named the station Camp Conger in honor of the Michigan senator, who had been instrumental in securing the Government appropriation for the expedition. Scientific observations (meteorological, astronomical, magnetic, etc.) were begun immediately and continued while they were at the post. The long Arctic winter was necessarily monotonous, but the regular routine of observations coupled with such military discipline as was not inappropriate to the climate and the mode of living rendered it more tolerable. One hour's exercise daily was exacted of all. The men were required to bathe once a week, and great care was taken by frequent inspection to see that the quarters and particularly the berths were kept clean. The efficiency of the hygienic arrangements adopted is fully demonstrated by the fact that there was no scurvy in the expedition, notwithstanding that the water used was from melted ice invariably obtained from the floe. Thanksgiving and national holidays were always celebrated by a good dinner, and the first Christmas was rendered pleasant by presents for every member of the expedition from unknown but thoughtful friends.

Meanwhile they were making expeditions to explore the country in different directions, The number of dogs had been sadly reduced by sickness and death, but those left were carefully looked after and by breeding Lieut. Greely was able, in the spring of 1882, to put two good teams in the field. In nearly all of his explorations, as ever in Arctic expeditions, the dogs were found most useful and almost indispensable accessories.

These exploring trips were always attended with peril, often with great suffering. The men at one time, under Sergeant Brainard, experienced the lowest corrected mean temperature ever known in the annals of Arctic travel—viz., minus sixty-one degrees. On another trip by Dr. Pavy, Mr. Rice, with the Esquimau Jens Edwards, and a team of dogs; to discover land to the north of Cape Joseph Henry, Rice and Jens traveled fifty miles on foot in a temperature of—40°, without sleeping bag or tent, and later the party were adrift on an ice pack and driven miles from land, escaping as by a miracle over the grinding, crumbling ice.

Again, Lieut. Lockwood with Brainard and Frederick Christensen with a dog team, set out to explore the northern shore of Greenland, crossed the Polar Ocean direct to Cape Britannia, thence through regions never before trodden by man, to a point they named Lockwood Island, the highest northern latitude ever yet attained, 83° 24.5′, in longitude 40° 45′ west—and would have gone further yet, but that the long shadows of Arctic cliffs prevented a determining of the latitude, so their instruments failed them before their courage. They found animal life abundant with scant vegetation similar to that met with in Grinnell Land. Traces of hares, lemmings, ptarmigan and snow bunting, and the tracks of a bear were seen, and droppings of the musk ox as far as twenty miles north of Cape Britannia. Looking to the northeastward from an elevation of about two thousand feet, the land was seen for about fifteen miles, the furthest point, Cape Robert Lincoln, being in about latitude 83° 35′ and longitude 38° west. Although the weather was unusually clear, no other land could be seen, the horizon being examined carefully to the northward and northwestward. On the 15th they started south, picking up *en route* the union jack and sextant left by Lieut. Beaumont, of the Nares expedition, during his extraordinary retreat with a scurvy-stricken party in 1875, and returned to Fort Conger, where they arrived on June 1, after an absence of fifty-nine days, all in good condition except that two were snow blind and had to be led into camp.

During the season of 1882 Lieut. Greely made two journeys into the interior of Grinnell Land, leaving Fort Conger on April 23 and June 24 respectively. Winter quarters of Esquimaux were found and some relics showing that they had possessed dogs, sledges and iron. Two ranges of mountains running nearly parallel with the United States range were called respectively Conger and Garfield range, and a lofty peak, the highest in Grinnell Land, Mount Arthur. Of glaciers there were many, the largest of which was called Henrietta Nesmith Glacier. Great hardships were endured on the second of these journeys, when Greely and Linn, leaving the supporting party, traveled with packs, which weighed on starting about eighty pounds, fording and swimming many streams and being otherwise subjected to much exposure, without, however, any eventual ill resulting therefrom.

Game was abundant, more than one hundred musk oxen being seen, besides hares and birds. From the summit of Mount Arthur, Lieut. Greely, who was alone able to make the ascent, was satisfied from the trend of the mountains and the appearance of the country that Grinnell Land ended but a short distance to the westward, and that its coast line must run nearly southwest from the extreme point reached by Lieut. Aldrich, Royal Navy, in 1876. Later in August


GREENLAND
HALL'S LAND
WASHINGTON LAND
PRUDHOE LAND
GRINNELL LAND
ELLESMERE LAND
NORTH LINCOLN
NORTH DEVON
REPULSE HARBOR Capt. Hall Oct. 17. 1871
CAPE BREVOORT
CAPE UNION
Highest point reached by Polaris
464 Miles from North Pole.
FORT CONGER
Greely Station
Party started from here Aug. 9, 1883
Dr. Kane June, 1854 With Dog Sledge
Dr. Kane's Winter Quarters 1853-54-55
Dr. Hayes Winter Quarters 1860-61
Dr. Hayes Sledge Journey 1861 With Dog Sledge from Port Foulke
Buddington's Party Picked Up
Esquimaux Village
Cape Sabine
Cape Sedgwick
Devil's Thumb
Wilcox Head
Cape Isabella
Cape Albert
Cape Victoria
Cape Bird
Cape Baird
Cape Bunny
Cape Athol
Cape Back
Cape Lieber
Cape Crocroft
Cape Louis Napoleon
Cape Sabine
Payer Harbor
Bird Inlet
Talbot Inlet
Braniqua
Dalrymple Rock
Whaling Ground
Whaling Station
Kane Basin
Kennedy Channel
Robeson Channel
Franklin Bay
Lady Franklin Bay
Victoria Head
Victoria Sound
Hayes Sound
Jones Sound
Lancaster Sound
Smith Sound
Whale Sound
Buddington's Track
Track of Little Juniata
Track of the Polaris
Polaris Winter Quarters 1871-72
Capt. Hall buried here Nov. 1871
Polaris Winter Quarters 1872-73
Polaris Winter Quarters 1873
Dr. Kane's Winter Quarters 1853-54-55
Dr. Hayes Winter Quarters 1860-61
Esquimaux Village
Esquimaux Village
Esquimaux Village



THE POLAR BASIN.
(By permission of the "New York Herald.")

furnished, and this meant, in all probability, ultimate starvation. Lieut. Greely upon hearing their report announced that the party must abandon Esquimau Point, as he had named it, and transfer the camp to a place nearer the base of supplies.

A start was made on the next day, when one load of provisions was advanced as far as Rosse Bay, and on the 11th the remainder. They then traveled along a strait discovered by Rice, and named after him, which connects Rosse Bay with Buchanan Straits, placing Cape Sabine on an island instead of the mainland, as was formerly supposed. Rice and Jens having gone to Cape Isabella to ascertain whether any supplies had been left there last year, found only the 144 pounds of meat left there by the English in 1875.

The people had been on reduced rations since September 25, when the allowance of meat was made twelve ounces, and at Eskimo Point one-half that quantity. On the evening of October 15, they reached the Proteus wreck cache, with all their provisions except one load, which had been cached at Cocked Hat Island, and set to work on winter quarters.

III.—CAMP CLAY AT CAPE SABINE.

A hut was built of stones, roofed over with the whaleboat from the Beebe cache, the oars serving as rafters and covered with canvas, the sides being banked up with snow. Of course, there were no means of heating it, as barely fuel enough was left to warm the food. It was never cooked. On the ground canvas was spread and over this buffalo overcoats, on the top of which the sleeping bags were placed, and yet these were generally frozen stiff throughout the winter. The boat left by Beebe was in good condition, except for a hole about ten by six inches, made probably by the paw of a bear. As soon as the state of the ice permitted the stores from the different caches were collected at Camp Clay. These may be summed up as follows: viz., Beebe cache and English cache 240 rations each. In the latter considerable tea, sugar, chocolate, bread and dog biscuit unfit for use. The rum and alcohol were missing. Garlington cache, 500 pounds of bread, ninety of pemmican and a few cans each of roast mutton, peas, string beans, green corn and two boxes of lemons. These last were in excellent condition and proved a rare treat in more respects than one.

On the 2d of November a party was sent to Cape Isabella to secure the meat which had been found there. It was composed of Rice, Linn, Elison and Fredericks, with the small sled and several days' provisions. On the 9th, about midnight, Rice returned and reported the party at the head of Rosse Bay suffering severely with cold and Elison dying with frost bites. Relief was at once sent, and about noon of the 12th Brainard reached them in a severe gale with food and medicine, and found Elison badly frozen and delirious. Fredericks and Linn were in the sleeping bag with him trying to keep him warm, and the three were literally frozen in the bag, and had to be cut out. They would undoubtedly have perished but for Brainard's timely arrival, as the temperature was minus 30° Fahrenheit, and they were without a tent. With the assistance of a party under Lieut. Lockwood, which had also come to the rescue, they were gotten to Camp Clay. Elison having both hands and feet frozen stiff, so that he never used them again. They had been compelled to abandon the meat at Baird Inlet, with everything not absolutely necessary to save life.

During the latter part of October, Long, with the two natives, was stationed at the junction of Rice and Buchanan straits for the purpose of hunting, and suffered greatly with cold and hunger. They had only a tent to live in and were on reduced rations. They returned about November 8, badly frost bitten, having killed only three seals. From November 1 the command was placed on further reduced rations, which had been accurately estimated to last until March 1, with a reserve of ten days' full rations for the trip to Littleton Island when the sound should freeze over. This reduced ration was composed as follows: Meat and blubber, four and one-third ounces; bread and dog biscuit, six and one half; canned vegetables and rice, one and two-fifths; butter and lard, three-quarters; soups and beef extracts, nine-tenths; cloud berries, pickles, raisins and milk, one ounce; making a total of $14\frac{88}{100}$ ounces per day. About this time the whaleboat Narwhal, which had been left on the floe, drifted down near Cape Sabine and was wedged in the ice between Brevoort Island and the main land. She was secured and used during the winter for fuel. After the middle of November hunting became impossible on account of the darkness and cold, besides being useless, as there was no game to be had, so they waited patiently for the closing of the sound by ice, but waited in vain.

Throughout the entire winter open water separated them from Littleton Island, where there was an additional cache of provisions which, though not large, would have been sufficient, with economy, to pull the entire party through, and near at hand were natives on whom they might have relied for assistance, as did Kane and Hayes. Every effort was made to preserve cheerfulness in that little band, so necessary to its very existence. Conversations were kept up on all sorts of subjects, however frivolous, and they talked when they felt least like it, because they deemed it their duty. The few books that they had were read and re-read by the dim light of a blubber lamp with moss wicking, and a statistical almanac was a perfect mine of wealth. The survivors speak in the warmest terms of Greely's powers of conversation and the gallant efforts which he made to keep up the spirits of his little band. Notwithstanding their destitute condition, Thanksgiving and Christmas days were observed as usual. For more than a month they saved from their scanty rations in order that they might have, at least by contrast, a good dinner on those days. It consisted principally of rice pudding, with a glass of rum punch to wash it down. March 13, 1884, Long was sent with Frederick and Jens to Alexandra Harbor to look for game, the English expedition of 1875 having reported abundant traces in that quarter. They returned exhausted, however, after an absence of three or four days and empty-handed. Long, however, had made the important discovery of new land in Hazen Sound, having seen from the western side of Mount Carri three capes beyond the furthest reported by the Nares expedition.

The life at Camp Clay during that terrible winter and spring is simply indescribable. Rice discovered salt shrimps, with which they eked out their suppers, but they contained very little nutriment, and the labor of catching them may be imagined when it is known that it required 1,300 to fill a gill measure. This fishing was done by hauling bags or nets from the ice with bare hands and with the temperature 20° below zero. The suffering entailed was tremendous. Lichens gathered from the rocks, saxifrage and boiled sealskin were also eaten. Twenty-four foxes, weighing about

four pounds each, were killed with shotguns as they prowled around the camp, and with the return of daylight fourteen ptarmigan, sixty dovekies, a small seal and, in April, a bear which netted them 257 pounds of good meat. Nothing was wasted, and this last undoubtedly saved the lives of the few who survived. Sergt. Brainard had charge of the issue of provisions, which were carefully weighed in an improvised scale, cartridges serving as weights, and equitably distributed. In March it was found necessary to again reduce the ration, there being nothing left then but bread, meat and tea.

The first death was that of Sergt Cross, who had been the machinist of the steam launch, and then there was a long lapse of time until Esquimau Frederick gave in. This last, together with the death of the other Esquimau, Jens Edward, by drowning, proved a serious loss, as they were both good hunters, and without the kyak much of the game that was killed could not be secured. Long, however, was the main reliance of the party as a hunter. He is an old frontiersman and a dead shot. Had it not been for the scarcity of game he would have had no difficulty in providing for the entire party.

Sergt. Julius R. Frederick relates a mournfully tragic story of the sad death on the ice-covered ground of George Rice, the artist of the expedition, on April 6. Rice and Frederick volunteered to leave the camp to proceed a distance of twenty-five miles for some meat that was cached near Cape Isabella. They had a sled, rifle and hatchet, and provisions for five days. They traveled for three days, but failed to find the cache. On the way toward their camp Rice became weak, and finally gave up. He was attacked by a blood flux that gradually wore him down, and he succumbed on the floe. His last words were: "Tell Lieut. Greely that I tried very hard to get the meat, but could not succeed." Frederick remained with Rice until he died, and camped out that night under the fragment of a boat, and next day revisited his companion to pay a last tribute to his remains. Frederick retained sufficient strength to drag back the sled, with the hatchet, rifle and cooking utensils, to the camp. During his absence Cross and Lockwood had died. Others followed in rapid succession.

On May 4 the winter hut, which was only six feet from high water mark, was abandoned, and the party took up their quarters in a wall tent further up the hill.

On May 14, the last issue of provisions was made. This consisted of six ounces of meat, everything else being exhausted. Some ate it at once, others hoarded it as long as possible. Then some lived and some perished on a starvation diet of seaweed, shrimp and lichens.

The rest is heartrending. They burned the hair off their sealskin boots and coats, cut them into strips, boiled them into a stew and ate voraciously of them till the stomach rebelled, and nausea and weakness ensued in several cases. Nature gave no call for twelve, fifteen and eighteen days, and then bloody hemorrhage and consequent weakness ensued, prostrating the victims for several days. The difficulty of keeping heat in the body was very great. The rule of the camp was to permit no one to sleep longer than two hours. He was awakened roughly and called upon to shake himself, beat his hands and pound his feet and restore circulation. This was found absolutely necessary to prevent torpor and possible death, the usual accompaniments of intense cold.

Mr. Israel, the astronomer, perished on May 27, Lieut. Kislingbury died on June 1, and Dr. Pavy, the naturalist, slept into death on June 6. Not one of the victims realized that death was near. They all died a tranquil, painless death. On June 18, Schneider, the nineteenth man, died.

Of the twenty-five only seven were left: Lieut. Greely, Sergt. Brainard, Sergt. Fredericks, Sergt. Long, Hospital Steward Biederbeck, Private Connell, and Sergt. Ellison. Finally all strength failed them. On the 22d of June the tent blew down upon them and they did not attempt to raise it. The seven starved wretches lay helpless beneath its folds, waiting for death to end their terrible agony.

IV.—THE RESCUE.

But succor was at hand. The relief ships sent out from New York in May, were breaking their way through the ice, and making all speed to Cape Sabine. On the 22d of June the Thetis and the Bear lay off the shore, while their crews were exploring the land for traces of the Greely party. The Thetis whistled to her boats. The half-conscious men in the tent heard it. Sergeant Long and Sergeant Brainard were the first to hear the sound, and they helped each other to crawl out of the tent. When Long got clear of the entanglement of the tent, which had been swept to the ground, he rose to his feet with great difficulty and succeeded in clambering up to a rock that gave the most extensive view in that neighborhood. Intervening hills hid the ships from their view and they returned disappointed with their melancholy report. Brainard says this was the bitterest moment of his life, and that he then gave up all as lost. Long, not yet fully satisfied, went out again, and climbing to the hill top remained looking out searchingly in every direction for some strange object. At length he saw an unwonted sight—a large, black object about a mile distant, which at first looked like a rock, but he knew there was no rock in that line. Suddenly the approaching steam launch changed its course, and Long recognized the approach of rescuers. He came down from the rock, went toward the camp, raised the flagpole and flag, which had been blown down during the gale, and held it for about two minutes, until his strength gave out, and it was blown once more to the ground. He then advanced totteringly in the direction of the little steamer, and, too overjoyed to control himself, almost too weak to stand, he tumbled rather than ran down the hill to meet his rescuers, and was the first of the party to arrive on board the ship.

Norman, the ice pilot of the Thetis, who was mate of the Proteus in 1881, and the last person to say good-bye to Greely at Lady Franklin Bay, was also the first to greet him here, having accompanied Lieut. Colwell was in the Bear's steam launch, and being the first to arrive at the camp he jumped ashore at once. Upon landing, with his pockets full of bread, he heard from Long the melancholy news that there were but seven left, and knowing that Greely was one of them he ran up the hill to within hailing distance and called out, "You are all right, Greely; there are two ships here for you." Greely recognizing the voice replied: "Is that you, Norman? Cut the tent."

Maurice Connell had no recollection of anything that transpired. He did not hear the awakening scream of the whistle. When his comrades shook him up from his prostrate position in the camp and told him of succor at hand he wildly exclaimed, "For God's sake let me die in peace!" A teaspoonful of brandy applied to his lips called back the fleeting life spark, for Connell could not have survived more than a few hours. He was by far the weakest of the seven survivors, and the strongest must have succumbed within forty-eight hours.

Ellison, who, because of his frost-bitten hands and feet had not moved all winter, would have lived longest without rescue, as his subsistence was provided for. A water bag filled, which he could open with his teeth, had been placed at his head, all spare food was at his side, and upon the stump of one arm a spoon was fixed to carry food to his mouth. He was taken on board the Bear, and his limbs amputated. He went mad with the agony and died.

The rescue took place under circumstance of great difficulty. The Thetis and Bear lay off from the shore about 300 yards. There was a terrific gale blowing from the southwest, a heavy sea was running, and a formidable ice nip was apparently inevitable. Lieut. Greely and the other six survivors had to be transferred from their camp to the steam launch and whaleboat in their sleeping bags, and while steaming from the land to the ships the destruction of the whole party at one time seemed certain. The sea swept furiously over them, and the fury of the wind threatened at every instant to capsize them. At length they were safely placed on board the rescuing squadron, where every possible preparation had been made to insure their recovery and comfort. Then the rescuers went back to the graves—ten of them—on the hill, and brought thence the bodies of the dead. Five bodies buried in the ice fort near the camp were swept away to sea by winds and currents and could not be recovered.

Then the ships turned southward, and on July 17, with the six survivors, steamed into St. John, Newfoundland.

Natural History.

THE GROUND SNAKE.

According to the Bridgeport (Conn.) *Farmer* there is, in a collection of curiosities in that city, what is called a ground snake, which was caught in Hawleyville. Only one is known ever to have been seen before. It is quite similar to the ordinary snake, but cannot be induced to withdraw from the loose earth in which it is kept. Whenever uncovered it makes haste to bury itself again.—*Boston Journal.*

THIS brings up an article written years ago, and which, like the snake and many other things in my possession, has been waiting for some circumstance—some jog on my constitutional indolence—to bring it out. I have had four of these reptiles; two are in my possession at present. The first was brought from Enfield, Conn., twenty years ago, thrown out while digging fish-worms, and said to "run" under ground. I looked the creature over to see what modification of form and what power of locomotion would be necessary in this new arrangement of animal economy, it being at once apparent that running under ground was a different matter from running on it. I then pickled the specimen and awaited further light. The second was turned out by the plough in Agawam, Mass., and brought me without note or comment. The third was hoed out in his garden by my old and tried friend, J. H. Batty, whose contributions to natural history speak for themselves. He represented the snake as very active, striking out at random and quickly burying his body in the soft earth, and with true philosophy coiling his tail around a stick or other object and pushing from that base. Color, a light brown above, white below, the entire length. The body, some eight inches long, is as round as if turned in a lathe, the tissue hard and compact beyond any reptile I ever handled. The broad, flattened, angular head and the narrow neck of solar reptiles is entirely wanting. The body tapers down to an ovate termination with a very small mouth, incapable of distention, and with a pair of eyes of doubtful utility crowded close upon it.

Here is evidently room for research. I preserved the first specimen for future reference and comparison as corroborative facts should arise. These have now brought up philosophic questions which must be met and answered, else our children, old as well as young, will miss intelligence just where they need it most.

Is the creature sightless, as striking at random seems to indicate? The eyes of mine changed to white opaque in alcohol, which prevented microscopic examination. Does the creature breathe, or does it draw oxygen from other sources? Is locomotion by the usual method of reptiles, by short curves, pushing from every object it touches, or is it like the worm, drawing the body together and from that base pushing its head forward? The snake method above ground would hardly work below the surface, nor would the worm method do better, except by modification or absence of the spinal column, and yet for which the firm, muscular body might in a measure compensate.

The question is not when was the reptile created, not who first saw one, nor yet who first counted the scales on his tail, if he had scales; but, does he or does he not hold the position of connecting link between two great orders in lower organic life, partaking of both? If he does, as I am ready to believe, we have one of those (not the missing link in evolution, as commonly understood) but connecting links of harmony and continuity in nature, an overlapping of the functions of life which, like that of instinct and mind, leave no break in the chain, no point unoccupied.

But this is not the only illustration of the question. I have in mind a vegetable which seems actually to possess the instinct of the eyeless worm and to unite the animal and vegetable by a shorter route than any usually followed. Not springing from the earth at all but uncoiling, precisely like the embryo serpent from the egg, then, from a club foot as a base, thrusting the head forward to an object, then drawing up the body left behind. The consideration of these connecting links in organic life, and over which science blunders with hybrids and crossings in the dark passages, require another paper. They are no part of nature's work. They are pure accident, or a human device and belong exclusively to artificial or domesticated life.

It is hardly necessary to say there is very little at present known in regard to this snake. My purpose is to submit one of my specimens to the mercies of microscope and dissecting knife on my return to Springfield. Presuming on its habits or food is hardly safe until that is done. B. HORSFORD.

NORTH THETFORD, Vt.

[Is not this the ground or worm snake (*Carphophiops amœna*)—a true ophidian? Information as to its habits is greatly to be desired.]

FISHING SPIDERS.—Prof. Berg, in Buenos Ayres, has discovered a spider which at times practices fishing. In shallow places it spins between stones a two-winged or conical net, on with it runs in the water and captures small fish, tadpoles, etc. That it understands its trade well is shown by the numerous shrivelled skins of the little eel pouts which lie about on the web of the net.—*Deutsche Fischerei Zeitung.*

A VISIT TO A HERONRY.

SEVERAL years ago the writer, who at that time was an ardent student of ornithology, heard of a tract of forest on the shores of Massachusetts, in which a colony of night herons (*Nyctiardea gardeni*) had bred for may years. Procuring a team, we started with a companion for the place, which was located in the township of Rawley. This town is situated on the Rowley River, a small stream, and about two miles back from the coast. Between the town and the sea is a strip of salt marsh extending for miles and intersected by numerous small inlets and ditches of varying depth, according to the state of the tide.

About two miles north of the town we found a strip of forest perhaps a mile long and a half mile wide on the edge of the marsh before mentioned. Above this piece of woods herons could be seen flying back and forth, so that we knew that this must be the place we were in search of. At a farm house near by we put up our horse and proceeded to the grove. As we reached it a most interesting sight presented itself. The trees were mostly of the beech variety, forty to fifty feet tall, with a smooth bark and not a limb projecting in the first thirty feet; then would come a few dead limbs, killed and stained white by the excrement of the birds, and followed by the live limbs, on which were heron's nests. These birds are gregarious, and a half a dozen families build in a single tree. Almost every tree in the grove had from one to six nests in it, and as it was hatching time, the noise made by both old and young birds was deafening. This heron is a lazy bird and does not believe in taking any chances in constructing his dwelling place. Therefore he builds but a small nest to start with, just large enough for the four eggs, and as each young one hatches out, he builds on an L, large enough to hold it, so that if an egg fails to hatch, no labor has been done in vain. Above our heads were nests of all sizes and shapes, and those to which additions had been made, were very one sided, and on the platform thus constructed could be seen an awkward squab trying to keep his balance.

Some nests had four young ones sitting on the edge. These were of enormous size, made of sticks thrown together in the most careless manner and were very clumsy-looking affairs.

Occasionally a tree with but one nest could be seen, and these were generally those of the green heron (*Butorides virescens*), who lived thus with his cousins. The uproar in this grove was simply frightful. Young birds squawking for food in every direction, old ones on the nest and at the side of it, and others departing for the shore and creeks to fish, and arriving from these places with fish in their mouths, their arrival was greeted with much enthusiasm. Our presence surprised these new comers so much that they must needs exclaim about it, and in so doing they would drop the fish which they were carrying in their mouths, letting it fall at our feet. It is a little singular that a bird which displays so much shrewdness in its nest building, should be so foolish as not to pick up a fish it had dropped; but such was the case, and the birds would turn immediately about and go back for another. The condition of the ground from this cause and the ordure of so many large birds can be well imagined. A more filthy or odorous place it would be hard to find, and the deposit of lime made there had killed nearly every species of vegetation. Mosquitoes of large size and ferocity abounded, and our stay there was not a happy one. We made several attempts to climb the trees to nests that looked as if they still had eggs in them (for it was early July), but the slippery bark and the distance the limbs were from the ground made our attempts futile. Each of us, aided by boosts from his companion, would climb within a few feet of the limbs, when his strength would give out, and down he would slide, landing with much bunched up clothing and scratched arms and legs. After a number of attempts with the same results, we decided that we could not (although we considered ourselves experts) climb those trees, and we sadly wended our way back to the farmhouse to get our horse. Arriving there, we related our ill luck to the farmer, when he said: "Wall, my darter was out thar the other day, and she clim' up and got some eggs, and ma'hap she'll sell 'em." We asked to see her, when a buxom six-foot daughter showed herself. We looked at her and acknowledged to ourselves that she was smarter than we were, as she could shin those slippery trees and we couldn't. She had four light green eggs for sale, and we asked her the price. "Well," she said, "would we think ten cents for the four too much?" We eagerly replied that we would not (we would have given her a dollar as quickly), and took them, feeling that we had secured a prize, and unwilling to say a word against the tree-climbing qualities of the Rowley women. After a long and hot drive we reached home.

A year later we again visited this heronry, and it was as silent as a tomb. The quabirds, after breeding in this spot for twenty years or more, had taken alarm at something, and gone, probably to a more remote and less disturbed locality. CURTIS.

MAINE.

DOMESTICATING QUAIL.

Editor Forest and Stream:

My pair of Virginia quail are in excellent health and plumage. June 29 I first saw unmistakable indications that they had mated. On the 10th of the present month the pair went to work building a nest in the long grass of their coop, the floor of which is the natural sod. Bob, the male bird, seemed to take principal charge and direction of the work, although Betty's interest increased very perceptibly after the first day or two. On the 16th (last Wednesday) the hen laid the first egg, and to-day (July 19) the nest contains three, all of which seem perfect in every respect. Perhaps you can guess how much I am pleased with my prospects of success in this most interesting experiment.

I propose to let the birds entirely alone, so far as any outside aid or interference is concerned, since I am confident that they will hatch a larger percentage of the eggs than if they were removed and placed under a common fowl or even a bantam. So far, I have never touched the eggs on the nest, but the birds show a singular absence of fear or distrust when I go into the coop, which I have been in the habit of doing once or twice a day for some time. Since she has begun to lay, the hen makes a point after I visit the coop to go immediately to the nest, as if to satisfy herself that nothing has been taken, and both the birds, instead of attempting to conceal the nest or distract attention from it, appear quite proud of their achievements.

My coop, which is 16 feet long by 8½ feet wide and 4 feet high, is both cat proof and rat proof. In other words, it cannot be climbed, burrowed under or gnawed into, and hence the chances of accident are reduced to a minimum. I shall be greatly disappointed if I do not have a bevy of

young chicks in August, hatched by the parent birds themselves, and I hope to be more fortunate than my friend Willis last August. He succeeded in saving only the "old man," but I confidently count on saving the mother and all the family. J. B. B.

TOLEDO, Ohio, July 19, 1884.

AN AMPHIBIOUS INSECT.

I WAS lying for ducks one evening in a Kansas cornfield. We had been having heavy rains and a portion of the field was submerged. I had taken my position as close to the water as the soft ground would permit. After getting settled so that I could give heed to sights and sounds, I became conscious of a peculiar noise, which I at first attributed to the splash of rain on the dry stalks of the standing corn, but as it was not raining I was soon convinced I must look to other causes for the phenomenon. In a little while my attention was attracted to an insect, whose gyrations greatly excited my curiosity. There were numbers of them, and an individual would rise in an irregular spiral to a height of twenty or thirty feet, doing it in a strong, bold, aggressive manner, and then when at that height would turn and plunge downward with the speed of a bullet, some impinging on the corn would produce the noise spoken of, others falling clear would strike the water and disappear instantly, a little swirl on the surface being the only indication of their disappearance. As well as I could observe, the creature appeared to be about an inch and a half in length, shaped generally like a beetle, with two plumes projecting from the head.

I have watched fishhawks and terns by the hour drop from a height on to the water, but here was an insect equally at home in the air and yet would dive under water and remain I know not how long. None of the sportsmen of the locality had noticed their peculiarity, and in none of the works on entomology that I have seen could I identify the insect. What was it? R. K. B.

[It would be impossible to determine from your description what the insects were. Very probably they were beetles, of which many species are aquatic. The families *Dytiscidæ, Gyrinidæ, Hydrophilidæ*, and others, spend most of their time in the water; or, it may have been one of the larger *Hemiptera*, many of which live in the water.]

HOW TURTLES DIG THEIR HOLES.—In an article in FOREST AND STREAM of July 10, entitled "A Tough Turtle," written by M. M. Benschoter, the question is asked if any of your readers ever noticed the manner in which turtles dig the holes in the ground in which they deposit their eggs. Yes. A case of this kind came under my observation while a mere lad, living in Kentucky. I was plowing corn in a field near which ran a creek of considerable size, and on going to a famous spring near its margin I saw a turtle upon the bank about fifteen feet above the water. It appeared to be awfully busy about something, and as I was in no haste to return to my plow I stopped and watched it for a while. I soon saw it was digging a hole in the hard, dry ground, not having noticed me; but what surprised me most was the fact that it moistened the earth with what I then thought was its own urine, repeating the moistening process as often as it became necessary to soften up the earth. When I thought it time for me to get back to my work I drove the turtle away by approaching closer, when it clumsily crawled down the bank and rolled into the creek. The dirt excavated from the hole was simply mud, while the earth thereabouts was dry as powder. I have always believed that turtle expedited its labors in the manner mentioned, though it may be that the water used was carried in the mouth. At all events, it drew its supply of water from its own tank.—BURR H. POLK (Lincoln, Neb.).

STRANGE ANTICS OF AN OWL.—Mr. J. Willard Schultz, author of the very interesting series of letters on the Blackfeet Indians recently published in FOREST AND STREAM, writes me from his ranch in Northern Montana that he "saw a very queer thing this spring," and goes on to say: "It was nearly sunset. An owl flew down into my garden and after hooting a few times flew up and slowly rose to a height of several hundred feet, his great wings flapping so slowly that by actual count they about kept time with the beat of my pulse. Suddenly he dropped swiftly toward the earth, and as he came he beat his wings together in front of his breast, making a sound like the rattle of a pair of bone clappers. It seemed as if merely the tips of his wings touched, and when he was doing it he was descending very rapidly. He kept the performance up at intervals until it was so dark I could see him no longer." Judging from a rough sketch inclosed by Mr. Shultz, the species seems to have been the great-horned owl (*Bubo virginianus*).—C. HART MERRIAM, M. D. (Locust Grove, N. Y.).

DONATIONS REQUESTED.—*Editor Forest and Stream:* I am making collections for all departments of the museum of Chaddock College, located here at Quincy, Ill. I am not being paid a penny for my time, or for the specimens placed in the collection. This much by way of preface. Among the readers of FOREST AND STREAM are very many lovers of nature who are constantly gathering from woods and rivers and lakes things that would be of great value in a museum. I have wondered if among the generous-hearted there could not be found some to help me in my work. I wish I could offer them pay for specimens, but I cannot. If any of them can send fossil, or shell, or snake, or bird, or fish, or skeleton, or horn, or antiquity, or other specimen, I will gladly attach their name to it as the donor on placing it in the museum.—RICHARD G. HOBBS (Quinby, Ill., July 11).

QUAIL'S FLIGHT AGAINST A HOUSE.—Pittsburgh, Pa., July 19.—One day in the summer of 1877, when I was living in Columbiana county, O., we were startled at our midday meal by a sharp bang against the side of the house, as if some one had thrown a brick against it. I rushed out to see what was the cause of the racket, and just as I turned the corner I saw a hawk turn abruptly in his flight away from the house. Looking at the end of the house I saw a full-grown quail sticking up against it. The quail had flown with such force in its vain endeavor to save its life that it sprung the weather boards enough to allow the feathers on the breast to pass in between them and pinion it fast in death.—S. C. G.

THE SEWAGE QUESTION.—Professor—What is a sewer? Student—A course for liquid refuse. Professor—What kind of refuse? Student—All imaginable kinds from dwellings and factories. Professor—Good; give an example. Student—The Schuylkill River.—*Philadelphia Exchange.*

Game Bag and Gun.

SUMMER WOODCOCK SHOOTING.

THE July noonday swoons with heat,
Yet pleasant is the wood's retreat,
For there the drooping branches spread,
A chequer'd umbrage overhead.

Where scarce the sun-spears, quivering bright,
May pierce the foliage with their light,
Ah! There so shadowy sleeps the wood,
Where hermit woodcock seek their food,

(Piercing with bill the oozy edge
Of stream, where bends the water-sedge)
That well the gunner may invade,
The cool recesses of the shade.

The alders there weave densest screen,
The willows lift their shields of green;
The woodbine twines its glossy crown,
The grapevine drops its garlands down.

There coppice thick, and thicket dense
That hem the brook with thorny fence,
Unite their verdurous shades to greet,
In woodcock haunts, the sportsman's feet.

Turn gunner then from harvest vale,
From wheat fields haunted by the quail,
For not yet may the gun molest
The bevies of the quail in nest.

Spare thou those russet-plumag'd flocks,
Till ripen'd corn is heap'd in shocks,
And all the sumptuous golden grain
Is garner'd from the harvest plain.

For then in sharp October days,
The quail-flock thro' the stubble strays;
And pealing shot and smoking gun
Will boast of ample triumphs won.

But rather seek the plashy swale,
Low in the moist and boggy vale,
Or pass thro' bushy swamps that hide
With briery hedge the brooklet side.

These shy, secluded birds, all day
In cool, thick-shaded haunts delay;
But when the woods at eve are dim,
To open feeding grounds they skim.

They bore for larvæ in the soil,
Or marsh worms, with a greedy toil;
Loving in spring time to arise
In spiral circles to the skies;
But ever 'tis a welcome mark
In open glade or woodland dark.

GREENPORT, L. I., July 18. ISAAC MCLELLAN.

OPEN SEASONS FOR GAME AND FISH.

REVISED TO JULY 17, 1884.

Minnesota.

Woodcock, July 4-Nov. 1. Pinnated and sharptail grouse. Aug. 15-Oct. 1. Quail, pheasant or partridge; Oct. 1-Jan 1. Ducks and geese, Sept. 1-May 15. Deer and elk, Dec. 1-Dec. 15, (may be had in possession to Jan. 1.)

Exportation from State or possession for purpose of exportation is unlawful. The Minnesota State Sportsmen's Association (W. S. Timberlake, Secretary, St. Paul) offers $25 reward for information leading to conviction.

Mississippi.

Ruffed grouse, quail and wild turkey, Oct 1-May 1. Deer, Sept. 15-March 1. Meadow lark, Sept. 15-March 1.

Deer and wild turkey law repealed in counties of Clark, Simpson, Smith, Covington, Greene, Wayne, Perry, Calhoun and Newton.

A WORD FOR THE OLD GUN.

Editor Forest and Stream:

When a sportsman of the present day contemplates his gun, he is glad he did not live and shoot in the "good old times." When he goes shooting his feelings are very apt to be reversed. In other words, we have an advantage in weapons, equipment, etc., over our fathers; but the general decrease of game within, say, forty years far more than balances the account. I, for one, would gladly go back to the muzzleloading gun, if I could then find three birds where I now find two. Of course this is out of the question, and, of course, I do not expect to permanently abandon the breechloader until, from necessity, I lay aside all firearms. I may abandon it temporarily; as, for example, if I should receive an invitation (now quite unexpected) to shoot with some veteran and conservative sportsman, who "allows no breechloaders" on his island. And in some other contingencies I may take for a time to the muzzleloader.

Still, although I shall do most, if not all, of the shooting that remains to me with the modern gun, I don't feel that going back to the old muzzleloader would be in itself a dreadful calamity. The pleasure of shooting would not be for me materially diminished. To illustrate, suppose two men, A and B, both being equally good shots, start out for a day's quail shooting. A carries a muzzleloader which, thirty years ago, was much admired, and is still in good order. B uses a well-made breechloader with the modern improvements, rebounding locks, pistol grip, snap fore end, etc. Now what will the result be? If A is a careless man, he will be more likely to shoot himself than will the equally careless B. A's hands will probably be grimed with powder dirt, more or less, before the day is over. If at night each party cleans his own gun, A's work will not be quite so easily done as B's. If they do not shoot together B may get over a little more ground than A, but the latter can go over enough to satisfy a reasonable man who is out for a day's pleasure, and not on a "go as you please" walking match. So B has some unquestionable advantages, but after all, luck being equal, A will bring home just about as many birds as he will. If his gun is a full choke, A will probably beat him, unless the parties shoot with uncommon precision, and in that case, A's birds will be in better order—not so much riddled with shot. Possibly A will lose a shot or two in the course of the day from not being able to load quickly enough. But this is not very likely to happen in quail shooting. I have heard of a flight of woodcock coming to a given point in such quick succession that a muzzleloader would not meet the emergency, but I have never had the luck to see anything of the kind. Leaving such extraordinary cases out of consideration, A's chances for game will be just about as good as B's.

In duck shooting the conditions are somewhat different. There, I suppose, the breechloading chokebore has a great advantage over the muzzleloading cylinder.

There is one point worth considering in favor of the old-fashioned gun, viz., the effect on the dog. When muzzleloaders were used, it was a necessity to have the dog drop to shot and remain steady at the "down charge" while the gun was being loaded. Now, a pause of a moment is all that is required, and I suspect the change is responsible not only for a good deal of "breaking shot," but also for some unsteadiness in pointing and backing. I do not speak from my own experience on this point, but should like to know what the veteran sportsmen think of the theory. I have enough faith in it so that if I ever again have a young dog to handle I shall be tempted to shoot over him the first season with a muzzleloader, and to brave the scorn and pity I may thus incur.

If any man who has an old-fashioned double barrel gun that serves him well, cannot afford a good breechloader, let him possess his soul in patience and stick to the old gun. Especially, let him not trade it for a single barrel breechloader, unless, perhaps for duck shooting. A heavy single gun is no mean weapon in that sport. But in the field I value the second shot to send after the flying bird more than all the "modern improvements."

I believe the introduction of breechloaders is not in any great degree responsible for the great decrease of game which has taken place within the memory of middle-aged men. I think so because I have shot in company with muzzleloaders that did much more than their even share of destruction. The principal causes of this decrease are: First, the snare; second, the tenfold multiplication of sportsmen; and third, the lax enforcement of the laws. PICKET.

RELOADING AMMUNITION.

Editor Forest and Stream:

It being so perfectly evident to me from what has been thus far written, particularly by the opponents of the repeater, that proper care is not exercised by riflemen in the selection and reloading of their ammunition, and their own faults being afterward laid upon the guns, perhaps it may be of interest to the many if I call attention to the various styles of cartridges, or more properly speaking cartridge shells, and give the method of loading followed by the army.

To begin with shells, the main point of importance to the rifleman is in the character of the "head," and the kind and quality of the material from which the shells are made. The head should always be of the solid form for long use, those with folded heads having but short life and being mainly intended for army use, to be thrown away after their first shot, and not to be kept for reloading. Folded interior-primed shells cannot be reprimed readily, and are not intended for such reloading, so they can be omitted from further mention. Folded exterior-primed shells can be reprimed and reloaded, but they are weak and dangerous from liability to rupture under the folded head when used any number of times, and although cheaper at first cost than the solid heads, they are the most expensive in the end, and their use should never be depended upon. We thus have the "solid head" form as the best for constant use, and the next point to consider is the character of the "seat" or "cup" prepared to take the primer.

There are several different styles, going by various names, and all good for the first fire, but some are better than others, and as we are looking for the best, let us see which they are, and the reasons.

It may be taken as an axiom in all matter pertaining to arms and ammunition that the best is that which is the simplest, provided strength and durability has not been sacrificed to simplicity. This rule, therefore, excludes all forms of shells with movable anvils, or removable heads, as they want simplicity and have no additional elements of strength or safety over those that are more simple. I have forgotten the names of these two forms of shells, but I have used them and know from experience that they are only a nuisance.

Coming then to shells without movable anvils, and with non-detachable heads, we have first the "Lowell" shell, and my objection to this is that the pocket for the primer is too small and not deep enough, and I have never succeeded in re-seating primers as they should be seated in this shell. The face of the primer cannot be seated deep enough beneath the face of the shell head, and it is, therefore, too liable to accidental explosion. The Lowell shell is made purposely to hold the primer very tightly, and a great deal of force is needed to seat the primer, causing a good deal of loss from primers prematurely exploding while being set. This form of shell was the first form of reloading shell furnished to our troops, and its use had to be abandoned for want of satisfaction, and the difficulty of setting the primers. I have had shot after shot accidentally fired from the face of the breech block striking against the exposed primer on closing the gun, and this, too, when care was exercised, from the fact of the primers being exposed being known, and I have had to abandon entirely the use of those shells.

Then we have the "Berdan" shell, the form made by the Bridgeport Company, and this shell strikes me as defective, inasmuch as it requires a special tool with which to extract the primers. The pocket has three vents to allow the passage of the flame from the primer to the powder, and a raised conical anvil in the center of the bottom of the pocket, on which the primer is exploded. Besides the difficulty of removing the primers,* this "anvil," being of brass, is easily battered down by repeated blows of the firing pin, causing frequent misfires, as the shell becomes old, from frequent reloading, and rendering it unserviceable long before the "life" of the shell itself has become exhausted. I have just cut open one of these shells and found it to be with folded head, although I think that they are also made with solid head. Of a lot that I bought for Winchester shells, there being no mark on the box; as soon as I learned that they were Berdan, I laid them away, and have never used or intend to use them the second time.

There is another form made by the Bridgeport Company, and stamped U. M. C. Co. on its rear face, which is much preferable. This shell has a solid head, and a central vent to the pocket, and is primed with a primer which con-

* I have never yet seen a tool that gave satisfaction in removing primers from shells that had no central vent. The "Bridgeport tool," furnished us to extract primers from Berdan shells, is simply worthless, and the tools made by the Remington Company for their "steel-coned" shells is but little better. The shells and anvils will become damaged by the awl or chisel cutting through, or slipping off of the primer in spite of the care that may be exercised.

tains its own anvil. The main objection to the shells, however, is the fact that the pocket does not receive the primer deep enough (as explained for the Lowell shell) and like this latter, is too thin in the flange, so that the extractor is liable to cut through in trying to extract a swelled shell, or one that hangs in the chamber from any cause.

The Winchester and Frankford strike me as the best shells for general and continuous use. The heads are solid and heavy, there is a central vent to the pocket, so that the primer can be driven out of the discharged shells with the simplest of tools and the greatest ease, and the pocket is deep enough to allow the primer to be seated deeply, and away below the rear face of the shell. There probably are folded-headed shells made by the Winchester Company, but all that I have in my possession are of the solid head form.

In buying shells it therefore strikes me that the rifleman should be careful and look for certain points and exact that his shells should comply therewith. He should call for exterior-primed, solid-headed shells, with deep pocket for primer, and with one central vent for the flame.

As to material, there is yet no settled opinion, some claiming that high brass makes the best, others that a composition called "gilding metal" possesses superior advantages. Those made for the trade are generally of fine brass, those made by the Government of gilding metal or copper. My experience is—and I have used all kinds—that those of fine brass have the longest life, and will stand heavier charges of powder and a greater number of reloadings.

But with the best shells in the world one cannot succeed without proper reloading tools with which to do his work of reloading, and this leads me to this subject. I have looked and looked and looked in vain to try and find such reloading tools in the market and for sale by the trade. Various styles of so-called reloading tools are to be found, but they do not satisfy all the conditions requisite for success; and I can find no tools outside of those supplied by the Government that will do their work properly. Let us examine some of the tools to be had in the market, and from this examination see what is lacking.

The Marlin Company advertises "reloading implements for all sizes Ballard and Marlin cartridges," comprising bullet-mould for either grooved or patched balls, ball-seater, re-capper and de-capper, powder scoop, wad-cutter, wood mallet, and swage for bullets. Very good, so far as it goes; but where is the resizing or crimping die? They also advertise a combination tool that they claim to de-cap and re-cap, seat the ball, and crimp at the same time (a thing that cannot be done properly in one motion with certainty), and this tool, it will be observed, does not resize the shell. The Winchester Arms Company also advertise reloading tool sets, but they are not complete, and will not give complete satisfaction. In 1876–77 I had a set of reloading tools for the Sharps .44-90 rifle and could do nothing with it, as there was no resizing or reloading die, and I found that my shells continually "stuck" from having become swelled, and I had no means of resizing them; neither could I seat a ball properly and accurately, as I had no guide to enter the ball in the shell. The Whitney Arms Company advertise and illustrate only a cap-extractor, ball-seater, and bullet-mould. The Providence Tool Company used to make reloading tools, but they did not comprise all the parts needed, although they were very good tools as far as they went, everything being done by the pressure of long lever handles. The "Brown variform reloader" does not comprise all the tools required, and, in fact, I never have seen a combination tool yet—and I have seen, or examined from advertisements, a good many—that filled its expectations, or that would do all that was claimed for it; and I have never seen but one advertisement of a resizing die, calculated to resize the entire length of the shell.

In order to tell exactly what is wanted I will have to go through the entire operation of reloading a shell as practiced in the army, properly, so as to give constant and proper results.

First—De-cap the fired shells. This is done usually with a primer punch, the body of which fits closely but not tightly in the inside of the shell, there being a fine steel punch in the end that passes through the central vent and drives out the exploded primer. This punch may be a plain round piece of steel, the shell in such case being seated in a recess in a block of iron or steel, with hole to allow the old primer to drop through, or it may be in the form of a pair of pliers, the punch being then pressed in by the handles.

Second—Wash the shells in boiling hot water until all the residuum has been removed, then bake the shells in a hot oven until they are thoroughly dried. Any remaining dirt may be taken out with a stiff round brush.

Third—Lubricate and resize each shell by driving it into the resizing die with steady and straight blows of a mallet. The resizing die should rest firmly on a support, and is provided with a punch for driving out the resized shells. The die and shells should merely be greasy and not wet with oil, as too much oil causes the shells to "buckle" in the die. Always resize each shell before recapping or reloading.

Fourth—As the resizing die punch is apt to leave a slight burr on the mouth of the shell, each shell should be lightly scraped with the shell scraper (a three-cornered piece of tempered steel set in a handle) on the inside edge around the entire mouth to take off this burr, but not so as to thin the shell.

Fifth—Re-cap, seating the primers well home, and being careful to see that pocket is free from dirt and the vent properly clear. Primers should preferably be seated by pressure, and the tool seats the primer the exact depth each time, so that there can be no exposed primers if the tool is properly used. The end of the screw or plunger which presses in the primer is so made as to insure the primer being seated at least 0.005″ below the surface of the head.

Sixth—Enter the re-capped shell into the reloading die, place the latter thus in the safety socket, measure out the powder with the powder measure, seeing that it is set to the proper weight, pour the powder into the shell through a funnel placed in the mouth of the reloading die (the longer the funnel the more powder can be got in the same space up to certain limits. I have used a funnel with spout over two feet long to get large charges in small shells), press down the already lubricated bullet through the mouth of the reloading die, observing that the cannellures are all full of lubricant, and drive the bullet home with the reloading punch, driving the latter until it is clear down with its shoulder on top of the reloading die. The bullet is then seated home and the cartridge will be of the exactly proper length. Press the loaded shell from the reloading die and it is ready for

Crimping.—Press the loaded shell into the crimping die, the head of the shell resting in a recess in the safety socket. Drive down the crimping die upon the shell with the mallet as far as it will go. Press out the shell now completely reloaded.

We therefore need a de-capper and re-capper. These may be separate or may be combined in one tool. In the army, for rifle shells, etc., they are generally separate; for shotgun shells they are combined in one tool, which can also be used for rifle, carbine and revolver shells. We need a resizing die: This is a tube of steel hardened, the interior being the exact shape and size required to resize the shell to its proper dimensions. The resizing die is five-thousandths of an inch less in internal diameter than the average chamber of the gun, hence resized cartridges will always fit even the chambers of guns that are of minimum diameter, and about the exact length of the shell. The punch is a cylindrical piece of steel, with an ogival point and a shoulder that fits the mouth of the shell exactly, the diameter of the punch body being that of the exterior of the shell. The shell being conical, but a light blow is needed on the punch to start out the resized shell. A suitable anvil should be provided with recess for the end of the resizing die to rest in both in driving in and driving out the shell, a hole being drilled through the anvil for the shell to drop into or through when being driven out. Shells should be resized after every fire, for otherwise there is no telling when a shell may stick in the chamber, and resizing after every fire prolongs the life of the shell, for it may spread in two or three fires when not resized, enough to prevent its being resized at all; whereas, after each fire the operation is comparatively easy and does not injure the shell.

A reloading die is absolutely necessary for accurate loading. It is again a tube of steel with interior the same size as the average chamber of the gun, and counter-bored on the end to receive the head. The upper interior end is slightly smaller for a length down to about the top of the shell (it is of the exact diameter of the bullet) and serves to guide the bullet properly into the shell, and hold it straight and concentric with the shell while being driven home. The reloading punch, with which the bullet is driven home, enters a certain fixed distance, so that the bullets are all seated alike, provided this punch is driven home, and when the punch is home the die then becomes an exact gauge as to the proper dimensions of the loaded shell. Any cartridge that fits this die, with punch inserted up to its shoulder, will fit the gun to a certainty, and each shell is rigidly gauged and inspected by its use while being loaded.

For cartridges that are to be used at once, or are not to be subjected to severe use, the crimping may be omitted, but I have found it better to always crimp. My cartridges are then waterproof, and are ready for any amount of knocking about, and I do not have to make allowances in aiming, as I would have to when using part crimped and part uncrimped cartridges. Crimping lessens the velocity slightly, and therefore changes the trajectory and necessitates changes of elevation from what would be necessary for those not crimped, leading to confusion when used together.

Never prime a loaded shell, nor attempt to prime it. This is one of the rules that always should be followed. It may be that a primer will jar out of its seat while the bullet is being driven home. In such a case throw the shell away, as it has become worn in the pocket until it is too large to hold the primers properly, and, even if it could be primed while loaded with safety, the primer is apt to work out again in the magazine of your gun, or while in your belt, and perhaps be the very cartridge you might load with for a very risky shot—to "get left" as a matter of course.

Now all this operation and description doubtless appears long and tedious, and it doubtless is so—but "whatever is worth doing at all is worth doing well," and certainly the rifleman should reload his ammunition as carefully as does the man of the "scatter gun," and I claim he should be more careful, for the man with the shotgun fires a scattering shot anyway, and a little, more or less, makes not so much difference, but the man with the rifle has but one bullet, and he wants that to go true to its mark and to go every time, for he hunts more valuable and more dangerous game than the shotgun man, and this cannot be guaranteed unless he is as careful about his ammunition as he is about his gun. The strictest and most scrupulous exactness should be demanded, and never rest content with "Oh! that will do; what is the use of being so blamed particular!" That one sometimes hears too often.

The man with the shotgun can and does generally provide himself with the best reloading tools the market affords, not only for rapid but exact work. Tools are to be had for the shotgun that fill all the requirements, therefore why should they not be provided for the rifle, where exactness is so much more needed?

And now I would ask sportsmen and manufacturers if we have any reloading tools that will do the work described above? Has there been any real effort to produce proper tools, and will any "makeshift" answer? Is it any wonder that some manufacturers refuse to warrant their guns unless their manufactory ammunition is used? For do not the manufacturers know that there are no proper tools, and that shells cannot be loaded properly with tools to be had?

As to the labor of reloading I cannot but admit that it is hard work, but the results more than repay for the exertion. One can choose his own powder, can regulate his own charges within certain limits, and can in every way produce better cartridges than those of the manufactory, while the expense becomes much less. By taking one operation at a time (such as resizing all, recapping all, etc.), the reloading can be done quite rapidly, and one soon acquires skill and exactness. I have reloaded hundreds of shells, have never met with any serious accident, and have had more faith in my cartridges than in any I could buy.

I would not advise any one to try and make their own bullets. Cast balls are not as accurate in their flight nor so invariable in their work as are those made at the factories. These latter are swaged from lead wire by powerful machinery, and are much more homogeneous and symmetrical than any home-made balls can possibly be, even when the latter have been swaged by the swaging mold and punch.

I would invite attention to the fact that nothing has been said about the "lubricating disk" in the above description, and this simply because it is no longer used. I know that it was used, and that some authorities still claim advantages for it; but it is not used in the army. I used it some years ago and found no good results therefrom, and abandoned it. I found that it fouled the bore and caused the gun to lead more with it than it did without. The carbonaceous matter contained in the disk would burn and leave a crust to adhere to the bore in addition to the residuum of the powder, and wilder shooting resulted than when it was not used, unless the bore was carefully wiped after each shot. But if the bore is to be wiped the disk is not needed, its office being to keep the bore lubricated for each successive shot when not wiping. Perhaps a thick felt wad would prove beneficial as tending to clean the gun and prevent leading where non-wiping matches are being shot. But it must be remembered that this wad would be between the bullet and the powder, and would not be in position to sweep out either lead or residuum from in front of the bullet, so that the bullet would yet have to encounter the residuum from the previous shot, and the wad would not prevent such residuum being left by the powder burning behind it; so I think it of little value.

For hunting, if the ball has been properly lubricated before being seated in the shell, there is no great necessity for any additional lubrication. At target practice I have obtained the best results from wetting the point of the bullet with saliva; this reduces friction as well as grease, and there is no residuum from the saliva on the gun. Many dip the bullet in oil, but I claim that this fouls the piece more than saliva and does not give as good results. In hunting with singleloaders the bullet can be thus moistened in the mouth; but for magazine rifles this is of course impossible; but then it is not so very great importance after all. If one uses good clean powder the fouling from even ten consecutive shots will be but a trifle, so little that one can still see the glitter of the iron the whole length of the bore (I have fired over an hundred shots from a Ballard gallery rifle before it was cleaned, and we were shooting at five-cent pieces at fifty feet and still did good shooting), and one has plenty of time generally to pull a field cleaner through his gun after every few shots even when hunting. What one wants in a magazine gun more than in a singleloader, although it is of importance there, is to see that his primers are properly set, his shells properly sized, his bullets properly seated, and then he can go forth confident that he has done his duty by the gun and the gun is ready to do its duty by him.

The primers for cartridges should be carefully selected according to the shells used, and no attempt be made to use anything except just exactly the right thing. No makeshifts will do; but the exact primers for the shells must be had to insure success. That this want of uniformity in shells and primers causes confusion, discontent and disgust I am well aware from experience, and I know, for I have tried it myself, the temptation to make something do that is wrong because that which is right cannot be obtained. One may have Winchester shells and be only able to obtain (close at hand and in a hurry, because one is out) the Berdan primers, or some other form that is not suitable, or *vice versa*, and be disabled for the time being. The only remedy that I know of is to adopt some uniform shell for use and keep a stock of shells and primers always on hand, in quantity sufficient to meet any emergency.

For repeaters, do not use too sensitive primers. The mainspring should be tested, and if found too weak for thick primers, replaced by a stronger one. It is always well to have an extra mainspring or two on hand at all times for possible accidents; but a weak mainspring may be stiffened temporarily by putting an auxiliary spring, made from any thin piece of spring steel, either under or over the spring, depending upon its position or bend.

Examine and see that your shell heads are large enough in diameter to fill the counter-bore completely yet easily, and that they do not slip by the extractor in singleloaders, for some day you may get badly "left" if you do not.

In all singleloaders that I know the extractor fits into a recess in the counter-bores and must go home before the shell, so as to be in position to extract. If the shell slips by you cannot get the extractor home and cannot either close the piece or get out the cartridge that has slipped by, except by pushing out with a rod or jarring the butt on the ground, and you are temporarily disabled and perhaps just when you need the shot the most.

To the many this may seem to be a needless precaution, as they naturally suppose that all shells of each caliber are the same by all makers, but from experience I know this is not the case. Another reason for my abandonment of the Lowell shell; for I had fifty of them that I tested one after another in a Government carbine and they all slipped by, and other ammunition, made by the Government, fitted all right; and yet we were supplied with the Lowell ammunition for campaign against Indians; it was entirely new, just out of the factory boxes, and was caliber .45 and intended for caliber .45 guns such as our carbines.

Perhaps it may serve as a lesson to some to hear how I came to learn this. It was in this wise: While on White River, Colorado, in the fall of 1879, my attention was called to a carbine that was disabled by the shell having slipped by the extractor. The officer who had the carbine had just come back from looking for grazing ground, and while out had run across a large wildcat, and had got down from his horse, slipped a cartridge into his gun, and started to kill the cat. The gun was a U. S. Springfield carbine in perfect order. He found he could not close the breech block, and on looking to see why, found the shell filled the counter-bore and closed up the recess in which the extractor should lie when home. Having no rod he could not drive the shell out, and had to abandon his shot, leaving the gun in a disabled condition until he could get back to camp and have it repaired.

I examined the gun carefully and tested it with every cartridge there was in the officer's belt, as well as others from other belts, and all slipped by when dropped into the receiver and pushed home. All these shells were the Lowell shells and were a trifle smaller in diameter and a good deal thinner in the flange than the Governmet ammunition proper, none of which slipped by or could be forced by, as was found on trial. Since that time I have always looked to see that I had what I should have and in a thoroughly reliable condition. It might have been something worse than a wildcat that had been found, and it so happened that only a few days before the same officer was jumped by the Utes and corraled in a ravine all the afternoon with his entire escort; but on that day he had regular Government ammunition and found no trouble in using his piece.

But I have said enough, perhaps nothing that is new to the many, but again perhaps a good deal that is new to some, and my desire to see this important subject properly recognized has been my excuse. I hope that others may give their experience, either agreeing with or contradicting mine.

WYOMING. C. D.

MAINE LARGE GAME.—Munson, Me., July 16.—The wonderful increase of caribou and deer since the game laws have been enforced in this region is acknowledged by those who have been the most bitter opposers of these enactments. One day during the past month a caribou was seen in the orchard of a farmer near this village, and during the day he swam across the lake to the forest within view of the Lake Hebron Hotel.—J. F. S.

BULLET VERSUS BUCKSHOT.

Editor Forest and Stream:

I wish to call your own and your readers' attention to a subject which has occasioned me much surprise, and if it astonishes and chagrins a frontiersman, who is familiar with rough experiences, how much more should it engender a kindred feeling among the more refined of sportsmen?

I have read carefully your columns for the past four years, and to them is due the credit of educating out of my nature many pot-hunting proclivities; *i. e.*, if taking sitting shots be pot-hunting, and I believe a majority of your correspondents are of that opinion. At present your columns are singularly free from those two nauseating terms, "pot-hunter" and "gentleman sportsman," which have pervaded nearly every communication published the past few years. This result is due, or largely so I believe, to your own caustic editorials on these subjects.

And now allow me to suggest another abhorrent practice, a relic of barbarism, which ought to have been relegated to the past centuries ago. I refer to the brutal practice of shooting deer with buckshot.

It is difficult to believe that men exist in this nineteenth century so little advanced beyond savages that they have the heart to deliberately shoot a charge of buckshot from a hand cannon into the body of the most beautiful animal in creation; but evidence of such taste comes to us in nearly every issue of FOREST AND STREAM, in some inquiry for the best gun to shoot buckshot, or in a glowing description of some hunt where the writer lauds his prowess and boasts of his wonderful gun that sent its dozen buckshot clear through the body of a deer at a hundred yards.

Any manner of killing game is cruel, but those methods which require a little skill and give the game some chance of escape are the only ones which sportsmen should ever practice.

If a weapon could be devised which would make a clean kill or leave the game untouched, it would be a glorious thing; but there is no such thing known, therefore the arm which approaches nearest to that result should alone be used.

If a man were starving and had no weapon but a shotgun he would be justified in killing a deer with it, but under no other circumstance, and then he ought to have decency enough to keep his deed to himself, and not publish to the world his disgrace.

It was my fortune not many months since to be one of a party which went in search of a grizzly. It was a mixed crowd of army officers, clerks and farmers. One of the latter was armed with this same phenomenal shotgun charged with buckshot. We did not find the bear. We did happen onto a deer which received the contents of the shotgun at about fifty yards and of course left on the jump. Another of the party opened fire with a Henry rifle, and knocked him down, but again he jumped and ran for life. He left a plain trail of blood which was followed. At a distance of fully a mile he was found dead. The rifle bullet had done the work of quick killing. Upon skinning, one buckshot was found to have entered the paunch and lodged under the skin on the opposite side. Enough to have killed the poor animal after a few days of most intense suffering, and that would surely have been his fate had not the more human rifle come to his relief.

The brutality of the shotgun man deserves to be announced by all sporting journals. A thorough ventilation of such "sport" would, I believe, educate men above it. If the use of the shotgun on deer were entirely discontinued, deer would increase largely, for the majority of those which are struck by buckshot escape, crawl away and die, doing the hunter no good, affording him no sport, and diminishing the supply for breeding purposes.

In this day of cheap and reliable firearms, a good, accurate rifle can be bought for a trifle, say $20 or $25. Every man or boy in America, who can find time to hunt, can possess one if he choose. If too poor to buy one, borrow for the day's hunt, a few hours' practice will make you sufficiently proficient in its use, to hit the vital part of a deer at ordinary shotgun range. Then if your hunt be successful you have not committed a deed which will trouble your conscience the remainder of your days. PIUTE.

FORT BIDWELL, Cal., July 5, 1884.

OREGON SKIN HUNTERS.—John Dunphrey, an engineer on the west side road, who is in the habit of taking a yearly hunt for deer in the mountains of Southern Oregon, a few days since received a letter from a friend at Grant's Pass, of which the following is an extract: "I expect you will be out this fall to take your annual hunt. You had better come as soon as you can if you want deer, as the skin hunters are killing them off very fast. You will hardly believe me when I tell you that two of these fellows now encamped eight miles below this place, brought in and sold here last week 130 skins, all killed during ten days in June. One of the hunters said that he killed twelve deer in one day, and in two days caught ten fawns, which he marked. When asked what he did with the venison he said he did nothing with it. His name is Stonebreaker and his partner's name is Ferrin. They got ninety-eight dollars for their load of skins. I saw the skins and the blood was not dry on some of them. I can prove every word of this. Skin hunters have been slaughtering deer all this summer, along the cañon by the railroad. The small mountain streams are dried up and the deer are obliged to gather along the larger streams for water and there is where they catch them. These scoundrels defy the law and say they have a perfect right to hunt on Government lands. It is high time this business was stopped. Just think how many poor little fawns these rascals have caused to starve and die." The above is from a responsible person, and there is no doubt of its truthfulness. The authorities of that section must be very remiss in their duties to allow such wholesale violation of the game law. The first game law passed in Oregon was originated in that part of the State, and was intended to prevent just such scandalous slaughter of deer for their skins as is mentioned above. Those skin hunters should be in the penitentiary, or better have their hides made into drum heads; the hulking, lazy, useless brutes are worse than wolves or coyotes. The people of Southern Oregon should combine and hunt them out of the country.—*Portland Oregonian.*

GRASS PLOVER.—Philadelphia, Pa., July 21.—A great many grass plover are being killed in this section. The season is just about in, but the birds are yet in poor condition. The pastures about Philadelphia are thronged with them, and their whistle is heard nightly as they arrive hereaway. Many gunners are after them, and about one or two birds fall to the share of each gun. Well may the grass plovers in this region whistle "we are all surrounded."—HOHO.

SPIDER LAKE GAME.—Sherbrooke, Quebec, July 12, 1884.—Have just returned to-day after spending a week at Spider Lake. Good bass trolling in the lake, and trout fishing on the Upper River. Saw deer every day and tracks of moose are numerous. Have never seen a season at Spider that looks more promising than the present for large game, and only hope they may be protected until the open season, Sept. 1, so as to give us all a chance. The existing game laws prohibit the hunting or killing of any female moose until Oct. 15, 1885. Am glad to see your correspondent "Penobscot" again to the front. He is familiar with the locality referred to. Have been very much amused with that character "Antoine," who visits "Uncle Lisha's workshop." I can pick out half a dozen French Canadians who would answer for his original so far as the broken English is concerned.—D. THOMAS.

WOODCOCK IN NEW HAMPSHIRE.—Dover, N. H., July 21, 1884.—*Editor Forest and Stream:* Woodcock in this section are not very plenty, while on the other hand partridges seem to outnumber them five to one. I know to my certain knowledge that parties have shot woodcock here this season. Our open season commences Aug. 1. It seems a shame that persons, for they can't be called brother sportsmen, should so lose all sense of what becomes a true sportsman, as to shoot game out of season, and especially woodcock, to secure which a sportsman has to journey many miles to make a fair bag. These parties should receive the full letter of the law in their nefarious business.—WOODCOCK. [Why does not "Woodcock" lay his evidence before the game wardens and secure the punishment of the offenders?"]

AFTER ADIRONDACK DEER KILLERS.—After working almost alone for four years or more to get something done to stop the slaughter of deer in the region south of here during the spring and early summer months, I have at last got the State Game Protector of St. Lawrence county to visit that region. He went up last week and procured evidence that will, he says, convict three of the parties, and he will prosecute them to the full extent of the law. He also appointed a deputy protector residing in that vicinity, whose duty it will be to watch for and prosecute all caught violating the game law.—A. C.

A CHATEAUGAY LAKE ASSOCIATION is being talked up, and a meeting for organization will be held at "Ralph's" Aug. 18. Its membership will embrace any visitor to or resident of the whole Adirondack region. Two of the most important purposes of the association will be the employment of men to look after the game interests of the mountains and the raising of a fund to yearly place in the various lakes, ponds and streams young fish. All who may wish to join this proposed association in any way can address Mr. W. S. McKean, Rogersfield.

BLACK-TAILED DEER ANTLERS.—Mandan, July 15.—In No. 24 I read of a correspondent that has a black-tailed deer's antlers with twenty-five prongs. I saw a black-tailed deer's head, that was killed sixty miles north of Mandan, that had thirty-two prongs.—HUNTER.

Sea and River Fishing.

CAMPS OF THE KINGFISHERS.

Black Lake, Michigan.—XI.

WITH characteristic pluck and perversity Knots had stuck to the oars; the devious course was ended; and he and Dick were now resting in the shade just across the little bay from us. When we had filled our last bucket with most excellent minnows and a few barred perch of the right size, we gave up our stake to three anglers, who had come up out of big Black River in a yawl in search of the Kingfisher party, as they said, but as they did not introduce themselves we failed to learn their names. They were not inclined to be very communicative, but we learned that two of them were from Detroit, while the other was an "Ohio man," and that they were fishing over at Long Lake, five or six miles below. They had taken a notion to try the bass in Black Lake a few hours and at the same time hunt up our camp. They had walked across from Long Lake to the river, a mile and a half, got a boat of a Mr. Cross, living near the head of the rapids, and here they were, fishing for black bass with worms. Just think of it, ye honest anglers.

They had stopped awhile at the stemwinder and one of them had taken a four-pound bass with a bunch of wriggling worms, a proceeding that so disgusted old Dan, when told of it, that he straightway exploded with, "deliver me from a worm fisher, any how!" We left them tied to the stake catching minnows, and pulled over to the raft to stretch our legs and try for the mate to their four-pounder with legitimate bait, for we were something of Ben's mind when we summed up his opinion of worm-fishing for bass in about this shape: "Ef I can't ketch bass without fishin' fur 'em with bait that's only fit fur white suckers and red hoss, I don't want no bass."

When the strangers had filled a bucket with minnows they came over to the raft, and soon after Knots and Dick pulled across to us, and the stemwinder bristled with seven rods, all feeling for the mate to their big bass; but a half hour's patient work failed to induce a strike except by an eighteen-inch pickerel that one of our party took, which was kept alive to bait the big hook for the big mascalonge as we went back to camp.

Our three anglers soon left for Long Lake, but before going they told us they were having fine sport over there with the bass—nearly all of the wide-mouthed tribe—and they were doing their fishing with worms. Now, this manner of bass fishing may be a pardonable offense among some fishermen, but were a "Kingfisher" caught angling with a squirming worm he would be drowned on the spot, or drummed out of camp to the tune of the "Pot-fishers Quick March."

Long Lake may be reached from Black Lake by going down the river to Cross's, a matter of three miles, and from there a mile and a half will take one to the head of it. A team may be had of Mr. Cross almost any day to haul a boat over, and on the lake shore is a very good little tavern, at which accommodations and boats may be had. The better way, however, to reach this lake is by team from Cheboygan.

Leaving the stemwinder, Muller and I started to fish around the shores of the little bay with our new bait, and before we had gone a hundred yards I struck and persuaded my first and only bass in Black Lake—a black-backed hard fighter of three and three-quarter pounds. I don't like to say this was the only one I took, but truth is nudging me to stand firm and I must so record it. Did I feel good over that first and only bass? Why, that fight was just an even balance for four days' first-class pickerel fishing, but I will not try to describe it lest, in the attempt to do it justice I overdo it. It was simply a glorious fight, and it was more good luck than skill, I think, that brought me out on top, for I confess to being a trifle nervous at points in the struggle where a hair would have turned the scale in favor of the fish.

Here at the mouth of the bay we saw another great mascalonge, near six feet, we judged, from the hasty glance we got of him. Muller had hooked and was playing a five or six pound pickerel, and as he was led near the boat and when only a few yards away, the mascalonge made a swipe at him, but missed by barely a couple of inches, a sudden twist on the part of the pickerel saving him from being crushed by the powerful jaws of the big fish only to meet a milder death by the club. He was a monstrous fish, probably as large as the one Dan and I saw, as Muller will be qualified that his head was fully eight inches broad at the eyes. We did not fish for him, as it would have been utterly useless to fight him with our tackle, among the grass and gigantic water weeds that grow around the mouth of the river and little bay, for to handle a fish of this size would require plenty of sea room in water clear of grass and weeds, and we did not feel like breaking up our rods in an encounter that would be sure to result in disaster to us. Here were three of these great fish seen by us in a few days, some miles apart, and I am convinced that the lake contains many others of the same kind, and possibly a few that are even larger than those we saw, but this is hardly probable.

Another hour's fishing resulted in more longsnouts, but not another bass, and we left for camp very much impressed with the belief that we were there quite two months ahead of the season for them. We fished awhile around Pickerel Reef as we went up, for the old chief that Dan and I held a special claim on, but the eighteen-inch longface on the big hook failed to attract his attention, and we went on to camp with another backset added to my score.

The day's fishing had, however, put us in possession of the fact that the "automatic abortion" is a fraud and a delusion as a bass reel, and subsequent performances of the machine has not altered our convictions. I expect this will raise a howl from the sun fishers and fingerling trout murderers, for the contrivance is specially adapted to this kind of fishing, but our minds are made up, and we are prepared to be covered up with abuse rather than concede a point in favor of this ingeniously arranged, but "wuthless affair."

At camp we found the other boys had not been out, owing to the rough water, but they had passed the day pleasantly in "reminiscences," smoking the pipe of contentment, etc., and Jim had actually distinguished himself by picking a camp-kettle full of huckleberries, and that evening Dick promised he would make a huckleberry roll next day big enough to kill the whole party. The roll was planned and constructed with perhaps the best intentions on Dick's part, but as he had forgot to put any shortening in it, his promise of a wholesale slaughter of the camp came very near being made good, as all who partook of that mass of tough dough and berries will remember it, if they live to be as old as "Methuscler." "Talk about eatin' crow," said Ben. "Crow ain't a marker 'longside o' that roll; Dick must a shortened that dough with injen rubber and b'iled owl."

Next morning the wind was an early riser and the lake was too rough to fish. We hung around camp till noon, but as the blow showed no sign of abating, Muller and I took our rifles and went back on the plains for a bear hunt; but it wasn't a good day for bear, and we came back to the camp after tramping down several hundred acres of huckleberries, and told the boys a half dozen barefaced lies about bruins that we expected to see, but didn't.

The nearest we came to seeing a bear was once when Muller called to me to come and look at some large tracks in the sandy road leading to Black River, which he said were tracks of the very varmint we were looking for, but on close investigation they proved to be the tracks of one of Merrill's old oxen.

This discovery moved us to make tracks straightway back to camp, where we were overwhelmed with congratulations on getting back alive, and next day the Assistant Postmaster was laid up with an attack of acute camp diarrhœa, from an overdose of huckleberry, which kept him in camp all day.

The wind was blowing a stiff breeze next morning, but the rest of us managed to fish all day with good results, as far as Merrill's bar'l was concerned; a few bass were taken, none, however, by the rod of ye writer.

We were now growing a little tired of bass fishing, and that evening around the camp-fire a five or six-days' trip to the Ocqueoc for grayling was planned, but when Stewart came to camp next day to arrange for the trip, he told us there were no grayling in the stream, but plenty of trout might be found if we struck it high enough up—some fifteen or twenty miles from our camp.

We began to consider whether the sport in prospect would pay for the trouble of reaching the stream by a rough, tedious road, and the trip was finally abandoned as one likely to prove unprofitable in the end. Then symptoms of I've-got-enough-of-this began to float around through the air, and next day Knots proposed that we break camp the following Tuesday instead of going to the Ocqueoc.

He gave as a reason for this move that the time of four of the party was nearly out, and as Dan, Ben, the Deacon and I wanted to go over to the Intermediate Chain before returning home, it would hardly pay them to go with us for two or three days at the old camp. I did not want to break camp, for I liked Black Lake, and I wanted to make a trip to the Ocqueoc; but a vote settled it, and the majority—in fact 7 to 1—carried it to break up. (Mem. for November—There's nothing like being crushed by a majority, and submitting to it with grace and serenity.)

The reasons given by Knots for wanting to break camp were good in their way, but we had a faint notion that the groundwork of his structure rested on the fact that the "festivities" had about run out, and he wanted to get back to a base of supplies. But it was settled that we were to leave our pleasant camp, and next morning, Muller and I started in a boat for Cross's, down the Big Black, to get him to help with his team to haul us and our traps to town. We fished to the foot of the lake, not forgetting to spend a half hour or so around Pickerel Reef after the big masky, but he was not at home, and it was perhaps well for him that he was not, for we were fully determined to turn him inside out should he swallow the pickerel and big hook trailing at the stern of our boat. The ride down the river was a very pleasant one, and we enjoyed ourselves like two schoolboys out for a frolic, pulling here and there sweet-smelling water lilies that grew in patches in the water along shore, or stop-

ping occasionally to pluck a wild rose that hung over the stream, till we had the boat full of rare perfume.

Mr. Cross was not at home, but his wife, a sweet-faced, middle-aged matron, told us he would be engaged with his team the next Tuesday, and could not promise to help us for a day or two after. Another backset.

The Cross farm is a little cleared patch right on the low bank of the river, and is as lonely a looking place as one can imagine, but Mrs. Cross said she had become accustomed to the solitude and did not mind it so much now as when they first settled there. The children and the deer that visited their little wheat field in front of the door at this season kept her company, and she was contented with her lot. She said that had we come a few minutes sooner we might have seen a deer swim the river just above the house, but we were glad we did not see it, for flesh is weak and Muller had his rifle along. We said good day to the matron and took our way back up the lovely stream and to camp, satisfied that contentment abideth not alone in the great cities. If this ever meets the eye of the gentle-mannered and kindly lady, she will recognize the writer as the smaller one of the two that drank up all her buttermilk, and asked if there were not a few drops left; and she may call to mind now we laughed when she told us she preferred a pickerel for the table to "a nasty thick-skinned bass." And she may be assured too, that brother Muller and the writer join in wishing her many years of quiet happiness in her little cabin on the bank of the Big Black, and we trust the "Crosses" she may be called on to carry through life may not be more of a burden than the little flaxen-headed ones we saw playing around the door. Blessed are they that dwell in peace and content in that virgin woods, for they are the "salt o' this livin' earth." (Ben.)

Back in camp again long before sundown, we had pleasant visitors that evening in the person of Judge S. N. Maxwell, an enthusiastic member of the Cincinnati Canoe Club, and three companions, who were camped for a day or two at the sandbank. They had come up the river in their canoes to the foot of the rapids, had then hauled around and were here for a couple of days' sport and sailing on Black Lake, and had come over to our camp this shank of the afternoon for a brotherly call. The Scribe acted as master of ceremonies, and notwithstanding the low state of the festivities they were not allowed to take their way across the lake with dust in their throats. They left for Cheboygan next day, in order to run the rapids in their canoes before a promised run of logs would most likely form a jam and force them to make another portage around.

Just below the roofless loggers' cabin, a stone's throw from our camp, two wandering brethren had pitched their tent a day or two before, but they, too, left us next day, in order to be ahead of the logs in going down the rapids. They had been wandering around over the North Woods for a couple of weeks, wherever they could find water to float their boat, and hearing of the attractions and beauties of Black Lake they had come up here to enjoy a few days' sport and comfort. If I remember, they were a Mr. Arthur Clement, from Joliet, Ill., and a younger companion from somewhere in New York State. They were pleasant, companionable gentlemen, and we were sorry when their boat disappeared from sight around the point below.

That night neighbor Merrill walked two miles in the darkness to get another neighbor, Mr. Bush, to help Stewart get us to town, and the arrangement was made for us to take our outfit in the boats to the landing below the sandbank where we first struck the lake, where they would meet us with the wagons.

A MORNING'S FISHING.

THERE is a necessity in our very natures for relaxation, not so much for rest as for change. It may and generally does require more exertion and actual expenditure of physical force to hunt or fish for a day than is required for several days devoted to our usual vocations, yet for all of that the day's hunting or fishing is restful, and one works better for the indulgence. A few weeks ago "our print shop" finished the big job of the season, one that had kept the full force hard at it to complete within contract time, and fully believing in this law of relaxation it was decreed that the day after the completion of the given work should be a holiday for all, from the editor to the urchin with the profane cognomen who is supposed to preside over the inky domains.

The foreman of the compositors and myself decided to go fishing, and fishing we went early in the morning. It was arranged to start at 4 o'clock; our team was engaged, tackle and boots placed in readiness the evening before, and a basket of provisions packed under my supervision. Our objective point was some seven or eight miles away where a broken and abandoned dam obstructed the Iowa River, affording superior fishing.

We were off on time, and before sunrise were at our fishing grounds. The foreman was detailed to make coffee and ge breakf ast while compositor and myself took the minnow seine, donned our rubber boots and finding a sandy shallow bay proceeded to supply a goodly quantity of bait, which we were not long in doing, but not before a pot of splendid coffee was waiting for us, and hurriedly disposing of our breakfast, for which we had an abundant appetite, we betook ourselves to the anticipated sport. The Iowa River this near its source is not a large stream, being only six or eight rods wide, and quite shallow. No such strings of fish are to be taken from its waters as can be from the lakes or the rivers in newer parts of the country, yet it abounds with black bass, pike, pickerel, catfish, and many other varieties of that joy of the small boy, the sucker tribe. It is a clear, limpid stream, running over a rocky and sandy bed, and among some of the finest scenery in all prairiedom. Many a fishing excursion has the writer taken along its pleasant banks, seldom returning without a very fair string of fish.

On this occassion we industriously fished the eddies and pools about the stranded logs and scattered rocks below the old dam and were fairly rewarded therefor. The compositor was the first to land his fish, but soon the rest of us had done as well. We quit in time to get home by noon, and upon counting them found we had seventeen fine bass.

It was a pleasant trip for us all, and although we worked harder than we should have done had no holiday been taken, we felt better for it and the next day took up our work with more energy, and I believe there was no loss to the business because of the diversion.

By the way, there is one stock subject or theme, upon which much is said by certain of your correspondents, which I do not quite understand, and I know that many who keenly enjoy angling can join me in this, and that is the element of "gaminess." Is not this a kind of fashion or "Oscar Wildeism?" One will write of taking a little bass or pickerel weighing a pound or two, and tell how it fought, and how it made his pulses beat. Some of them even time the "struggle," giving the number of minutes, as one did lately, saying "time of fight, 20 minutes." Now I do not exactly understand this. I have caught such fish and much larger ones in both lakes and running water, and I have tried to get up such combats and failed. I have let a five or pound six pickerel have the line to run with, and they will run until it fairly hisses through the water, but I know that fish is fast and unless the line is thrown slack he cannot get off the hook, and I also know that I can stop his race at any time I see fit, and take him out of the water, and that almost without his pickerelship making a struggle. I can see no rare sport in letting a fish swim about in the water, thinking it can get away, when I know it cannot, and that I can take it from the water at any time I please after the hook is struck, and such sport seems to savor more of cruelty than is necessary. I think any fair-minded man who will take the trouble to catch the "critter" will agree with me that a sucker or red horse will, pound for pound, "fight" harder, and give its captor more trouble in getting it out of the water if he will attempt to take it as soon as it is hooked, than will a pike, pickerel, or black bass. This may be rank heresy, but it is my experience. W. S. P.

ELDORA, Ia., July 12, 1884.

"SALT-WATER FISHING."

Editor Forest and Stream:

Your article on sea-fishing and the replies lately published were read by me with much interest. I am as fond as any one of trout fishing, but I do not consider that the only kind, nor do I sympathize with the pharisaical spirit which holds that among sportsmen, he who wades the stream and throws the fly has the sole monopoly of virtue, poetry, and peace of conscience. The truth is the two kinds of fishing are distinct. Each suits its own mood; each satisfies some bodily or spiritual want which the other cannot meet; each demands, and so fosters in its votary, certain valuable but different qualities, moral and physical.

Salt-water fishing, however, undoubtedly occupies but a small space in sporting papers. It is probable that if more interest were shown and more written about it, its methods might improve; and, conversely, such improvement would create interest. Last summer I tried for the first time trolling with rod and reel for bluefish. The result seemed to me so satisfactory and such an improvement over the hand line, that I send you the following account, in the hope of interesting, and perhaps calling out suggestions from some of your readers.

The ground we visited was Nantucket. Off the extreme point of this island are bars, over which, at low tide, there is a considerable surf. In this rough water bluefish were nearly always to be found. For the most favorable conditions the tide must be on and the wind off. This enables you to sail along the edge of the rough water (to go through it would drive out the fish), the tide carrying the trolling lines into it. For tackle, we used the ordinary bass rod of about sixteen ounces, though I have no doubt a lighter weight would do, and about one hundred yards of twisted linen line, rather light. We found this length sufficient, though some might feel safer with more. The spoons were rather small size, made by Gregory, which we refitted, using but one set of larger hooks at the tail, rigged with copper wire instead of gimp. This gimp or fiddle string, by the way, seems a special favorite with tackle makers, the theory being that a fish cannot bite it off. This is probably true, as they always break it. In trolling we were more successful when at moderate speed. In high winds we hooked fish nearly always when going about. A strike when under way makes lively work for a few minutes. As your reel starts the skipper throws the boat into the wind, and your companion gets in his own line to give you room, meanwhile you must handle your rod, control the line without losing a finger, keep clear of the main sheet, see that you are not knocked over by the boom, and remember to smile and pretend to like it when the sea shoots over and soaks you, which it is sure to do. As the boat loses way your fish is just getting under way; the reel probably stops and the line slackens until you think he has probably left you. After a moment of dreadful doubt and rapid reeling you find he is still fast and may then address yourself to bringing him to gaff with what skill you are master of. Not being in the season for the largest fish, the heaviest we caught weighed ten pounds.

In closing, I may state that the catch will not be large, probably not above one-fourth of what would be taken with hand lines under the same conditions. There are several reasons for this. Where four hand lines can be used, not more than two rods can troll with any comfort; otherwise tangles and maledictions are inevitable. Again, the time required to land a fish is much greater, during which, also, the other rod is out of the fight, and can enjoy himself only as an altruist. I suppose, too, there are not many spots where, as here, the fish keep in a comparatively small space. At sea, or where a school must be followed up, the rod would be still more unproductive. Yet, where it can be used, the capture of a large fish will inspire the true angler with a feeling of self-respect and deep satisfaction which mere numbers cannot yield. C. E. P.

PHILADELPHIA, July 19.

[The second paragraph in this article is exactly the idea we wished to convey, *i. e.*, if more were written about salt-water fishing the interest in it would increase. The tone of our much-criticised article was that sea fishing does not seem to inspire its votaries to write about it; they are content to catch fish and to trust to makers of tackle to improve their tools. There is no experimenter like Mr. Wells among them.]

Editor Forest and Stream:

Your editorial of July 10, on "Salt-water Fishing," has stirred up a brace of correspondents to write in defense of the charms of their sport. They seem to me to bear witness to the truth of your remarks rather than to controvert them. Mr. C. T. Duncklee mentions Scott and Roosevelt as authors who have been poetically inspired by sea fishing, but a perusal of Scott will show that it is only in salmon and trout angling that he becomes enthusiastic on the subject, and that when he treats of salt-water fishing he merely gives directions for the capture of the fish. The same may be said of Roosevelt, whose sense of humor makes him always readable no matter what may be the theme. His other author, Ward, I do not know.

Your next critic, "Knebel," proves the truth of your statements, for he measures his sport entirely by the pounds of fish caught. He says:

"I will give you an account of my sport and luck combined that I have had lately, hoping others will do the same. Friday evening, June 20, a party consisting of myself and two friends took the last train on the New York, Woodhaven & Rockaway Railroad to Broad Channel, Jamaica Bay (you can start from Hunter's Point, Bushwick or Flatbush avenues as well). We stopped over night; room and bed for $2.50. Got up at 3 A. M., took a boat and paid fifty cents for use of same. Pint of shrimp cost forty cents. Started at 3:30 A. M., tide running in, and went east to the club house, or a little above it, between the club house and a place they call the "Pot," known to most of our baymen, and dropped anchor, rigged our rods and commenced to fish about 4:30 A. M. I was the first to get the line over, and soon hooked a two-pound weakfish, and a hungry fellow he was, for he had my bottom hook away down in his belly. We fished until 6:30 A. M. The tide changing, fish stopped biting, and to be sure we stopped fishing, put up our tackle, and took a bite ourselves, which we had fairly earned after one hour and three-quarters of exciting sport, for fish at that time in the morning bite fearful and almost take the rod and reel out of your hands. We counted our fish, in sizes running from one and a quarter to three and a quarter pounds, and 139 was the number, all weakfish. Now if this don't come up to your fresh-water fishing, I mean when you fish for about five or six hours and catch thirty or forty fine trout from five to six inches in length, or about six to the pound, and instead of sailing to your hotel in a boat you must walk from three to five miles and carry a heavy load of trout, then I am greatly mistaken. We congratulated each other, divided our fish, and by 8 o'clock we fastened our boat to the float and took the first train for home."

This probably was sport, but it contains nothing instructive except the locality, expense, and the pot. Nothing of tackle, no observations on the surroundings except a reference to the bird called the quack, and is wholly destitute of the inspiration of the angler. It reminds one of the idea of fishing expressed by John Smith, of Pocahontas fame, who wrote of the fishing in Virginia as follows: "And is it not pretty sport to hale up two pence, six pence and twelve pence as fast as you can hale and reare a line?"

A trout fisher often has an enjoyable day on the streams when his catch is not worth mentioning, and he finds pleasure outside of the weight of his creel. It would appear that salt-water anglers, as a rule, have little besides their catch to rejoice in, because, as you have hinted, their surroundings are not of an inspiring kind. I troll for bluefish and also take them with the rod, but the prospect of a day's sport with them does not produce the pleasures of anticipation that an appointment to fish a mountain stream does. Nor does the retrospect of a day spent weakfishing linger in the memory as does the same time in the woods. I think it is the woods themselves that cause this difference. FONTINALIS.

SIZE AND WEIGHT OF BLACK BASS.

IT is a most difficult thing to get a rule that will give an approximation of the weight of any fish, taking its length as a base. This is especially true of the black bass, which varies so much in depth and thicknsss.

The largest bass which I ever weighed and measured was one from Rice Lake, Canada, of 6 pounds. It was 20 inches from nose to end of the caudal fin; 14 inches in girth and 3¼ thick. Another fish of the same length and thickness, but only 13 inches in girth, weighed 5¾ pounds. A bass taken from Lake Champlain, 16½ inches, the other dimensions not recorded, weighed 3¾ pounds. Small fish weigh less in proportion to their length than larger ones. From some crude memoranda I condense the following table of relative lengths and weights of black bass, the lengths being from nose to end of tail fin:

Length.	Weight.
8 inches	½ pound.
9 "	11 ounces.
9½ "	15 ounces.
10 "	1 pound 2 ounces.
10½ "	1 pound 6 ounces.
11 "	1 pound 8 ounces.
11½ "	1 pound 12 ounces.
12 "	2 pounds.
13 "	2 pounds 4 ounces.
14 "	2 pounds 10 ounces.
14½ "	3 pounds 2 ounces.
15 "	3 pounds 8 ounces.

There is always a difference in females at the spawning season, and this table is not to be considered as infallible.

POKE-O-MOONSHINE.

FISH-EATING PLANTS.

PROF. Baird has just received from Prof. H. N. Moseley, of Oxford University, England, a specimen of an aquatic plant holding in its fond embrace a considerable number of young fish which it has caught and killed.

This plant is the Great Bladderwort, known to botanists as *Utricularia vulgaris*, L. The species is widely distributed over England, and has been introduced into our waters where it is often found in abundance in fresh-water ponds and ditches and in the shallow coves along some of our river banks. It is a large plant, with stems often attaining a length of two or three feet. It has no roots, but floats free in the water, its root-like branches being covered with pinnatified capillary leaves, each bearing one or more small transparent hollow bladders, with openings at one end, which serve as traps to catch newly-hatched fishes, minute crustacea, worms, and infusoria. It has no digestive apparatus, but is thought to derive nutriment by absorption, from the decomposing animals.

The bladderwort has long been known to catch the lower forms of animal life, but it was only recently that its fish-catching propensities were discovered. Mr. G. E. Simms, of Oxford, was the first to call public attention to the fact, on finding that a specimen which had been placed in his aquarium for supplying oxygen to the water was actually catching and killing large numbers of newly-hatched perch and roach which had hatched from a mass of eggs lying at the bottom. The little fish were usually caught by the head, but some were caught by the tail, while others were doubly trapped, the head being held fast by one trap and the tail grasped by another, the body of the fish forming a connecting bar between the two.

To learn something of its destructive powers, Mr. Simms placed 150 perch fry in a glass vessel containing specimens of *Utricularia*, and at the end of two days all but one or two had been trapped.

Prof. Baird thinks the discovery has an important bearing on the future abundance of several of our important food-fishes.

Twelve to fifteen species of the genus, some of which have a wide geographical range, are found within the limits of the United States, and millions of fry must be annually caught in the little bladder traps.

The *Utricularia* occurs in abundance in carp ponds throughout the country, including the U. S. Fish Commission ponds in Washington, and in some localities has been in-

troduced at considerable trouble and expense, as it was thought to be excellent food for the carp. Prof. Baird will cause every vestige of it to be immediately removed from the Government ponds, and will warn carp-culturists everywhere to examine their ponds and destroy any that may be found there.

The specimen received from England has been placed on exhibition in the Fishery Section of the National Museum, where it can be seen by any who are interested in the subject. R. EDWARD EARLL.

NATIONAL MUSEUM, July 10.

THE SCHOODICS.

AT the Schoodics some good fishing for landlocked salmon has been enjoyed, though there comes the same complaint of unfavorable weather. The mystery is as great as ever why these lakes afford no large fish, unless the food theory is correct. There is no appreciable difference between the Grand Lake salmon and those from the Sebago waters, except in point of size, and yet fish have been taken from the latter waters weighing twenty-five pounds, while the salmon from the Schoodics (Grand Lake) seldom go above two pounds, and four-pound fish are very rare. The explanation of both Messrs. Stillwell and Stanley, Fish Commissioners of Maine, is that the food in the one lake is abundant and of the right sort, while in the other waters it is a quantity unknown or but little understood. This theory would seem to be confirmed, from the fact that large salmon are already being found in the Androscoggin lakes, although they have been but a few years stocked with these fish. A salmon was hooked the other day in Mooselucmaguntic Lake, which was large enough to break away from a rigging which would have been ample to have secured an eight-pound "red spot." A five-pound salmon has also lately been taken from Umbagog Lake, of the same chain. Besides, Mr. Stanley mentions seeing one on the spawning beds in Rangeley Stream (Androscoggin waters) when taking brook trout for propagation, in the fall of 1882, which must have weighed ten pounds. The abundance of fresh-water smelts in the Sebago and the innumerable chub and dace (*Cyprinidæ*) in the Androscoggin waters are doubtless the cause of the large size of the "black spots" (landlocked salmon) as compared with the Schoodic fish. SPECIAL.

GREENWOOD POND.—Monson, Me., July 16.—The numerous visitors to Lake Onaway (Ship Pond), in Elliottsville township, will be pleased to learn that E. H. Gerrish, the well-known guide, will open his camps at that beautiful resort about Aug. 1, and will remain there about two months. I spent four days a short time ago, camping and fishing at Greenwood Pond, one mile from Onaway, which is the water crossed by the traveler in his route to the latter place. Lake and spotted trout from two pounds to four pounds in weight were quite plenty. Many lake trout are taken in this pond which weigh six, eight and ten, and sometimes twelve pounds. The scenery is good, and although there are no land-locked salmon here as in Onaway, I believe the other fish are much more abundant, and I advise those who intend to visit Onaway the present season to tarry for a while at Greenwood, where they will undoubtedly find satisfactory sport. The spotted trout will rise to a fly, and the angler who retains the habit of the fathers by fishing with "live bait" and worms cannot fail of having a "good time." The laws against poaching and the special laws against winter fishing on several ponds are well enforced, and their good results are already apparent to all observers.—J. F. S.

CROTON LAKE.—New York City, July 19.—*Editor Forest and Stream:* Croton Lake, in Westchester county, is a splendid place for the New York business man to spend a few days fishing for bass. Every summer I make it a point to spend several days on this lake. The lake is filled with bass, white and yellow perch; the largest bass I ever saw taken there was last August; it weighed exactly 5 pounds 5 ounces, there are a great many taken weighing over 3 pounds, but the usual size is three-quarters to a pound. In one day's fishing my companion and myself took 279 bass, weighing 147 pounds. I have also, with two companions, taken a bushel basket full of perch in one day's fishing. The bass do not take a fly well and will not often bite at the spoon. I have always found the grasshopper and especially the cricket the most effective in killing. I write that you may let your readers know that they can have some fair sport fishing within an hour's ride by rail from New York city. Take the New York City & Northern Railroad and get out at South Croton. As for accommadations, they are fair, as there is a good hotel on the lake.—E. L. L.

NO MASCALONGE IN SARATOGA LAKE.—Your correspondent from Saratoga asks if any mascalonge have ever been captured in Saratoga Lake. I would say, having shot and fished in and around that lake for over 15 years, and being peronally acquainted with all the fishermen of local celebrity, such as old Pete Francis, Jim Black, the Averys, Rileys, old Uncle Bill Valentine, Harvey Cook, Dutch Henry, that was drowned in its waters, and a host of others, and spent many days fishing in their company, I never saw in all that time a true mascalonge (*Esox nobilior*) taken from its waters. I have seen the great northern pickerel (*Esox lucius*) shot in the spring weighing as high as thirty-three pounds. Have seen them caught by fair angling on hook and line to weigh from seven pounds to fifteen pounds. In conclusion would say I think if any mascalonge had been taken, as I know the fish well, I should have known it, but the vulgar error or localism there is to call all those big northern pickerel mascalonge.—WASHINGTON A. COSTER.

NEW BRUNSWICK SALMON.—Several Boston sportsmen have within a year or more become interested in leases of salmon waters in New Brunswick, on the Restigouche and other favored localities. Some of them have just returned from a fishing trip, and they are much pleased with the locality and the waters, but they report the fishing as having been very poor up to within a week or more, when some good sport was had, but no very large fish. The weather has been unfavorable and the salmon have failed to rise till of late. Good weather promises better things of the waters where the lamented Dawson so charmingly depicts the struggles of Chester A. Arthur with his salmon rod landing twenty and even thirty-pound fish. The rod was not burdensome, but the face of the President—that was to be—was disfigured by a malignant carbuncle, the burnings of which none but a true sportsman with a lion heart could have "endured without a groan," and—kept on fishing.—SPECIAL.

BROTHER STITES.—A man who calls himself "Brother Page Stites," at Schellinger's Landing, near Cape May, has issued a card that reads thus:

"If you have been wishing
For to go a fishing
Take the cars for Sewell's Point,
Where you will find in waiting
Hook and lines and baiting,
And ask for Brother Page Stites
Who will take you where you
Can yank 'em."

SHEEPSHEAD ON LONG ISLAND.—West Hampton, L. I. L., July 15.—Four sheepshead were caught in Shinnecock inlet, with a seine, about four weeks ago. In the same haul were caught nineteen striped bass, and 125 bluefish. Bay snipe have not made their appearance here yet to any extent. —BAY SNIPE.

ONE THOUSAND BASS.—Philadelphia, July 21.—The Presbyterian Fishing Club caught 1,000 sea bass last Wednesday on the Fishing Banks off Cape May, N. J. Dr. Moffatt, one of the leading spirits of the organization, says it was the best fishing he ever had.—HOMO.

Fishculture.

NATURAL CAUSES INFLUENCING THE MOVEMENTS OF FISH IN RIVERS.

[A paper read before the American Fishcultural Association.]

BY MARSHALL M'DONALD.

IF we will consider for a moment the varieties of conditions that concur in and modify agricultural production we will be better prepared to appreciate the multiple influences that enter into the question of maintaining and increasing the production of our fisheries.

The farmer of to-day has as a guide in the conduct of the practical operations of agriculture, the collective experience of all who have preceded him. The observations of many generations condensed in proverb and apothegm, and handed down from father to son, gives to the unlettered peasant the interpretation of natural signs, the forecast of seasons and the empirical rules by which he tills and sows and garners the unequal harvests, which the unequal seasons bring.

Less than a century ago, chemistry allying herself with agriculture, laid the foundation of rational methods and since then chemists and botanists, physicists and physiologists, have been busy with their investigations, each contributing in some essential particular to the solution of the important problem of increasing and maintaining the fertility of the soil.

In those countries, like England for example, where the results of scientific investigations have been formulated into rules of practice, the average production of cereals per acre, now exceeds two-fold, and often three-fold, the average production per acre two hundred years ago.

This result has been accomplished in the face of an intensive system of cropping which long ago would have rendered the fertile fields of England unproductive moorlands, or barren wastes, but for the lessons taught by chemists in its applications to agriculture, and appropriated and applied in practice.

Just in proportion as man has learned to dominate the conditions which influence agricultural production, he has been enabled to raise the average yield per acre; but, unequalities of production from year to year, resulting from the influence of natural conditions beyond his control, still persist.

Confronted with those adverse influences, all the toil of the husbandman, all his stores of experience, all the resources of science, are powerless to avert scanty harvests, or absolute failure of crops.

What is true of agriculture is equally true of aquiculture, and more particularly of pisciculture in rivers.

The restoration and maintenance of our river fisheries depends upon our ability to promote conditions favorable to production and exclude those which are adverse.

First—The seed of the future harvest must be sown. Where, in consequence of the interference of man by excessive fishing, or by the destruction of spawning grounds, natural agencies are inadequate to produce the young fish in numbers sufficient to repair the inroads made by capture or by natural casualties, we must supply the deficiency by artificial propagation.

But the breeding and planting of shad or herring by the million or tens of millions, in an area like the Potomac or the James or the Susquehannah rivers, cannot carry the annual product of the fisheries in these rivers beyond a certain maximum limit, which is defined first, by the extent of the breeding and feeding area acceptable to the fish, and second by the abundance of food for the fry which is to be found in this area.

Second—The extension of the breeding and feeding areas to their natural limits, by providing practicable passes for our anadromous fishes over the artificial or natural obstructions which have contracted these areas, is a second essential condition to be fulifilled, and is one of equal or even greater importance than the artificial propagation and planting of the fry, because it is possible by this means to secure the permanent restoration of our river fisheries under natural conditions.

A third condition, exercising an important influence upon the permanence of our river fisheries, has only recently attracted attention and offers an inviting and important field of investigation.

We may plant the young of shad or herring in our rivers in countless millions, we may extend the breeding and feeding areas to their natural limits, but if the agency of man has so modified the natural conditions that the proper food of the young fish during their river life is no longer found, or occurs in much less than the necessary abundance, then the effort to increase supply by artificial propagation and planting will prove a dismal failure.

How far the pollution of our rivers by sewerage, gas tar, refuse chemical products, etc., has changed the original conditions of our rivers, is a matter inviting exhaustive and critical investigation.

Fourth—A rational code of laws, relating to the fisheries, may exert an important conservative influence, by imposing such restrictions upon the time and methods of capture, as will permit some considerable portion of the shad and herring which enter our rivers to reach their spawning grounds and deposit their eggs without molestation.

By the observance and enforcement of the conditions above indicated, we may reasonably expect to greatly increase the average annual production of our river fisheries, but we can never hope to eliminate great unequalities in the product of the fisheries in different seasons.

Natural conditions, apparently beyond the control of man, will determine disastrous and discouraging failures one season and the next a teeming abundance in the same river.

The influence of water temperatures, in determining the presence or absence of certain species of fish in certain areas of water, has been observed both in regard to the ocean and the river species which are the object of commercial fisheries. Observation of water temperature and its relations to the migrations of fish have not been continued long enough to justify us in formulating conclusions, but the drift of investigation and observations goes to show that there is for each pecies a normal temperature in which it prefers to be, and that its migrations are determined by the shifting of these areas of congenial temperature under the influence of the seasons.

Observations, now continued for several years, have led to the conclusion that, in the case of the shad, the normal temperature, toward which it is ever moving, is about 60 degrees Fahr. The data upon which this conclusion is based are as follows:

First—The shad make their appearance in the St. Johns River, Florida, as soon as the temperature of the river falls to 60 degrees, or thereabouts, which takes place from the middle of November to the 1st of December. At this time the river is colder than the ocean plateau outside, and the movement or migration is from warmer to cooler areas in the direction of the normal temperature of 60 degrees.

Second—The shad which are spawned in the Potomac in April, May and June remain in the river all summer. Schools of them may be frequently seen in the river in front of Washington. They continue abundant until the latter part of October or 1st of November. When the temperature falls below 60 degrees, they begin to drop down the river in their migrations seaward. In this case they are moving from cooler to warmer waters and toward the normal temperature of 60 degrees.

Third—The beginning of the spring run of shad into the Potomac River is about coincident with the date when the river temperature rises above that of Chesapeake Bay. In this case, too, the shad are moving from cooler to warmer waters, and in the direction of the normal temperature of 60 degrees, for the temperature of both bay and river is at the beginning of the season always below 60 degrees.

It will be seen, therefore, that wherever we have been able to intercept the shad in its migrations and place it under observation, it is always moving in the direction of the normal temperature of 60 degrees.

Assuming it to be true as a general fact that the shad in their ordinary migrations are ever traveling on temperature paths which lead to the normal temperature of 60 degrees, it becomes possible to determine the law, the rate, and the limit of their movements in a certain area, by tracing the shifting of the areas of congenial temperature under the influence of the seasons.

The data for the discussion are furnished by the records of observations of water temperatures, made at the lighthouses by the direction of the Lighthouse Board, and at Washington by an employe of the U. S. Fish Commission.

The three stations selected for comparison of ocean, bay and river temperature are (1) Winter Quarter Shoals for the ocean plateau, (2) Wolf-trap Light for Chesapeake Bay, and (3) Washington, D. C., for the Potomac River.

The station at Winter Quarter Shoals is up the coast about forty miles north of Cape Charles, and is about eight miles from shore. It is close to the edge of that cold Arctic current which wedges itself down between the Gulf Stream and the shore, and, bringing with it the temperature of Arctic latitudes, builds a wall of minimum temperature beyond which the shad probably never pass in their migrations.

The only records of bay temperature available for the season of 1881 were the signal service observations in Norfolk Harbor. These records, which give the temperature of Elizabeth River rather than the bay, indicate more rapid fluctuations than is possible in the general temperature of the bay, and give a daily range of temperature several degrees higher than that of the bay.

This correction I have approximately applied in the discussion of the temperature observations of 1881, in order to bring them into harmony with the observations of bay temperature for 1882 and 1883, which were made by observers at Wolf-trap Light.

This locality is on the west shore of the bay, half way between the Rappahannock and York rivers, and being well off from the shore, little influenced by local variations, the temperatures taken here may therefore be taken to represent the general temperature of the bay waters for corresponding dates.

The result of the study of the data above indicated are graphically presented in three outline maps of the Chesapeake and Delaware basins, illustrating the movements of the areas of congenial temperatures under the influence of the seasons, and in the chart showing the relations between the temperatures of the Potomic River during the fishing seasons of 1881, 1882 and 1883, and the fluctuations in the shad fisheries of the river for the same period.

(The rest of Col. McDonald's remarks were oral and with reference to the maps and charts exhibited.)

The conclusions deducted by him from the discussion of the data presented were as follows:

The temperature records for 1881, '82 and '83 indicate that for the winter months the area of maximum temperature is not in the rivers or in the bay, but on that ocean plateau outside, extending from the capes of the Chesapeake to the Delaware breakwater. The presumption, therefore, is that the schools of shad belonging both to the Chesapeake and the Delaware, have their common winter quarters on this plateau. When under the influence of the advancing seasons the waters of the Chesapeake and the Delaware Bays become warmer than on this plateau, the migrations into continental waters begin. The proportion of the entire run that will be directed to the Delaware or the Chesapeake, will be determined at this time. If the northern end of the area warms up more rapidly than the southern, then an unusual proportion of the shad will be thrown into the Delaware. On the other hand, cold waters coming down the Delaware, may effect a contrary movement, and throw the schools of shad almost entirely into the Chesapeake; thus leading to a partial or total failure of the shad fisheries of the Delaware for the season.

When the schools of shad have entered the Chesapeake, their distribution to the rivers will be determined in the same way by temperature influences operating. If the season is backward, so as to keep down the temperature of the larger rivers which head back in the mountains, then the run of shad will be mainly into the shorter tributaries of the bay, which have their rise in the tide-water belt, and which, of course, are warmer at this season than the main rivers.

Again, warm rains at the beginning of the fishing season in our large rivers and the absence of snow in the mountains will determine the main movement of the shad into the larger rivers of the basin; and if, when the schools enter the estuaries of these rivers, they encounter a temperature considerably higher than that in the bay itself, the movement up the river will be tumultous; the schools of shad and herring all entering and ascending all at once, producing a glut in the fisheries such as we sometimes have recorded.

It follows, therefore, in the light of these facts, that we may have a successful fishing on the Delaware accompanied by a total or partial failure in the Chesapeake area, and *vice versa;* and considering the Chesapeake area alone, we may have a very successful fishery in the aggregate, yet accompanied by partial or total failure in particular streams under the influence of temperature conditions, as above indicated. Statistics of the shad fishery, if they are to furnish a measure of increase or decrease, must include the aggregate catch of the Chesapeake and Delaware River, and indeed of the rivers much further to the north. Statistics based upon a comparison of the catch in the same river in different seasons, are of no value as serving to give a measure of the results of artificial propagation.

A WATER SNAKE KILLED BY A CARP.—(From a letter to Prof. S. F. Baird, by Milton P. Peirce).—Philadelphia, Pa., May 14.—The following very singular incident has just been related to me by the owner of some carp ponds in Southern New Jersey, and it occurs to me to forward it. A gentleman was sitting upon the bank of the pond with a gun,

watching for snakes. Suddenly there was great commotion in the water near by, which he soon discovered was caused by a large carp. The water being quite clear and shallow he could see what appeared to be a large water snake hanging to the anal fin. The fish moved with great rapidity in various directions as if endeavoring to free itself from the snake. After a while its movements became spasmodic, for a time rapid and then slow. Finally the fish passed slowly near the water's edge and close to the gentleman, who discovered that instead of the snake having hold of the fin that it was itself clasped under the fin some three inches back of its head and was apparently nearly lifeless, though a short time before there was a lively writhing action of the tail. The gentleman now went to dinner but returned as soon as practicable to further observe if possible the strange aquatic episode. All was quiet, but he soon found a dead snake at the water's edge, with distinctly perceptible lacerations about three inches back of its head. Who will say that the carp is not a "game fish?" The serrated process or "strong ray," seems to have its uses besides that of tangling a net.

The Kennel.

FIXTURES.

BENCH SHOWS.

Sept. 1 to 6.—Bench Show of the Lancaster County Fair, Lancaster, Pa.

Sept. 9, 10 and 11.—Third Annual Bench Show of the Montreal Kennel Club. Chas. Lincoln, Superintendent. John F. Campbell, Secretary, P. O. Drawer 1,955, Montreal, Canada.

Sept. 16, 17 and 18.—Collie Bench Show and Field Trials of the Ontario Collie Club, Toronto, Ont. Entries close Aug. 23. Mr. H. J. Hill, Secretary, Toronto.

Sept. 16, 17, 18 and 19.—Bench Show of the Philadelphia Kennel Club. Chas. Lincoln, Superintendent. Mr. Benj. C. Satterthwaite, Secretary.

Oct. 8, 9, 10 and 11.—Third Annual Bench Show of the Danbury Agricultural Society, Danbury, Conn. E. S. Davis, Superintendent, Danbury, Conn.

Oct. 21, 22, 23 and 24.—First Annual Fall Bench Show of the Westminster Kennel Club, Madison Square Garden, New York. Mr. Chas. Lincoln, Superintendent.

FIELD TRIALS.

Dec. 8.—Sixth Annual Trials of the National American Kennel Club at Canton, Miss. D. Bryson, Secretary, Memphis, Tenn.

A. K. R.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (25 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription $1. Address "American Kennel Register," P. O. Box 2832, New York. Number of entries already printed **1407.** Volume I., bound in cloth, sent postpaid, $1.50.

POINTERS AT NEW YORK.

Editor Forest and Stream:

Mr. Wanmaker's reckless letter in your last number is not likely to benefit him or weaken my position. I can assure Mr. Wanmaker that I excuse the tone which pervades his communication, but in the future I would advise him to think (if he ever does think) before he sends such an illogical and untrustworthy production to a public paper. Thunder was not introduced into this discussion by me, he was resuscitated by Mr. Tracy. I even apologized for having to trespass on your space to reply. The discussion was of the relative merits of certain pointers, not of Thunder or lightning, neither of which, or both combined, can affect the issue. CHAS. H. MASON.

Editor Forest and Stream:

The pointer breeders who own descendants of old Lily, wait to hear from Mr. J. W. Munson. T. B. DORSEY.

ELLICOTT CITY, Md., July 21.

COLLIE SHOW AND FIELD TRIALS.

THE Ontario Collie Club will hold a bench show and field trials of collies at Toronto, Ontario, Sept. 16, 17 and 18, in connection with the industrial fair. We have no doubt that the affair will be successful. Following is the bench show premium list: Champion, rough-coated, dogs $10; bitches the same; open, dogs $15, $10 and $5; bitches the same; puppies $5. Champion, smooth and medium coated, dogs $10; bitches the same; open, same as rough-coated. Animals to compete in the champion classes must have won first at the Toronto, Ottawa, London, New York, Cincinnati, Philadelphia, Chicago or Cleveland shows. The field trials will take place between the hours of 3 and 4 o'clock each day. The dogs will be required to take their sheep between two posts and back to a pen, or such trial as the judges may decide on. The prizes offered are as follows: Dogs, $25, $15 and $8; bitches the same. We hope that all of our prominent breeders will send representatives from their kennels to compete in both events. Entries close Aug. 23. Blanks may be obtained by addressing Mr. H. J. Hill, secretary, Toronto, Ontario, or at office of FOREST AND STREAM.

THE LAVERACK SETTERS.

Editor Forest and Stream:

I am mystified by "Homo's" article on the Laverack setter in your last issue. I quote and comment on some of the more emphatic passages:

"It would seem that Mr. Laverack, jealous of the high standard he had attained in breeding his dogs and anxious that his setters should still hold the position they had gained under his management, overstepped the limit and continued his inbreeding to such an extent that where he improved their wonderful scenting power and more firmly stamped their natural tendency to find and point game, he multiplied that nervousness to which all inbred animals are prone, until shyness of the gun has become such a part of the nature of the breed that it is an exception to the rule when the timidity in this particular does not show itself." * * * "So marked has this peculiarity shown itself to me that I detect it most frequently (far too often) in the field trial or Llewellin breed of setters, or where there is a preponderance of Laverack blood in them, and they show the typical points of the older breed. While the Laverack setter is apparently courageous when allowed his own way in pursuit of game and self-willed in his method, he will bear no correction. It becomes then a most difficult task even with the cord to train him to obedience, or by taking advantage of his affections to guide him as he should go. In all the setters of this breed that I have owned or ever saw there seems to be a want of knowledge on their part that their powers should be coupled with those of their master in order to render themselves useful."

Further on in his article he says: "In the stud they are priceless, in the field useless," and winds up by saying, "We must use the Laverack setter to improve our native stock, and for this purpose they will be most useful."

From the foregoing, if "Homo" is correct in his premises, the Laverack is the embodiment of all that is worthless in a field dog, an unmitigated brute, stupid, nervous, game and gunshy, earning the whip at every turn, yet too cowardly to bear chastisement, a cowering, skulking wretch. And yet this dog is priceless in the stud, though useless in the field.

Like will beget like, this is a well established law in breeding and every stock breeder of experience admits the soundness of that other law in breeding, viz.: that inbred sires are prepotent in transmitting their moral and physical characteristics to their progeny, overwhelming, so to speak, the weaker individuality of the dam. Therefore the inbred Laverack sire is either a dangerous or useless factor in setter breeding. If the law of heredity is carried out his produce will resemble him in morale and like him be useless in the field; if on the other hand they take after the dam, and notwithstanding their Laverack sire they prove good field dogs, then he is shown to be a complete nonentity, subject to no known law, an incestuous abortion. RUSTICUS.

CRYSTAL PALACE BENCH SHOW.

[From our Regular Correspondent.]

UPON the grounds of the Crystal Palace the Kennel Club held their twenty-third exhibition of sporting and non-sporting dogs, on July 1, 2, 3 and 4. The total number of entries as per catalogue was 1,286, which, of course, included double entries, nearly 200 in number. The benching, as usual, was done by Spratt's Patent, and the tents were also supplied by the same firm. During the show the weather was warmer than any we have had previously this season. The attendance was only moderate, but, taken altogether, the show was a very good one and the quality good throughout.

BLOODHOUNDS.

There was a small collection of nine entries in the three bloodhound classes, the well-known Nestor winning first in champion, having no competitor. In the open dog class, first again went to Triumph, who was followed by Mr. Tinker's Duncan, who is well on his feet and legs and a good color, but lacks the grand head qualities of Triumph, the winner. Only three bitches were shown, Mr. Nichols winning first and second with Pattie and Phryne, both good ones.

MASTIFFS.

Champion Cardinal got only vhc. He was not looking as well as when he was at Warwick. First and the 40-guinea challenge prize went to Crown Prince, looking well. Rosalind, belonging to the same kennel, winning first in champion bitches. The open dog class was a good collection, Maximilian, late Hampton, who made his first appearance last November at Edinburgh, made his appearance here greatly improved on his old form, and won first and the 5-guinea prize for the best mastiff in the open classes, and also secured a 5-guinea cup for Mr. Woolmore as the breeder of the best mastiff under two years old. Moses, second prize, is much improved since Warwick. Rudolph, third, is good in body but his ears are not correctly carried and his eye is against him; in fact, we preferred the vhc. Bismark, and think he ought to have been further up in the prize list. Dictator, fourth, has good head, feet and legs. He will never be a large one and is very coarse in coat and in color, but is only ten months old at present, and of course may improve, he won first in puppies. There was a very strong class of bitches, the best seen for years. First went to Elaine. She is small but of good type, and well shown; she also won special for the best bitch in the show. Vixen, vhc., is larger in ear than the winner, and is not so good in color. She is also slacker behind the shoulder and not so well made up or furnished. Lady Ella, second, is a good bitch, larger and not exactly of the same type as the winner. Lorna Doone, the same type as the winner, but not in as good condition, won third, and was claimed at the catalogue price. Princess Ida, vhc., is leggy, light of bone, long of face, and narrow skull. There were only six entries in the two classes for brindles, and with the exception of the first prize bitch Lily II., we saw nothing fit to compete against the fawns. In mastiff puppies (dogs), first went to Dictator, fourth in the open dog class. Second to The Doctor, only a moderate specimen. In bitch puppies, Princess Rita, first, is small but of good type. Second went to Princess Ida, shown in the open class.

ST. BERNARDS.

The champion class had five entries, but the competition really lay between Bayard and Save, the former being better in muzzle and having dew claws, won, but as Save is so much his superior in every other point we would have had no hesitation in giving him first. In champion bitches, first went to Cloister, who was looking remarkably well and won quite easily. In the open class for dogs (rough-coated) Silver King, vhc., is very large, but a cripple behind. Leonard, in most perfect condition, won somewhat easy; he also won the challenge prize, beating Bayard, and the decision seemed to give general satisfaction. Gaylord, vhc., is a good type of dog, with good color and markings, but out of form, and we don't fancy his coat. Correze, fourth prize, has a good head and good color, but is small and short of bone. Plinlimmon, second prize, is a remarkably large dog of his age, which was one day too old for a puppy; he has greatly improved since we saw him at Warwick; he is still too long in face and large of ear, nevertheless he is so good in size, feet, legs, coat and color that we consider him a dog likely to be hard to beat should nothing happen to him. Valentine, third, was about the most typical dog in the class. He was not in full coat. In bitches (rough-coated) Briseis, the fourth prize, had bad ears and bad coat, and stands too high on her legs. Khiva, vhc., is a good stamp and well known. She shows age. Seiva, second, is a good bitch all through and deserved her position. Crevasse II., first and cup, never looked better. In smooth dogs Mr. Murchison won first and second with Sirius and Dignity, correctly placed. The former has improved since we last saw him, while the latter has altered in no way. In smooth bitches Her Majesty, well-known, won well. Bon Bon, second, is another good bitch of good color (brindle) and markings. In puppies, dogs, (rough) Beaulieu, first, is a good puppy with no dew claws. Leicester Lion, second, is a good young one, but is too long in face. In the corresponding class for bitch puppies, Thisbe, hc. in open class, won, closely pressed by the second prize winner. In the class for smooth-coated puppies, first went to Brennus, a very nice young dog and cheap of his price, £20. He was claimed by the owner of Leonard, his dam won second in smooth bitches.

NEWFOUNDLANDS.

Nelson I. won again in the champion class, he is well-known. Trafalgar had an easy win in the class other than black. In the open dog class Bruce II. was first and no doubt deserved the position, but we fancied the c., King Bruce, equally as much as any of the others.

GREAT DANES OR BOARHOUNDS

were one of the best if not the best class in the show. It is really surprising to note the improvement that this breed has undergone within this last few years. Mr. Onderwater, of Holland, exhibited several very good animals, among which were a pair of white ones. They were fairly good animals, but quite out-classed by the quality against them. Champion Sultan II. had the champion class to himself, but was afterward beaten by Cedric the Saxon for the challenge prize, and as grand a dog as Sultan II. is he was correctly beaten, if the unanimous voice of exhibitors goes for anything. Nero, the winner at Warwick, came second in the open dog class. Mr. Onderwater's Victor, a grand brindle with the best of feet and legs, lots of muscle and the best of movers, showing great quality for the amount of substance he possesses, came third. Bitches were equally as good as the dogs and any of the noticed ones are fit to show and win. The winners will require a lot of beating and we have no doubt but there will be some hundreds bred before they will have their colors lowered.

DEERHOUNDS.

Lord of the Isles won in the champion class. He seemed scarcely as full of go as we have seen him. Chieftain was absent on this occasion. Gunner, first in open dogs, has good bone. He stands a trifle low on leg. Sir Max, second, does not move so well. The well-known Minna won in bitches. She was looking well. Mr. Taunton, as usual, made a wonderful display in the foreign classes, all of which, with the exception of Sir John Franklin in the champion class, were entered not for competition.

GREYHOUNDS.

The dogs had only three entries, first and second going to the well-known Memnon and Whiskedale II. Bonny Lass, from the same kennel, looking well, won in bitches, followed by a good lemon and white bitch, which would be improved by a little more condition.

HARRIERS.

There was only one pair entered.

BEAGLES.

There were eight entries, two of them being absent. Sportsman II., unnoticed, is small, thick and cobby. Honesty II., pedigree unknown, vhc. and reserve, is a fair specimen. Myrtle, first, is good. She was closely pressed by Freeland Countess, the second prize.

POINTERS.

Graphic, looking well, won with no competition in the champion class. The bitch class had four entries, Beryl absent. Daphne was rather heavy in flesh. Belle of Bow, in good form, won. Young Dick, first in open class over 55 pounds, is a good dog, but rather coarse. Belhus Hector, equal second with Grandee, is not quite good in head, while Grandee shows great quality, but falls off in his loins. Devon III., second prize, is coarse and throaty. Earl of Croxteth should have been mentioned. Mr. Norrish won well in large-sized bitches with Revel III., second going to Nan, too long and fine in face with too light an eye. We think Peach, third, should have occupied that position. In dogs under 55 pounds Naso of Kipping won; he is rather light in eye; he was closely pressed by Donald III. Third, Sir Garnet, is rather light of bone in hocks. In bitches under 40 pounds Mr. Norrish was again to the front with Beau Ideal, the York winner. Zasme, second prize, is light in bone. Jetsam, third, is a fair good black bitch, with litter sister Flotsam unnoticed, but worth a card. There was nothing really first-class in puppies.

ENGLISH SETTERS.

Sting, reported upon at Warwick and York, had little difficulty in disposing of Sir Alister, who is decidedly coarse in head and too heavy in ears, a fault which is very noticeable in his stock. In open dogs Prince Fred, first, is a liver and white with fair head, but too long in body and slack behind shoulder. He is a bad mover and too short of coat on body. Sir Kent, second, is of better type. He is a trifle high on leg. Sir Colin, third, is rather coarse in head and heavy in ears. Lord Westmoreland, unnoticed, was shown too heavy in flesh. He is plain in head, otherwise we consider him and Glencairn, hc., the two best in the class. In the bitch class first went to Plimsey, the York winner, shown in the best of condition. Rose, second, is anything but a show bitch. In puppies we preferred the second prize winner to the first, and only for the low condition of the vhc. Blue Peter II. we think him about the best in the class.

BLACK AND TAN SETTERS

were well represented but the quality was only moderate; we can see no improvement in this variety.

IRISH SETTERS.

Garryowen, looking well, won in champion class, with nothing against him, Geraldine winning in the corresponding bitch class. In open dogs, first went to Tyrone, a good, strong dog, lacking the quality of the true red setter. The second and third prize dogs were nothing above the average. The bitches were better in quality. Frya, third, is of good type but short in coat. Ruby VII., vhc., was out of form, as also was Nellie III. First went to the well-known Lady Palmerston. She was in good condition. The winning puppy was a promising young one but quite too young to show.

COLLIES

were good classes and we never remember hearing so much satisfaction expressed by exhibitors; every person seemed to think the awards were correct and satisfactory. Charlemagne won quite easily in champions from Eclipse, Peggie II. winning in bitches with nothing against her. In the open dog class the black and white Sly Fox won. He is a good dog, but would be improved with more frill and a better texture of coat. Kintore, the York winner, sadly out of form since then, coming second, and another of the blueish gray color third; this dog is particularly good in face, frill, coat and ears, which are properly carried, but we don't like his quarters or carriage of tail. The Squire, vhc., is leggy and out of coat. Charlatan, fifth, is fine of bone. General McPherson, fourth, wants more coat and better texture. Collie bitches introduced us to Lady of the Lake, one of the best young ones we have ever seen. She was an easy winner and won the special for the best bitch in the open class and first prize in bitch puppies; second, Mistress Beatrix, the winner at York, was an easy second; third, Young Meg, is short of under coat and carries her tail rather high, otherwise she is a good collie. Lady Lorne, fourth prize, is black, tan and white, fine in coat, but small in face and a trifle coarse in shoulders; fifth prize, Plaidie, is a black and white, short of coat. The Lily, vhc., is light in bone and short of coat. In champion smooth, Sattie was in bad form and Lady had an easy win; Clyde won well in smooth dogs. Gazelle, who won second, has ears *à la* fox-terrier. Nullamore, second in dog puppies, is a good specimen, sable tan in color. General McPherson, third, was fourth in the open class. Kintore, first, was second in the open class. Bitch puppies, except the winner, were moderate. The collie derby was won by Lady of the Lake, second going to Kintore.

BASSET HOUNDS.

There were four classes with a total entry of thirteen, six of which were Mr. Krehl's and three Mr. Blain's. The winners were all good ones and well known.

DALMATIANS

had five entries; only two put in an appearance—Treasure and Nelson, both well known.

POMERANIANS.

First went to the black dog Scoff, well known, who was looking better than usual. Second went to the equally well-known white Charlie.

POODLES

were a really good class. Lyris, who won first in the open class, is a clinking good black, as also was Boy, the second prize winner. The well-known Fairy Queen, with her long, white cords, much longer than herself, won third. The class was a remarkably good one.

BULLDOGS.

In the champion large class, Taurus won; in champion class for dogs under 60 pounds and bitches under 50 pounds, Monarch and Britomartis were not to be denied. In the open class for large-size dogs and bitches, Big Ben won well. In dogs under 60 pounds, the York winner once more came to the front. He is own brother to Britomartis, and resembles her very much. In fact we consider him about the best in head of any bulldog we know. He has immense chop and good expression. Bessie, vhc., is too leggy. Castor, also vhc., is too bullet-headed. Cossack, second, has drop ears which are rather large, and we certainly think the third prize, Black Prince, ought to have been second, although he might be shorter in barrel. In bull bitches not exceeding 50 pounds Acme, first, is a very good one. Ariel, second, who is in whelp, is also a good one, brindle smut in color. Third, Scissors, is too light in bone. In small-sized dogs first went to Royal George; he has a brindle head and

white body; he is too leggy; we preferred Bacchus II., who won second, a white dog with marked ears. Sedan, third, is leggy and light of bone. In small bitches Jenny Howlett II., first, won well, with the second and third correctly placed. Ridotto, vhc., is a nice little bitch; she might be better shown; she is a trifle long in ear. There was nothing special in puppies.

IRISH WATER SPANIELS.

In dogs first went to Blair, winner at the last Dublin show. He was correctly placed, but was not in the best of trim. Mickey Free was second. Barney O'Toole is rather coarse in head and deficient in feather. In bitches Young Hilda and Lady were placed equal. It has always been a matter of opinion which of these should be first; we prefer Young Hilda.

CLUMBER SPANIELS.

The champion class had only one entry, the well-known Psycho, who shows age. He was claimed at his catalogue price, £15 15s., and now goes to Wales. In open dogs Boss III. won, owing to his condition. He is plain in head. Duke, vhc. reserve, is of better type but was badly shown. In bitches, Foxey Beauty and Rose III. were equal first and second, the former was looking well, the latter in bad condition.

LIVER OR SUSSEX SPANIELS.

Harvester, unnoticed, is a good spaniel, but with wrong type of head for a liver or Sussex. Guy, first, we consider the best of the class going at the present time. Bachelor III., who won third, is coarse and has bad eyes. Horatio, second, is leggy and short of coat. In bitches Aureola, second, is out at shoulders. The third prize, Petrel, has the same fault. Brida II., placed first, was much the best, and possessed good color and coat. Easten's Bee is not of Sussex type.

FIELD SPANIELS.

Solus and Squaw very properly divided the champion prize. In the open class for blacks. Newton Abbot Nigger is of good stamp and a good dog, with rather crooked legs. Easten's Bracken, third, is coarse in head and has bad eyes. Lord Bute, second, is also coarse in head and short of feather. Castle Raven, vhc. reserved, is leggy and short in head. In bitches Easten's Busy, second, a long, low and good specimen, is improving. Newton Abbot Bess, first, long and low, with a good coat and a fair head. Alva, Jet and Thyra we fancied as much as any in the class. Only for white on the former we consider her the best we know. In cocker dogs there were only two entries, and neither of them cockers. In bitches first went to Dolly Obo, a clinker. Lilac, vhc., ought to have been second. In cockers (dogs) other than liver and black, all were field spaniels, not cockers. In the corresponding bitch class Zuess, second, was short of feather. Fanciful, first, has a short, round head. She is good in coat and feather; black, white and tan in color.

FOX-TERRIERS.

In champion fox-terrier dogs, first went to Spice, who was looking well, Sutton Veda winning in champion bitches, with Diana second. In the open class for dogs, first went to a young dog, Result, with a heavily marked head. He was bred from a brother and sister, and a grand result it has been. We consider him the best we have seen since Buffet first came out. He also won the grand challenge cup, beating Spice and Sutton Veda, and the decision was pretty well indorsed. He also won a special 5-guinea and another 10-guinea cup, presented by the Fox-Terrier Club. Hognaston Rebel made a good second. Nothing extra turned up in bitches, the winner is too much of a toy and not enough terrier. Had she been placed in the list of the he.'s, the other awards would have done. The second prize, Nettle, is a good one, and the third, Poppy II., a puppy, is also a fairly good one. She is a trifle large in ear and fine in muzzle, otherwise a good terrier. She won first in bitch puppies. The Right Hon. Earl of Lonsdale won in wire-haired champions, with the well-known Briggs, and first and second in champion bitches, with Miss Miggs and Vora, and again in open dogs, with Lord Randolph. He is a good sort, but rather soft in coat for a wire-haired. We prefer Jack Frost, the second prize dog, who also won first in puppies, with the vhc. and reserve Ringleader second to him. Taken altogether the wire-haired terriers are improving, except in coat, and we think they are losing one of the most valuable and characteristic points of the breed.

BULL-TERRIERS.

Cairo once more came to the front in the champion class. In open dogs Count won somewhat easy. Murderer, second, is rather coarse in head, and Crown Prince, third, is shelly in body. In bitches, Maggie, first, is a good-bodied bitch; she might be longer in face. Maggie May, second, is long in face but too high on her legs. In the medium class the third prize, Dutchman, is light in body. Grand Duchess, first, is light all through; we preferred Nelson, second, who may be a little too strong in head. In the small class Quick was an ounce over weight in the ring. When weighed the night before he was one-half pound under, so some kind friend evidently fed him before the judging, otherwise he no doubt would have won. Pearly was also over weight. The winners were only moderate specimens.

AIREDALES.

First and second prizes were awarded to the two largest and coarsest dogs in the class. We consider the third prize, Fritz, worth all the others.

BEDLINGTONS.

Mr. Batty had things mostly all his own way. In champions, Dina beat Topsy, owing to the condition of the latter. In the open class, Sentinel, vhc., is too light in color for his age, 10 months. The well-known Tinner was here unnoticed, Randolph, vhc., is a light blue. He is undershot and has bad quarters. Hairdresser, second prize, is of good color and coat, and a good dog. First was won by the well-known Lord Stowell. Scotch Mist, third, is a good one and will improve. Vhc., Bishop, is good but coarse. In bitches, Lass, first, has a good head but is leggy. Daffodil, second, is a liver, a well-known good one. Salters, unnoticed, is as good as any, but was badly shown. Violet, vhc., was another good one shown badly. In dogs and bitches that never won a prize, first went to Scotch Mist, third in open class. Sentinel won in puppies, followed by Julius Cæsar, who is good in style and the best color.

IRISH TERRIERS.

In champion dogs first went to Playboy who had no competitor. In bitches Poppy was absent, and Sting looking well, won. In open dogs first went to the York winner, Gilford, who also won in the puppy class. In bitches we preferred Pretty Lass to the winner, who was claimed at the catalogue price, £10, so evidently the judge thought more of her than her owner. The puppies, except the winner, were a moderate lot.

BLACK AND TAN TERRIERS.

In the champion class first went to Wallace, who was too heavy in flesh, we preferred Burke, who was in better form; however, the judge thought different and said that Burke was too thin. Florence III., unnoticed in open class, we thought should have been second. Nellie, who won first, is plain in head and has no feet markings. Robin Hood, second, is rather too large. Welfare, hc., we would have put second and Robin Hood first, the remainder were a poor lot. In the class under 16 pounds, Streamlet, first, had an easy win. Harvester, second, is dished in face; Sissy, third, should have been second, and we would have put her first in puppies where she only got hc. Sir Wilfred, the second prize puppy, has a bad eye and is leggy. Harvester, first, was second in the open class, he should have been second here with, as we said before, Sissy II. first.

SKYE TERRIERS

were a good collection, Mr. Pratt, the judge, showing a grand team, entered not for competition. In the champion class for dogs there were three entries, and bitches had two, all bred by the judge, and good specimens. In the open class for dogs we preferred the second prize to the winner. The first prize bitch is a rare good one; she might be better in head.

HARD-HAIRED SCOTCH.

The hard-haired Scotch were a good collection and pretty well handled. We missed Capt. Mackey's dogs on this occasion.

DANDIE DINMONTS

were also a good collection, Astrologer winning well in champion dogs. There was only one entry in the bitch class, Jennie Deans, who no doubt frightened away the others eligible to compete. In open dogs Mr. Ball's Roderick, not in as good bloom as we have seen him, had to stand back before Tip, who was cheap at his price, £25. Lochinvar, whose name has been so much before the public since the last Hertford show, got vhc. and reserve, also special for best mustard colored dog or bitch. In open bitch class Hannah and Queen Mary were first and second. The latter was heavy in whelp or she might have been a step higher. There was nothing special behind them.

PUGS

came out in good force. Stingo Sniffles, well-known, beat Challenger in champions, Jenny winning in champion bitches, with nothing against her. In open dogs Bradford Ruby was first, and correctly so, being good in marking, good ears and tail, and cobby. His only drawback is light-colored toe nails, which is generally the case when distinctly marked every way else. The bitches were a good class, all the noticed ones being quite up to show form. Puppies were a rather large class. They are bad to judge as they alter so much.

MALTESE.

Lady Giffard, as usual, had the whole class to herself, and they were quite a show in themselves.

BLENHEIMS

made a good show; most of the winners were conspicuous for having no spot, otherwise they seemed good, with large skulls and good eyes.

KING CHARLES SPANIELS.

Mrs. Buggs had everything mostly her own way, Mr. Forder coming second with Jumbo II.; rather larger and darker in tan than Bend Or or Young Prince.

There was only one entry in Italian greyhounds.

TOY DOGS.

In rough toys, champion class, Mr. Tronghear had an easy win over Mr. Foster's pair. In smooth toys there was keener competition than we have seen for some time. However, Sibyl won well, being the best in face, a thing so difficult to get on a toy. Second and third were also fairly good. There was a good class of rough toys, a great many of which changed hands.

CHOW CHOW DOGS.

First went to Chow IV. and second to Chow III. We may remark all these chow chows seemed very much alike, in fact when they are well mixed up it is difficult to tell Chow I. from Chow II.

JAPANESE SPANIELS.

First went to Tokio. He appears to be crossed with King Charles blood, and we preferred any of the others to it, particulary the second prize Chang, which we thought was better in skull and eye, and being pure black and white and free from tan markings. Following is a list of the

AWARDS.

BLOODHOUNDS.—CHAMPION—M. Beaufoy's Nestor.—OPEN—*Dogs:* 1st, E. Nichols's Triumph; 2d, J. C. Tinker's Duncan. *Bitches:* 1st and 2d, E. Nichols's Patti and Phryne; 3d, W. Foster's Duchess of Ripple.

MASTIFFS.—CHAMPION—*Dogs:* 1st, Dr. Forbes-Winslow's Crown Prince; 2d, M. Beaufoy's Pontiff. *Bitches:* 1st, Dr. Forbes-Winslow's Rosalind.—OPEN—OTHER THAN BRINDLE—*Dogs:* 1st and cups 3 and 4, Dr. Forbes-Winslow's Maximilian; 2d, J. Evan's Moses; 3d, J. L. Piddocke's Rudolph; 4th, E. Nichols's Dictator. *Bitches:* 1st and cup 2, J. Evan's Elaine; 2d, H. Oldham's The Lady Ella; 3d, R. Cook's Lorna Doone.—BRINDLE.—*Dogs:* 1st, W. K. Taunton's Commodore; 2d, J. Hutchings's Gwalior. *Bitches:* 1st, Dr. F. J. Campbell's Lilly II.; 2d, W. K. Taunton's Cleopatra.—PUPPIES—*Dogs:* 1st, E. Nichols's Dictator; 2d, G. M. Allender's The Doctor. *Bitches:* 1st, M. Beaufoy's Princess Rita; 2d, E. Nichols's Princess Ida.

ST. BERNARDS.—CHAMPION—*Dogs:* 1st, J. C. Macdona's champion Bayard; 2d, J. F. Smith's champion Save. *Bitches:* 1st, W. G. Marshall's Cloister.—OPEN—ROUGH-COATED—*Dogs:* 1st, J. F. Smith's Leonard; 2d, Rev. A. Carter's Plinlimmon; 3d, S. W. Smith's Valentine; 4th, H. I. Betterton's Correze. *Bitches:* 1st, L. C. R. Norris-Elye's Crevasse II.; 2d, Farmer & Dixon's Seiva; 3d, L. C. R. Norris-Elye's La Mascotte; 4th, G. R. Krehl's Brisels.—SMOOTH-COATED—*Dogs:* 1st and 2d, J. H. Murchison's Sirius and Dignity. *Bitches:* 1st, Geo. Porter's Her Majesty; 2d, W. B. Megone's Bon Bon.—PUPPIES—ROUGH-COATED—*Dogs:* 1st, J. H. Rutherglen's Beaulieu; 2d, W. Potter's Leicester Lion; 3d, Lord Camoys's Cis. *Bitches:* 1st, Rev. A. Carter's Thisbe; 2d, S. W. Smith's Duchess of Leeds; 3d, Mrs. A. Mansfield's Lady Burghley.—SMOOTH—1st, W. B. Megone's Brennus; 2d, J. C. Macdona's Snowstorm II.

NEWFOUNDLANDS.—CHAMPION—BLACK—Cup and 1st and 2d, E. Nichols's champion Nelson I. and Lady Mayoress.—OPEN—*Dogs:* 1st, E. Bird's Bruce II.; 2d, H. R. Farquharson's Courtier; 3d, T. E. Mansfield's Leo V. *Bitches:* 1st, E. J. Bird's Isla; 2d, E. Nichols's Queen.—OTHER THAN BLACK—*Champion*—1st, H. R. Farquharson's Trafalgar. OPEN—*Dogs:* 1st, E. Nichols's Admiral Drake; 2d, A. Moore's Ajax. *Bitches:* 1st, J. & W. H. Charles's Bonnie Maid; 2d, J. H. Turner's Superba. *Puppies:* 1st and 2d, E. J. Bird's Isla and The Black Prince; 3d, H. R. Farquharson's Rescue.

GREAT DANES OR BOARHOUNDS.—CHAMPION—C. Petrzywalski's champion Sultan II.—OPEN—*Dogs:* 1st and challenge cup, R. L. Pemberton's Cedric the Saxon; 2d, E. G. Martin's Nero; 3d, F. A. Onderwater's Victor. *Bitches:* 1st and challenge cup, Drew & Bolton's Else II.; 2d, C. Petrzywalski's Mirza; 3d, F. A. Onderwater's Selma II. *Puppies:* 1st, G. R. Krehl's Siegfried; 2d and first special, C. Petrzywalski's Turco; 3d and second special, R. C. Bryan's Ida; third special, N. J. M. Hughes's Mirza II.

DEERHOUNDS.—CHAMPION—G. W. Hickman's Lord of the Isles. OPEN.—*Dogs:* 1st, H. P. Parkes's Gunner; 2d, W. J. M. Temple-Barrow's Sir Max; 3d, Mrs. R. Peck's Bevis III. *Bitches:* 1st, A. Maxwell and E. Cassel's Mina; 2d, W. Gordan's Beatrice; 3d, G. W. Hickman's Barra.

GREYHOUNDS.—*Dogs:* 1st and 2d, H. P. & P. J. Charles's champion Memnon and Whiskedale II.; 3d, J. L. Yates's Chimney Sweep. *Bitches:* 1st, H. P. & P. J. Charles's champion Bonny Lass; 2d, J. K. Kaye's Heather Belle.

HARRIERS.—Prize, H. Cox & E. W. Jaquet's Witchcraft and Rasselas II.

BEAGLES.—1st, C. H. Beck's Myrtle; 2d, W. H. Parker's Freeland Countess.

EXTRA CLASS.—Any known breeds of foreign dogs which have not got a separate class provided for them.—CHAMPION—Prize, W. K. Taunton's champion Sir John Franklin.—OPEN—*Dogs:* Prize, Miss M. Peel's Asgard.

POINTERS.—CHAMPION—*Dog:* E. C. Norrish's Champion Graphic. *Bitch:* B. Field's Belle of Bow.—OPEN, 55LBS. AND UPWARD—*Dogs:* 1st, B. Field's Young Dick; 2d, D. R. Scratton's Devon III.; equal 3d, Sir T. B. Lennard's Bellus Hector, Major H. Ashton's Joe II., E. C. Norrish's Grandee. *Bitches:* 1st, E. C. Norrish's Revel III.; 2d, C. H. Beck's Nan; 3d, A. P. Heywood-Lonsdale's Peach. UNDER 55LBS.—*Dogs:* H. S. H. Prince Albert Solms's Naso of Kipping; 2d, E. C. Norrish's Donald III.; 3d, J. Whitley's Sir Garnet. *Bitches:* 1st, E. C. Norrish's Beau Ideal; 2d, J. E. Lloyd-Lloyd's Zasme; 3d, Addie and Carr's Jetsam. *Puppies:* 1st, Lieut.-Col. C. J. Cotes's Lady Di; 2d, J. Stedman's Nymph.

ENGLISH SETTERS.—CHAMPION—*Dog:* J. H. Platt's champion Sting.—OPEN—*Dogs:* 1st, Castle's Prince Fred; 2d, J. Hogarth's Sir Kent; 3d, T. Cunnington's Sir Colin Kendal. *Bitches:* 1st, J. H. Platt's Plimsey; 2d, Lieut.-Col. C. J. Cotes's Dashing Rose; 3d, T. Cunnington's Lady Westmoreland.—PUPPIES—*Dogs:* 1st, F. R. Moser's Avon Tyrrell; 2d, F. Damm's Rector VI. *Bitches:* 1st, W. Parrott's Fiossie.

BLACK AND TAN SETTERS.—CHAMPION—T. Jacobs's Czarina.—OPEN—*Dogs:* 1st, T. Jacobs's Newton Abbot Duke; 2d, E. L. Parson's Beaumont; 3d, P. Caillard's Young Duke II. *Bitches:* 1st, G. L. Parson's Floss IV.; 2d, T. Jacobs's Newton Abbot Kate; 3d, Mrs. F. A. Manning's Juno V. *Puppies:* 1st, J. Borland's Sir James; 2d, Capt. P. Priestley's Euxton Rock.

IRISH SETTERS.—CHAMPION—*Dog:* J. J. Giltrap's champion Garryowen. *Bitch:* Rev. R. O'Callaghan's Geraldine.—OPEN—*Dogs:* 1st, Rev. R. O'Callaghan's Tyrone; 2d, L. F. Perrin's Scamp; 3d, H. M. Wilson's Mountaineer. *Bitches:* 1st, J. J. Giltrap's Lady Palmerston II.; 2d, L. F. Perrin's Wee Kate; 3d, G. Liedman's Freya. *Puppies:* 1st and 2d, D. Sullivan's Lady Garnet and The Marquis.

RETRIEVERS.—BLACK—WAVY-COATED.—*Champion*—Lieut.-Col. H. C. Legh's champion Mabel. OPEN—*Dogs:* 1st, H. Cox and E. W. Jaquet's Black Diamond; 2d, G. Foster's Foppery; 3d, E. G. Farquharson's Joey. *Bitches:* 1st, E. G. Wheeler's Delta; 2d H. Cox and E. W. Jaquet's Zealous; 3d, A. P. Heywood-Lonsdale's Merry Meg. *Puppies:* 1st and 2d, H. Cox and E. W. Jaquet's Black Diamond and Black Satin; 3d, E. G. Farquharson's Marvel. CURLY-COATED — BLACK.—*Champion:* Equal 1st, G. H. Granville's Chicory II. and G. Culley's champion Jet II.—OPEN—*Dogs:* 1st, the Duke of Hamilton's The Chief; 2d, G. Culley's Crown Prince; 3d, W. Parrott's Berry. *Bitches:* 1st, the Duke of Hamilton's Lady Nell; 2d, S. Darbey's Pearl of Devon; 3d, J. H. Fisher's Lune. *Puppies:* the Duke of Hamilton's The Chief; 2d, W. Parrott's Berry. OTHER THAN BLACK.—1st, Sir W. N. Abdy's Prince Rupert.

SHEEPDOGS.—ROUGH-COATED—CHAMPION—*Dogs:* 1st, J. Bissel's Charlemagne; 2d, G. R. Krehl's Eclipse. *Bitches:* Rev. H. F. Hamilton's Peggie II.—OPEN—*Dogs:* 1st and No. 1 special, H. Ralph's Sly Fox; 2d, W. R. Dockrell's Kintore; 3d, J. G. R. Homfray's Scottish Hero; 4th, W. Adam's General McPherson; 5th, W. R. Dockrell's Charlatan. *Bitches:* 1st and No. 2 special, A. L. Chance's Lady of the Lake; 2d, G. R. Krehl's Mistress Beatrix; 3d, J. & W. H. Charles's Young Meg; 4th, S. Boddington's Lady Lorna; 5th, Dr. G. C. Thomson's Plaidie. SMOOTH COATED.—*Champion*—A. H. Easten's Lady.—OPEN—1st, J. Royle's Clyde; 2d, Dr. W. A. G. James's Gazelle; 3d, W. H. Beach's Baronet. PUPPIES.—ROUGH AND SMOOTH-COATED—*Dogs:* 1st, W. R. Dockrell's Kintore; 2d, J. Forrest's Nullamore; 3d, W. Adams's General M'Pherson. *Bitches:* 1st, A. L. Chance's Lady of the Lake; 2d, S. Boddington's Discount; 3d, H. Ralph's Fedora. BOB-TAILS.—1st and 2d, D. P. Thomas's Sir Guy and Welsh Boy. Fifth Collie Club Derby, for rough or smooth collie dog or bitch puppies,—1st, A. L. Chance's Lady of the Lake; 2d, W. R. Dockrell's Kintore; 3d, H. Ralph's Fedora.

BASSET HOUNDS.—CHAMPION—M. B. Kennedy's champion Fino V.—OPEN—*Dogs:* 1st and 2d, F. W. Blain's Bourbon and Bavard. *Bitches:* 1st and 2d, G. R. Krehl's Theo and Gavotte. *Puppies:* 1st, W. Blain's Bavard; 2d, L. Pelly's Mioche.

DALMATIANS.—1st and 2d, J. Fawdry's Treasure and Nelson.

POMERANIANS.—1st, J. K. Kaye's Scoff; 2d, J. Fawdry's Charlie; 3d, Mrs. E. M. Monk's Coco.

POODLES.—CHAMPION—Miss J. Quain's Zulu.—OPEN—1st, P. Lawrence's Lyris; 2d, S. Howell's Boy; 3d, Mrs. M. A. Tronghear's Fairy Queen.

BULLDOGS.—CHAMPION—Dogs over 60lbs. and bitches over 50lbs: J. L. Elias's Taurus. Dogs under 60lbs.: Prize and challenge cup, H. Layton's champion Monarch. Bitches under 50lbs.: Prize and challenge cup, Champion Britomartie.—OPEN—Dogs over 60lbs. and bitches under 50lbs.; 1st, A. T. Foreman's Big Ben; J. H. Elias's Paul Clifford. Dogs not exceeding 60lbs.: 1st, G. Raper's Robinson Crusoe; J. H. Elias's Cossack; 3d, C. R. C. King's The Black Prince. Bitches not exceeding 50lbs.: 1st, F. Adcock's Acme; 2d, Dr. W. R. Lyddon's Ariel; 3d, Rev. J. W. Mellor's Scissors. Dogs not exceeding 45lbs.: 1st, E. Stevens's Royal George; 2d, A. K. Smith's Bacchus II.; 3d, J. H. Ellis's Sedan. Bitches not exceeding 35lbs.: 1st, H. Layton's Jenny Howlett II.; 2d, J. S. Pybus-Sellon's Belladona; 3d, A. F. Nash's Dolores. *Puppies:* 1st, W. A. Williams and G. J. Padbury's Burlona Chancera; 2d, A. F. Nash's Dolores.

IRISH WATER SPANIELS.—*Dogs:* 1st, Captain G. H. Dwyer's Blair; 2d, J. S. Skidmore's Mickey Free. *Bitches:* Equal 1st and 2d, G. S. Hockey's Young Hilda and Lady.

CLUMBER SPANIELS.—Champion—N. P. Stilgoe's Champion Psycho.—OPEN—*Dogs:* 1st, J. Allen's Boss III.; 2d, F. W. Rouse's The Dodger. *Bitches:* Equal 1st and 2d, R. P. and P. J. Charles's Foxley Beauty and J. W. Frankland's Rose III. SUSSEX AND LIVER-COLORED.—*Dogs, over 25lbs.:* 1st, Captain S. M. Thomas's Guy; 2d, Holley Bros. Horatio; 3d, T. Jacobs's Bachelor III. *Bitches, over 25lbs.:* 1st, J. Partridge's Brida II.; 2d, Holley Bros. Aureola; 3d, W. Connah's Petrel.

FIELD SPANIELS.—CHAMPION—Equal prize, J. Royle's champion Solus and T. Jacobs's champion Squaw.—OPEN—BLACK.—*Dogs, over 25lbs.:* 1st, T. Jacobs's Newton Abbot Nigger; 2d, J. H. Hussey's Lord Bute; 3d, A. H. Easten's Easten's Bracken. *Bitches, over 25lbs.:* 1st, T. Jacobs's Newton Abbot Bess; 2d, A. H. Easten's Easten's Busy; 3d, Holley Bros. Althea.

COCKER SPANIELS.—NOT EXCEEDING 25LBS.—*Dogs:* 1st, R. Lloyd's Little Dan; 2d, G. W. Carter's Jingo. *Bitches:* 1st, J. Farrow's Dolly Obo; 2d, G. J. Newson's Queen Adelaide. ANY OTHER COLOR—*Dogs, exceeding 25lbs.:* Equal 1st and 2d, T. Jacobs's Newton Abbot Beau and A. H. Easten's Easten's Bruce. *Bitches:* 1st, H. B. Spurgin's Fanciful; 2d, J. Royle's Zuess.

FOX-TERRIERS.—SMOOTH — CHAMPION — *Dogs:* 1st, L. Turner's champion Spice; 2d, A. R. Wood's Splinter; 3d, Rev. C. T. Fisher's Richmond Jack. *Bitches:* 1st, A. R. Wood's Sutton Veda; 2d, L. & W. Rutherfurd's Diana; 3d, J. C. Tinne's Deacon Ruby. OPEN—*Dogs:* 1st and cups 1, 3 and 5, A. H. Clarke's Result; 2d, A. Hargreaves's Hognaston Rebel; 3d, J. A. Doyle's Beggerman; 4th, A. H. Clarke's Forest; 5th, G. Raper's Raby Nailor. *Bitches:* 1st, A. Hargreaves's Dame Verity; 2d, L. Turner's Richmond Nettie; 3d and cup 6, H. J. Pim's Poppy II.; 4th, G. Raper's Richmond Olive Bud; 5th, A. H. Clarke's Douglas Nettle. PUPPIES—*Dogs:* 1st, A. H. Clarke's Result; 2d, G. Raper's Raby Nailor; 3d, F. Burbridge's Hunton Tip. *Bitches:* J. J. Pim's Poppy II.; 2d, G. Raper's Richmond Olive Bud; 3d, F. Redmond's Dusky.

WIRE-HAIRED FOX-TERRIERS.—CHAMPION—*Dogs:* 1st and cup 2 Earl of Lonsdale's champion Briggs; 2d, H. Cox and E. W. Jaquet's champion New Boy. *Bitches:* 1st and 2d, Earl of Lonsdale's champion Miss Miggs and champion Vora.—OPEN—*Dogs:* 1st, Earl of Lonsdales Lord Randolph; 2d, A. Maxwell and Cassel's Jack Frost; 3d and cups 7 and 4th, W. Carrick, Jr.'s Carlisle Bruce and Master Tiger. *Bitches:* 1st and cups 4 and 8, W. Carrick, Jr.'s Carlisle Gipsy; 2d, P. C. Reid's Grand Duchess; 3d, Earl of Lonsdale's Black Watch; 4th, H. Cox and E. W. Jaquet's Sissy la Muguet. PUPPIES—*Dogs:* 1st, A. Maxwell and E. Cassel's Jack Frost; 2d G. Raper's Ringleader; 3d, W. W. Pugh's Harfat Surprise. *Bitches:* 1st, H. Cox and E. W. Jaquet's Sissy la Muguet; 2d, W. Carrick's Miss Tiger. Second division of the fifth Fox-terrier Open Produce Stakes.—SMOOTH—*Dogs:* 1st, W. Hurst-Wright's Holm Track; 2d and 3d, J. A. Doyle's Indus and Ingomar. *Bitches:* 1st and grand prize, J. C. Tinne's Brokenhurst Gem; 2d, F. Redmond's Diamond Chips; 3d, J. A. Doyle's Incense.

DACHSHUNDE.—CHAMPION—*Dog:* Prize and Cup 1, H. A. Walker's Maximus. *Bitch:* C. H. W. Woodroffe's Fliege.—OPEN—*Dogs:* 1st and No. 2, Mrs. P. M. Hoare's Kossuth; 2d, H. A. Walker's Culoz; 3d, J. S. Pearson's Zugwong. *Bitches:* 1st and Cup 3, Mrs. P. M. Hoare's Zither; 2d, J. C. Knight-Bruce's Lady; 3d, H. Jones's Jessica. PUPPIES—*Dogs:* 1st, 2d and 3d, Mrs. P. M. Hoare's Kossuth, Thaler and Faust IV. *Bitches:* 1st, H. Jones's Jessica; 2d, W. J. Ingram's Zebra; 3d, Mrs. P. M. Hoare's Rapunzel III. The Dachshunde Club Sweepstakes,—1st and 2d, Mrs. P. M. Hoare's Kossuth and Drachen.

BULL-TERRIERS.—OVER 25LBS.—CHAMPION—A. George's Cairo.—OPEN—EXCEEDING 25LBS.—*Dogs:* 1st, J. R. Pratt's Count; 2d, T. A. Hewitt's Murderer II.; 3d, A. George's Crown Prince. *Bitches:* 1st, T. Wright's Kettering Maggie; 2d, A. George's Maggie May II.—NOT EXCEEDING 25LBS.—1st, E. G. Martin's Grand Duchess; 2d, T. L. Puttock's champion Nelson I.; 3d, A. George's Dutchman.—NOT EXCEEDING 18LBS.—1st, F. Hinks's Vinnie; 2d, S. P. Shaw's Yokum.

AIREDALE TERRIERS.—1st, T. Horsfall's Trimmer; 2d, H. C. Grove's Roy; 3d, W. Tatham's Fritz.

BEDLINGTON TERRIERS.—CHAMPION—J. A. Baty's Diana.—OPEN—*Dogs:* 1st, J. A. Baty's Lord Stowell; 2d, A. N. Dodds's Hairdresser; 3d, J. A. Baty's Scotch Mist. *Bitches:* 1st, J. A. Baty's Durham Lass; 2d, Captain S. M. Thomas's Daffodil; 3d, E. Margetson's Crinoline. Dogs and bitches that have not won a prize up to day of entry.—1st, J. A. Baty's Scotch Mist; 2d, A. N. Dodds's Mark Tapley. *Puppies:* Cup and 1st, J. Cornforth's Sentinel; 2d, J. A. Baty's Julius Cæsar.

IRISH TERRIERS.—CHAMPION—*Dogs:* Prize and No. 1, H. A. Graves's Play Boy. *Bitches:* Prize and No. 2, R. B. & T. S. Carey's champion Sting.—OPEN—*Dogs:* 1st, W. Graham's Gilford; 2d, A. Krehl's Cauboen; 3d, R. B. & T. S. Carey's Banagher. *Bitches:* 1st and No. 3, R. Clifton's Merry Lass; 2d, H. A. Graves's Pretty Lass; 3d, A. G. Momber's Gramachree. UNCROPPED EARS—1st and No. 4, Major J. H. Annand's Fury II.; 2d, A. G. Momber's Buckshot. *Puppies:* 1st, W. Graham's Gilford; 2d, E. N. Kent's Rufus.

SMOOTH-HAIRED TERRIERS—EXCEPT BLACK AND TAN.—1st, C. F. Copeman's Leading Star; 2d, Mrs. M. A. Tronghear's North Star.

BLACK AND TAN TERRIERS.—CHAMPION—J. Gravett's Wallace.—OPEN—EXCEEDING 16LBS.—1st, W. J. Tomlinson and G. S. Manuelle's Lady Nellie; 2d, W. Joyner's Robin Hood; 3d, W. J. Tomlinson and G. S. Manuelle's Lady Jessie.—NOT EXCEEDING 16LBS.—1st, W. Adams's Streamlet; 2d, J. W. Pestell's Harvester; 3d, J. Taylor's Sissy II. *Puppies:* 1st, J. W. Pestell's Harvester; 2d, J. & R. B. Tronghear's Sir Wilfrid.

SKYE TERRIERS.—PRICK OR DROP-EARED—CHAMPION—Prize and

medal, Mrs. Jacobson's Cuthullin.—OPEN—DROP-EARED—*Dogs:* 1st, G. Earley's Donald McBain; 2d, J. Henderson's Pibroch; 3d, C. B. Windeler's Donald McPherson. *Bitches:* 1st and medal, Mrs. Jacobson's Maggie McDonald and Blue Bell. PRICK-EARED—*Dogs:* 1st, Rev. T. Nolan's Kingston Roy; 2d, J. Davidson's The Earl. *Bitches:* 1st, J. Davidson's Missie; 2d, A. Todd's Lothian Queen.

SCOTCH TERRIERS.—HARD-HAIRED—1st, H. J. Ludlow's Worry; 2d, J. M. Marshall's Marjory and E. M. Bristowe's Brick. *Puppies:* Equal 1st, H. J. Ludlow's Tatters II., J. M. Marshall's Marjory.

DANDIE DINMONT TERRIERS.—CHAMPION—*Dog:* J. Locke's The Astrologer. *Bitch:* G. S. Ball's Jennie Deans.—OPEN—*Dogs:* 1st and No. 1, W. W. Reid's Tip; 2d, G. S. Ball's Roderick; 3d, J. Flinn's Border King. *Bitches:* 1st and No. 2, W. Tait's Hannah; 2d, D. B. Lytle's Queen Mary; 3d, J. C. Carrick's Effie. *Puppies:* H. S. Whipp's Bess II.

PUGS.—CHAMPION—*Dogs:* 1st, W. L. Sheffield's Stingo Sniffles; 2d, Lady Brassey's Challenger. *Bitches:* Mrs. M. A. Foster's champion Jenny. OPEN, NOT EXCEEDING 20LBS.—*Dogs:* 1st and No. 1, Mrs. M. A. Foster's Bradford Ruby; 2d, Mrs. R. H. Denne's Beau; 3d, Mrs. Hemming's Lord Fritz. *Bitches:* 1st and No. 2, E. M. Monck's Little Gipsy Queen; 2d, H. Maule's Lady Cloudy. *Puppies:* 1st, Mrs. V. M. L. Newton-Eldershaw's Ikey Mo; 2d, Mrs. F. Stephens's Punch VIII.

YORKSHIRE TERRIERS.—1st and 2d, Mrs. M. A. Foster's Harry and Effie.

MALTESE.—1st, 2d and 3d, Lady Giffard's Hugh, Rob Roy, and Lord Clyde.

BLENHEIM SPANIELS.—RED AND WHITE—CHAMPION—Mrs. L. E. Jenkins's champion Flossie II.—OPEN—1st, H. E. Jenkins's Valentine Trixey; 2d and 3d, F. Keehner's Sir Garnet and Prince Leopold.

KING CHARLES SPANIELS.—BLACK AND TAN—CHAMPION—Mrs. J. A. Buggs's Alexander the Great.—OPEN—1st, Mrs. J. A. Buggs's Bend Or; 2d, Mrs. W. Forder's Jumbo II.; 3d, Mrs. J. A. Buggs's Young Prince.

OTHER TOY SPANIELS.—1st, C. Thorpe's Toffy; 2d, Mrs. Beavan's Princess Alice.

ITALIAN GREYHOUNDS.—Prize, Mrs. M. A. Tronghear's Little Gem.

TOY TERRIERS—SMOOTH AND ROUGH, NOT EXCEEDING 6LBS.—CHAMPION—Mrs. M. A. Tronghear's Conqueror.—OPEN—SMOOTH-HAIRED—1st, J. K. Kaye's Sibyl; 2d, R. Fulton's Sampson; 3d, C. Whitehouse's Whist.—ROUGH-HAIRED—1st, Mrs. E. M. Monck's Dolly; 2d, Mrs. M. A. Foster's Lady Bective; 3d, C. Walker's Rose II.

CHINESE CHOW-CHOW.—*Dogs:* 1st, Mrs. F. Porter's Chow IV.; 2d, C. F. M. Cleverly's Chow III. *Bitches:* 1st and 2d, Lady M. O. Gore's Papoose and Peridot.

JAPANESE DOGS.—1st, Mrs. V. T. Poynder's Tokio; 2d, Mrs. E. M. Monck's Chang.

SALE OF SPORTING DOGS AT ALDRIDGE'S.

THE fourth sale of the season was held by Messrs. Freeman yesterday, the feature of which was the dispersing of the well-known kennel of pointers belonging to Mr. T. Pilkington, which included the grand old dog Garnet, a pointer who carries his head better than any other pointer in England, and he has carried it to victory more than once both at field trials and on the bench. Mr. Pilkington's dogs are so well known that a large attendance was the consequence at the sale, and prices were good accordingly, as there were those men there whom prices would not stop when the animal in question was the best of its kind. Mr. Barclay Field was a large purchaser, and so was Mr. Haywood Lonsdale, who secured that grand dog Lake at 110gs. Below we give the prices with the names of the purchasers. The whole of the dogs were sold without reserve, with the exception of Laurel, which it was stated would be bought in. Col. Cotes sent to the sale four well-broken, flat-coated retrievers, which did not go above their value. The pick of the basket, in our opinion, being Duck, who Mr. Haywood Lonsdale got for 30gs. Three partly-broken young ones from the same kennel averaged 10gs. each, and there was a rare good one in the lot. A lot of Irish and Laverack setters of fair quality were sent by Mr. T. D. Hine, and mostly went very cheap. Altogether Mr. Farmer disposed of 68 dogs.

MR. PILKINGTON'S POINTERS.

Lot 1, Tory II., Duke of Portland, 25gs.; 2, Guard, Mr. Bristowe, 29gs.; 3, Garnet, Mr. Peters, 36gs.; 4, Druid, Mr. Bristowe, 46gs.; 5, Lake, Mr. B. Field, 61gs.; 6, Dingle, Mr. B. Field, 63gs.; 7, Justice, Mr. Cash, 25gs.; 8, Moffat, Mr. B. Field, 55gs.; 10, Lilac, Mr. B. Field, 61gs.; 11, Peace, Mr. Haywood Lonsdale, 60gs.; 12, Pardon, Mr. B. Field, 56gs.; 13, Lincoln, Mr. B. Field, 57gs.; 14, Lundy, Mr. Bristowe, 46gs.; 15, Lymm, Mr. H. Lonsdale, 110gs.; 16, Lace, Mr. Bristowe, 34gr.; 17, Law, Mr. Sellars, 15gs.; 18, Zeus, Mr. Part, 18gs.; 19, Crozier, Mr. Pleydell, 22gs.

COL. COTES'S RETRIEVERS.

Lot 40, Merle, Lord Alfred Fitzroy, 28gs.; 41, Major, Col. Campbell, 20gs.; 42, Mars, Col. Campbell, 26gs.; 43, Duck, Mr. H. Lonsdale, 30gs.. 44, Magic, Mr. Somervell, 9gs.; 45, Mab, Mr. Sebright, 11gs.; 46, Daphne, Mr. Somervell, 10gs.—*Land and Water, July 5.*

ENGLISH FIELD TRIAL RULES.

AT a meeting of the committee of the National Field Trials, held on June 6, at 23 Grosvenor Square, London, W., A. P. Heywood-Lonsdale, Esq. in the chair, the following resolutions, with a view of strengthening the hands of the judges in the case of disobedient and noisy breakers, and for the protection of those who suffer from the unruly actions of their opponents, were passed, viz.:

1. That at the National Field Trials Meetings of the future the judges be requested by the committee and empowered to first caution, and, upon repetition of the offense, turn out of the stake any breakers not beating the ground to their satisfaction, not keeping together, or outwalking their opponents, or unduly or unnecessarily whistling or shouting, or in any way behaving in such a manner as in the opinion of the judges is detrimental to the chance of success of their opponents; and that it shall be permitted for any breaker or owner feeling himself aggrieved upon any one of these points to request the interference of the judges.

2. That the judges be requested in giving their awards to take into their very serious consideration the manner in which the ground is quartered and beaten, and not to award a prize to any breaker or dog who does not beat his ground and work exactly as he should do were he actually out shooting.

3. That at the National Field Trial Meeting, 1885, a prize of £10 be awarded to the breaker who, in the opinion of the judges, beats his ground in the most sportsmanlike manner.

(Signed) A. P. HEYWOOD-LONSDALE, Chairman.
Samuel Ebrall, Secretary.

[We think the Committee of the National Field Trials have not taken this matter in hand one moment too soon. We have time after time called attention to the manner in which the ground is wasted at field trials, and the "jockeying" that is occasionally practiced is very reprehensible.—ED. L. & W.]—*Land and Water.*

THE PHILADELPHIA DOG SHOW.—The Philadelphia Kennel Club, in connection with the Fair of the Pennsylvania State Agricultural Society, will hold a bench show at Philadelphia on Sept. 16, 17, 18 and 19. Sheep dog trials will also be held at the same time. The premium list, we understand, will be liberal, and a large number of special prizes will be offered. Mr. Charles Lincoln will superintend the show, which is a guarantee that the arrangements will be first-class. We would suggest to English exhibitors who intend sending their entries to the New York show in October that they can also show their dogs at Montreal Sept. 9, 10 and 11 and at the Philadelphia show a week later and then have ample time to get their dogs in condition for New York.

ADDRESS WANTED.—*Editor Forest and Stream:* Can you or any of your readers inform me of the address of Mr. John B. Summer, who at one time was a breeder of Chesapeake Bay dogs?—M. G.

A STORY FOR THE COMPOSITORS.—The remarkable intelligence of the dog has been very many times illustrated, and in Hartford, too, but we cannot forbear to instance a still further example of what he will do when pressed by hunger. This morning the unofficial dog of the *Evening Post* office entered the composing room, wagged his tail to all the "comps" in great good humor, and after sniffing around in an innocent manner, slyly unearthed the dinner of an epicurean type-sticker and made a huge and hasty meal of it. Then he trotted off and, coiling up, went to sleep to dream of boned turkey, lollipops, cheese, crustacea, and all the other good things that make a paradise of this world in a dog's eye. The consternation and despair of the compositor, as he beheld the remains of his dinner and realized that the afternoon would have to be spent on an empty stomach, with all the ills that that implies, will remain forever fresh and horrible.—*Hartford Evening Post.*

TEST OF RABIES.—"When a person hath been bitten by a dog that is apprehended to be mad it commonly happens that the dog is killed before one is assured of his condition, and the person bitten continues in a cruel uncertainty. Mr. Petit, the surgeon, hath an expedient for putting an end to this uneasiness. He rubs the throat, the teeth, and the gums of the dead dog with a piece of meat that hath been dressed, taking care that there be no blood to stain it, and then offers it to a living dog. If he refuses it with crying and howling the dead dog was certainly mad, but if the victuals have been well received and eaten there is nothing to fear."—*Memoirs Royal Academy at Paris, 1753.*

MISTAKE IN PEDIGREE.—Rosendale, Wis., July 14.—*Editor Forest and Stream:* In regard to the article of Mr. W. N. Callender, in your issue of July 10, in reference to mistake in pedigree of Fancy, I wish to remark it is ingeniously worded, but at this time the only point at issue is, is this pointer bitch Fancy "Cara C.?" if not, then the pedigree, by whomsoever given, is fraudulent, is not "correct as to sire and dam" or "technical error," and it is for those gentlemen, without special communication with them, to explain. This bitch Fancy was advertised with a given pedigree, is it fraudulent or not?—S. B. DILLEY.

THE AMERICAN ENGLISH BEAGLE CLUB will offer one or two special prizes at the Philadelphia bench show in September. The beagle classes will be judged entirely by the standard of the club.—A. C. KRUEGER (Sec'y and Treas.).

KENNEL NOTES.

NOTICE TO CORRESPONDENTS.

Kennel notes are inserted in this column free of charge. To insure publication of notes, correspondents MUST GIVE the following particulars of *each animal:*

1. Color.
2. Breed.
3. Sex.
4. Age, or
5. Date of birth, or breeding or of death.
6. Name and residence of owner, buyer or seller.
7. Sire, with his sire and dam.
8. Owner of sire.
9. Dam, with her sire and dam.
10. Owner of dam.

All names must be *plainly* written. Communication on one side of paper only, and signed with writer's name.

NAMES CLAIMED.

☞ *See instructions at head of this column.*

Picket. By Mr. D. S. Gregory, Jr., 2d, for liver and white pointer dog, whelped April 16, 1884, by Scout (A.K.R. 216) out of Ruby (Woodruff's Dick—Fan).

Sultana. By Mr. Erastus Corning, Jr., Albany, N. Y., for red Irish setter bitch, whelped April 10, 1884, by champion Glencho out of Claire (A.K.R. 233).

Lady Grace. By Mr. Erastus Corning, Jr., Albany, N. Y., for liver and white pointer bitch, whelped April 10 (Ducalion—Fancy).

Malite By Mr. J. W. Munson, St. Louis, Mo., for liver and white pointer bitch, whelped April 18, 1884, by imported Bang out of Kate (Croxteth—Trinket).

Millie. By Mr. J. W. Munson, St. Louis, Mo., for liver and white pointer bitch, whelped May 6, 1884, by champion Meteor out of Dell (Croxteth—Trinket).

Lady Alice, Maud and Blanch. By Mr. C. F. Wilson, Palmyra, O., for mastiff bitches, whelped April 19, 1884, by his Cæsar (A.K.R. 12) out of his imported Oma.

Phallas, Fantine and Monica. By the Shamrock Kennel, Beach Bluff, Mass., for red Irish setters, one dog and two bitches, whelped Sept. 6, 1883, by champion Elcho (A.K.R. 295) out of their Zelda (A.K.R. 240).

Mack Duff, Mack B. II., Peck's Bad Boy and Peck's Bad Girl. By Mr. W. B. Peck, Central Falls, R. I., for two white, black and tan and one lemon belton dogs and lemon belton bitch, whelped May 8, 1884, by Mack B. (Dick Laverack—Twilight) out of Chica (Royal Blue—Diana).

Dave Bondhue. By Messrs. Austin & Mason, Providence, R. I., for black, white and tan English setter dog, whelped Feb. 27, 1884, by Gus Bondhue (Dashing Bondhue—Novel) out of Countess Mollie (Count Noble—Spark).

BRED.

☞ *See instructions at head of this column.*

Nell Kelley—Blue Gound. Mr. W. R. Travers's (Washington, D. C.) English setter bitch Nell Kelley (A.K.R. 286) to Blue Gound (Frank—Victoria), May 14.

Fanny—Watty. Mr. G. Sanderson's (Moncton, N. B.) imported prick-eared Skye terrier bitch Fanny to his imported Watty, June 30.

Daisy Starlight—Count Paris. Mr. H. W. Durgin's (Bangor, Me.) English setter bitch Daisy Starlight to Count Paris (Royal Blue—Modjeska), May 28.

Pet Berwyn—Foreman, Mr. W. B. Peck's (Central Falls, R. I.) English setter bitch Pet Berwyn (Dashing Berwyn—May Druid) to Mr. C. Fred. Crawford's champion Foreman, June 22.

Rosa—Benefort. The Clifton Kennel's (Jersey City, N. J.) pointer bitch Rosa (A.K.R.) to Mr. C. H. Mason's Beaufort (A.K.R. 694), July 19.

WHELPS.

☞ *See instructions at head of this column.*

Nancy Rake. Mr. E. I. Milline's (Flatbush, L. I.) English setter bitch Nancy Rake (A.K.R. 42), July 13, seven (two dogs), by Mr. W. A. Coster's Buckellew (A.K.R. 30).

Bessie. Mr. A. Weeks's (Locust Valley, L. I.) English setter bitch Bessie (Gypsum—Jessie), July 12, eleven (six dogs), by Tilley's Bang Duke—Dot).

Snipe. Mr. Edward Lawrence, Jr.'s, (Boston, Mass.) red Irish setter bitch Snipe (Palmerston—Quail), July 14, nine (six dogs), by Mr. Joseph Hayes's Suil-a-Mor (Claremont—Dido).

Snowball. The Millbrook Kennel's (New York) St. Bernard bitch Snowball (A.K.R. 416), July 1, two dogs, by Prince (A.K.R. 1053); one since dead.

Flash III. Mr. J. W. Munson's (St. Louis, Mo.) imported pointer bitch Flash III. (Bang—Pride), July 13, ten (three dogs), by champion Meteor.

Queen Maud. Mr. E. S. Hawks's (Ashfield, Mass.) English setter bitch Queen Maud (Racket—Kelp), June 22, nine, by Count Oberon (Count Noble—Rosalind).

SALES.

☞ *See instructions at head of this column.*

Nancy Rake. Black, white and tan English setter bitch (A.K.R. 42), by Mr. Thos. F. Connolly, Flatbush, L. I., to Mr. E. I. Milline, same place.

Critic. Black spaniel bitch (A.K.R. 303), by Mr. Winchester Johnson, Boston, Mass., to Mr. W. O. Partridge, same place.

Prince Boy. Pointer dog, color and age not given (King Bow, A.K.R. 83—Chess, A.K.R. 77), by the Detroit Kennel Club, Detroit, Mich., to Mr. John Gross, Jr., Junction City, Kan.

Peck's Bad Girl. White, black and tan English setter bitch, whelped May 8, 1884 (Mack B.—Chica), by Mr. W. B. Peck, Central Falls, R. I., to Mr. C. Fred. Crawford, Pawtucket, R. I.

Mack Duff. White, black and tan English setter dog, whelped May 8, 1884 (Mack B.—Chica), by Mr. W. B. Peck, Central Falls, R. I., to Dr. James E. Tobey, same place.

Mack B.—Chica whelps. Lemon belton English setter dogs, whelped May 8, 1884, by Mr. W. B. Peck, Central Falls, R. I., one to Mr. Lawrence Lockwood and one to Mr. Beggi, A. Guaze, Pawtucket, R. I.

Princess Pearl. White, black and tan English setter bitch, age not given (Druid—Princess Draco), by Mr. C. R. Dufour, Washington, D. C., to Mr. W. R. Travers, same place.

Tempest—Lilly whelp. Black, white and tan English setter bitch, whelped November, 1883, by Mr. Andrew J. Ward, Boston, Mass., to Mr. W. D. Wilson, Augusta, Ga.

Peck's Bad Boy. Lemon belton English setter dog, whelped May 8, 1884 (Mack B.—Chica), by Mr. W. B. Peck, Central Falls, R. I., to Mr. E. Eastwood, same place.

Don Gus. Black, white and tan English setter dog, 3yrs. (Gladstone—Juno), by Dr. Otto Mobes, Rowland, Ala., to Mr. E. S. Hawks, Ashfield, Mass.

Foreman. White, lemon and tan imported beagle dog, 4yrs. (Bravo—Honesty), by Mr. W. H. Ashburner, Philadelphia, Pa., to Mr. E. S. Hawks, Ashfield, Mass.

Countess Lill. Black, white and tan English setter bitch, 1yr. (Gladstone—Donna J.), by Mr. J. L. Barker, Racine, Wis., to Mr. E. S. Hawks, Ashfield, Mass.

Bessie T. Black, white and tan English setter bitch, 4yrs. (Gladstone—Fly), by Mr. Geo. H. Tousey, Mandan, Dak., to Mr. E. S. Hawks, Ashfield, Mass.

Craft. Lemon and white pointer dog (A.K.R. 1038), by the Knickerbocker Kennel Club, Jersey City, N. J., to Mr. J. S. Brown, Montclair, N. J.

Chief. Black pointer dog, age not given (Stocking—Lady Mab), by the Knickerbocker Kennel Club, Jersey City, N. J., to Mr. B. P. Bell, Woodside, N. J.

Glenmark. Lemon and white pointer dog, age not given (Rush—Romp), by the Knickerbocker Kennel Club, Jersey City, N. J., to Mr. Geo. S. Tucker, Peterborough, N. H.

Jimmie. Liver pointer dog, 2yrs. (Start—Maud), by the Knickerbocker Kennel Club, Jersey City, N. J., to Mr. Louis S. Livesey, same place.

Lady Isabel. Lemon and white pointer bitch (A.K.R. 461), by Mr. Geo. S. Tucker, Peterborough, N. H., to the Knickerbocker Kennel Club, Jersey City, N. J.

Essex. St. Bernard dog (A.K.R. 931), by the Essex Kennel, Andover, Mass., to the Strawberry Hill Kennel, Leicester, Mass.

Flirt Warren. Black and white English setter dog (A.K.R. 1368), by the Strawberry Hill Kennel, Leicester, Mass., to Mr. Calvin Perry, same place.

Primer (A.K.R. 227)—Jessy Gyp (A.K.R. 107) whelps. English setters, whelped March 3, 1884, by Mr. W. E. Rea, Hackettstown, N. J., a white and lemon dog to Mr. Theo. A. Weller, Middletown, N. J., and a white and black bitch to Mr. W. H. Larison, Madison, N. J.

A SURPLUS OF NEARLY $2,000,000 is the solid guaranty offered by the Travelers, of Hartford, Conn., that all just claims will be paid in full, as they always have been.—*Adv.*

Rifle and Trap Shooting.

RANGE AND GALLERY.

THOMASTON, Conn., July 8.—The Canton Rod and Gun Club and the Empire Rifle Club shot the second of the series to-day on the range of the latter club, near Reynold's Bridge, in which the Empires were victorious by 30 points in a possible 1,500. Part of the match was shot in the rain, which made a rather bad light. The conditions were teams of nine men each, 10 shots per man off-hand, distance 200yds., Massachusetts ring target. Following are the scores:

Canton Team.										
Q B Hull	11	10	11	10	11	11	12	7	12	9—104
S J Lyons	9	11	11	9	10	11	9	10	11	12—103
G J Case	10	12	12	6	9	10	9	10	10	11— 99
G Barbour	9	11	7	9	11	9	12	11	7	9— 97
J D Andrews	8	10	12	8	7	10	10	10	10	9— 93
J Laubenstein	7	11	8	8	11	10	9	9	7	10— 90
B O Higby	11	6	12	7	8	10	9	9	7	9— 90
G F Lewis	4	9	6	8	8	4	4	6	11	11— 71
J B Flint	7	10	2	8	5	8	9	8	6	6— 69—816
Empire Team.										
W H Dunbar	9	10	9	11	11	10	10	8	11	11—100
G Gilbert	7	10	9	11	8	12	10	10	9	12— 98
G C Canfield	12	10	10	5	12	10	10	10	12	7— 98
G A Lemmon	10	9	10	9	10	11	11	7	11	8— 96
C F Williams	7	11	10	10	9	8	9	10	10	11— 95
E Thomas	7	10	10	7	11	10	11	10	8	9— 93
F Carr	11	10	8	9	9	11	9	7	7	7— 90
A S Hubbard	6	10	7	11	10	9	7	11	8	10— 89
E W Bennett	11	9	11	5	10	4	7	10	12	8— 87—846

At the weekly shoot for the badge, July 12, the following scores were made: F. Carr 102, C. F. Williams 98, C. L. Alling 96, G. A. Lemmon 93, G. P. North 88, A. Fox 84.

GARDNER, Mass., July 17.—Yesterday was the regular day for the meet of the Gardner Rifle Club at Hackmatack Range. The American decimal target was used; distance, 200yds.; shooting off-hand, with a possible 100. Only a few members faced the bullseye, their scores being as follows: J. N. Dodge 86, G. F. Ellsworth 84, A. Mathews 81, W. C. Loveland 77.

JAMESTOWN, N. Y., July 18.—Regular medal match; Creedmoor target; 200yds. off-hand; 10 rounds, wind at 9 o'clock light, bright light: S. N. Ayres 45, H. V. Perry 45, N. J. Fenner 44, R. H. Burns 44, A. F. Ward, 43, F. K. Dowler, 41, A. F. Warner 41.—R. H. BURNS.

THOMASTON, Conn., July 19.—The weather conditions at our weekly shoot to-day were very unfavorable for high scores. Part of the match was shot during a thunder shower, with a strong wind blowing directly across the range. Following are the scores:

G Gilbert	10	7	7	9	9	12	9	12	12	11—98
G A Lemmon	9	10	8	9	10	7	11	9	10	11—94
C L Alling	12	9	5	10	10	9	7	11	9	10—92
W Kerwood	12	11	7	11	4	9	5	9	10	11—89
C F Williams	9	7	8	10	8	9	9	9	9	10—88
A Fox	10	7	10	10	6	10	11	6	8	8—86
F A Perkins	10	9	8	7	8	6	10	9	8	11—86
B W Pease	9	2	9	11	10	5	7	11	11	10—85

BOSTON, July 19.—There was a large attendance at Walnut Hill to-day, and while the gentlemen found a very perplexing wind from 6 o'clock, still it was a delightful place to spend a summer afternoon. No very high scores were made, and not many were finished, the gentlemen preferring to experiment rather than to struggle for high record. A team match was shot between two teams of the association, which resulted in a victory for Mr. Berry's team. Following are the best scores:

Creedmoor Practice Match.

H Cushing	5554445545—46	R Borden	4448444454—40
E C Barnes	4444555544—44	H M Cross	4345332444—36
W Carter	4444544445—42	A F Hall (mil.)	2454433325—35

Creedmoor Prize Match.

F W Perkins	4555451555—47	E C Barnes	5444444554—43
W Fisher	4454545445—43	J A Cobb	4445535454—43
E B Souther	4444455554—44	R Emery	4444544445—42
R Gardner	4455445544—44	F Warden	4544445541—42
J P Bates	5554444541—44		

Captain Berry's Team.

J Francis	4554454555—46
C E Berry	4554455544—45
E B Souther	4445544545—44
J B Fellows	4345555445—44
W Fisher	4454544444—42
H A Lewis (mil)	4435043443—31

Captain Perkins's Team.

Q M Jewell	5445555455—46
R Reed	4444554544—43
E F Richardson	4545454444—43
F W Perkins	4544444544—42
W H. Oler	4445454444—41
F G Ames	2245544455—39—254

2 points for military rifle... 2—257

THE TRAP.

Correspondents who favor us with club scores are particularly requested to write on one side of the paper only.

CLAY-PIGEON POINTS.

Editor Forest and Stream:

Will you kindly allow us to answer a few criticisms lately passed on us? With reference to inaccuracies in the count of the number of clay-pigeons in a barrel. Any such mistake (for such they are) made by any of our packers will always be cheerfully remedied by us upon authoritative representation through the trader of whom the club purchased same. No honorable sportsman and no sensible man can believe for a moment that such a miscount has been made intentionally. We have three packers at work, the public are welcomed to inspect our packing department at any time. The clay-pigeons are first "strawed" in groups of five high, which groups are then placed in a crate beside the packer, who then counts the number of groups of five high he places in the barrel, a few odd ones being used now and then to fill the interstices. We are doing and have been doing all we could to avoid miscounts, which, if they occur now, are due to fallibility of man, and which we always "make good." It has been suggested that we pack the clay-pigeons in boxes holding 100 each. This we are prepared to do at the extra charge of fifteen cents per box. Should any club prefer same let them give their orders for same through their nearest traders and we will ship same at twenty-four hours' notice.

Secondly—With reference to the "aggravating tail." We thought we had overcome this difficulty, judging by the numerous conversations with sportsmen at the Chicago clay-pigeon tournament. However, by Aug. 1 we will be prepared to supply clubs, etc., with a de

tachable "spring" metal tongue, to be used when the pasteboard tongue is torn off by the carelessness of the trapper or becomes useless through moisture. This substitute will not prove equal to the pasteboard, which we predict will always make our present clay-pigeon the best substitute for the live bird which will ever be placed upon the market.

Thirdly—With reference to the legality of our patents. We must decline to discuss our legal attitude in a sportsman's paper, but will do so in the U. S. courts of justice whenever the occasion offers. We have repeatedly offered (and hereby repeat the offer) to any would-be competing manufacturer—both through the press and to individuals—to enter a full, personal, legal discussion, and to expose our evidence, to show our books as to cost of manufacture. Any one who will do so will undoubtedly withdraw from his contemplated opposition enterprise.

Fourthly—As to the cost of the clay-pigeon; irrespective of "patent" or "no patent," we desire to say (though we presume many of your readers will not believe this) that our profits are less than the same capital would earn if invested in any stable manufacturing business not protected by patents. As partial proof (and we trust all candid sportsmen will listen to us on this point) we will mention the following: (a) In Holland (where there is no patent law whatsoever) some manufacturer tried to make the clay-pigeon and failed utterly. (b) An English company, after canvassing the whole of Great Britain, found one firm who undertook to make the clay-pigeon at £3 (about $15) per 1,000, upon a contract to manufacture 150,000; result, a failure, though the retail price in England is $30 per 1,000. (c) A firm in France made a similar failure. (d) A firm in Toronto, Canada, tried a similar experiment; result, a failure, though the duty there is 25 per cent. on the invoice price of the import. We claim broadly that no better in this country can manufacture same in quantity at less than $15 to $18 per 1,000; if any man thinks otherwise, a walk through our factory will convince him to the contrary. Therefore, we trust that sportsmen will cease to backbite us on account of the price. Those who do not wish to use them, need not do so; all we ask is that they cease to compare the price with that of the insipid glass ball, but rather with that of the game, gallant bird it strives to emulate, and with the success now universally recognized.

Fifthly—With reference to reloading the trap after each shot. When shooting at five traps we are decidedly in favor of same in order to assimilate live bird shooting in the field. Trap-shooting, to preserve its charm, and above all to raise this sport from the level of the pure gamester to that of the gentlemanly sportsman, must be made as nearly analagous as possible to field shooting, preserving all the uncertainties of the latter. The man who shoots for money only wants no uncertainties whatsoever; he who shoots for pure love of the sport (even though some "sugar" be mixed in the "tea") prefers the uncertainties of field shooting, and desires to see those uncertainties incorporated in any artificial trap-shooting. Now this is a point on which honest sportsmen may differ, and I doubt not the sentiment is equally divided on this subject; therefore, Mr. Editor, let us have a full discussion from all sides. Our desire is to see trap-shooting contests placed on a high level, so that the thousands of amateur gentlemanly sportsmen, who to-day hold themselves aloof from tournaments may be induced to participate. We would like to see trap-shooting contests on a large scale and of frequent occurrence in all our principal cities. There are thousands of people to-day who attend baseball contests, who never handle a bat; and we wish to see these same people witness gun club contests, though they never handle a gun. Rob trap-shooting of its uncertainties and this can never be accomplished; give it all the uncertainties practicable and success will surely follow. Do not the baseball patcher and batter vary their balls? In billiards do not contestants have uncertain conditions? How stupid a championship game of billiards would be, if each player had the same certain shot instead of the present varied uncertainties. Let trap-shooters do likewise, if they would triple and quadruple the number of contestants at their tournaments, whether local or national.

We trust no man will take offense at the above criticism; we wish to antagonize no man, we care not what the motive may be which prompt a man to enter a shooting contest. What we wish to do is to increase the present passive interest of the public in shooting matters to the mutual interest and pleasure of the present shooting. Let us ask ourselves why shooting has heretofore failed to draw an audience? Is not the gun much more attractive than the bat? Is it not a more manly sport? To all answer in the affirmative. Wherein then, lie the faults of the past, and what should be done to place shooting on so broad a basis that a man need not blush to be known as a "sportsman" or to participate in a trap-shooting contest under his proper name, in place of a *nom de plume*? Doubtless this latter remark will astonish some of your readers, but it conveys the truth as we have ascertained through contact with devotees of the gun throughout the country. Our remedy is conveyed in the above suggestion, viz.: to assimilate "trap-shooting" to "field-shooting" so as to preserve all the uncertain conditions possible; it will place the amateur on a par with the professional, it will increase the interest in all shooting contests, it will draw the public, it will greatly increase the ranks of the shooting fraternity.

J. E. BLOOM (for L. C. P. Co.).

CINCINNATI, July 11, 1884.

DETROIT, Mich.—Maine Gun Club.—The following scores were made at the last match of the club:

Robenet	1101111111—9	Robenet	1111101011—8
Endriss	1101111011—8	Endriss	1111010111—8
Bryant	1101111110—8	Bryant	0011111110—7
Bowers	0111101110—7	Bowers	0111111010—6
Peaselus	0110100000—3	Peaselus	1101000000—3
Heck	1110001111—7	Heck	1011111011—8
Moebs	1001110111—7	Moebs	1001001001—4
Miller	1011111100—7	Miller	0011111110—7
Martz	1001110101—5	Martz	1010000111—5
Besser	0011110111—7	Besser	1111101010—7
Reaster	1100011111—7	Reaster	0101011111—7
Robenet	1111101011—8	Robenet	1111100011—8
Endriss	1111010111—8	Endriss	1111010110—7
Bryant	0011111010—7	Bryant	0011100000—3
Bowers	0110111010—6	Bowers	1110110000—5
Peaselus	0111010010—5	Peaselus	1001000000—2
Heck	1101111011—8	Heck	1111000100—5
Moebs	0101100111—6	Moebs	0010110000—3
Miller	0111100111—7	Miller	0111000010—5
Martz	0001001000—3	Martz	1010000001—3
Besser	1101010110—6	Besser	1100100001—4
Reaster	0111101111—8	Reaster	0111001000—4

THE MISSOURI STATE SPORTSMEN'S ASSOCIATION will probably not have a meeting this year, as there are no wild pigeons to be had.

ALBERT LEA, Minn., July 17.—Combination traps, 18yds. rise, first notch:

J A Fuller	0100101001101101001100000100101111010101010100111—24
B Pinkham	1001101011101100010110000111001110011010000101011—26

WINCHENDON, Mass., July 17.—The Winchendon Gun Club had their regular shoot yesterday. Out of a possible 10 clay-pigeons, the result was as follows:

G S Loud	0100111111—7	P S Davis	1001000110—4
L F Martin	1010101110—6	Dr J G Henry	1000010010—3
L P Ball	1011010100—5	James Southerland	0010100000—3
Moses Manzer	0010101101—5	F M Brown	0000000110—2

THE NEW YORK TOURNAMENT.—In our last issue was given the programme of a three days' tournament, which will be held at the Metropolitan Base Ball Park, in this city, Aug. 14-16. That the meeting will be an interesting one is already assured by the entries which have been made. They comprise the Exeter (N. H.), Massachusetts Rifle Association, Boston, Worcester, Windsor (Conn.), Jersey City Heights and Capital City (Washington) clubs, and about as many more are expected.

TRAP-SHOOTING GROUNDS IN NEW YORK.—One great drawback to the sport of trap-shooting in New York has been the necessity of crossing the ferries to find suitable grounds. There are many suitable grounds in the upper part of the city, but shooting there is prohibited by a city ordinance. Through the exertions of Mr. J. E. Bloom, of Cincinnati, the New York Aldermen last week adopted a resolution permitting the use of shotguns in the Metropolitan Base Ball Park, at the corner of First avenue and 107th street, reached via the Third avenue Elevated to 106th street. We presume that the grounds could be secured by gun clubs on very reasonable terms.

TOPSHAM, Me., July 18.—Regular shoot of Riverside club for club badge, 20 clay-pigeons, 10 singles, 5 pairs, 3 traps, use of both barrels:

Goud	1011111111	10 11 11 11 01—14
Alexander	1111212010	10 01 10 10 00—11
Hall, A E	1020010112	10 10 11 11 01—12
Hall, M C	1110111110	11 11 11 11 10—17
Winslow	1011110010	10 11 10 00 11—12
York	1101100210	00 11 00 10 00— 8½
Greenleaf	1100110010	11 00 11 01 00— 9

ASSOCIATION OF THE CAROLINAS.—Rockingham, N. C., July 16.—*Editor Forest and Stream:* The tournament (?) of the Sportsmen's Association of the Carolinas, will not take place in Columbia, S. C., on the 23th inst., as I advised your readers. It has been postponed so as to get a day which will suit better the convenience of one of our members. I will endeavor to inform all persons interested, in due time for them to make all arrangements, and have requested T. H. Gibbes, Esq. to make all needful communications in the matter. At present I am inclined to think the shooting will take place in Charlotte, N. C., during the latter part of August.—WELLS, President.

LOWELL.—The Lowell (Mass.) Rod and Gun Club's second annual tournament will be held at the club grounds, July 30, clay-pigeons and glass balls, open to all. For programme address the secretary, E. W. Lovejoy.

Yachting.

DORCHESTER Y. C.

THE eighty-first matches of the Dorchester Y. C. were sailed in Dorchester Bay on July 15, in a strong breeze from northwest. The course for first class, 21 and under 27ft., was from a line between the judges' boat and stakeboat to Cow Pasture buoy No. 6, leaving it to port, to buoy No. 7 off Fort Independence, leaving it to starboard, Spectacle Island, Sculpin Ledge buoy and buoy No. 6, Lower Middle, on port, Cow Pasture buoy No. 6 on starboard, to finish—9½ miles. The second class, 18 and under 21ft., and third class, under 18ft., started from the same line, leaving Farm Bar buoy on port, Old Harbor buoy, Half Tide Rock buoy, Farm Bar buoy for the second time, Old Harbor buoy, Half Tide Rock buoy on starboard, and finally Farm Bar buoy on port, a total distance of 7½ miles. The sloop yacht Lydia Adams was used as a judges' boat. Seventeen yachts started, all being double reefed, and fourteen went over the course, as follows:

FIRST CLASS.	Length.	Actual.	Corrected
Sea Bird, G. L. Forbush	24.02	1 50 57	1 18 39
Amy, E. W. Baxter	21.00	1 57 13	1 22 03
Thisbie, S. A. Freeman	21.02	1 58 16	1 23 21
Saracen, W. P. Fowle	22.10½	2 06 02	1 34 32
SECOND CLASS.			
Scamp, F. Gray	18.04½	1 31 00	1 00 17
Niobe, F. L. Dunne	20.01	1 30 29	1 01 46
Water Witch, T. W. King	19.05	1 30 49	1 02 21
Madelon, W. A. Tucker	20.07	1 32 25	1 04 15
THIRD CLASS.			
Mirage, A. J. & L. M. Clark	17 05½	1 34 56	1 03 03
Nonpareil, E. Lanning	16.06	1 36 06	1 03 15
Guenu, W. L. Dearborn	17.07½	1 39 37	1 07 58
Juliet, H. L. Mann	17.10	1 47 18	1 15 55
Yolande, C. H. Nute	16.00	1 50 11	1 16 22
Ethel, W. F. Cutter	16.08	1 53 44	1 20 46

The judges were C. M. Noyes, C. H. Whiting and A. J. Clark.

YACHTING IN SAN FRANCISCO.

THE run of the Pacific Y. C. from San Francisco to Santa Cruz, on July 2, proved by far the most interesting race yet sailed by the club.

The start was made early in the morning, the yachts towing out from their rendezvous off Front street to the Heads.

The competing yachts were, Halcyon, 72ft. waterline; Casco, 85ft.; Lurline, 72ft.; all keels, Aggie, 70ft.; Annie, 45ft. 6in.; Ariel, 69ft.; Nellie, 43ft. 6in.; Fleur-de-Lis, 59ft. 10in., centerboard, and Lady Mine, a keel pilot boat. Halcyon was first away at 8:48 A. M., standing off shore to windward, with kites set. Lurline over within a minute of her, but keeping in shore. Aggie starting with the pack, soon lett them and overhauled the two leaders near Point Pedro about 10 o'clock, Lurline dropping astern shortly after, the wind being very light.

The after division were having a race to themselves meanwhile, Nellie taking the lead finally and holding it, with Annie last. The last twenty miles was in a fine breeze, in which Nellie gained on the Aggie but could not pass her, the latter crossing the line one minute ahead. The full times were as follows:

	Start.	Finish.	Elapsed.	Corrected.
Halcyon, k	8 48 00	4 34 00	4 46 00	7 27 37
Lurline, k	8 48 35	4 26 45	7 38 10	7 19 37
Aggie, c. b	9 01 22	4 25 40	7 24 18	7 01 16
Lady Mine, k	9 36 40	5 27 20	7 50 40	7 50 40
Nellie, c. b	9 38 39	5 34 30	7 56 10	7 11 45
Casco, k	9 38 50	5 34 00	7 55 10	7 53 10
Fleur de Lis, c. b	9 39 50	5 40 55	8 01 25	7 23 09
Annie, c. b	9 40 40	6 38 30	8 37 05	7 55 17
Ariel, c. b	9 41 20	7 00 00	9 18 40	8 53 45

The four prizes are of silver, their total value being $500.

The San Francisco Y. C. contented themselves with a quieter cruise than that of their more daring rival, braving the dangers of the Napa River in preference to the Pacific swells.

The fleet sailed on Thursday evening from San Francisco, Sea Nymph going in advance, the others—Startled Fawn, Whitewing, Chispa, Rambler, Lolita, Emerald, Frolic, Dawn, Ripple, Nellie, Magic, Spray, Idle Hour, Neva, Eva and Thetis—arriving at Vallejo by moonlight.

Some smallboat races were promised on the morning of the 4th, but none took place. At 9 A. M. all sailed for Napa, the only incidents of note being the grounding of several yachts, which occurred sufficiently often to justify the suspicion that more than one San Francisco yachtsman used his chart of the Napa upside down. Lolita was first in, then Emerald, Rambler and Fawn.

After some boat races, the party gathered on board the Whitewing and Chispa, where several hours were passed pleasantly, the fleet starting down in the evening in tow of two steam launches. Chispa grounding and lying ashore all night. The others left Vallejo at noon on the 6th, arriving in the evening at their moorings.

AMERICAN Y. C., STEAM YACHT RACES.

THE following circular and the report appended have been issued by Mr. Henry A. Taylor, secretary of the American Y. C., concerning the coming races of the club from Larchmont to New London in August. The club have accepted the invitation of the Larchmont Y. C. to rendezvous at Larchmont for the start:

There will be a rendezvous of the yachts of this club, prior to a regatta and cruise, at the Larchmont club house, on Wednesday, 6th of August next, P. M. From thence, at 10 A. M. on the following day, there will be a race around the lighthouse off Stratford to abreast the lighthouse at New London, and prizes of equal value are to be competed for in two classes of yachts, viz.: first class, all exceeding 100 gross tons; second class, all under 100; two or more entries in a class necessary to make a race.

The restriction of yachts to but two classes is for this occasion only, and is the consequence of there being but two prizes for competition with allowance of time. A third prize will be awarded to the yacht making the least time over the course without reference to allowance of time.

Owners of steam yachts of any organized club are invited to enter and to compete for the prizes under time allowance. The allowance of time is that recommended and reported by a select committee, and which has been adopted by the club, a copy of whose report is herewith inclosed.

Owners of yachts desiring to enter for competition in the above race, or in any that may occur during the cruise, are required to furnish the Measurer (Chas. H. Haswell, Box 2,961, N. Y.), on or before Monday, the 4th August next, at 2 P. M., at which time the entries will close, with the name, tonnages as taken from their register issued during the current twelve months, area of grates and character of combustion, as whether natural draft, jet, blast or exhaust, also with a copy of their signal, provided it is not already furnished.

The Regatta Committee will make the necessary arrangements, compute the time allowance, and have direction of the race, or any that may occur during the cruise, and all questions arising between competitors will be decided by them, under the rules and regulations of the club, so far as they may apply, and the decision of the committee will be final.

Report of the Committee on Time Allowance:

The committee to whom was confided the preparation of a rule for the determination and governing of time allowance of steam yachts in a competitive operation, respectfully submit that, having considered the subject and communicated with several engineers and owners of yachts in relation thereto, they find, that in order to attain a condition of competition approaching to that of exactness, that it would be necessary to ascertain the displacement of the vessel, the area of her freeboard at different drafts of water, the weight of the fuel carried, the character of its combustion, a reliable report of its consumption, and a visual verification of the pressure of steam, point of cutting off, number of revolutions, etc. The first two of which elements would involve the mitiatory computations of an expert, and the least of the latter, the presence of a capable and disinterested party to verify, whenever the vessel was in operation. Added to which, the attainment of the initiatory elements of displacement and areas would involve a character of labor and amount of expense wholly impracticable for the club to provide for at this time.

In view then of the assent that has been given to the report of Mr. Haswell on this subject to Secretary Taylor, in June last, we have decided to adopt the method therein detailed, with the units for allowance for the different characters of combustion of the fuel, viz.:

$$\sqrt[3]{\frac{GC}{T^2_3}}\ V.,\ \text{or, in other words,}$$

The velocity of a vessel is assumed as the cube root of the quotient of the product of the area of her grate surface, and constant due to the character of combustion, divided by the cube root of the square of her gross tonnage.

The constants being for natural draft, 1; jet, 1.25; blast and exhaust, 1.6, and in order to further equalize competition we recommend that the yachts be divided into three classes, thus: 1st class, 250 gross tons and exceeding that. 2d class, 100 gross tons and less than 250. 3d class, all under 100 tons.

Respectfully yours,
J. C. HOAGLAND.
GEO. W. HALL.
CHAS. H. HASWELL.

HENRY A. TAYLOR, Secretary American Y. C.

BEVERLY Y. C. SECOND CHAMPIONSHIP RACE.

THE second race for the Buzzard's Bay championship was sailed on Saturday last, the day opening with a S.W. by S. wind, so strong that the second class cats did not start. In the large cat class Iris was disabled and could not start, and no club member could be found to sail Lestris and Violet.

The preparatory gun was fired promptly, and at 1:12 the boats went off to a one-gun start, Tantrum and Whisper coming almost on the second, with Flirt, Atalanta and Mascot just astern, and Mattie, who was caught napping, just two minutes later.

Mascot crossed just to windward of the stakeboat, and would have been ruled out if she had come in first. Atalanta and Whisper carried single reefs, the other boats double reefs.

They had it hot and heavy beating out to Scraggy Neck, then a run across to Bird Island, and home with the wind on the quarter. Coming in Tantrum and Flirt shook out their reefs and crossed the line side by side.

	Length.	Actual.	Corrected.
Atalanta, I. R. Thomas	29 07½	2 02 17	1 54 02
Whisper, F. W. Sargent	28.00	2 05 15	1 55 30
Mattie, Vice-Com. Stockton	28.10	2 05 46	1 56 47
Tantrum, J. M. Codman	25.00	2 13 32	2 00 27
Flirt, Geo. H. Lyman, Jr.	25.02	2 13 32½	2 00 45½
Mascot, F. E. Bacon, Jr.	24.06	withdrew.	

Judges: Edward Bangs, E. A. Bangs, W. Lloyd Jeffries. Judges' yacht, Madcap, B. Y. C.

BLUE WITH A GOLD CASTLE.

STEAM YACHTS AND STEERING GEARS.

A NEW device for quickly Landling a steam vessel has been applied to the steam yacht Vixen, built by Mr. John Samuel White, of East Cowes, for Lieut.-Gen. Baring, and described in the London *Field* of June 28.

Two balanced rudders are employed, the larger, of 8sq. ft. area, being fitted abaft the wheel in the usual manner, but the smaller, of 4sq. ft., is hung directly forward of the sternpost, the deadwood being nearly all cut away, the rudder filling the space between the keel, sternpost and shaft. The rudder heads, above deck, are connected by chain gearing, one wheel, of course, operating both. In a trial of her speed in turning, on the helm being put hard over, an angle of 45°, the time occupied being 7 seconds, the boat turned in a circle of two and one-quarter times her length, or 137ft., in 38 seconds. The dimensions of the yacht are: Length over all, 62ft.; length on water-line, 61ft.; extreme beam, 11ft.; depth, 5ft. 1in.; extreme draft, 4ft. 10in.; displacement, 18 tons; cylinders, 8½ and 13in. by 9in. stroke; screw, 4 blades, 3ft. 8in. in diameter, 4ft. 1½in. pitch.

Mr. Stewart Clark, owner of the Vanduara, has lately had built for him a new steam launch named Morna, from designs by Watson. She is intended for a tender to the Vanduara, and is spoken of as a very handsome vessel.

The Kunstadter screw has lately been tested in this country by the Naval Board, who will report in its favor. The trials were made at Newport, ending on July 9. In the first trial the boat was reversed from full speed ahead to full speed astern in 2m. 43s., the helm being hard over, changing the head eight points, the same maneuver without the extra screw occupying six minutes like good staunch ships should do. Though the Sunbeam came out ahead, it was clearly demonstrated that the narrower boat, with greater freeboard, was all the time the ablest and safest boat. Captain Krouse made a mistake in his course, and that beat him. Wide boats, however well shaped, cannot cope with narrower ones in a sea.

Your readers will remember in the report of the annual regatta, June 2, Quaker City Y. C., the Thomas won the first prize and the Commodore's challenge cup. The Nahma, winning second prize, challenged the Thomas for the cup, according to the rules of the gift. The boats sailed on July 14, over the Q. C. Y. C. course, starting at 10:05 A. M., wind blowing hard from N.W., going with nearly a square boom. The Thomas with a single reef in the mainsail, whole jib, the Nahma with a double reef hauled down. The boats ran side by side until reaching the Horseshoe, where the river turns to the westward, bringing the boats sharp on the wind. The Thomas outlooked and outfooted her opponent, and kept opening the gap to the buoy on the upper spit of Chester Island, turning it 11:55, Nahma 12:01. Squaring away for home, Thomas shook out reef and set jibtopsail, Nahma coming along with her two lower sails only, gradually but surely closing the gap. Passing inside of Ironside shoal, she came up abreast and the Thomas set working topsail, but without avail, and rounding the Shoe, the Nahma went to the front in good style, her powerful wide headsail making her jump. For myself I can say, as an old yachtsman generally steady under excitement, I caught the "thrill," and was just as crazy as any one else. It was now anybody's race. The yachts winded each other alternately. It was nearly a dead beat from the Shoe to the home stakeboat, which was reached: Thomas, 2:10 P. M.; Nahma, 2:10:08. I desire to return thanks to the Thomas's crew, one and all, for their courtesy to me as the Nahma's judge.

R. G. WILKINS.

CAPSIZE OF A SANDBAGGER.—A race between open boats took place on July 19 in Newark Bay, the course being 10 miles. There were eight entries, and the wind was squally. Just Woke Up capsized near the Newark Bay Bridge, her crew of sixteen men being thrown into the water. The leading boat, Maggie P., went to their rescue, taking four on board, the Emma C. also rendering necessary assistance. Maggie P. went on finally winning on time, Emma losing her chances by staying to help her unfortunate competitor. The times were as follows:

FIRST CLASS—JIB AND MAINSAIL.	Start.	Finish.	Elapsed.	Corrected.
Just Right	3 45 30	5 29 45	1 44 15	1 44 15
Emma C.	3 45 15	Did not go course.		
Just Woke Up	3 45 45	Capsized.		
Maggie P.	3 45 00	5 28 00	1 43 00	1 42 00
SECOND CLASS—CAT RIGGED.				
Triton	3 40 45	5 17 00	1 36 15	1 36 05
Whisk	3 41 30	Did not go course		
Zephyr	3 40 00	5 27 00	1 47 00	1 47 00
Bon Ton	3 40 15	5 20 00	1 39 45	1 38 55

EAST BOSTON YACHTING.—The Jeffries Boat Club, of East Boston, held their races on Saturday last. The boats were divided into two classes, the prizes for the first being $20 and $10, and for the second $15 and $5. The course was 12 miles for first class and 6 for second, with a strong northwest wind blowing, the start being made at 3:32, but two boats entering.

	Length.	Actual.	Corrected.
Una, John Marno	29.00	1 50 15	1 45 50
Judith, E. T. Pigeon	26.10½	1 59 16	1 59 16

The second class got away at 3:31, finishing as follows:

	Actual.	Corrected.
Hard Times, Geyer & Moore	1 6 40	1 6 40
Zetta, Warren & Fowle	1 6 44	1 6 32
Unknown, Ambrose Martin	1 8 16	1 8 03

Mr. B. S. Palmer was time keeper and judge. The next race will occur Saturday afternoon next, at 3 o'clock.

DORCHESTER Y. C.—The next meeting of this club will be held on July 28, and will be open to boats of the club of 18 and under 21ft., the courses being 7½ miles. The prizes offered are: For first class, $12 and $6; second class, $10 and $5. The first signal will be given at 2:55 P. M., the starting signal at 3 P. M. for first and 3:05 for second class. One man is allowed for every five feet of deck length, and no shifting ballast is permitted.

AN ADVENTUROUS VOYAGER.—Captain W. Johnson, a Norwegian, arrived at the Town Quay, Southamption, on Saturday, in his little craft Neptune, a boat somewhat of the whale-boat type, rigged with two masts, carrying a jib, lugsail, and mizzen. Captain Johnson early in last year sailed this boat from Drontheim, in Norway, to London Bridge, his narrative of the voyage afterward attracting much attention. The Neptune was shown in the lake at the Horticultural Gardens, South Kensington, during the time the International Fisheries Exhibition was on view, being in company with many other curious craft. She is 26ft. long over all, with a beam of 5ft. 2in., and is decked in with waterproof weather cloth to cover up the well. Captain Johnson sailed from the Thames on April 1, his only companion being a cat, and he has been cruising along the north coast of France, and, crossing to Worthing, had his little boat hauled up on the beach, where she was an object of much curiosity, a photograph being taken of her and her owner. The Neptune is now hauled up in Stockham and Pickett's yard at West Quay, and is having an iron keel put on. Captain Johnson intends to cross the Atlantic in her if possible, and will commence his voyage at the Town Quay some time during to-day.—*Land and Water, July* 12.

EASTERN Y. C.—The prize which was won by Fortuna at the annual regatta on the 27th of June last, has been returned as a cup, by Commodore Hovey, to the regatta committee, who have decided to offer it to be sailed for on the annual cruise of the club, at New Bedford, on Monday, the 28th July (or, if stormy, next day), open to first and second class schooners of any club, E. Y. C. measurement and allowances. The course will be notified to the boats hereafter. The race will be sailed in cruising trim, with anchors and chains on board, boats at davits, etc., but sails allowed by E. Y. C. rules may be carried. There will also be sailed at the same time and place, a race for first and second class sloops, for a cup offered by Commodore Hovey, over the same course, and under the same conditions. These races will be started as near to twelve o'clock as possible, and the committee's boat may be used as a stakeboat at the beginning and finish. Entries may be made to the fleet captain, at the flagship Fortuna, up to eleven o'clock on the day of the race.—Daniel Appleton, George A. Goddard, Edward B. Haven, Regatta Committee. (Boston, July 18, 1884).

TORONTO Y. C.—A race for yachts of 7 tons and under was sailed on Saturday, July 19, with three entries, Iris, Mischief and Kestrel. The start was made at 3 P. M. from the club house, in a northwest blow that put all under close reefed mainsails and storm jibs. Mischief crossed first, with a good lead over Iris, Kestrel being delayed considerably. The time at the first buoy was: Iris 3:16, Mischief 3:18:30, Kestrel 3:27:20, Iris having more than made up her loss. In the run to the buoy off Gibraltar Point, Iris still held her place, rounding at 3:39:45, Mischief at 3:31:15, Kestrel 3:40. Here Kestrel had a misunderstanding with her spinnaker boom, which went overboard, one of her crew going over as well, but both being picked up. So much time was lost, however, that she withdrew. Iris rounded the next buoy at 4:08:15, and Mischief at 4:12:45, and started for a run down, Iris with gafftopsail over close-reefed mainsail. Mischief could not carry her spinnaker, though she tried. Iris finished at 41:44, beating Mischief 5min. on corrected time. Iris has to win once more before owning the prize.

HULL Y. C. OREGON HOUSE MATCHES.—A match will be sailed on Saturday, July 26, off the Hull Y. C. house, open to all yachts of the club, for prizes given by the guests of the Oregon House, near by. There will be four classes of yachts, as follows: First class, keel sloops, measuring 21ft. and under 28ft.; second class, centerboard yachts, measuring 20ft. and under 25ft.; third class, cat rigs, measuring 18ft. and under 20ft.; fourth class, cat rigs, measuring under 18ft. The prizes are: First class, first prize $25, second $10; second class, first prize $25, second $10; third class, first prize $20, second $10, third $5; fourth class, first prize $15, second $10, third $5. The courses will be 10 miles for first and second classes, and 6 miles for the third and fourth. The first signal will be given at 3.30 P. M., the starting signal at 3:40 for first class, the others starting at 3:45, :50 and 3:55 respectively. The committee are Messrs. Harrington, Dunne and Brown; judges, Messrs. L. J. and C. F. Harrington, and M. J. Kiley.

OPEN BOAT SAILING IN NEW YORK.—Our columns every week ear testimony to the popularity of smallboat sailing in Boston, nd this week the Beverly, Lynn, Dorchester, Hull and Salem clubs are on record with matches just sailed or about to be. In New York the record is easily summed up; a race on Newark Bay on the 19th, in which the capsize of one boat in a strong tideway placed the lives of her crew, sixteen men, in great danger for a time; another race on the following day in the Sound, with another capsize, the five men being finally rescued, and an upset of a small, shoal sailboat, with a party of six, half of them women, in the Hudson. These last also were saved, but only by chance. How much longer are we to wait, and what emphatic warning to come, before the advent of safe boats, limited crews, and fixed ballast?

HULL Y. C., LADIES' DAY.—Thirteen yachts took part in the ladies' day sail of the Hull Y. C. on July 19; the schooners Silvie, Com. Perkins; Vif, Vice-Com. Crane; yawl White Cap, Rear-Com. Rice; schooners Geo. H. Warren, Alice, Marion Wentworth and Tempest; sloops Anna, King Philip, Ella May, Ariel, Vishnu, and cat Rambler. With a fresh wind from southwest the fleet started off under single and, in some cases, double reefs, the signal being given at 2:45 P. M. The fleet sailed past the Silvis in review, then stood out through Hull Gut, down almost as far as Minot's light, then turning sailed in, arriving at about 6 P. M. The ladies were taken ashore in the tug Wesley A. Gove to the club house, where supper was served, after which a dance occupied the rest of the evening.

BEVERLY Y. C. BOOK.—The Club Book for 1884 shows a membership of 127 with 88 yachts, all being under 30ft., among which are 8 cutters, 2 yawls, 19 sloops, 1 schooner and 59 catboats, 23 keel and 65 centerboards. The success this club of small boats has met with may be judged from the list of its matches last year, a full account of which is given. The entries for the eleven matches sailed during the season, were no less than 303, nearly all the boats starting. The grand occasion of the year was the open race in August, in which 190 yachts entered, by far the largest fleet ever brought together in a race in American waters, while the arrangements were so perfect that the large fleet were started and timed with hardly any mishaps.

NEW HAVEN Y. C. CRUISE.—A start was made on Saturday, July 19, delay being occasioned at first by a violent thunder storm at the hour appointed. The fleet includes the Minerva, Mascotte, Zephyr, Acme, Wild Pigeon, Vixen, Endeavor, Rajah, Flora, Marguerite, Ceres, and Wild Duck. On Monday at 7 A. M. the yachts left Stony Creek, arriving at Greenport in the afternoon. Endeavor and Mascotte put back owing to the heavy weather on the Sound. On the run across Rajah arrived first at Greenport, having been lost under way at Stony Creek. The fleet will proceed to New London, Newport, and New Bedford, where a race will be held. The start for home will be made on the 28th.

LAKE YACHT RACING ASSOCIATION.—The new Lake Yacht Racing Association will hold their first matches at Oswego on July 30, and a large number of boats will probably enter. The following prizes are offered: First class, first $150, second $75, third $50; second class, first $100, second $65, third $35—a third prize only being given if four boats start and a second if three start. The second race for the championship pennant given by Commodore Mott will be sailed by all yachts of the Oswego Y. C. over the second class course. All races will be sailed under the rules of the L. Y. R. A. Entries must be made in writing to W. E. Lee, secretary, on or before July 28.

A NARROW ESCAPE.—A party of six, three of whom were ladies, were thrown into the Hudson on Sunday by the capsize of the catboat Edith, a trap of the usual model. In this case the presence near by of the police boat, Patrol, prevented the customary tragedy attendant on such accidents. If men choose to peril their own lives in such machines perhaps they have a right to do so, but risking the lives of women who are ignorant of the danger and trust in their superior knowledge is a different matter.

A NEW YORK BOAT IN EASTERN WATERS.—The owner of the open jib and mainsail boat Cruiser, well-known in the Seawanhaka and Larchmont clubs, will take his boat to Boston next month, for a series of races with Eastern boats. The following races have already been arranged: Aug. 18, A. M., Thisbe; Aug. 18, P. M., Viva; Aug. 19, A. M., Hornet; Aug. 19, P. M., Holden; Aug. 20, Amy; Aug. 21, Queen Mab; Aug. 22, Sea Bird; Aug. 23, Black Cloud. The Cruiser will also enter the matches of the Hull Y. C. on Aug. 16 and Beverly, Aug. 23.

BEVERLY Y. C.—The second championship matches will be sailed on July 26, at Swampscott, at 12 M. The classes are: First, over 23ft. 6in. and under 30ft., water-line; second, over 19ft. 6in. and not over 21ft; third, 19ft. 6in. and under. No change of ballast may be made on the day of the race. The time of the race is limited to 2½ miles per hour for second and third classes, 2¾ miles for all others. A special prize for first class schooners, and also one for second class keels, will be given, provided two start in a class.

OPEN BOAT RACE ON THE SOUND.—A race was sailed on Wednesday, July 16, from Bridgeport Light to Westport and return, 20 miles, between the open yachts Americus, Hugh Masterson, and Alice, E. W. Smith, both of Bridgeport. The Americus won in 4.37, beating the Alice 24 minutes, corrected time. The race was sailed under the rules of the Dorchester Y. C.

LYNN Y. C.—The Lynn Y. C. will hold their matches on Saturday next, off their club house, starting at 1 P. M. There will be three classes.

WRECK OF A YACHT ON LAKE ERIE.—The Petrel, a schooner yacht 30ft.x11.1ft., parted her moorings on July 13 and went ashore near Angola, proving a total wreck. Her crew were on shore at the time. The Petrel was built in Buffalo, where she was owned, in 1879.

QUAKER CITY Y. C.—A sweepstakes race has been arranged between the fourth class yachts Minerva, Adelphia, Elwell, T. J. Pratt, and Francis K. Pierson, to take place over the usual course from Market street wharf, Camden, around Chester Buoy and return.

SALEM BAY Y. C.—The matches of this club, postponed until July 17, were not sailed on that day, owing to a heavy thunder storm at the time of starting, so they were postponed for the third time, no date being set.

VIKING.—This steam yacht, built by Roach & Son in 1883, has been sold by her owner, Mr. G. S. Scott, to Mr. Samuel J. Tilden.

Canoeing.

CANOEISTS are invited to send us notes and full reports of cruises, club meets, information about canoeable waters, and other communications of interest.

FIXTURES.

July 24 to 26.—Lake George Meet, Lorna Island.
Aug. 1 to 15.—A. C. A. Meet, Grindstone Island.

WEIGHT OF CENTERBOARDS.

WHEREAS, The use of heavy centerboards has made it desirable to define the limit of weight at which it may be claimed a board is not used as ballast,

Resolved, That to be eligible for races without ballast, the centerboard, with case complete, should not exceed 15 pounds in weight.

The above resolution was unanimously agreed to at a regular meeting of the Mohican C. C. There are no heavy centerboards in the club, and none of the members use ballast; but an expression of opinion was made with a view to directing attention to an important subject. The captain or some other M. C. C. man will move as above at the next A. C. A. meet in order to put an end to the vague terms "light" and "heavy," as applied to boards, and for the guidance of future regatta committees.

The Mohicans recognize the heavy board as a legitimate appliance, and ballast as an advantageous aid under certain circumstances; but they like to keep their boats light, because they paddle as well as sail, they travel by rail and by steamer quite frequently, and they like to float in a few inches of water as they explore creeks and streams near home and rifts and rocky rivers away from home, and they like a buoyant boat, because they have lively squalls and pretty rough water, and not infrequen capsizes (which are, under the circumstances, very good fun).

And the Mohicans believe that quite a number of other canoeists agree with them. Therefore, they desire in their own club, and in the Association, to have races wherein the light all-round canoes can compete apart from racing sailboats, although they are not afraid to try conclusions with the veriest racing machines in any weather, in other races.

And this resolution is published in order that proper consideration may be given to the question before it is put to the vote.

[There would probably be some difficulty in limiting the weight of board and trunk, as the latter is a fixture in the canoe, and in many cases its weight, if not ascertained when building, could not be afterward determined. Would it not be best to limit weight of board only, as the board can, in almost all cases, be detached and weighed?]

ROYAL C. C. ANNUAL REGATTA—JUNE 28.

THE Royal C. C. were again favored with glorious weather for their interesting and popular annual meeting. The entries for the paddling races were not perhaps as numerous as on some previous occasions, but the events were for the most part hotly contested, and afforded considerable amusement to the spectators. The entries for the sailing race were good, and much interest was centered in Mr. Baden-Powell's new Nautilus. Unfortunately, however, he was unable to get a suit of sails made for her in time, and was therefore compelled to stand out from this event. In the running race, however, the new boat showed considerable speed, and won, after a good race with the old Pearl, now Violet. During the day the band of the H. A. C. performed a selection from their repertoire, and greatly aided to the enjoyment of the meeting. The results of the various events were as follows:

Half-mile paddling race, any canoes.—Claud Scott, 1; S. Futcher, 2. A splendid race, Futcher leading at the start, Scott passing him at the half distance, and winning by a bare five feet.

Paddling and sailing race; sail before wind, and paddle back.—A. B. Ingram, 1; J. V. Vesey-Fitzgerald, 2. Fitzgerald led in the run down, but got in a mess with his sails on rounding, Ingram winning easily.

Mile Paddling in Rob Roys.—Claud Scott, 1; P. Nisbet. Won anyhow, Nisbet giving up at half distance.

Half-mile double canoe race, lady and gentleman in each canoe.—F. W. Lewis-Farrar and lady, 1; P. Nisbet and lady; E. L. P. Nisbet and lady, 0. Won easily.

Sailing race, four times round.—T. F. Knowles, Gladys, 1; E. A. Leach, Wave, 2; W. Watney, Violet, 0; H. Church, Imogene, 0. Violet got away first, but was passed by Gladys. In the second round, however, Violet got away again and had a good lead, when her skipper got literally "up a tree," and extinguished his chance. Imogene got an unlucky puff, which nearly filled her, so the Wave was left to walk in for second place.

Mile paddling challenge cup.—M. A. Ord-Mackenzie, the holder, did not put in an appearance, and the race lay between Claud Scott and Futcher, the former winning, after a good race, by about three lengths. Both men steered miserably.

Sailing race, running only.—W. Baden-Powell, Nautilus, 1; W. Watney, Violet 2; J. Vesey Fitzgerald, Zoedone, 3; H. Church, Imogene, 0. The new Nautilus, with a small sail borrowed for the occasion, sailed a good race and won.

Four-paddle race.—Claud Scott, E. L. P. Nisbet, H. K. Bridger, P. Nisbet, 1; S. Futcher, W. E. Graham, G. V. Gaskell, A. B. Ingram, 0. A splendid race, the boats being neck-and neck all the way, Scott's crew just winning by half a length.

Chase over land and water.—P. Nisbet, 1; S. Futcher, 0. Futcher was first across the river, but hurried too much on getting his canoe out of the water and in again; Nisbet taking matters more coolly, got his canoe in right side up and won easily.

Scratch fours, half mile.—First heat; H. Davenport, G. V. Gaskell, W. O'Mally, and P. Hart 1; E. L. P. Nisbet, Carpenter, P. Nisbet, and W. Scott, 0. Won by three lengths.—Second heat: H. Tuppin, C. L. O'Mally, Chancellor, and Claud Scott, 1; G. J. B. Porter, E. Morley, H. Church and G. Ingram, 0.—Final heat: C. Scott's crew, 1; Davenport's crew 0. A splendid race, resulting in favor of Scott's crew by a length.—*London Field, July* 5.

CRUISING CANOES AND THE A. C. A. RULES.

SINCE the publication of the official programme of the annual races, the attention of canoeists generally has been drawn to a most important feature of the present racing rules, their influence on canoe models. It will be admitted without question that the main end in view in all canoe legislation is the encouragement of legitimate cruising, and to that end the development of the best possible model for general cruising work and the limitation of extreme types and racing machines.

The value of canoe races in the development and promotion of the sport is beyond dispute. They add greatly to the interest of canoeing. They can be held at all times, on any afternoon through the season, and so are open to many who cannot spare time for cruising. To their influence we owe many of the most valuable improvements in boats and gear, and they occupy deservedly a prominent place in our meets; but with them comes the necessity for fixed and carefully prepared rules. Even without racing some limit or definition of a canoe would be necessary, but to class the boats properly for the races is the first requisite. Those most interested in such work would naturally be racing men, and the chances are that in their eagerness to provide sport for all they will forget the medium boats and favor the racers, both sailing and paddling.

In criticising any set of rules, the test question is, "What is their influence on canoe models," or what classes of canoes will be built under them, and in connection with this, it must be considered that the records of all sports prove, that where a limit is set, competition will always force the contestants to build up to it in time.

The history of the present rules is known to all canoeists; in 1881 a committee of three was appointed by the A. C. A. to draw up rules and sailing regulations; their work was submitted to seven other canoeists, representatives of various clubs, and the work amended in accordance with their suggestions, after which the rules were distributed among canoeists for their opinions, before being finally submitted to the Association and being adopted. After a limited trial in one regatta, the regatta committee of 1882 and 3 rejected them, in favor of those at present in use, which have thus far had also one season's trial.

In the former rules, every canoe was placed definitely in a fixed class, according to its leading dimensions, races being arranged for that class, both paddling and sailing, the consequence being that the same boats came together in each race, and if one improved his advantages as a sailing boat by an undue sacrifice of paddling requisites, he paid for it by being at a disadvantage in paddling, and vice versa. Of course there will always be some boats difficult to place in any one class under any rules, but the difficulties arising under the former rules, owing to diversity of size, there never having been any standard or limit previously, would disappear in a few seasons, as the rules were built up to. The new rules were based on an entirely different plan, the primary distinction being sailing canoes, and paddling canoes, or two totally distinct classes, the limit of size for each being widely different. The immediate tendency of such a rule is evidently to develop special boats, some fast under paddle, and others only fast for sailing, and while one year is hardly long enough to test the matter conclusively, the coming meet will probably prove the truth of the above, by bringing out boats built to the limit in one class, but useless in the other, such boats of course taking the prizes, to the exclusion of the all-round canoe.

For instance, taking a canoe of 14×28, it is called upon to paddle against a canoe of 17×28, a handicap of 3ft. in favor of he latter boat, certainly an immense advantage, other things being equal. In sailing it is brought against a boat 16×28, or 2ft. against it. The smaller or Rob Roys, 26in., must paddle against a boat 2ft. longer, and their only chance for a sailing race is with a canoe 16×28, in which their chances are decidedly poor. The 14×30 canoes must also give 2ft. of length, and even then there is but one paddling race that they can enter, while in sailing, in the three races they can enter they are heavily handicapped. The entire pressure of the rules then, is to boats either 16×28in. or 16×30, both of which sizes are but little used, and by the general practice of canoeists are far from the best, and while, at present, the small intrinsic value of the prizes makes the pressure comparatively light, as races increase in the clubs, as they are rapidly doing, canoes of other dimensions must withdraw almost entirely from them.

It will be easier to say after the present season how far this evil will extend, but we would call the attention of all canoeists to the rules, as worthy of their most careful consideration, with a view to their improvement. One of the first requisites of a measurement rule is stability, that it should remain as far as possible unchanged, in order that boats built under it may not be outclassed in a year or so, and we would not advise another ill-considered and radical change, but a careful effort on the part of all for the removal of the present difficulties.

THE A. C. A. RACES.

Editor Forest and Stream;

Mr. Whitlock's letter and the editorial note following it give a different aspect to the programme question, but there is still an uncertainty about some points. First let me say that the Mohican resolutions were prompted by the programme published in FOREST AND STREAM, which Mr. Whitlock has declared incorrect, but which was nearly the same as a proof which he offered for my perusal some time previous, and against which I protested, without effect, as I supposed, since the chairman of the Regatta Committee wrote to me unfavorably and then published a letter defending outside ballast (which Mr. Tyson has ably met). Therefore we had every reason to believe that the programme in FOREST AND STREAM was authentic. But referring to *Canoeist*, I find:

12. Sailing light race, 3 P. M., 1½ miles
(*a*) Canoes without ballast.
(*b*) Canoes with heavy board only.

I infer from Mr. Whitlock's last letter that the *a* and *b* do not refer to classes. The use of these letters is somewhat misleading, therefore, but this does not matter much if it is clearly explained.

But the next inference (or rather consequence) is that in light races Classes A and B are to compete together, in fact, Mr. Whitlock writes that in that race, "which has always been for any canoe, the divisions into A and B classes becomes unnecessary." Now, referring to the no ballast race in last year's programme, I find classes A and B mentioned, and I remember that, although sailed together, they were separate races with separate prizes, and it seems to me that the idea of cutting down the programme is not furthered by adding a light race for canoes with heavy racing appliances, if it has to be done by crowding the real light boats into a single race where Class A boats have no chance against their bigger opponents. It simply alters our complaint that there was no light race for Class B to one that there is none for Class A, and as I have not, from the commencement of this discussion, wished to obtain advantages for my own boat but have only asked for an equitable arrangement, I think the situation is not improved.

Only one Class A Mohican canoe is likely to be at the next meet, the Marion, and it was her owner who offered the resolution petitioning in favor of Class B. Now it is her turn to be advocated. She was proved at Newburgh to be a good boat and skillfully commanded, yet it is well known that against three inches more beam she has no chance worth speaking of, and that too, in her proper and favorite trim of no ballast. There are many canoes of the same type; I speak of the Marion only as an instance of her class.

It seems to me to be evident without argument that each of the classes, A and B, should have a race without ballast. I think they were the most valuable races on the programme and the ones most likely to encourage good canoeing in fair boats not over-rigged. At the same time I personally, and the Mohicans as a club, are sorry to be thus at variance with the chairman of the Regatta Committee, knowing how able and beneficial his previous services to the A. C. A. have been. For my part I would withdraw everything and say no more rather than assume the responsibility of being a useless critic. I commenced as a petitioner, circumstances have since put me in the attitude of a critic. I have no more to say on this question unless it is the opinion of the A. C. A. that enough is not yet said.

ROBERT W. GIBSON.

[As stated last week, the error alluded to was in the original copy sent to us by the Regatta Committee. It would be very easy to divide the canoes in the first division of race No. 12 into A and B classes, starting all together, of course. The main difficulty, as we have pointed out elsewhere, lies in the basis of the present rules.]

THE LOG BOOK.

IX.—A CRUISE ON THE MERRIMACK.

LEAVING Salem by the first train on the Fourth of July, the canoe Joie started for a cruise down the Merrimack, from Lawrence and through to Ipswich. The Joie is a canvas canoe of the Rob Roy style, decked over, and is a home-made craft. Leaving the canoe at North Andover, being nearer the river than Lawrence, I went into the city, my object being to see if I could get a friend, who is a canoeist of some note, to accompany me a short distance down the river; but on reaching his house I learned that he had left early in the morning to go up the river, so I returned to North Andover alone.

With a little assistance I got the canoe into the water and started down the river. There was a slight breeze up the river, so the crew was obliged to take to the paddle. Moving slowly down, and stopping occasionally to go ashore, it was nearly noon before the Joie reached St. Mitchel's Falls, which she ran in safety luckily, as they were her first rapids. A short distance below I met a couple of boats, whose occupants were camping further down for the day. They kindly invited me to stop and take dinner with them, which invitation I accepted, and remained there until 3 o'clock, when, bidding them good-by, I continued on my journey.

Passing by Haverhill and Groveland, I reached a good camping ground about a mile and a half or two miles below Groveland bridge on the right hand side of the river. It is around a curve that hides a picnic ground below the bridge from sight, on a grassy bank amid a large group of trees. There is plenty of wood and a farmhouse near by, where you can obtain milk, etc. Landing there I pulled the Joie on the bank and put up my canoe tent and prepared for the night. About eleven o'clock I was awakened by the sound of rain on the tent, but as that was waterproof it did not trouble me. It rained until seven o'clock the next morning, so the Joie did not get started until nine.

During the night the wind had shifted and was blowing down the river, so I hoisted my two "legs of mutton" sails and bid my friends of the farmhouse good-bye, and the Joie bore away down the river for Newburyport.

She had a hard struggle through Rock's bridge, as the tide was running up strong, but she made it all right at last; at Amesbury the wind died away and she finished the distance to Newburyport under a "spruce breeze."

The crew stopped there awhile for luncheon and tried to get some information concerning Plum Island River, which he did not understand very well. Leaving there under full sail again, the Joie sailed down nearly to Woodbridge Island, where I asked some men if that was Plum Island River; they told me it was, so I started through. The tide was running out strong and the water was getting shallow, but supposing that the channel was just ahead I kept on until the Joie was high and dry on the mud flats about three-quarters of a mile from either shore. A man who was shooting told me that the tide would not be in until six o'clock, so I propped the canoe up on the mud and took a nap and read until the tide rose.

At a quarter past 9 o'clock I started for Ipswich Little Neck. There

was a strong current and wind against me through the river, and so I was obliged to paddle. On reaching the Sound I was completely lost, having no landmarks to steer by, for it was dark and the wind was blowing hard. At last, seeing a light inshore, I decided to paddle for it and learn where I was. On reaching it and finding a beach, I went ashore and learned that I was up Parker River.

As it was then about 9 o'clock I decided not to go any further that night, and on being offered a bunk in a small shanty, I accepted and passed the night there. In the morning, after a hearty breakfast in a cottage, the Joie started for the Little Neck again. There was a stiff breeze blowing against her, so the crew were obliged to paddle across. It was a hard, wet struggle, but the Neck was reached at last, and there the Joie stayed until the next morning. I met some Salem friends and remained there that night.

In the morning I paddled up to Ipswich and took the train for Beverly, where I put the canoe overboard again and paddled up to the wharf, reaching it at 10 o'clock in safety. Thus ended my first cruise, but I hope not the last. JOIE.

CRUISING NOTES.—Messrs. J. L. Greenleaf, Knickerbocker C. C., Frank J. Proctor and A. G. Webster, Harvard C. C., called at this place (Newburgh) July 17, Mr. Greenleaf being on a cruise to Albany and the Messrs. Proctor and Webster en route to the Lake George C. C. meet at Lake George and the A. C. A. meet at Grindstone.—PIXIE.

Dr. Neidé and Mr. Newman reached Plattsburg on July 9, Rouse's Point, 10th, and crossed by rail to Ogdensburg on the 11th, starting up the St. Lawrence on the 12th. For two days progress was very slow against wind and current, while rain at intervals made matters worse. On Monday the wind came from the east, so an early start was made, the remaining run of nearly thirty miles being made in five hours, before the wind, both canoeists being soaked with spray. The wind changed back again just after their arrival in camp. Dr. Neidé is now hard at work on the island, and reports that he cannot hire any help. There are, no doubt, plenty of canoeists who have time to spend an extra week in camp, and a little help from some of them now will be very acceptable.

CANOEING IN PITTSBURGH.—Canoeing is rapidly becoming more popular in Pittsburgh, and aside from three perfectly organized and equipped canoe clubs, every urchin and street gamin that enjoys a love for aquatic sport, has drawn upon his limited amount of genius, and converted an indescribable mass of driftwood into a canoe shaped "something," which he paddles to and fro with a broken oar, or a piece of board, with all the pride and satisfaction of the commander of the finest lapstreak.—C. A. R.

CANOE PHOTOS.—We have received from Mr. F. H. Pullen, two handsome photos of the Merrimack River meet.

A NEW NAUTILUS CANOE.—Mr. Baden-Powell has just completed a new Nautilus canoe for cruising and occasional racing, and will "trial trip" her in the regatta races of the Royal C. C. to-day at Teddington. As regards model, she looks "twelf;" there is not a hollow line in her. She has a considerable rise of floor, with a raking midship section, and a long, fine "run." Her designer's aim is to create a craft which, under light spars, and with only stores for ballast (in addition to a cruising centerplate) shall paddle easily, sail well, and at the same time afford sleeping accommodation, and yet not be too heavy for her crew to haul about on shore. These qualities from the look of her, will no doubt be attained; and, further, when ballasted, sparred, and "plated" for a race, she should cause a flutter among the bashful ones of the racing fleet. Her leading dimensions are, length 15ft., beam 2ft. 7½in., depth 16in. There are several novel features about her—notably, in that she has two complete watertight bulkheads, which prevent any possibility of a wash of water fore and aft in the event of shipping a sea, or filling the cockpit in a squall, the fore and aft compartments being got at by means of deck hatchways, instead of bulkhead doors. The after end of the "twelf" is so arranged as to seat a passenger for short trips, and forms, when not so used, a comfortable head and shoulder rest for her skipper when sailing. She has no side deck flaps, but is so constructed that the skipper can lie down at full length under the side deck and steer with his feet. Her sheer and general appearance are very taking to the eye, and suggest good sea-going qualities. Her own sails are not yet ready. However, an old suit is being fitted to her for the regatta; but even then her owner will have all his work cut out to get her fitted by the time of the first race. She has been put together in little more than a fortnight by the able R. C. C. builder, Mr. Turk, of Kingston, and shows considerable excellence in material and workmanship. The Nautilus will compete in the cruiser race and in both the sailing races to-day at the R. C. C. regatta at Teddington.—*London Field, June 28.*

OSHKOSH C. C. ANNUAL RACES.—The Oshkosh C. C. held their first annual races on Wednesday, July 16. The course was three miles triangular, the wind very light from the East. The start was made at 3 P. M., the following boats crossing: Aloka, W. J. McCoy; Alice, Otto Schloerb; Sis, A. M. Von Kaas; Reine, W. A. Session; Meta, Oscar Timm; Bon Ami, R. P. Finney; Dollie R., W. A. Radford, and Jen, Wm. Brand. The race was very slow owing to the lack of wind, Bon Ami winning in 1:28:20, with Jen, Lis and Reine following. Afterward a scrub race was sailed, in which Alice was first, Reine second, and Aloka third. Bon Ami takes the champion flag for the balance of the year, and holds the challenge prize until won by another boat.

SEAWANHAKA C. Y. C. RACE FOR CANOES.—The annual open boat races of the Seawanhaka C. Y. C., on July 30, will be open to canoes of all recognized canoe clubs, a prize valued at $30 being given. The conditions are given in our yachting columns.

ANSWERS TO CORRESPONDENTS.

NED, Allegany.—See our last issue for fish seasons.

N. J. O., Blairsville, Pa.—The gun has a good reputation.

C. C. M.—Please give me the names of five or six most important flies for trout fishing in the Adirondacks the first of August. Ans. Coachman, Professor, Red Spinner, Montreal, Red Ibis, and Queen of the Water.

J. T. G., Keyport, N. Y.—1. You can carry 50ft. in mainsail and 20ft. in mizzen, for moderate cruising rig. 2. Step mainmast 2ft. 6in. from bow, mizzen 2ft. 9in. from stern. 3. Write to C. A. Neidé, Schuylerville, N. Y.

X. Y. Z.—In an ash and lancewood, 7-ounce, three-joint fly-rod should the middle joint be of ash or lancewood? Ans. It is largely a matter of taste. Lancewood is heavier than ash, and the latter is generally used. This would be our choice.

PITTICUS—Will you kindly inform me (1) if the fishing in Lake Ronkonkoma, L. I., is good enough to warrant going there for a week? 2. Are there any fish in the lake which are forbidden to be caught? 3. Could I camp out there? Ans. The fishing is fair there but at times is overdone. 2. No. 3. Yes.

J. L. L.—What varnish is best to use in revarnishing a split bamboo rod, and I would also be obliged for any other points as to keeping a rod of that kind in good condition. Ans. Shellac dissolved in alcohol. Keep the rod well varnished and do not tie it too tightly in the case. Let it lie down instead of standing.

GRAYLING.—1. Where is the best fishing among the Thousand Islands, especially near Kingston? 2. At what date does duck shooting commence? Ans. 1. Inside of Howe Island, and between that and Grindstone on the east. South between Wolfe Island and Cape Vincent. 2. On the Canada side Aug. 15. New York side Sept. 1.

AMATEUR, Paterson, N. J.—1. How is the silk prepared for tying guides on a fishing rod? 2. What is the best wood for the butt of a light trout rod, the wood to be light and of sufficient strength? Ans. 1. No preparation is necessary; take silk thread and wind it around the guides and finish with an invisible knot. 2. Ash is commonly used and is as good as any if tough and close grained.

EWOR.—Can you inform me what is the togue, its scientific name and habitat; also the best work on ichthyology? Ans. Togue is merely a local name for the fish otherwise known as lake trout, salmon trout, etc. (*Salvelinus namaycush*). Get Synopsys of N. A. Fishes, by Jordan and Gilbert, Bulletin 16 of the U. S. National Museum. It may be difficult to obtain now. You can get Jordan's "Manual of the Vertebrates" from Jansen, McClurg & Co., Chicago, for $3.

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Brass Multiplying Reels with Balance Handles, first quality and fine finish, 75ft., $1.00; 120ft., $1.25; 180ft., $1.50; 240ft., $1.75; 300ft., $2.00; 450ft., $2.25; 600ft., $2.50. Any of the above Reels with Drags, 25 cts. extra; nickel plated; 50 cts. extra. Brass Click Reels, 20yds., 50 cts.; 30yds., 75 cts.; 60yds., $1.00; nickel plated, 50 cts. extra. Marster's celebrated Hooks snelled on gut, Limerick, Kirby Limerick, Sproat, Carlisle, Chestertown, O'Shaughnessy, Kinsey, Aberdeeen, Sneak Bent, and all other hooks. Single gut, 12 cts. per doz.; double, 20 cts. per doz.; treble, 30 cts. per doz.; put up one-half dozen in a package. Single Gut Trout and Black Bass Leaders, 1yd., 5 cts.; 2yds., 10 cts.; 3yds., 15 cts. Double Twisted Leaders, 3 length, 5 cts.; treble twisted, 3 length, 10 cts. Trout Flies, 60 cts. per doz. Black Bass Flies, $1.00 per doz. Trout and Black Bass Bait Rods, 9ft. long, $1.25 to $5.00. Trout and Black Bass Fly Rods, 10ft. long, $1.50 to $10.00. Also forty-eight different styles of rods for all kinds of fishing. Samples of hooks, leaders, etc., sent by mail on receipt of price in money or stamp. Send stamp for catalogue.

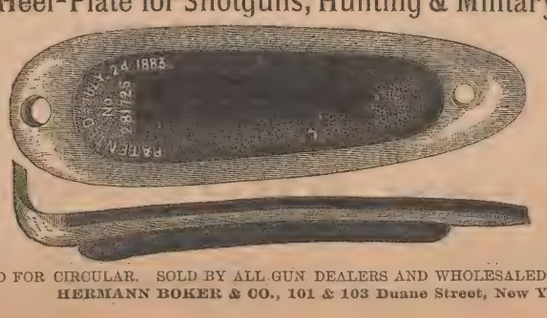
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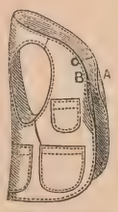
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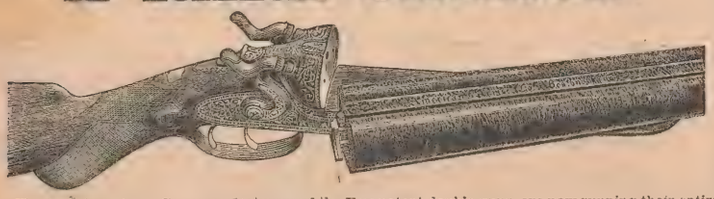
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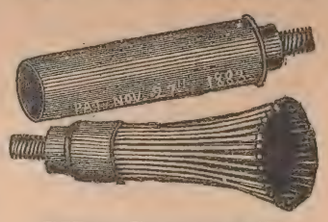
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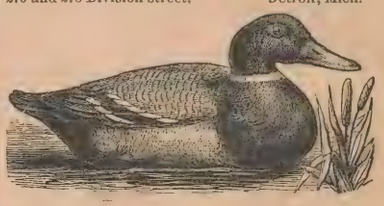
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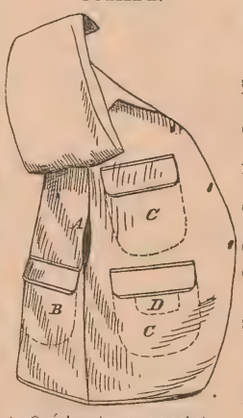


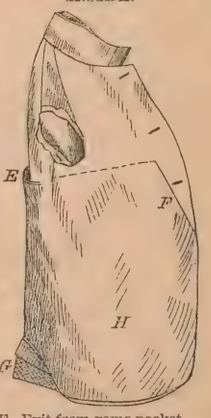
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AT THE LONDON FISHERIES EXHIBITION

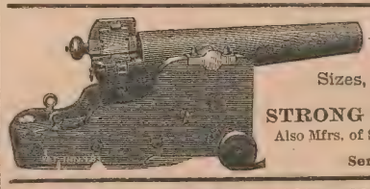
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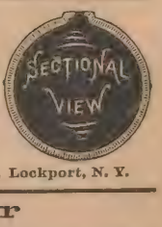


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